



Permit Number: _____

PERMIT AND RIGHT OF ENTRY**PERMITTEE:**

City of Portland Environmental Services
1120 SW 5th Avenue, Room 1000
Portland, OR 97204

Contact: David Helzer
Environmental Specialist
Phone: (503) 823-5760
Email: david.helzer@portlandoregon.gov

PORT OF PORTLAND:

Port of Portland
7200 NE Airport Way
Portland, OR 97218

Contact: Patti Freeman
Property Manager
Phone: (503) 415-6048
Email: patti.freeman@portofportland.com

RECITALS

A. The Port of Portland, a port district of the State of Oregon (the "Port") is the owner of real property located in Multnomah County, Oregon, as further described in Section 3 below.

B. The City of Portland ("City" or "Permittee") is planning to construct a habitat enhancement project on property owned by Permittee or third parties that is located adjacent to Port owned property ("Project"), to benefit juvenile salmonids within the Lower Columbia Slough ("Slough"). The Project involves the construction of several large woody debris structures in the Slough. During construction, the City desires access to Port owned property to temporarily stage and store logs that will be used to construct the structures.

NOW, THEREFORE, in consideration of the promises and covenants contained in this Permit and Right of Entry (this "Permit") and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. RECITALS

The Recitals above are true and are incorporated into and are a part of this Permit.

2. GRANT OF RIGHT TO USE PREMISES

The Port hereby grants to Permittee the nonexclusive right to enter upon and use the Premises (defined below) in accordance with the terms and conditions set forth below.

3. PREMISES

The "Premises" shall consist of roadway access and a log storage area, all located adjacent to the Lower Columbia Slough, in the Ramsey Lakes area as more precisely depicted on the attached Exhibit A.

4. PERMITTED USES

This Permit authorizes Permittee and Permittee's employees, agents, contractors and consultants to enter upon the Premises for the purpose of: (a) conducting staging and storing logs to be used in the habitat enhancement Project; (b) staging equipment for the placement of woody material in the Slough; (c) establishing turtle nesting substrate in accordance with the staging area restoration plan; and (d) constructing temporary road improvements, all as more precisely

described in the attached **Exhibit B** ("Permitted Uses"). Upon termination of this Permit, the Port will conduct a five-year monitoring and maintenance program of the site to ensure establishment of any planted seedlings and/or vegetation and preservation of the turtle nesting substrate area.

5. SPECIAL CONDITIONS

5.1 Work Activity and Equipment

Permittee acknowledges that the Premises contain natural resources and may be adjacent to waterways. Therefore, Permittee shall strictly adhere to all terms and conditions of this Permit, including without limitation the conditions described in this Section 5 and in Section 18. In order to protect the water and soil resources and wildlife habitat of the Premises, vehicles shall be driven and parked only on designated roads and shall not be allowed off road for any reason. Permittee shall provide a hard copy submittal of the type and origin of all gravel and roadbase related products used on the premises and a spill kit with adequate supplies to provide initial control of a spill from vehicle or equipment must be onsite at all times when vehicles or equipment are in operation.

5.2 Access and Port Contact

Access to the Premises will be as noted on the attached Exhibit A. Permittee shall notify Carrie Butler (503-415-6319) for any access or site-related questions and for scheduling a final walk-through of the Premises as described in Section 16.

5.3 Subject to Prior Existing Rights

This Permit, and all rights granted to Permittee hereunder, is subject to any easements and other rights of record affecting the Premises and Permittee shall not conduct any activities on the Premises in violation of such previously existing rights. Permittee shall not interfere with (a) the rights or operations of any tenants or other parties authorized by the Port to be present on the Premises, or (b) the use of property adjacent to the Premises.

5.4 Prohibited Activities

No Hazardous Substances may be brought onto, used, handled, treated, recycled, disposed of, transferred, transported, deposited, placed, or stored on the Premises other than small amounts (1000 ml or less) of ethanol for specimen preservation. No washing, fueling, repair, storage, maintenance, or modifications of vehicles or other equipment, or other activities other than the Permitted Uses is permitted on the Premises.

5.5 Survey Reports

Permittee agrees to provide the Port within twelve (12) months of completion and at no cost to the Port, copies of all wildlife survey reports and raw data produced in connection with Permittee's activities on the Premises.

6. TERM OF PERMIT

The term of this Permit shall commence on November ____, 2014 (the "Commencement Date") and shall terminate on March 31, 2016 unless extended by mutual agreement of the parties.

7. COMPENSATION TO BE PAID BY PERMITTEE

No permit fee is required under the terms of this Permit.

8. CONDITION OF PREMISES

The Port makes no warranty, guarantee or representation concerning the physical condition of the Premises or the suitability of the Premises for any of City's intended uses, and it is agreed that the Port will not be responsible for any loss, damage or costs which may be incurred by Permittee by reason of any such physical condition.

9. WASTE, REMOVAL AND DEMOLITION

City shall not cause or permit any permanent waste or damage to the Premises or the improvements thereon and shall not remove or demolish, in whole or part, any existing improvements, trees or vegetation on the Premises, except for minor vegetation clearing required for purposes of the Permitted Uses, without the prior written approval of the Port.

10. UTILITIES

Permittee may not access, connect to or use any of the utilities, including but not limited to water, sanitary sewers, storm drains, power, telephone and natural gas, located at or in the vicinity of the Premises. Permittee shall supply its own water and its own electricity from sources outside the Premises. Permittee shall not draw any water from any location on or adjacent to the Premises.

