City of Portland, Oregon
Bureau of Development Services
Land Use Services
FROM CONCEPT TO CONSTRUCTION

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Date: August 17, 2017

To: Interested Person

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NOTICE OF A TYPE Ix DECISION ON A PROPOSAL IN YOUR NEIGHBORHOOD

The Bureau of Development Services has approved a proposal in your neighborhood. The mailed copy of this document is only a summary of the decision.
The reasons for the decision are included in the version located on the BDS website http://www.portlandonline.com/bds/index.cfm?c=46429. Click on the District Coalition then scroll to the relevant Neighborhood, and case number. If you disagree with the decision, you can appeal. Information on how to do so is included at the end of this decision.

CASE FILE NUMBER: LU 17-162183 CN

GENERAL INFORMATION

Applicant/Owner: Metro, Attn: Jonathan Soll and Elaine Stewart
600 NE Grand Avenue | Portland, OR 97232
email: jonathan.soll@oregonmetro.gov | tel: 503.797.1727

Representative: Tina Farrelly | Pacific Habitat Services
9450 SW Commerce Circle, Suite 180 | Wilsonville, OR 97070
email: tf@pacifichabitat.com | tel: 503.570.0800

Additional Owner: Port of Portland, Attn: Dana R. Green
7000 NE Airport Way | Portland, OR 97218

Site Address: 5300 N MARINE DRIVE (Smith and Bybee Lakes Natural Area, Smith Channel)

Legal Description: TL 400 105.50 ACRES, SECTION 31 2N 1E; TL 600 258.16 ACRES SPLIT MAP R501591 (R971360360) R501593 (R971300140), SECTION 31 2N 1E

Tax Account No.: R951310020, R951310090

State ID No.: 2N1E31 00400, 2N1E31 00600

Quarter Section: 1824

Neighborhood: St. Johns, contact sjnalanduse@gmail.com.

Business District: Columbia Corridor Association, contact Debbie Deetz-Silva at 503-978-6044.

District Coalition: North Portland Neighborhood Services, contact Mary Jaron Kelley at 503-823-4099.

Other Designations: *Smith and Bybee Wetlands Comprehensive Natural Resource Plan* (2013); *East Buttes, Terraces, and Wetlands Conservation Plan* (1993); *Columbia Corridor Environment and Industrial Mapping Project* (1989); 100-year floodplain

Zoning: OS, RF h, p—Open Space, Residential Farming base zones, with Environmental Protection and Airport Height overlay zones.

Case Type: CN – Comprehensive Natural Resource Plan Review
Procedure: Type Ix, an administrative decision with appeal to the Oregon Land Use Board of Appeals (LUBA).

Proposal: On May 30, 2013, the City approved the *Smith and Bybee Wetlands Comprehensive Natural Resource Plan* (CNRP), in Land Use Review Case #LU 12-167334 CN. The Smith & Bybee CNRP included final approval of 11 projects, and tentative approval of 9 projects within the 2,100-acre Smith & Bybee Wetland Natural Area in North Portland. Projects receiving tentative approval through the CNRP are subject to a second Type Ix land use review before they can be constructed to ensure conformance with the plan, when details are available.

The applicant proposes to implement Project #5: Wildlife Diseases, as tentatively approved in the CNRP, which seeks to reduce the threat of avian botulism by better managing water levels in Smith Lake. Project #5 in the CNRP was tentatively approved by the Hearings Officer as a "Permanent Solution for beaver dams/avian botulism" in his Decision for LU 12-167334 CN.

To implement this project, the applicant proposes to dredge 7,100 cubic yards of sediment from Smith Channel, Smith Lake's singular hydrological connection, which connects Smith Lake to Bybee Lake. The resulting deeper channel (becoming 2 to 3 feet deep, and approximately 10 feet wide) would reduce the occurrence of stagnant water trapped in Smith Lake, which is associated with outbreaks of avian botulism. An additional 350 cubic yards of riprap and other fill related to a former road crossing of the slough would also be removed, and disposed of at the St. Johns landfill.

The dredged sediment from Smith Channel will be deposited on-site to expand forested wetland habitat that has been diminishing in the Smith and Bybee Lakes Natural Area. The proposed forested wetland area will cover 2.9 acres, plus a forested-scrub zone of 0.3 acres. After placing the sediment, this area will be graded, then seeded with native grasses. In the following winter, the applicant will plant the entire forested wetland area with a total of 5,556 native trees and shrubs, including red-osier dogwood, Oregon ash, swamp rose, Pacific willow, and Douglas spiraea.

The temporary staging area for this work will be located in an upland parking area, adjacent to the existing water control facility and near the St. Johns Landfill. A 10-ft wide temporary gravel access path, impacting a total 1.18 acres of wetland, will be established along the south side of the channel from the St. Johns Landfill; fencing along the access path will limit the disturbance area; gaps in the fence will be established so as not to impede wildlife movement. Two, 30-inch trees will be removed within the Environmental Protection overlay zone. Native grass species selected from the *Portland Plan List* will be seeded in areas of temporary disturbance.

One of the key challenges to maintaining a healthy water level in Smith and Bybee Lakes has also been the resurgence of beaver dams in the area, as identified in the project title. The proposed project includes deeper pools to encourage beaver habitation without the need for building dams, which may limit lake level response. Beaver dams currently obstructing the channel will be disassembled, with the woody debris left to the side of the channel.

The City approved the *Smith and Bybee Wetlands* CNRP on May 31, 2013, in LU 12-167334 CN. The CNRP approved multiple land use actions anticipated to be implemented during the 10-year term of the plan. The proposal described in this notice was tentatively approved as *Project 5, "Permanent Solution for Beaver Dams/Avian Botulism,"* in the CNRP. City code 33.809.040 states that such projects are later subject to an additional Type Ix procedure to evaluate the more detailed proposal. The CNRP further stipulated that this project would be subject to additional review unless the standards of 33.430.140 could be met. This proposal will remove at least one native tree from the resource area, proposes dredging and fill within a water body and wetland area, and will create a disturbance area that exceeds the standards. The proposal would not be able to meet the applicable standards, and is therefore subject to this Type Ix CN review.

Relevant Approval Criteria:
In order to be approved, this proposal must comply with the approval criteria for the *Permanent Solution for Beaver Dams/Avian Botulism*, as required in the *Smith and Bybee Wetlands Comprehensive Natural Resource Plan* and supported by 33.809.040. The original text of the criteria can be found in the Decision of the Hearings Officer for LU 12-167334 CN , Table 3, included in the CNRP. The relevant approval criteria are:

- Designs and construction methods are less detrimental to identified resources and functional resources and functional values than other practicable and significantly different alternatives;
- There will be no significant detrimental impact on resources and functional values in areas designated to be left undisturbed, including adjacent water bodies;
- The mitigation plan demonstrates that all significant detrimental impacts on resources and functional values will be compensated for, will occur within the same watershed as the proposed use, and the applicant owns the mitigation site;
- All applicable Zoning Code development standards

ANALYSIS

Site and Vicinity: The Smith and Bybee Wetlands Natural Area covers approximately 2,100 acres and is one of the largest urban freshwater wetlands in the country. The area is managed by Metro. Historically, the area was a complex of wetlands, sloughs, and shallow lakes. This complex was seasonally flooded during high stands of the Willamette and Columbia Rivers and naturally drawn down when waters receded.

The Smith and Bybee Wetlands Natural Area is currently comprised of two large shallow lakes and a complex of adjacent wetlands. Smith Lake is hydrologically isolated except for an approximately 0.75 mile long channel (Smith Channel), which connects it with Bybee Lake. Bybee Lake is hydrologically connected to North Slough, which flows into the Columbia Slough.

