



MEMORANDUM

To: Portland Water Bureau
From: Anita Cate Smyth, M.S., SPWS
Date: May 19, 2025
Re: **PWB Filtration Facilities: ORP 2 Wetland Response**

This memorandum responds to comments related to jurisdictional wetlands and waters of the state submitted during Open Record Period (ORP) 1. The responses below denote the exhibit in which the comment was found, a brief description of the issue raised, and our response to the comment.

Comments in Exhibit S.5

Comment: *Swale indicated on aerial image (page 2). "The 2024 Google Earth image below clearly shows a swale in the ground leading right up to Dodge park BLVD" (page 1).*

Response: The referenced Google Earth image included in the comment was modified by adding blue line to seemingly denote an area identified in the caption as "the Beaver Creek drainage swale." The area identified in the image as a drainage swale was piped beneath the agricultural field, presumably by the property owner, long before the wetland delineation occurred February 2023. The wetland delineation report (WD2023-0085), included in the record at S.33, shows the full extent of the resource within its study area at the time of the report concurrence in 2023.

Comments in Exhibit S.22

Comment: *WD2023-0085 is not in the record (page 1).*

Response: WD2023-0085 and agency concurrence with this report were attached to S.33 submitted into the record during ORP 1.

Comment: *While it is true that most of the pipelines avoid wetlands, some wetlands will still be impacted by pipeline site preparation and installation, as acknowledged by PWB in the Winterbrook report. Winterbrook identifies the impacted wetland a between the toe of the SE Dodge Park Blvd roadway embankment and an area of agricultural use (83 square feet). However, there are seasonal wetlands and a pond adjacent to the raw water pipeline portal (Figure 1), which have already been impacted (Figure 2). The area is currently graveled over and a temporary bridge installed. (page 2)*

Response: Pipeline site preparation and installation are both construction activities. Nonetheless, the wetland areas and pond along the raw water pipeline alignment were addressed in Exhibit S.33. As detailed in that response, the structure referenced in the comment in fact avoids impact to the wetlands located on either side of the dirt farm road that bisected two distinct delineated

wetlands on the property. Cory Rasico, City of Portland, Public Works Inspector, confirmed that the locations of the regulatory boundary of the pond and wetlands were located by surveyors prior to installation of erosion control measures and the construction of the bridge to ensure those activities occurred in uplands (pers. comm. May 7, 2025).

Comment: “...mitigation plantings proposed to offset construction impacts will not instantaneously restore functional wetland conditions. The establishment of wetland vegetation, soil structure, and hydrological function is a long-term process. Even under optimal conditions, it can take years or decades for planted vegetation to develop the structural complexity, soil microbial communities, and hydrological regimes that support wetland ecosystem services such as water filtration, flood attenuation, and wildlife habitat. As a result, there will be a substantial temporal gap between impact and ecological recovery, during which wetland function and biodiversity will remain impaired.” (page 2)

Response: At the Dodge Park Boulevard temporary wetland impact location, the 83 square feet of pipeline construction related impact is located in an area of active agricultural use. As described in the Supplemental Narrative for Temporary Disturbance to Non-Tidal Wetlands dated December 20, 2023 and submitted to DSL to support the request for a General Authorization (Exhibit S.33), the linear wetland has formed against the roadway fill slope in an area where ponding water occurs between a break between an existing stormwater culvert under the roadway and a pipe in the agricultural field.

In terms of vegetation impact and restoration, there is no woody vegetation in the area of impact. The dominant species in the area to be disturbed is *Phalaris arundinacea* (commonly known as reed canarygrass), designated a noxious/invasive species by the Oregon Department of Agriculture, City of Portland, and the Multnomah County Natural Resources Conservation Service. Per NWP-2024-102 and 64845-GA (Exhibit S.33), PWB will re-establish native herbaceous vegetation in the 83 square feet, which will provide increased biodiversity and habitat function compared with a monospecific stand of an invasive species. The reseedling will occur in the fall after pipeline installation and prior to filtration facility operation. Germination will happen within days of appropriate conditions (fall rains), with the seedling development continuing over weeks to several months. The reference in the comment to wetland plantings taking years or decades is not applicable to this wetland. There is no expected temporal loss of habitat function from the disturbance of *Phalaris arundinacea*.

In terms of project impact to soil structure, the disturbance area is located in an area of intensive agricultural use. The soil at this location is already routinely subject to seasonal disturbance from discing and tilling as well as compaction from light trucks and equipment used to harvest. The construction excavation will temporarily disturb the soil, but the pre-disturbance contours will be replaced and trenching measures will restore the pre-disturbance permeability and drainage, per Corps and DSL request and as stated in NWP-2024-102 and 64845-GA (Exh. S.33). Pre-construction agricultural activities are anticipated to resume in this area following construction.