11. INDEMNITY

To the extent allowed under Oregon law, City agrees to indemnify, hold harmless and defend the Port, its commissioners, directors, officers, and employees from and against, and to reimburse the Port for all claims, actions, damages, injuries, costs, loss, or expenses incidental to the investigation and defense thereof, arising out of the acts or omissions of, or use or occupancy of the Premises by the City, its agents, contractors, or employees. To the extent allowed under Oregon law, the Port agrees to indemnify, hold harmless and defend the City, its commissioners, officers, and employees from and against and to reimburse the City for all claims, actions, damages, injuries, costs, loss, or expenses incidental to the investigation and defense thereof, arising out of the acts or omissions of, or use or occupancy of the Premises by the Port, its agents, contractors, or employees.

12. INSURANCE

The Port recognizes that Permittee is self-insured and subject to the terms and conditions of the Oregon Tort Claims Act and the Constitution of the State of Oregon, accepts Permittee's self-insurance program in fulfillment of the insurance requirements listed in this Section 12. Notwithstanding the foregoing, Permittee shall require each contractor entering onto the Premises for the Permitted Use to provide and maintain the insurance coverages as set forth below. The amounts listed indicate only the minimum amounts of insurance coverage the Port is willing to accept to help insure full performance of all terms and conditions of this Permit. All insurance required by this Permit shall meet the following minimum requirements:

12.1 Certificates; Notice of Cancellation

Permittee shall ensure that its contractor(s) each provide the Port with current certificates of insurance, including a copy of the additional insured endorsement required pursuant to Section 12.2, executed by a duly authorized representative of each insurer, prior to each such contractor's entry onto the Premises. Permittee contractors may not enter onto the Premises or commence the Permitted Use until the Port has received the certificates of insurance for such

contractors meeting all requirements of this Section 12. Permittee's contractors' insurance policies may not be canceled, materially revised, or non-renewed without at least thirty (30) days' prior written notice being given to the Port. Insurance must be maintained without any lapse in coverage for the duration of this Permit. The Port shall also be given copies of Permittee's contractors' policies of insurance upon request. Failure of the Port to demand such certificates, copies of policies, or other evidence of full compliance with coverage requirements shall not be construed as a waiver of Permittee's obligation to maintain the insurance required by this Permit.

12.2 Additional Insured; Separation of Insureds

The Port shall be named as an additional insured in each general liability policy. Such insurance shall provide cross-liability coverage equivalent to the standard Separation of Insureds clause published by the Insurance Services Offices ("ISO") or its successor organization.

12.3 Primary Coverage

The required policies shall provide that the coverage is primary with respect to the operations of Permittee and its contractor(s) and that Permittee and its contractor(s) will not seek any contribution from any insurance or self-insurance carried by the Port, except to the extent that such efforts to obtain contribution are related to claims of Permittee arising from the negligence or intentional misconduct of the Port. Permittee's self-insurance program and, to the extent applicable, policies to be provided by Permittee's contractors pursuant to this Section 12, each shall provide that the coverage is primary with respect to the operations of Permittee and its contractor(s) and that Permittee and its contractor(s) will not seek any contribution from any insurance or self-insurance carried by the Port, except to the extent that such efforts to obtain contribution are related to claims of Permittee arising from the negligence or intentional misconduct of the Port.

12.4 Required Insurance

At all times during this Permit, Permittee shall ensure that its contractor(s) provide and maintain the following types of coverage:

12.5 General Liability Insurance

Permittee's contractor(s) each shall maintain an occurrence form commercial general liability policy or policies insuring against liability from premises operations, independent contractors, products-completed operations, personal injury, and liability insured under an insured contract (including the tort liability of another assumed in a business contract) occurring on or in any way related to the Premises or occasioned by reason of the operations of Permittee. Coverage shall not exclude operations adjacent to or over water or work within 50 feet of railroad tracks or coverage for the explosion, collapse, and underground ("XCU") hazards arising from Permittee or its contractors' operations. Coverage shall be, in an amount of not less than ONE MILLION DOLLARS AND NO CENTS (\$1,000,000.00) per occurrence. If subject to an aggregate limit, such aggregate shall not be less the ONE MILLION DOLLARS AND NO CENTS (\$1,000,000.00) per policy year.

12.6 Contractors Pollution Legal Liability

Permittee's contractor(s) each shall maintain an occurrence form contractor's pollution legal liability protecting it against liability for sudden and accidental pollution arising from its

operations and/or exacerbation of existing pollution. The amount of coverage shall be not less than TWO MILLION DOLLARS AND NO CENTS (\$2,000,000.00) per occurrence, with the Port of Portland named as an additional insured. If the additional insured status of the policy requires suit to be brought against the Named Insured before any protection is afforded to the additional insured, the Port reserves the right to require Permittee and its contractor(s) to modify coverage or provide other protection acceptable to the Port.

12.7 Automobile Liability Insurance

Permittee's contractor(s) each shall maintain an automobile liability policy insuring against liability for bodily injury, death, or damage to property, including the loss of use thereof, arising from the use, loading and unloading of Permittee and its contractor(s) owned, hired, and non-owned automobiles on and around the Premises. Coverage shall be in an amount of not less than ONE MILLION DOLLARS AND NO CENTS (\$1,000,000.00) per accident.