Human impacts have, historically, irrevocably changed the area's hydrology. The construction of levees along the Columbia Slough and the development of the surrounding land stopped the natural cycle of seasonal flooding and drawdown. Today, a water control structure at the mouth of Bybee Lake mimics natural hydrologic conditions within the Natural Area, holding as much water as possible in the lakes during winter and spring to improve habitat for waterfowl and juvenile salmonids, and to control invasive species such as reed canarygrass. In May through June of each year, the water control structure is used to draw down water gradually after the salmon have migrated to the ocean. After drawdown and until the winter, the two lakes are at equilibrium with the Columbia River.

The project area comprises approximately 50 acres in and around Smith Channel, which connects Smith and Bybee Lakes. Additionally, the St. Johns Landfill will provide an access point into the project area. While the Natural Area is surrounded by many industrial uses, the project area is situated at least a half mile within the natural area, and a half mile from the nearest neighbor.

Zoning: The Open Space (OS) base zone is intended to preserve public and private open and natural areas to provide opportunities for outdoor recreation and a contrast to the built environment, preserve scenic qualities and the capacity and water quality of the stormwater drainage system, and to protect sensitive or fragile environmental areas. No new uses are proposed within the OS zone and the regulations of this zone do not apply to this proposal; the OS provisions are not specifically addressed through this Environmental Review.

The Residential Farm-Forest (RF) base zone is intended to foster the development of single-dwelling residences on lots having a minimum area of 52,000 square feet. Newly created lots must have a minimum density of 1 lot per 87,120 square feet of site area. The regulations of this zone do not apply to this proposal; these provisions are not specifically addressed through this Environmental Review.

The Airport Height ("h") overlay zone limits the height of structures and vegetation in the vicinity of the Portland International Airport. The height limits in the vicinity of the proposal are above 1,200 feet and these provisions are not specifically addressed through this Environmental Review.

The Environmental ("c" and "p") overlay zones protect environmental resources and functional values that have been identified by the City as providing benefits to the public. The environmental regulations encourage flexibility and innovation in site planning and provide for development that is carefully designed to preserve the site's protected resources. They protect the most important environmental features and resources while allowing environmentally sensitive urban development where resources are less significant. The purpose of this land use review is to ensure compliance with the regulations of the environmental zones.

Land Use History: City records indicate that prior land use reviews include the following:

- **LUR 97-00405 EN.** Approval of an environmental review to allow construction of a gas pipeline and compressor station.
- **LUR 97-00843 EN.** Approval of an environmental review to allow repair of an eroding embankment and to allow placement of rock and sand within the Columbia Slough at three specific locations along the perimeter of the St. Johns landfill.
- **LUR 99-00579 EN.** Approval of an Environmental Review to repair three banks around the perimeter of the St. Johns Landfill, situated entirely within the Environmental Conservation and Protection overlay zones. Required conditions related to establishing a trail, maintenance of bank repairs, and mitigation plantings.
- **LUR 00-00779 EN.** Approval of an Environmental Review for disturbance area and stockpiling in the environmental zones and construction of an underground wall along the north perimeter of the St. Johns landfill to retard the migration of contaminants from the Columbia Slough.
- **LU 02-113706 EN.** Approval of the removal and replacement of a water control structure, installation of a fish ladder, planting of native vegetation along the berm, and the removal and replacement of soil and installation of plants to enhance turtle habitat. Required conditions for mitigation plantings.
- **LU 03-100430 EN EF.** Approval of an Excavation and Fill Review for: Excavation of 8,000 cubic yards at the N Portland Road site; and Fill of 13,000 cubic yards at the St. Johns Landfill. Approval of an Environmental Review for: Excavation of the N Portland Road site; Resource enhancement of the N Portland Road site; and Maintenance activities as described in attached Exhibit C.15, all within the Environmental Conservation overlay zone. Required conditions for mitigation plantings.
- **LU 03-162374 EN.** Approval of an Environmental Review to place large woody debris throughout the Buffalo Street, Elrod Road, Vanport, Smith and Bybee Lakes, Ramsey Lake, Rivergate Consent Decree, Pickle Pond, West Wye, and Bonneville Pond wetland mitigation sites over a span of 10 years, all within the Environmental Conservation or Protection overlay zones. Required conditions for mitigation plantings and monitoring large woody debris.
- **LU 08-113402 EN.** Approval of excavation of 5,000 cubic yards of soil along 1,000 feet of the south streambank of the North Slough; Bank stabilization using rock with large woody material such as tree rootwads integrated into the rockfill structure, compacted soils contained in stacked geocells and reinforced wrapped geogrids, and heavy overplanting of the site with approximately 2,434 wood plants; and maintenance and monitoring activities as described in attached Exhibit C.5, all within the Environmental Protection overlay zone. Required conditions for mitigation plantings.
- **LU 12-167334 CN:** Approval of a Comprehensive Natural Resource Plan review, which required the further environmental review of the project at hand. Includes conditions for mitigation plantings when applicable projects are permitted.

Except for LU 12-167334 CN, the current proposal does not affect the site areas of previous land use reviews; and the purpose of the current proposal is to implement LU 12-167334 CN.

Environmental Resources: The application of the environmental overlay zones is based on detailed studies that have been carried out within separate areas throughout the City. Environmental resources and functional values present in environmental zones are described in environmental inventory reports for these respective study areas.

The project site is mapped within the *Inventory and Analysis of Wetlands, Water Bodies, and Wildlife Habitat Areas for the Columbia Corridor* (Columbia Corridor Inventory), as Inventory Site #55 (Smith & Bybee Lakes). Site #55 is described as follows:

"Smith and Bybee Lakes is the most complex and unique natural area within Portland's Urban Growth Boundary. It is about 2,000 acres of a type of habitat which was formerly widespread throughout the lower Columbia River riparian area. Almost all of the site is within the 100-year flood boundary. Even though this site scored the highest on the Wildlife Habitat inventory of all sites inventoried, there is still potential for further enhancement. Extensive amounts of edge habitat are found at this wetland, and are one of the site's most significant and basic natural resources for wildlife."

The inventory notes that this area is the largest, most significant wetland area in the City of Portland, with tremendous habitat value and diversity. Resources of concern on the project site include high quality uplands and wetlands. Drainageway functions include fish habitat, flood storage, desynchronization, erosion control, sediment trapping, the balance of pollution and nutrient cycling.

Portions of Smith and Bybee Lakes were separately inventoried in the East Buttes, Terraces, and Wetlands Conservation Plan (1993) after they were annexed into the City. These areas are beyond the immediate project area, but the study further confirmed earlier inventory findings and listed significant findings of a tri-colored blackbird colony, peregrine falcon, bald eagle, osprey, band-tailed pigeon, black-crowned night heron, and yellow-headed blackbird.

The site has further been identified as a Special Habitat Area by the Recommended Draft of the City's *Natural Resource Inventory*. At this site, resources such as wetlands, bottomland hardwood forests, migratory stopover habitat, connectivity corridors, and at risk wildlife use has been identified.

Impact Analysis and Mitigation Plan: A full description of the proposal was provided on page two of this report. The following discusses development alternatives that were considered by the applicant. The following additionally describes the proposed construction management plan, mitigation, and monitoring proposal.

Development Alternatives: The applicant considered several alternatives for this project, as listed in the Comprehensive Natural Resource Plan. They are presented in detail in Exhibit A.1 in the application case file. They include no-build options, alternative methods for controlling water flow in the lakes, as well as different construction options for dredging Smith Channel once it was established as the preferred alternative. Their analysis is summarized below:

Alternative 1 (No Build/Active Intervention): A scenario in which there is no change to the connection between Bybee Lake and Smith Lake would require highly active human intervention in order to reduce the threat of avian botulism, and success would be uncertain. In this scenario, outbreaks of avian botulism could be managed (as they have been in past years) by actively removing and burying dead waterfowl, and actively hazing birds from dawn to dusk throughout the duration of an outbreak. Active measures in 2014 required this active hazing for 12 consecutive days, along with the deployment of approximately 7,000 pyrotechnic noisemakers. Even with these efforts, about 200 duck deaths related to avian botulism were observed in the natural area.