12.8 Workers' Compensation Insurance

Permittee's contractor(s) each shall maintain workers' compensation and employer's liability insurance for all of such contractor(s) employees subject to the Oregon Workers' Compensation laws (or other state if applicable), either as a carrier-insured employer or as a self-insured employer as provided by ORS 656.407. The amount of employer's liability coverage shall not be less than ONE MILLION DOLLARS AND NO CENTS (\$1,000,000.00) per accident and ONE MILLION DOLLARS AND NO CENTS (\$1,000,000.00) per employee for disease. In lieu of such insurance, the Permittee and its contractors may maintain a self-insurance program meeting the requirements of the State of Oregon and a policy of excess workers' compensation and employer's liability insurance.

13. COMPLIANCE WITH LAW

City shall conduct its activities under this Permit in compliance with all applicable state, federal, and local laws, regulations, agency guidance documents, Port rules and regulations, and terms of any permits applicable to the Premises, the Permitted Uses, or the Port's property, as each of the foregoing may be amended from time to time. City shall obtain all necessary federal, state and local permits necessary for the Permitted Uses.

14. ENVIRONMENTAL MANAGEMENT AND COMPLIANCE

14.1 Definitions

For the purposes of this Permit, the following definitions shall apply:

14.1.1 Environmental Law

"Environmental Law" shall mean applicable federal, state and local laws, now or hereafter in effect, as the same may be amended from time to time, and applicable decisional law, which in any way govern materials, substances, regulated wastes, emissions, pollutants, animals or plants, noise, or products and relate to the protection of health, natural resources, safety or the environment.

14.1.2 Hazardous Substance

"Hazardous Substance" shall mean any and all substances, pollutants, materials, or products defined or designated as hazardous, toxic, radioactive, dangerous or regulated wastes

or materials or any other similar term in or under any Environmental Law, and shall also mean fuels, petroleum and petroleum-derived products.

14.1.3 Hazardous Substance Release

"Hazardous Substance Release" shall mean the spilling, discharge, deposit, injection, dumping, emitting, releasing, leaking or placing of any Hazardous Substance into the air or into or on any land or waters, except as authorized by a then-current and valid permit issued under applicable Environmental Law.

14.1.4 Use of Hazardous Substances

City shall not use, handle or store any Hazardous Substances on or about the Premises, except for petroleum-derived products fully contained within motor vehicles.

14.2 Treated Soil or Waste or Soil Containing Industry Byproducts

City shall not store, treat, deposit, place or dispose of on the Premises, without the prior written consent of the Port, which consent may be granted or denied in the Port's sole discretion: (a) soil or waste treated to remove or reduce its Hazardous Substance content, including soil or waste treated on the Premises; (b) contaminated soil or waste; or (c) soil containing industry byproducts, including, without limitation, slag.

14.3 Environmental Remediation

14.3.1 Response

In the event of a violation of Environmental Law, a violation of an environmental provision of this Permit, a Hazardous Substance Release, or the threat of or reasonable suspicion of the same for which City is responsible under this Permit, City shall immediately undertake and diligently pursue all acts necessary or appropriate to (a) cure or correct the violation, (b) investigate, contain, stop and remediate and remove the Hazardous Substance Release, and (c) restore the Premises and other affected property or water.

14.3.2 Port's Right to Review and Comment; Notice to the Port

Prior to the commencement of any investigatory, containment, remediation or removal procedures required by this Permit or by Environmental Law on the Premises or on any affected property or water, the Port shall have, except in the case of an emergency or an agency order requiring immediate action, the right to (a) review and comment on such procedures and (b) require revisions to any procedures not in compliance with Environmental Law. City shall promptly notify the Port upon becoming aware of (i) a violation or alleged violation of any Environmental Law related to the Premises or to City's occupation or use of the Premises or any environmental provision of this Permit; and (ii) any Hazardous Substance Release on, under or adjacent to the Premises or threat of or reasonable suspicion of any of the same. If notice must be given on the weekend or after 5:00 p.m. on any day, City shall notify the Port by calling the Port's emergency telephone number. That number currently is: (503) 240-2230.

14.3.3 Report to the Port

Within thirty (30) days following completion of any investigatory, containment, remediation and/or removal action required by this Permit, City shall provide the Port with a written report outlining, in detail, what has been done and the results thereof.

15. INSPECTION

The Port reserves the right, at any time and from time to time, after notice to City, to inspect the Premises and City's operations on and use of the Premises: (a) for compliance with applicable law and with the provisions of this Permit, (b) for presence of and/or City's management of Hazardous Substances; and (c) to facilitate the Port's environmental management, permitting, sampling and analysis related to the Premises or any other property of the Port.

16. DUTIES UPON TERMINATION

Upon termination of this Permit, City shall repair any damage to the Premises caused by City's use or activities, shall restore the truck turn-out and staging areas to their condition at the commencement of this Permit, except for changes made necessary by the Permitted Uses (i.e. ecological improvements as described in Section 4), and shall remove from the Premises all of City's property including equipment, materials and debris. Small woody material may be left on-site for use in the Ramsey natural area and a joint walk-through upon completion of the project and termination duties will be scheduled pursuant to Section 5.2.

16.1 Damage to Property

City shall compensate the Port for damage to the Premises remaining after City repairs damages pursuant to Section 16, including without limitation any improvements thereon, caused by access to and use thereof by City, its agents, contractors, or employees.

17. SURVIVAL

City's obligations, including without limitation indemnification obligations, under this Permit shall survive termination.

18. GOVERNING LAW

This Permit shall be governed and construed according to the laws of the State of Oregon, without regard to its choice of law provisions. Venue shall be in Multnomah County.

19. NOTICES

All notices required under this Permit shall be sent by certified mail, return receipt requested, or hand delivered, to the addresses set forth below unless changed by the parties by notice in writing:

To Permittee:

City of Portland – Environmental Services
1120 SW 5th Avenue, Room 100
Portland, OR 97204
Attn: David Helzer

To Port:

The Port of Portland
Property and Development Services
7200 NE Airport Way
Portland, OR 97218
Attn: Patti Freeman

With a copy to:

The Port of Portland
Legal Department
P.O. Box 3529
Portland, OR 97208

The date of service of such notice by mail is agreed to be three (3) calendar days after the date such notice is deposited in a post office of the United States Post Office Department, postage prepaid, return receipt requested, certified mail or, if delivered by hand, then the actual date of hand delivery.

20. MEDIATION

If any dispute should arise between City and the Port concerning this Permit or the parties' obligations or activities under this Permit, the dispute shall be submitted to mediation before a mediator agreed to and compensated equally by both parties, prior to commencement of arbitration or litigation. If the parties fail to agree on a mediator, a mediator shall be appointed by the presiding judge of the Multnomah County Circuit Court.

21. COUNTERPART

This Permit may be executed in counterpart, each of which will be deemed an original, but all of which together will constitute one and the same agreement.

22. EXHIBITS

All Exhibits attached to this Permit are incorporated herein by this reference.

23. WARRANTY OF AUTHORITY

The individuals executing this Permit on behalf of the Permittee warrant that they have full authority to execute this Permit on behalf of the Permittee.

24. ENTIRE AGREEMENT

This Permit represents the entire agreement between the parties with respect to the subject matter of this Permit, and supersedes all prior agreements, written or oral. No amendment to this Permit shall be effective unless in writing and signed by the parties hereto.

IN WITNESS HEREOF, the parties have subscribed their names hereto effective as of the year and date first written above.