Furthermore, this alternative would necessitate water level management choices that are in conflict with vegetation management goals; non-native emergent species would continue to

thrive. Low summer dissolved oxygen levels (and associated poor water quality) would also remain an issue. Metro also considered a plan in which they would remove beaver dams on an annual basis, but this annual effort would be more impactful to the natural area than other alternatives, and likely to be ineffective on a long-term basis.

Alternative 2 (New hydrologic connections): The applicant considered building a pipe connection between Smith Lake and the Columbia River or the Columbia Slough to establish a new hydrologic connection. The associated costs with such a project were not realistic, and other logistical barriers also make this alternative infeasible.

Alternative 3 (Dredging the Smith channel): Dredging the Smith Channel was determined to be the strongest alternative approach, and this is the preferred alternative. Within this approach, several sub-alternatives to dredging were considered for various depths and widths of dredging. Hydraulic analysis of the grading alternatives showed that lake levels are more responsive to the depth of excavation than the width. The preferred alternative is a varied approach with an average excavation depth of two to three feet, with a deeper pool to encourage beaver habitation without the need for building dams.

Alternative Excavation Techniques:
Hydraulic dredging: This method was studied for feasibility in the interest of minimizing temporary impacts to the surrounding wetlands during site access. The lake levels during the in-water work window are too low to support a barge, nor is there enough water to support a sediment slurry. This method would also necessitate a large stockpile area to dewater the slurry, ultimately increasing the disturbance area.

Conventional excavation (preferred alternative): Use of this technique allows the option of distributing the dredged sediment to convert an adjacent, lower quality, monotypic, emergent wetland, to a higher functioning, forested wetland. Standard, rubber-tracked excavators, and small dump trucks would be used to excavate and transport sediments between the channel and the future forested wetland area. Temporary impacts will be reduced with fewer trips needed to the St. Johns Landfill.

Construction Management Plan (CMP): The applicant provided a description of proposed construction techniques to be used to minimize construction impacts (see Exhibit A.1); they are highlighted here:

- All work will be conducted during the ODFW preferred in-water work period between June 15 and September 15.
- Staging will occur in the upland informal parking area adjacent to the water control structure.
- Erosion control efforts will include tree protection measures, staked turbidity curtains, compost socks, and establishment of temporary construction access paths.
- Temporary access routes will be aligned along higher ground. The paths would be mowed and covered with geotextile fabric. High-visibility fencing will define the edges of the path, but fencing will not be continuous so as not to impede wildlife movement. Turnaround areas will be established to prevent any need to go off the path.
- The access path will be revegetated after construction. Geotextile fabric will be removed, and the ground scarified 8 to 10 inches. The ground would then be covered in compost and a seed mix of native grasses.
- Transportation of sediment from the channel to the expanded forested wetland area will be accomplished with traditional small equipment or limited use of conveyor belts. Where feasible, conveyor belts will limit the number of trips required through the site.
- Disturbance to wildlife will be minimized through work isolation measures; sediment fencing and tree protection fencing choices have been selected to allow wildlife movement while still providing protection to areas outside the disturbance area.
- Water flow from the North Slough into Bybee Lake will be stopped at the water control structure. Up to three rows of "super sacks" may be placed in the channel to ensure isolation. All fish and aquatic wildlife will be salvaged from the work area and

released into Bybee Lake will be pumped dry, except where otherwise directed by ODFW (e.g. guidance to destroy bullfrogs).

Unavoidable Impacts:

- The temporary access path will impact 1.18 acres of land in the Environmental Protection overlay zone, and will require the removal of one mature willow tree (30 inches diameter at breast height [dbh]).
- 3.86 acres of the channel will be dredged, encompassing 7,450 cubic yards of permanent excavation.
- Placing this fill over 3.2 acres of monotypic emergent wetland will allow its conversion into a forested wetland habitat. The applicant has demonstrated that, while this proposal involves fill below the base flood elevation, non-storm water levels are maintained at a higher elevation than normal due to levees and flood control structures, and that both the area of excavation and the area of fill are already within the level of non-storm conditions; therefore, there will be no net loss of floodplain storage.
- The wetland conversion will directly impact a second mature willow tree (also 30 inches dbh); while it is not proposed for active removal, disturbance to the root zone may jeopardize its survival.
- Construction activities in a robust wildlife habitat area pose risk of disturbing wildlife despite precautions described in the construction management section.

Proposed Mitigation: The mitigation measures presented by the applicant in Exhibit A.1 in the application case file, and graphically depicted on Exhibit C.4, are described below:

- Temporary disturbance created by the construction access paths will be reseeded with native grasses.
- total of trees, shrubs, and 3.2 acres of native ground covers, in substantial conformance with Exhibits C.4 Mitigation Plan
- A total 4,520 native trees and 3,190 native shrubs will be planted throughout the planting area shown on Exhibit C.4. This will offset construction impacts within wetland and riparian areas along Smith Channel, as well as make up for grading impacts within the existing emergent wetland to be converted to forested wetland. The overall planting plan includes:
  - Red-osier dogwood: 910
  - Oregon ash: 2,310
  - Swamp rose: 1,160
  - Pacific willow: 2,210
  - Douglas spiraea: 1,120
  - 3.2 acres of native grass and sedge seed

Monitoring Plan for Mitigation: The planting density of trees and shrubs is intended to allow for plant mortality that may result from wildlife browsing, unexpected climatic conditions (extremely dry or extremely wet weather), and other unforeseen plant stressors. However, the applicant proposes to monitor both the plantings and climatic conditions during dry summer months. If plantings show signs of water stress or extremely dry summer conditions which necessitate watering, the applicant will make arrangements for hand watering or a temporary irrigation system.

In addition to monitoring for water stress during the summer months, the applicant, Metro, will conduct on-going annual monitoring of the proposed forested wetland area. Metro will replant as necessary to achieve the desired wetland plant community and plant densities. Metro proposes to provide a monitoring report to BDS that will provide written proof that all specifications of this section have been met one year after the planting is completed.

Agency Review: A Notice of Proposal in your Neighborhood was mailed on **May 31, 2017.** The following Bureaus have responded with no issues or concerns about the proposal:

- Bureau of Environmental Services (Exhibit E.1).
- Portland Bureau of Transportation (Exhibit E.2).

- BDS Site Development Section (Exhibit E.3).
- BDS Life Safety Plans Examiner (Exhibit E.4).

BDS Site Development Staff, however, did comment that a Site Development Permit is required prior to construction. Special inspection by the project civil engineer to verify cut and fill volumes are per plans is required.

Neighborhood Review: A Notice of Proposal in Your Neighborhood was mailed on **May 31, 2017**. No written responses were received from either the Neighborhood Association or notified property owners in response to the proposal.

ZONING CODE APPROVAL CRITERIA

The CNRP specifically addresses this project as "Permanent solution for beaver dams/avian botulism." The project received "tentative approval" in the CNRP and is subject to a Type Ix CN Review to receive final approval for the resource enhancement work. Preliminary project plans were reviewed in the CNRP. The CNRP identifies four applicable approval criteria for this review:

1. **Designs and construction methods are less detrimental to identified resources and functional resources and functional values than other practicable and significantly different alternatives;**

   Findings: The applicant provided an alternatives analysis that can be found in the application case file in Exhibit A.1, and is summarized in this report on pages 5 and 6. Alternatives included a no-build scenario with active human intervention, annually removing beaver dams, creating new hydrologic connections, and different depths and approaches to excavation within the channel. In this analysis, the applicant demonstrates that the proposed dredging in the Smith Channel would result in the fewest environmental impacts of other practicable available options. *This criterion is met.*

2. **There will be no significant detrimental impact on resources and functional values in areas designated to be left undisturbed, including adjacent water bodies;**

   Findings: This approval criterion requires the protection of resources outside of the proposed disturbance area from impacts related to the proposal, such as damage to vegetation, erosion of soils off the site, and downstream impacts to water quality and fish habitat from increased erosion off the site.

   The construction management plan (CMP) and mitigation plan are described on page 6 and 7 of this report. The CMP will be effective because it provides realistic limits of disturbance for both construction (dredging) and for access, while containing the necessary elements (e.g., staked turbidity curtains, compost socks, and establishment of temporary construction access paths on higher ground, tree protection measures, and a restoration plan for access paths following construction). The proposed CMP will provide protection for the resources and values in areas designated to be left undisturbed for these reasons.

   The applicant further considered the decision to transfer sediment from the Smith Channel to an adjacent wetland area on site as it relates to the natural area's functional resources and values:

   With regard to wetland resources and functions, there will be no overall loss of wetland or waters from the placement of sediment to convert emergent wetland to forested wetland. Given the large complex of wetlands and the relatively small volume of fill, there will be no loss of water storage and delay. Although planting woody species could retard water flow and capture more sediment, there may be a slight decrease in phosphorus uptake and nitrogen removal, though this change is projected to be negligible.

With regard to fish and wildlife habitat functions, the existing emergent wetland is a monotypic and dense stand of *Persicaria amphibia.* It is unlikely the existing habitat provides valuable breeding support for wintering and migratory waterfowl, and amphibian and turtle habitat, though a conversion from emergent to forested habitat by definition decreases these functions, however, converting the vegetative structure to trees and shrubs will increase roosting and nesting habitat for birds, especially Neotropical migratory birds.

Due to the existing dominance by a monotypic emergent plant community, the proposed vegetative enhancements will significantly increase the function of supporting diverse native plant communities. A positive environmental impact from the project will be the expansion of willow habitat that borders Smith Lake and two other habitat types that previously thrived when historic hydrologic conditions existed: Columbia sedge meadow and mudflats. The Columbia sedge community is listed as "critically imperiled" in Oregon (and globally) by the Oregon Biodiversity Information Center. Mudflats are exposed as the water is drawn down in both lakes over the summer, which provides valuable habitat for migrating shorebirds. Prior to the drawdown each year, seasonally high open water covers more than 800 acres in the winter and spring. Bottomland hardwood forests have suffered from the high stands in Smith Lake, but are targeted to eventually cover approximately 260 acres if the historic conditions are allowed to return. These forests provide valuable habitat for Neotropical migratory birds, such as Swainson's thrush and Yellow warbler, and sensitive bat species that may include hoary bat and *Yuma myotis.* When fully restored, shrub wetlands will occupy approximately 360 acres surrounding the wetlands. The scrub shrub wetlands provide habitat for little willow flycatcher, which is an Oregon Conservation Strategy species for the Willamette Valley.

Temporary construction impacts will be contained within access areas, dredging areas, and forested wetland expansion areas. Temporary construction areas will be returned to a natural state, and overall wildlife habitat will be improved, and *this criterion is met.*

3. **The mitigation plan demonstrates that all significant detrimental impacts on resources and functional values will be compensated for, will occur within the same watershed as the proposed use, and the applicant owns the mitigation site;**

Findings: This criterion requires the applicant to assess unavoidable impacts and propose mitigation that is proportional to the impacts, as well as sufficient in character and quantity to replace lost resource functions and values. The anticipated impacts and proposed restoration and mitigation plans, as proposed by the applicant, are described on page 7 of this report.

The overall proposal will mitigate 1.18 acres of temporary disturbance created by the construction access path, by replanting the access path alignments after scarifying the earth and introducing compost to alleviate the effects of compaction. The applicant proposes that geotextile fabric will be removed from all access path areas, and the ground will be scarified 8 to 10 inches. The ground will then be covered in compost and a seed mix of native grasses.

Sediment from 3.86 acres of channel dredging will primarily be kept on-site in the 3.2-acre area to be converted to forested wetland. This area will be planted with of a total 4,520 native trees, 3,190 native shrubs, and 3.2 acres of native grass and sedge seed, as shown on the applicant's mitigation plan. This plan will more than mitigate the removal of two willow trees from the project area, and will offset the temporary impacts associated with the 1.18 acres of temporary construction access paths within wetland and riparian areas, the impacts of channel dredging in Smith Channel, and filling and grading within the existing emergent wetland to be converted to forested wetland.

The proposed plant materials are native and were selected from the *Portland Plant List.*

The selected plants do not include any species on the Nuisance Plant List. The following specifications regarding plant materials are included in the applicant's graphic Mitigation Plan, Exhibit C.4.

- Willows will be stakes and cuttings. All other the trees and shrubs shall be bare root, nursery propagated, and non-clonal in origin.
- Plant materials are to be used for restoration purposes and should not be treated with pesticides, fungicides, or fertilizers.
- The seed mix shall be supplied by a local nursery with the specification that the seed source must be as local as possible.
- Plants listed on the Nuisance Plants List shall be removed from the mitigation area.
- Trees shall not be staked or otherwise marked with non-biodegradable material.
- Trees and shrubs will be planted in rows 7 feet apart, with plantings spaced at 4-foot intervals in the rows.

The selected contractor will be required to comply with these specifications to ensure that the proposed project complies with Section 33.248.090.

The proposed plantings will be installed in the wetland area during the rainy season (early 2018). The area currently experiences prolonged inundation and saturation during the growing season and is below the ordinary high water (OHW) limits established by the Department of State Lands (11 feet msl, DSL ORS 196.820). Although the surface elevation in the proposed forested wetland will be between 1 and 3 feet higher than the existing elevation, the area is expected to continue to be saturated, and will still be below the OHW elevation. It is expected that plant survival during the critical establishment period will not be limited by lack of water. Further, given the sensitive location of the proposed plantings, it is undesirable to implement regular manual watering during the establishment period as such access could disturb both the proposed forested wetland and the surrounding natural area.

The proposed Mitigation Plan will be installed and maintained under the regulations outlined in Section 33.248.040.A-D (Landscaping and Screening). To confirm initial installation of mitigation plantings, the applicant will be required to have the plantings inspected by applying for a Zoning Permit.

While the restoration of access path areas is described in the applicant's narrative, it is not clearly depicted on site plans. Therefore, the applicant will be required to provide a detailed access path Restoration Plan at the time of permit review.

A one-year monitoring plan is described by the applicant to ensure survival of proposed mitigation plantings. To confirm survival of the plantings for the initial establishment period, the applicant will be required to have the plantings inspected 2 years after plantings are installed, by applying for a Zoning Permit.

With conditions to ensure that restoration of construction access path areas is conducted as described in the applicant's narrative, and that plantings proposed by the applicant to mitigate construction impacts are installed, maintained and inspected, *these criteria can be met.*

Mitigation for significant detrimental impacts will be conducted on the same site as the proposed use or development, and the applicant owns the proposed on-site mitigation area.

With conditions as described above, *these criteria will be met.*

4. All applicable Zoning Code development standards

Findings: The CN review presented above serves to address the environmental standards of Zoning Code Chapter 33.430. Whereas no structures or recreational facilities are proposed, there are no base zone standards that are applicable.

The landscaping and screening standards of 33.248 are generally met by the mitigation plan discussed above. All proposed plants are native and covered by the *Portland Plant List*, and will be sourced locally. Plants listed on the Nuisance Plants List will be removed from the mitigation area. Trees shall not be staked or otherwise marked with non-biodegradable material. Plans will be maintained and monitored as discussed above.

These criteria are met.

OTHER TECHNICAL REQUIREMENTS

Technical decisions have been made as part of this review process, based on other City Titles, as administered by other City service agencies. These related technical decisions are not considered land use actions. If future technical decisions result in changes that bring the project out of conformance with this land use decision, a new land use review may be required. The following is a summary of technical requirements applicable to this proposal. This list is not final, and is subject to change when final permit plans are provided for City review.