CITY OF PORTLAND by and through its
BUREAU OF ENVIRONMENTAL
SERVICES

THE PORT OF PORTLAND

By: _____

By: _____

Print Name: _____

Print Name: _____

As Its: _____

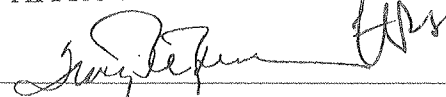
As Its: _____

Date: _____

Date: _____

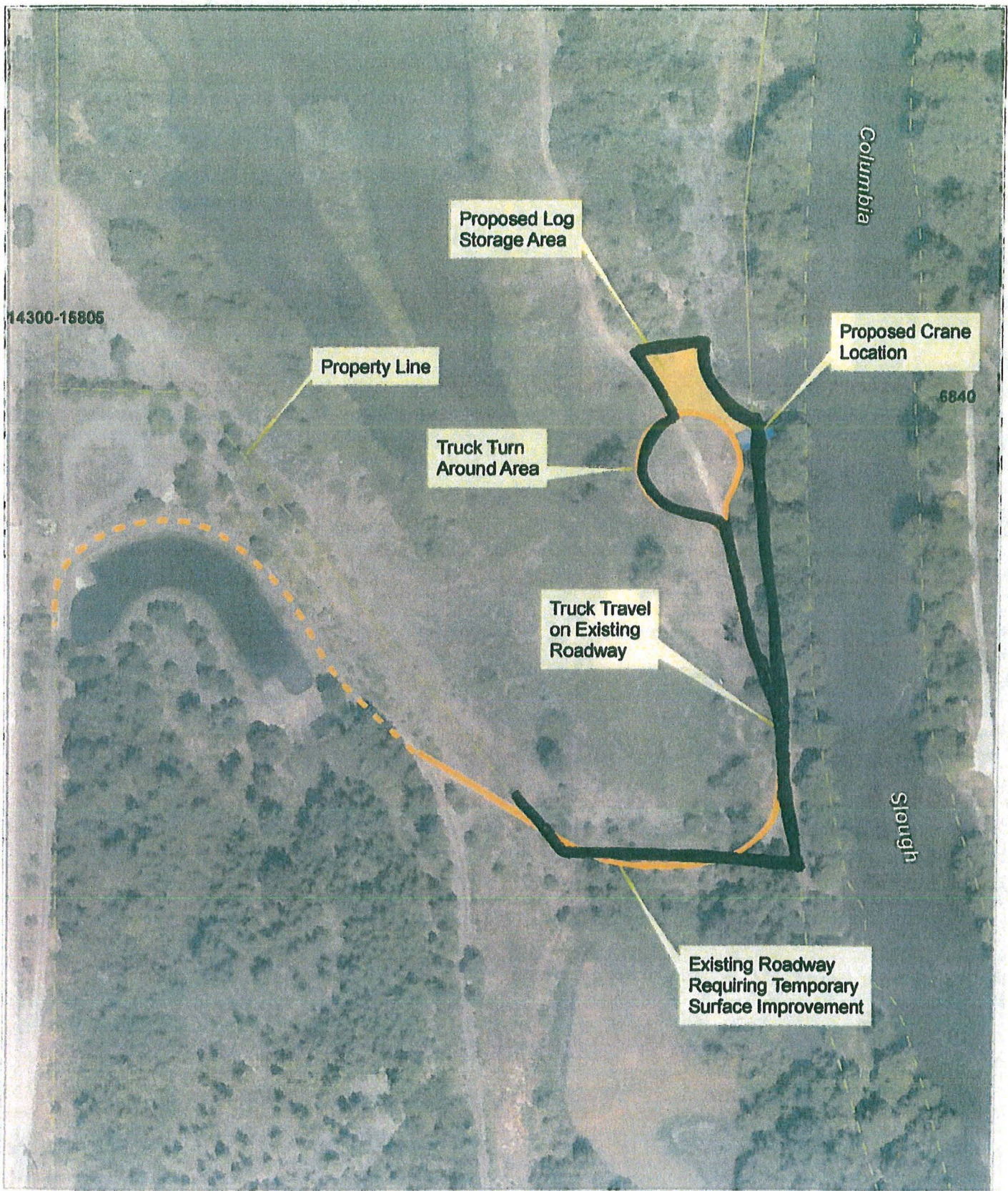
APPROVED AS TO FORM

APPROVED AS TO LEGAL SUFFICIENCY
FOR THE PORT

By:  _____
City Attorney

By: _____
Counsel for Port of Portland

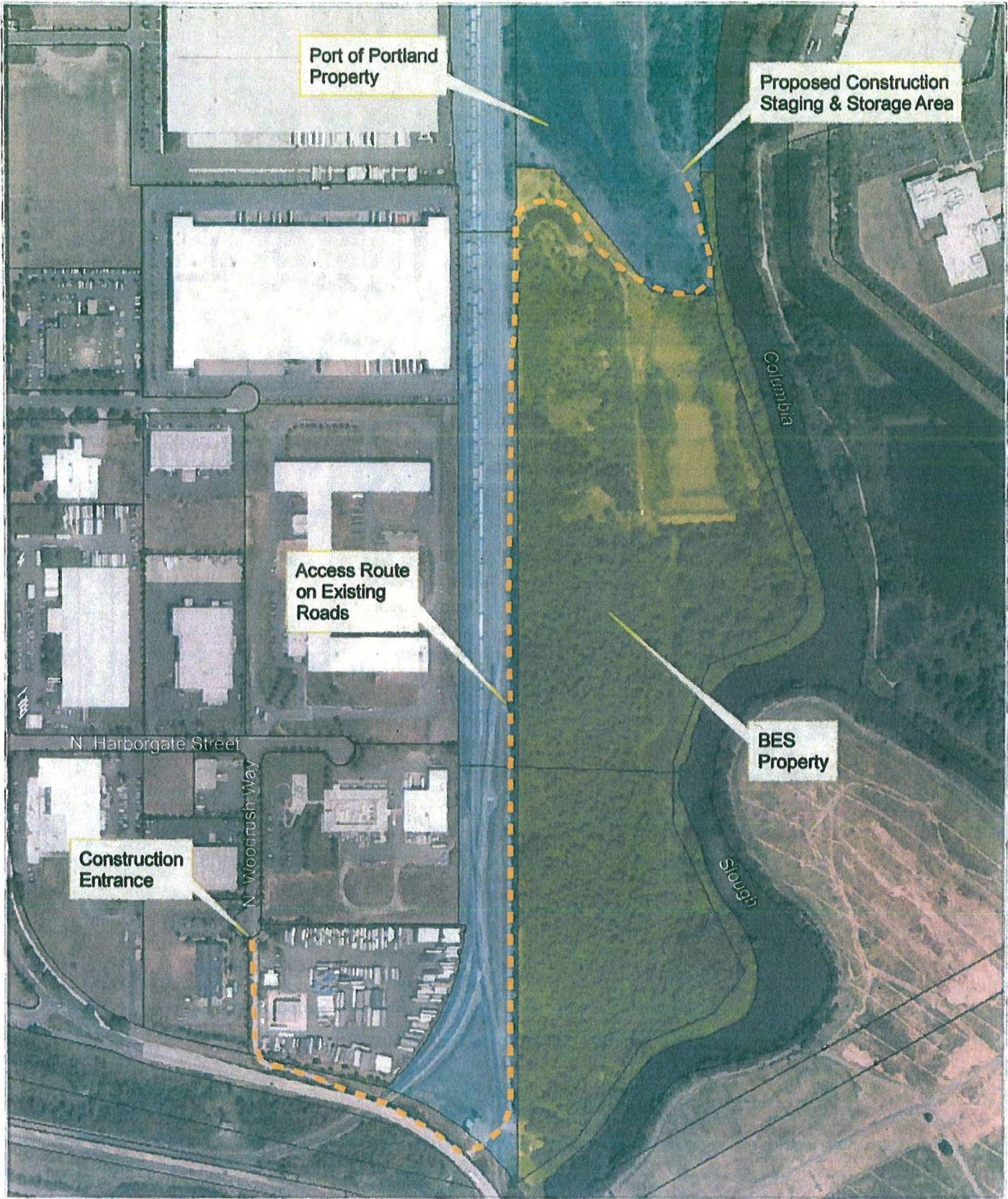
CITY ATTORNEY



City of Portland
Bureau of
Environmental Services

**Figure 2 - Construction Access, Staging & Storage Areas
Lower Slough Refugia Habitat Enhancement Project
Project No. E10176**

Exhibit A



City of Portland
Bureau of
Environmental Services

Figure 1 - Construction Access
Lower Slough Refugia Habitat Enhancement Project
Project No. E10176

EXHIBIT B



— CITY OF PORTLAND —
ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ■ Nick Fish, Commissioner ■ Dean Marriott, Director

November 10, 2014

TO: Carrie Butler, Port of Portland
 Patti Freeman, Port of Portland

FROM: Fred MacGregor, Bureau of Environmental Services
 David Helzer, Bureau of Environmental Services

RE: Construction Staging and Storage for the Lower Slough Refugia Habitat Enhancement Project, BES Job No. E10176

BES is proposing to construct a habitat enhancement project, focused on juvenile salmonids, within the Lower Columbia Slough. The project involves constructing several Large Woody Debris (LWD) structures in the Slough. There are two distinct project areas in the Lower Slough: Ramsey Reach and Wright & Moore Islands. As part of the project, the Contractor will need space to temporarily store the logs as they are delivered and have space to move them from the land to the water. BES staff conducted several field visits to determine the location with the least amount of potential environmental impact from construction staging and storage activities. We determined that a site on Port of Portland property was the best suited for work in the Ramsey area because of the existence of the existing maintenance roadway network, minimal vegetation impacts and the proximity to the Slough. This letter describes the process of the construction activities and the proposed post construction mitigation measures.

Scope of Construction

Location of Site

The proposed staging and storage site is located on the west bank of the Columbia Slough, across from the Wapato Jail. See attached Figure 1.

Access to Site

Access from public right-of-way would be from the south end of N. Woodrush Way as shown on Figure 1. A rock construction entrance would be installed just inside the existing gate to conform to construction stormwater BMP requirements. Truck traffic would travel along the existing maintenance roadway network as shown in Figure 1 to access the proposed staging and storage site.

We anticipate using the existing maintenance roadway alignment to the proposed staging and storage area, but plan to improve the surface to handle truck traffic for hauling logs to the staging area. Materials proposed for access road improvements will consist of a 12" layer of 1" minus gravel, or gravel of various sizes up to 1" in diameter. The 1" minus must be derived from mineral based rock and not contain any organic or man-made material. Materials placed on the existing roadway will be left in place upon

project completion, at the request of Port staff. Materials used in the staging and storage area will be removed as further described below.

Stored Materials

The materials stored on the site would be logs, with and without rootwads. We anticipate a maximum of 160 logs be stored on site during construction. Each log would be approximately 30' in length and can vary in diameter from 16" to 24."

Delivery of Materials

The logs will be delivered by logging trucks. We anticipate that contractor would use a traditional logging truck that is adjustable in length. The overall length of the loaded truck and trailer would be approximately 50 to 55.'

Movement within Site

The trucks would travel into the site on the temporality improved maintenance road to the storage location as depicted on Figure 2. A turn around area would be designated for the trucks as shown on Figure 2. This area would also have to be temporarily improved to handle the truck movement as well. The treatment would be the same as the maintenance roadway, geotextile fabric and a layer of gravel.

Storage Area

BES proposes the area shown in Figure 2 to be designated for storage of the logs during construction. The area proposed is approximately 4,000 square feet.

Staging Area

Logs will have to be moved from the land (storage area) to a barge on the water in the Slough during construction. The logs will be moved using a crane that we propose to locate near the bank of the Slough as indicated on Figure 2. The crane will sit and be leveled on large blocks to reduce the pressure exerted on the soil below. The crane will be driven into the site along the maintenance road to the staging area. Once the work is complete, the crane will be removed and the area will be restored.

Construction Schedule

We expect to issue Notice to Proceed to a Contractor in January 2015. The Contractor will have the ability to begin importing logs to the site to the staging area once they prepare the temporary improvements to the roadway. We are specifying a large quantity of logs on this project, so we want to give the Contractor ample opportunity to source the materials and transport them to the site. The anticipated schedule would be as follows:

Issue NTP	Jan 2015
Begin Mobilization-Temporary Roadway Improvements	Jan 2015 - Feb 2015
Delivery of Logs	Feb 2015 - Mar 2015
Installation of Logs	Apr 2015 - Jun 2015
Restoration Measures	June 2015 - Mar 2016

Post Construction Restoration

BES will prepare a mitigation plan to repair the ground surface and revegetate the area that is impacted during construction. A revegetation planting plan is attached to this memorandum.

As part of the mitigation effort, BES will install turtle nesting habitat within the staging and storage area. The materials used for turtle nesting habitat and the location of the nesting mound are shown in the attached staging area plan sheet.

Turtle Impacts and Management Plan

City and Port owned properties within the "Ramsey Complex" include wetland mitigation areas, stormwater treatment wetlands and ponds, a salmon restoration project, and natural areas. The complex supports a sizable population of Western painted turtles. BES is committed to avoiding and minimizing impacts to turtles within the vicinity of construction staging and access areas. Although juvenile Salmon are the focus of the Lower Slough Refugia project, it is anticipated that native turtles will be a secondary beneficiary for the placement of large wood structure in Lower Columbia Slough.

However, the planned construction activities at this staging area could have temporary adverse impacts on native turtles, particularly nesting habitat. In order offset these potential impacts, BES is proposing to place turtle nesting substrate on the site as part of the staging area restoration plan.

BES and the Port have collaborated to create an Adaptive Wildlife and Turtle Management Plan for the Ramsey staging area. The goals of the plan include:

- avoiding and minimizing destruction of any existing nests within the staging area footprint
- discouraging/excluding adult turtles from attempting to nest in hazard areas
- clear guidance on response to any encounters with live turtles in the staging area.