Bureau	Code Authority and Topic	Contact Information
Environmental Services	Title 17; 2014 Stormwater Manual	503-823-7740 www.portlandonline.com/bes
Development Services	Title 24 - Building Code, Flood Plain, Site Development; Title 10 - Erosion and Sediment Control	503-823-7300 www.portlandonline.com/bds
Urban Forestry	Title 11 – Trees	503-823-8733 http://www.portlandoregon.gov/trees/

CONCLUSIONS

The applicant proposes to excavate Smith Channel and create a beaver pool along its path. The applicant will place excavated sediment in a nearby emergent wetland to convert it to forested wetland. The overall project is intended to significantly improve habitat value by reducing the threat of avian botulism, providing a pool for beaver, and planting 4,520 trees, 3,190 shrubs, and 3.2 acres of native ground covers within the forested wetland area. Temporary disturbance areas associated with accessing the site will be restored, and replanted with native grasses after work, to reduce compaction.

The applicants and the above findings have shown that the proposal meets the applicable approval criteria with conditions. Therefore, this proposal should be approved, subject to the following conditions.

ADMINISTRATIVE DECISION

Approval of an Comprehensive Natural Resource Plan Review for:
- Dredging of approximately 7,450 cy in Smith Channel;
- Creation of a temporary access path, including two trees to be removed, to be restored and replanted upon project completion;
- Placement of fill over 3.2 acres of emergent wetland to convert to a forested wetland area, and installation of 4,520 trees, 3,190 shrubs, and 3.2 acres of native ground covers;

all within the Environmental Preservation overlay zone, and in substantial conformance with Exhibits C.2, C.3, and C.4, as approved by the City of Portland Bureau of Development

Services on **August 14, 2017**. Approval is subject to the following conditions:

A. A BDS Zoning Permit is required for inspection of required restoration of the temporary construction access path and for mitigation plantings, and a separate BDS Site Development Permit is required for development. The Conditions of Approval listed below, shall be noted on appropriate plan sheets submitted for permits (Zoning, grading, Site Development, erosion control, etc.). Plans shall include the following statement, ***"Any field changes shall be in substantial conformance with approved LU 17-162183 CN Exhibits C.2 through C.4."***

Special inspection by the project civil engineer to verify cut and fill volumes are per plans is required as part of the Site Development Permit.

Construction Permits (such as Site Development Permits) shall not be issued until a BDS Zoning Permit is issued.

Construction Permits shall not be finaled until the BDS Zoning Permit for inspection of mitigation plantings required in Condition C below is finaled.

B. Temporary high-visibility construction fencing, or flagging tape supported by 4-foot stakes, shall be installed around the perimeter of the staging area near the existing water control structure, and along the edges of the temporary access paths shown on the Construction Management plan. Such high-visibility fencing or flagging shall define the edges of the temporary access paths, but fencing/flagging shall not be continuous so as not to impede wildlife movement.

1. Except for within the Forested Wetland area to be created, and except on all temporary access paths, no mechanized construction vehicles are permitted landward of the top of bank line shown on the Construction Management plan. All planting work, invasive vegetation removal, and other work to be done upland of the top of bank line, shall be conducted using hand held equipment.
2. In the area designated as "Constructed Forested Wetland" no mechanized construction vehicles area permitted beyond the "grading limits" line shown on the Construction Management plan, and the "Forested Wetland grading limits" shown on the Mitigation Plan and Forested Wetland Planting Plan.

C. The applicant shall obtain a BDS Zoning Permit for approval and inspection of 1) a Restoration Plan for the 1.18 acres of temporary construction access path, and 2) a Mitigation Plan for a total of 4,520 trees, 3,190 shrubs, and 3.2 acres of native ground covers, in substantial conformance with Exhibits C.4 Mitigation Plan. Any plant substitutions shall be selected from the *Portland Plant List*, and shall be substantially equivalent in size to the original plant.

1. The Restoration Plan for the temporary construction access path shall show:
   a. The removal of all geotextile fabric from all access path areas, and scarification of the ground to 8 to 10 inches.
   b. Covering all access path areas in compost, and
   c. Seeding all access path areas with native herbaceous seed mix suitable for the various hydrologic conditions within the different areas of the access path.
2. Mitigation plans shall show:
   a. The general location of the trees, shrubs and ground covers as shown on Exhibit C.4 Mitigation Plan, and labeled as "new required landscaping". The plans shall include a 40-foot by 40-foot "typical", scalable planting layout for each planting zone, and shall illustrate a naturalistic arrangement of plants and should include a planting table listing the species, quantity, spacing and sizes of plants to be planted.
   b. The applicant shall indicate on the plans selection of either tagging plants for identification or accompanying the BDS inspector for an on-site inspection.

3. Plantings shall be installed between October 1 and March 31 (the planting season).
4. Prior to installing required mitigation plantings, non-native invasive plants shall be removed from all areas within 10 feet of mitigation plantings, using handheld equipment.
5. All trees removed for construction of this project, with trunks greater than 12 inches in diameter, shall be retained on the site and within the resource area of the Environmental zone.
6. If plantings are installed prior to completion of construction, a temporary bright orange, 4-foot high construction fence shall be placed to protect plantings from construction activities.
7. After installing the required mitigation plantings, and the access path restoration plantings, the applicant shall request inspection of mitigation plantings and final the BDS Zoning Permit.
8. All restoration, mitigation and remediation shrubs and trees shall be marked in the field by a tag attached to the top of the plant for easy identification by the City Inspector; or the applicant shall arrange to accompany the BDS inspector to the site to locate mitigation plantings for inspection. If tape is used it shall be a contrasting color that is easily seen and identified.

D. The land owner shall maintain the required plantings to ensure survival and replacement. The land owner is responsible for ongoing survival of required plantings during and beyond the designated two-year monitoring period. After the 2-year initial establishment period, the landowner shall:

1. Obtain a Zoning Permit for a final inspection at the end of the 2-year maintenance and monitoring period. The applicant shall arrange to accompany the BDS inspector to the site to locate mitigation plantings for inspection. The permit must be finaled no later than 2 years from the final inspection for the installation of mitigation planting, for the purpose of ensuring that the required plantings remain. Any required plantings that have not survived must be replaced.
2. All required landscaping shall be continuously maintained, by the land owner in a healthy manner, with no more than 15% cover by invasive species. Required plants that die shall be replaced in kind.

E. Failure to comply with any of these conditions may result in the City's reconsideration of this land use approval pursuant to Portland Zoning Code Section 33.700.040 and /or enforcement of these conditions in any manner authorized by law.

Staff Planner: Stacey Castleberry

Decision rendered by: _____ **on August 15, 2017**
By authority of the Director of the Bureau of Development Services

Decision mailed: August 17, 2017

Note: In addition to the requirements of the Zoning Code, all uses and development must comply with other applicable City, regional, state and federal regulations.

This decision applies to only the City's environmental regulations. Activities which the City regulates through PCC 33.430 may also be regulated by other agencies. In cases of overlapping City, Special District, Regional, State, or Federal regulations, the more stringent regulations will control. City approval does not imply approval by other agencies.

About this Decision. This land use decision is **not a permit** for development. Permits may be required prior to any work. Contact the Development Services Center at 503-823-7310 for information about permits.

Procedural Information. The application for this land use review was submitted on April 27, 2017, and was determined to be complete on May 18, 2017.

Zoning Code Section 33.700.080 states that Land Use Review applications are reviewed under the regulations in effect at the time the application was submitted, provided that the application is complete at the time of submittal, or complete within 180 days. Therefore this application was reviewed against the Zoning Code in effect on April 27, 2017.

ORS 227.178 states the City must issue a final decision on Land Use Review applications within 120-days of the application being deemed complete. The 120-day review period may be waived or extended at the request of the applicant. In this case, the applicant did not waive or extend the 120-day review period. Unless further extended by the applicant, **the 120 days will expire on: September 15, 2017.**

Some of the information contained in this report was provided by the applicant. As required by Section 33.800.060 of the Portland Zoning Code, the burden of proof is on the applicant to show that the approval criteria are met. The Bureau of Development Services has independently reviewed the information submitted by the applicant and has included this information only where the Bureau of Development Services has determined the information satisfactorily demonstrates compliance with the applicable approval criteria. This report is the decision of the Bureau of Development Services with input from other City and public agencies.

Conditions of Approval. If approved, this project may be subject to a number of specific conditions, listed above. Compliance with the applicable conditions of approval must be documented in all related permit applications. Plans and drawings submitted during the permitting process must illustrate how applicable conditions of approval are met. Any project elements that are specifically required by conditions of approval must be shown on the plans, and labeled as such.

These conditions of approval run with the land, unless modified by future land use reviews. As used in the conditions, the term "applicant" includes the applicant for this land use review, any person undertaking development pursuant to this land use review, the proprietor of the use or development approved by this land use review, and the current owner and future owners of the property subject to this land use review.

This decision, and any conditions associated with it, is final. It may be appealed to the Oregon Land Use Board of Appeals (LUBA), within 21 days of the date the decision is mailed, as specified in the Oregon Revised Statute (ORS) 197.830. Among other things, ORS 197.830 requires that a petitioner at LUBA must have submitted written testimony during the comment period for this land use review. Contact LUBA at 775 Summer St NE Suite 330, Salem, OR 97301-1283 or phone 1-503-373-1265 for further information.

The file and all evidence on this case are available for your review by appointment only. Please call the Request Line at our office, 1900 SW Fourth Avenue, Suite 5000, phone 503-823-7617, to schedule an appointment. I can provide some information over the phone. Copies of all information in the file can be obtained for a fee equal to the cost of services. Additional information about the City of Portland, city bureaus, and a digital copy of the Portland Zoning Code is available on the internet at www.portlandonline.com.

Recording the final decision.
If this Land Use Review is approved the final decision will be recorded with the Multnomah County Recorder.

- *Unless appealed,* the final decision will be recorded after **August 17, 2017** by the Bureau of Development Services.

The applicant, builder, or a representative does not need to record the final decision with the Multnomah County Recorder.

For further information on your recording documents please call the Bureau of Development Services Land Use Services Division at 503-823-0625.

Expiration of this approval. An approval expires three years from the date the final decision is rendered unless a building permit has been issued, or the approved activity has begun.

Where a site has received approval for multiple developments, and a building permit is not issued for all of the approved development within three years of the date of the final decision, a new land use review will be required before a permit will be issued for the remaining development, subject to the Zoning Code in effect at that time.

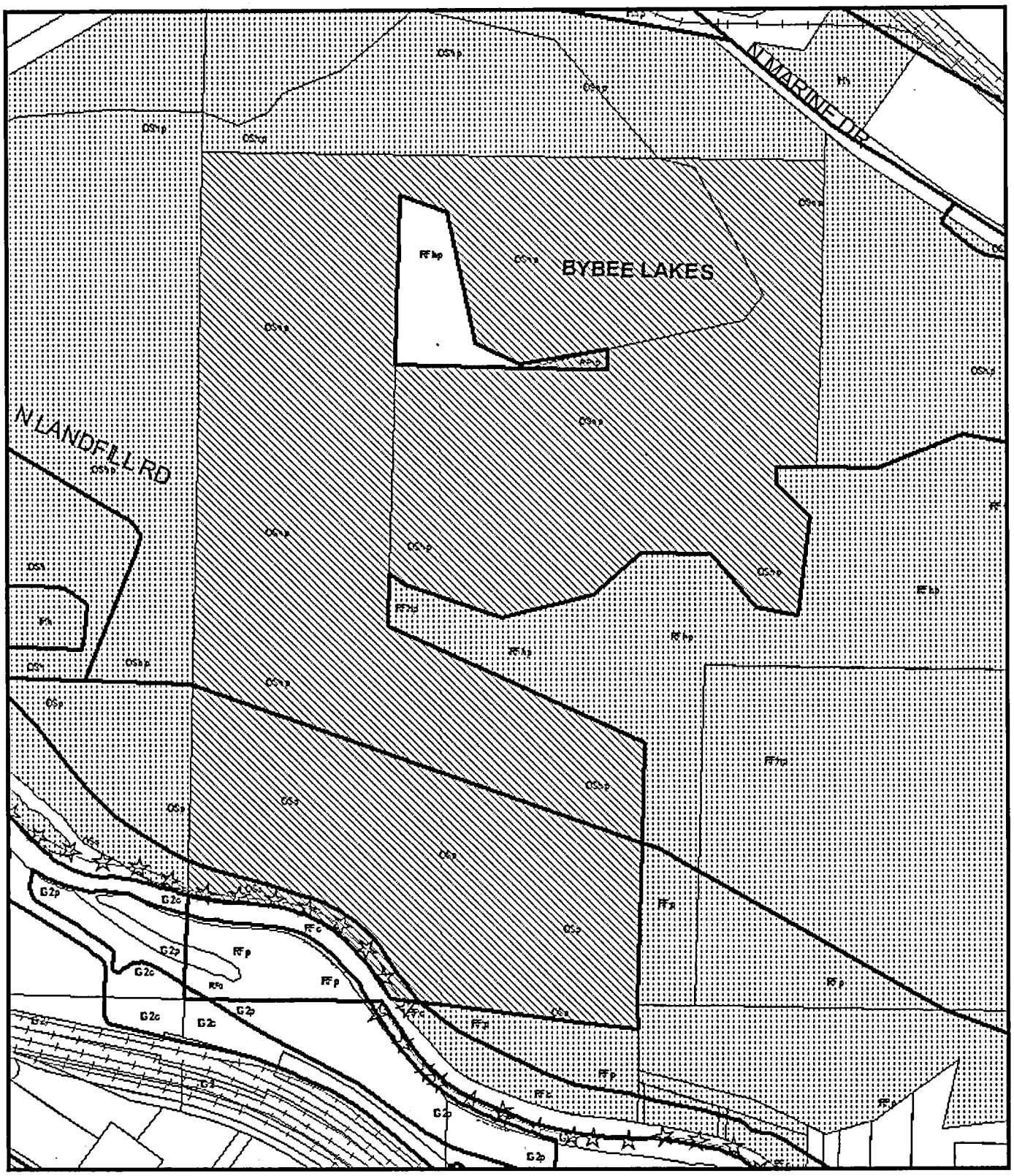
Applying for your permits. A building permit, occupancy permit, or development permit may be required before carrying out an approved project. At the time they apply for a permit, permitees must demonstrate compliance with:

- All conditions imposed herein;
- All applicable development standards, unless specifically exempted as part of this land use review;
- All requirements of the building code; and
- All provisions of the Municipal Code for the City of Portland, and all other applicable ordinances, provisions and regulations of the City.

EXHIBITS
NOT ATTACHED UNLESS INDICATED

A. Applicant's Statement
B. Zoning Map (attached)
C. Plans/Drawings:
   1. Existing Conditions Plan
   2. Site Plan (attached)
   3. Construction Management Plan (attached)
   4. Mitigation Plan and Forested Wetland Planting Plan (attached)
D. Notification information:
   1. Mailing list
   2. Mailed notice
E. Agency Responses:
   1. Bureau of Environmental Services
   2. Bureau of Transportation Engineering and Development Review
   3. Water Bureau
   4. Fire Bureau
   5. Site Development Review Section of BDS
   6. Bureau of Parks, Forestry Division
F. Correspondence: (None received)
G. Other:
   1. Original LU Application
   2. Early Assistance Memo: EA 16-283 875

The Bureau of Development Services is committed to providing equal access to information and hearings. Please notify us no less than five business days prior to the event if you need special accommodations. Call 503-823-7300 (TTY 503-823-6868).