The Wildlife Plan is attached.

Thank you for your support and collaboration on this project.

Fred MacGregor, P.E., Project Manager
503-823-4981
fred.macgregor@portlandoregon.gov

David Helzer, Project Biologist
503-823-5760
david.helzer@portlandoregon.gov

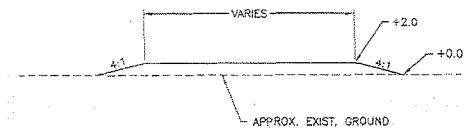
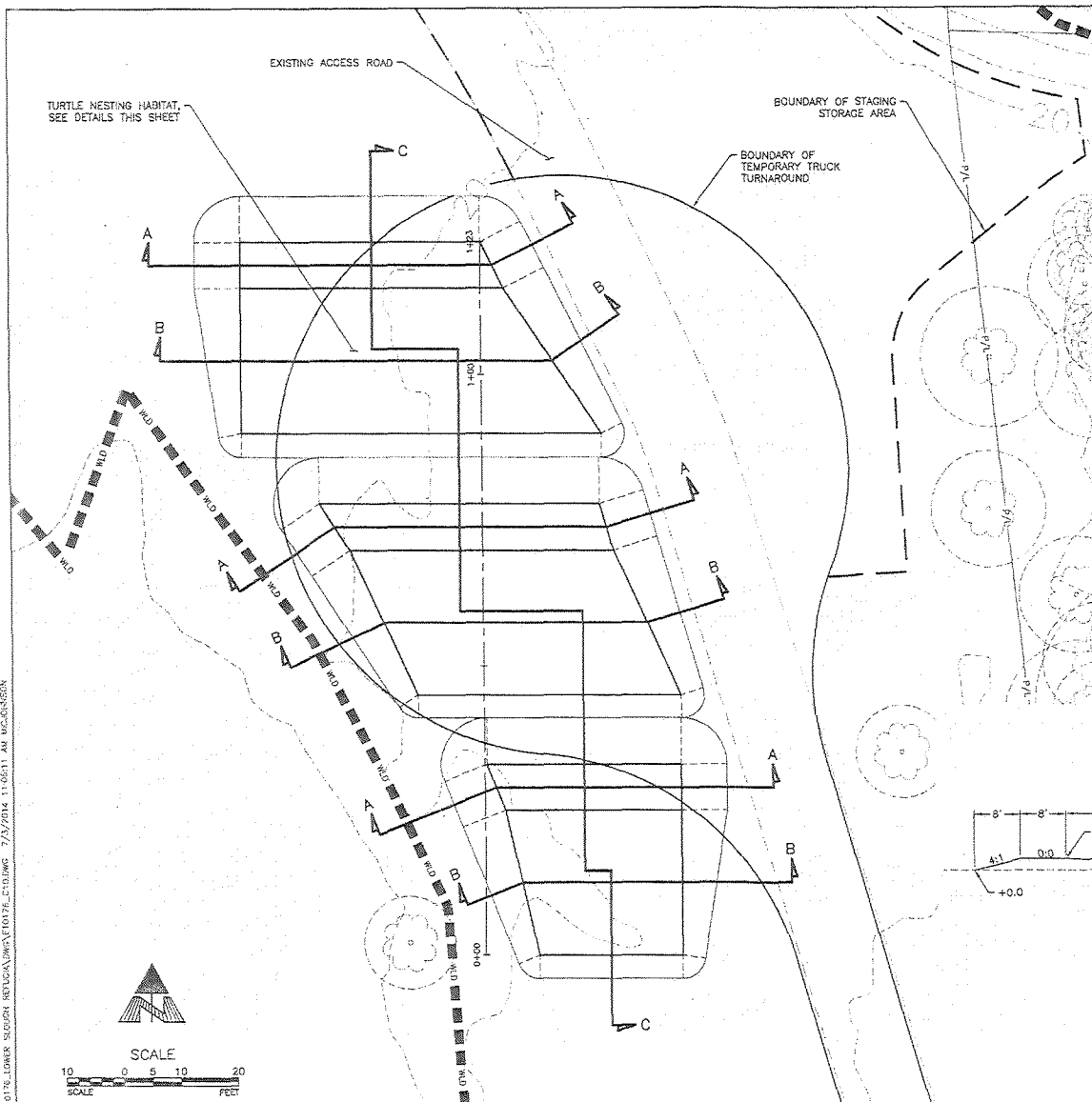
Lower Slough Refugia Habitat Enhancement