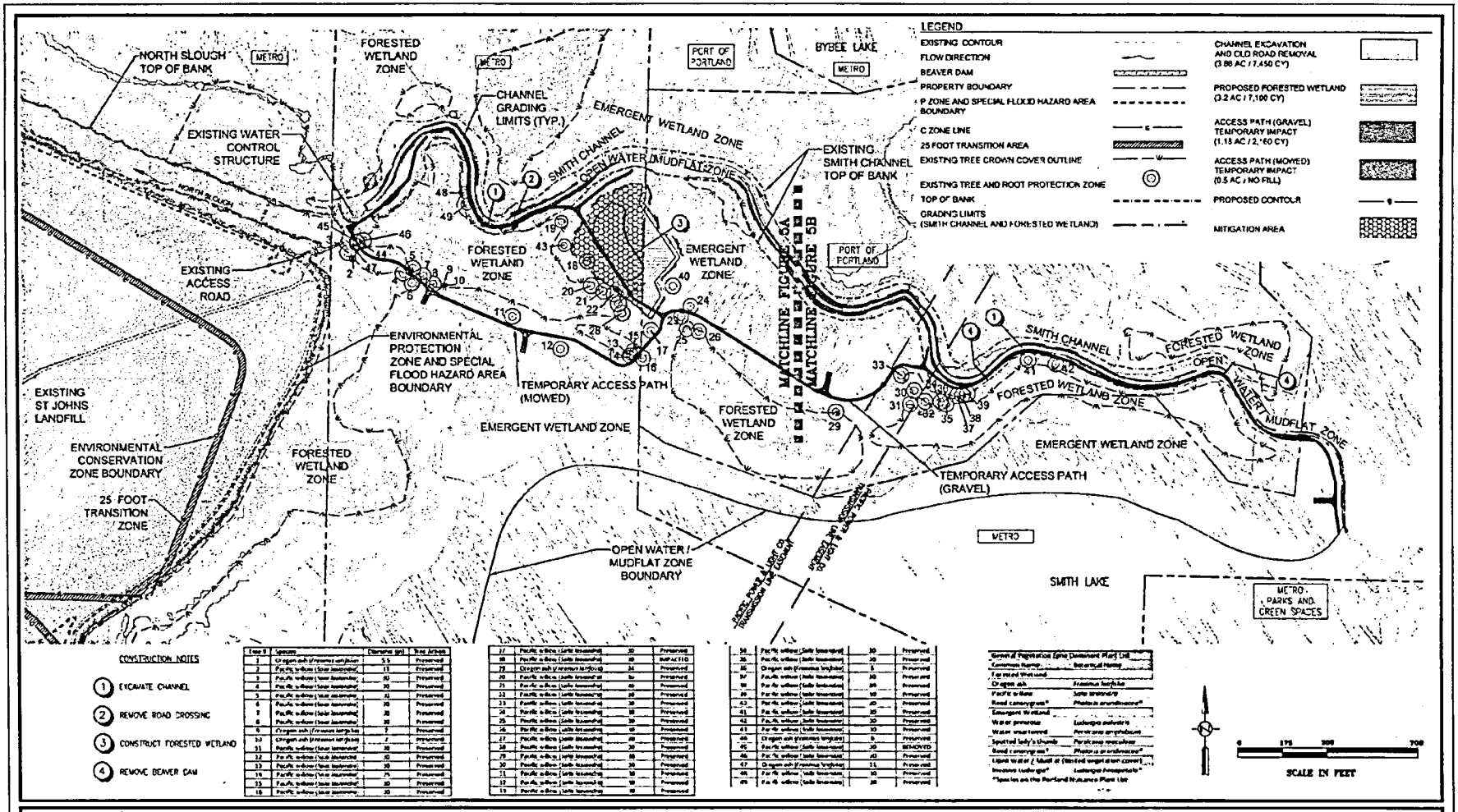


ZONING

Site
Also Owned Parcels
Recreational Trails

NORTH

File No. LU 17-162183 CN
1/4 Section 1824
Scale 1 inch = 800 feet
State_Id 2N1E31 400
Exhibit B (May 01, 2017)



Plan Provided by OTAK, Inc.

PHS
Pacific Habitat Services, Inc.

Site Plan Overview
Smith and Bybee Channel Management - Portland, Oregon

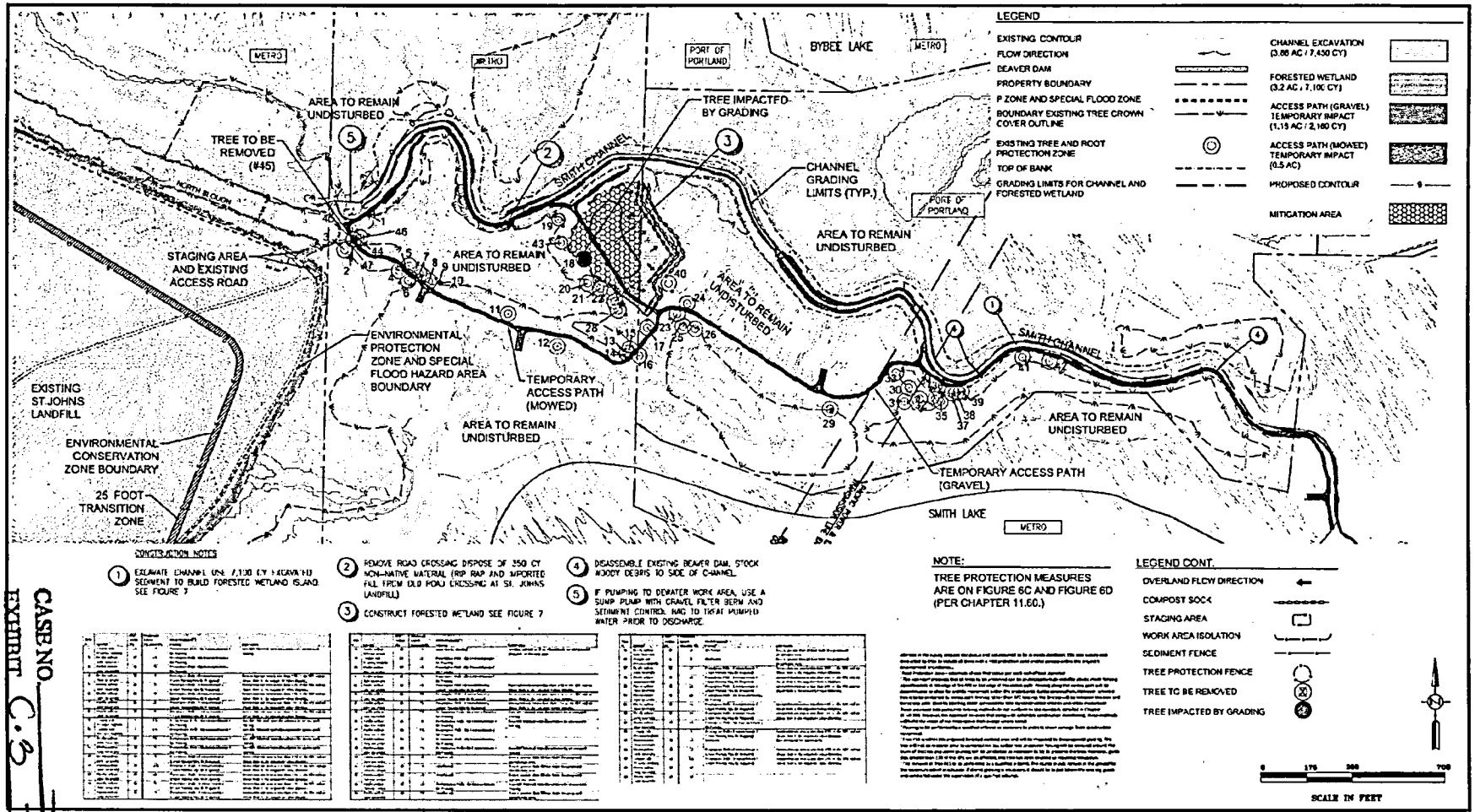
FIGURE 5

4-14-2017

Approved
City of Portland - Bureau of Development Services
LU # LU17-162185
Planner Stacey Castro Date 8/15/17
* Approval for Environmental Review only. Not a building permit.
Additional zoning requirements may apply.