BES Project E10176

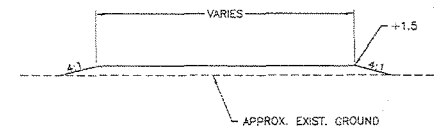
WILDLIFE PLAN

For Ramsey Staging Area

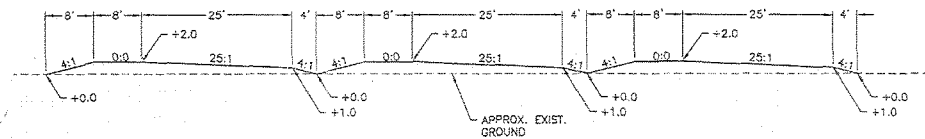
- Contact information if wildlife encountered within project area:
 - BES Construction Manager, Peter Hesford 503-823-8348
 - BES Biologist, David Helzer 503-823-5760
 - Port Mitigation Specialist, Sarah Wilson 530-588-4332
 - Port Senior Mitigation Specialist, Carrie Butler 503-928-1611
- The Western Painted Turtle, a state protected species, is known to occur in the project area and should not be harmed. The surrounding area is considered a wildlife habitat area so other native wildlife may be encountered as well.
- Mobilization and establishment of the Staging Area will occur between December 2014 and February 2015.
- Temporary construction exclusion fencing and sediment fencing will be installed along the access road and around the entire staging area adjacent to the Columbia Slough. Both will serve to exclude turtles from all construction work areas.
- BES Construction Inspectors will monitor the integrity of both fences and ensure their functionality.
- Communication with the City's contractor must go through the BES Construction Manager Peter Hesford.
- Sarah Wilson will monitor turtle activity within the vicinity of construction activities. Sarah is the on-the-ground point of contact for the Port.
- David Helzer will serve as point of contact for BES for any turtle or wildlife issues and will communicate with the BES Construction Manager Peter Hesford, Design Engineer Fred MacGregor and Sarah Wilson as needed.
- Turtles lay their eggs in the ground. Hatchlings emerge from nests in the early spring (Feb/Mar) and adult females seek nesting areas during late spring and summer months.
- If a nest is discovered or a turtle is encountered within the construction exclusion zone (work area), operations will be suspended. BES biologist David Helzer will be notified and will coordinate the response with Sarah Wilson.



SECTION A



SECTION B



SECTION C

TURTLE NESTING HABITAT DETAIL
NOT TO SCALE

CITY OF PORTLAND
ENVIRONMENTAL SERVICES



LOWER SLOUGH REFUGIA
HABITAT ENHANCEMENT PROJECT

TURTLE NESTING HABITAT PLAN
SITE 2: RAMSEY REACH

1/4 SECTION
1621/1721
JOB NO.
E10176
SHEET NO.
C10
14 of 26

DESIGNED BY FLM	CHECKED BY SAH	DATE 8/26/14	REVISION
CONTRACTOR MWH	CHECKED BY LCA	DATE	
PROJECT COMPLETED	CHECKED BY	DATE	
MAP CORRECTED BY	CHECKED BY	DATE	
APP'D	DESIGN MARK	DATE	
DRAWING NAME: E10176_C10.dwg	DESIGN MARK LCA	DATE	
REVISION			

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1086910



Bureau of Environmental Services

Revegetation Plan – Ramsey Staging Area
Lower Columbia Slough Refugia Project – E10176

Introduction

The Bureau of Environmental Services (BES) will restore native vegetation to approximately 0.3 acres of area temporarily impacted by construction activities. BES will provide and install all plant materials (see attached schedule of tasks). Installation will include the application of native seed to establish a native herbaceous ground cover and the installation of woody plant materials (bare-root trees, bare-root shrubs and live pole cuttings) on approximately 0.3 acres surrounding and including the construction area at the Ramsey access point.

Application of Native Seed

BES will apply native grass seed to all exposed/disturbed soils within the project disturbance areas immediately following cessation of construction activities, or seed will be provided to construction contractor for application. Species composition of the native seed mix is shown in Table 1. All seed material will be collected and/or propagated from local seed sources to help maintain local genetics and improve survival. Seed will be applied during and after construction activities.

Table 1 –Native Herbaceous Seed List

Native Grasses	Common Name	Lbs/Acre
Bromus sitchensis	Sitka Brome	15
Elymus glaucus	Blue Wild Rye	10
Agrostis exarata	Spike Bent Grass	1
Deschampsia elongata	Slender Hair Grass	1
Hordeum brachyantherum	Meadow Barley	2
	Total Lbs/Acre	29

Installation of Native Woody Materials

BES will provide and install all native woody plant materials. Materials will consist of native trees and shrubs in the form of bare-root seedlings and live cuttings. All plant materials are collected and/or propagated from a Portland metro area wild population/seed source. Installation of these materials shall occur in winter 2016. Table 2 lists the plant species and planting density.

Table 2 – Riparian Native Woody Plant List

Species	Common Name	Plant Density
Bare-root Trees/Large Shrubs		
Fraxinus latifolia	Oregon Ash	600/acre
Populus trichocarpa	Black Cottonwood	
Malus fusca	Pacific Crabapple	
Alnus rubra	Red Alder	
Salix laesiandra	Pacific Willow	
Bare-Root Shrubs		
Salix fluviatilis	Columbia River willow	1500/acre
Ribes sanguineum	Red Flowering Currant	
Sambucus racemosa	Red Elderberry	
Spirea douglasii	Spirea	
Oelemaria cerasiformis	Indian Plum	
Cornus sericea	Red Osier Dogwood	
Physocarpus capitatus	Pacific Ninebark	
Symphocarpus alba	Snowberry	

Actual numbers of plants may be adjusted and species substitutions may be made depending on availability of plant stock at the time of planting. Trees will be planted on approximately 8 foot spacing. Shrubs will be planted in clusters of five and staked with bamboo.

Schedule of Tasks

Schedule	Task	Details
Summer/Fall 2015	Non-Native Vegetation Removal, Erosion Control, and Seeding	<ul style="list-style-type: none"> • Introduction of native grass seed. • Will occur during and immediately after construction
Winter/Spring 2016	Planting	<ul style="list-style-type: none"> • Includes all labor and materials for the initial plantings. • May include installation of animal damage prevention materials.