CASE NO. EXHIBIT # C.2

LU17-162185



CASE NO.
EXHIBIT C.8

Pacific Habitat Services, Inc.

Plan Provided by OTAK, Inc.

Construction Management Plan And Tree Plan Overview
Smith and Bybee Channel Management - Portland, Oregon

FIGURE 6

4-14-2017

Approved
City of Portland - Bureau of Development Services
LU # LU 17-16218
Planner Date 8/15/17
* Approval for Environmental Review only. Not a building permit.
Additional zoning requirements may apply.

LU 17-16218

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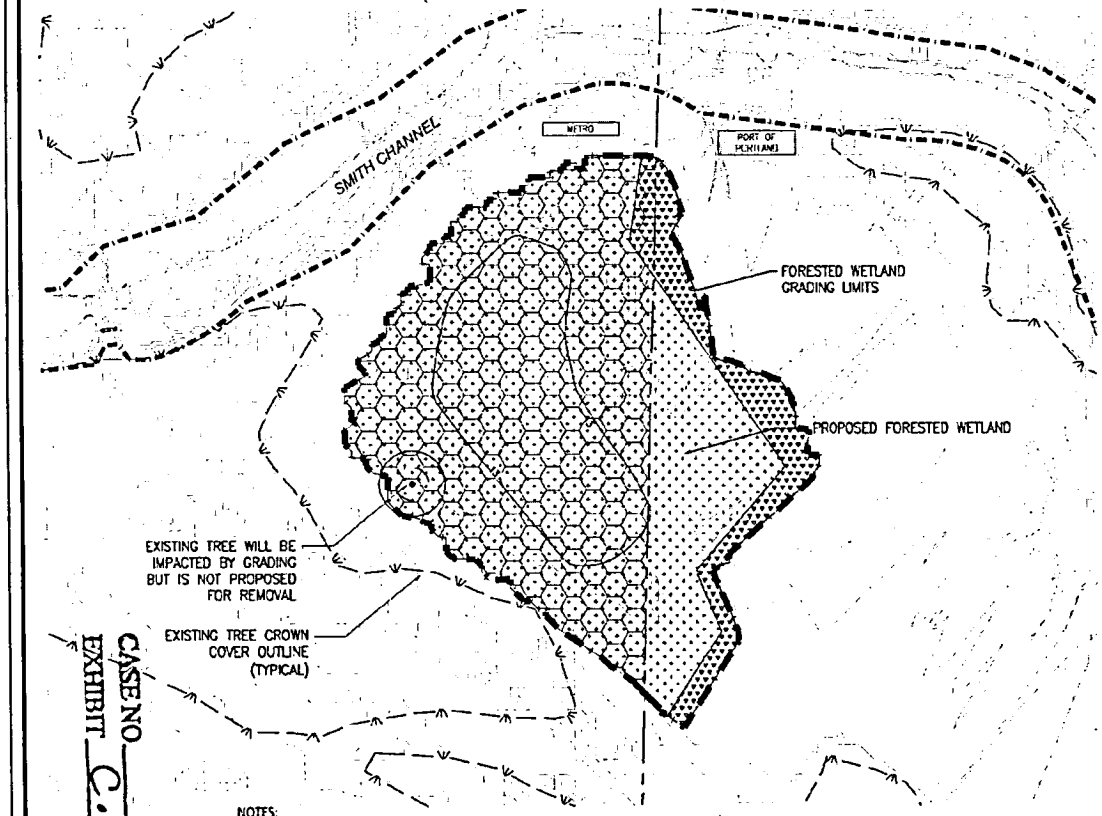

TOP OF BANK

MITIGATION AREA (2.1 AC – METRO PROPERTY)

TRANSITION PLANTING ZONE AND SEED MIX NO. 1 (0.3 AC)

FORESTED WETLAND PLANTING ZONE AND SEED MIX NO. 1 (2.9 AC)

PLANTING TABLE					
Mitigation Area (2.1 acres - METRO property)					
ZONE	SCIENTIFIC NAME	COMMON NAME	WIS*	SIZE**	QUANTITY
FORESTED WETLAND	*Cornus sericea*	Red-osier dogwood	FACW	12-24"	539
	Fraxinus latifolia	Oregon ash	FACW	12-24"	1,617
	Rosa pisocarpa	Swamp rose	FAC	12-24"	808
	Salix lasiandra	Pacific willow	FACW	Cutting	1,617
	Spiraea douglasii	Douglas spiraea	FACW	12-24"	808
TRANSITION AREA	*Cornus sericea*	Red-osier dogwood	FACW	12-24"	49
	Fraxinus latifolia	Oregon ash	FACW	12-24"	49
	Rosa pisocarpa	Swamp rose	FAC	12-24"	26
	Salix lasiandra	Pacific willow	FACW	Cutting	26
	Spiraea douglasii	Douglas spiraea	FACW	12-24"	17
Other Planting Area (1.1 acres - Port of Portland property)					
FORESTED WETLAND	*Cornus sericea*	Red-osier dogwood	FACW	12-24"	161
	Fraxinus latifolia	Oregon ash	FACW	12-24"	484
	Rosa pisocarpa	Swamp rose	FAC	12-24"	242
	Salix lasiandra	Pacific willow	FACW	Cutting	483
	Spiraea douglasii	Douglas spiraea	FACW	12-24"	242
TRANSITION AREA	*Cornus sericea*	Red-osier dogwood	FACW	12-24"	161
	Fraxinus latifolia	Oregon ash	FACW	12-24"	161
	Rosa pisocarpa	Swamp rose	FAC	12-24"	84
	Salix lasiandra	Pacific willow	FACW	Cutting	84
	Spiraea douglasii	Douglas spiraea	FACW	12-24"	53

* WIS = Wetland Indicator Status; FAC = Facultative; FACW = Facultative Wetland

** All plantings will be bare root except where noted as cuttings. Cuttings will be a minimum of ½" diameter.

SEED MIX NO. 1			
SCIENTIFIC NAME	COMMON NAME	WIS*	SEEDING RATE (LB/AC)
Agrostis exarata	Spike bentgrass	FACW	0.5
Beckmannia syzigachne	American sloughgrass	OBL	9.0
Carex comosa	Sedge	OBL	1.0
Deschampsia cespitosa	Tufted hairgrass	FACW	1.0
Deschampsia elongata	Slender hairgrass	FACW	1.0
Festuca arundinacea	Fine fescue	OBL	6.0

* WIS = Wetland Indicator Status; FAC = Facultative; FACW = Facultative Wetland

NOTES:
1. Willows will be stakes and cuttings. All other trees and shrubs shall be bare root, nursery propagated, and non-clonal in origin.
2. Plant materials are to be used for restoration purposes and should not be treated with pesticides, fungicides, or fertilizers.
3. The seed mix shall be supplied by a local nursery with the specification that the seed source must be as local as possible.
4. Plants listed on the Nuisance Plants List shall be removed from the mitigation area.
5. Trees shall not be staked or otherwise marked with non-biodegradable material.
6. Trees and shrubs will be planted in rows 7 feet apart, with plantings spaced at 4-foot intervals in rows.

CASE NO.
EXHIBIT C.4

LU 17-162189

0 50 100 200
SCALE IN FEET

Plan Provided by OTAK, Inc.

Pacific Habitat Services, Inc.

Mitigation Plan and Forested Wetland Planting Plan
Smith and Bybee Channel Management - Portland, Oregon

FIGURE 7

4-14-2017

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Approved
City of Portland - Bureau of Development Services
LU # LU 17-162189
Planner _____ Date 8/15/17
* Approval for Environmental Review only. Not a building permit.
Additional zoning requirements may apply.