Regarding hydrology, the water source for the wetland at Dodge Park Boulevard is surface water runoff from adjacent uplands and direct precipitation. Per Corps and DSL request and as stated in NWP-2024-102 and 64845-GA (Exh.S.33), the pipeline construction will occur during dry conditions. The work area will be isolated per stormwater Best Management Practices (BMPs) presented in the permit application to prevent the export of sediment to Beaver Creek

downstream. Following installation, soil contours and permeability will be restored to pre-development conditions for groundwater recharge and stormwater attenuation. The native herbaceous vegetation that will be planted following pipeline installation establishes quickly and will provide long-term soil stability once established. BMPs protect stability during the short period required for vegetation establishment described above. Because the work will happen in the dry season, no temporal loss of hydrologic function will occur. For these collective reasons, there will not be a long-term adverse effect to wetland function or habitat following the pipeline construction period.

At the 36910 SE Lusted Road location along the raw water pipeline alignment, there are no impacts to wetlands or waters of the state. Vegetation impacts during construction were limited to a thin strip of escaped pasture grasses and forbs on either side of the existing dirt road used by the property owner to access the north side of his property. Four saplings located just north of the farm road and an ash tree located near the northeast edge of the wetland south of the farm road were also removed during construction to place the silt fencing and other erosion control BMPs. The saplings were at the edge of a larger community of dense shrub vegetation. As described in Exhibit S.33, the following vegetation will be planted around the wetland and pond area once construction of the raw water pipeline is complete:

- Forest Shrub Mix: Bare root native shrubs with native understory seeding;
- A specific seed mix for SEC seeding;
- Filter strip seeding; and
- Slough sedge (*Carex obnupta*) and tufted hairgrass (*Deschampsia cespitosa*) container plantings immediately next to the road.

The seed mixes and wetland plantings will establish quickly and provide both habitat and filtration benefits at the edge of the resource immediately following construction of the raw water pipeline and prior to facility operation.

To replace the saplings and ash tree, 5 red alder and 5 Western red cedar trees will be planted in the wetland area located north of the road. An updated wetland enhancement plan and a corresponding update to the landscape plan for the raw water alignment (00-LU-200) are attached. The trees are anticipated to contribute new habitat functions to this area, including shading, perching and nesting habitat, allochthonous inputs supporting insects and the salmonid food chain, and other functions.

In response to alleged impacts to wetland soil and hydrology functions at the raw water pipeline alignment. As addressed in the memo included in Exhibit S.33, no wetlands were impacted at this location. The construction access stabilized an existing road to create a drive surface that can support the design equipment used to construct the project. The pre-existing road surface did not contain wetland soil and the construction of the road did not alter the adjacent soil within wetlands. Water inflow into the pond and the adjacent wetland and culvert function were not impacted by building the construction access and will not be impacted by leaving the hardened surface in place once construction is complete. Consistent with my conclusion in the memo at S.33, taking into consideration the pre-construction condition of the road and the wetland enhancements described above, leaving the construction road in place post-construction will not adversely affect the wetland and pond functions or the habitat within and surrounding the

adjacent wetlands and ponds. The claims in the comment related to the installation of the raw water pipeline are addressed in a separate memo.

Comment: “BMPs are insufficient to protect the areas [sic] natural resources” (page 3):

- *Focus on minimization not elimination*
- *Not site specific*
- *Do not address cumulative or subsurface impacts*
- *Do not apply to the protective county standards*

Response: The BMPs that will be implemented during pipeline construction at the Dodge Park Boulevard site and along the raw water alignment during construction were selected based on a context-sensitive evaluation of the specific risks posed by the construction activities required for this project. The evaluation of location, seasonal changes, current land use practices, construction methods, existing soil/hydrology/vegetation conditions, guided the selection and design of site-specific measures to protect on- and off-site resources. For the raw water alignment, this included the design of the hardened road surface to protect the wetlands and to avoid damage to the culvert and subsequent in-water repair or replacement. The site specific considerations across the project were developed in discussion with the project design team and in several Streamlining Committee meetings attended by federal, state, and local resource agencies. Thus, the BMP design and protection of natural resources was specific to this project, focused on avoidance of on- and off-site impacts to the extent feasible before proceeding to minimization and rectification of impacts per agency permitting requirements, and the project methods, BMPs, and mitigation approved by those agencies in their respective permit processes as sufficient to achieve short- and long-term protection.

Cumulative impact evaluations consider the combined effect of many small impacts in a system that combine to create an aggregate degradative effect. Because the impacts to the wetland at Dodge Park Boulevard are temporary, very small (83 square feet), do not impact woody vegetation that takes longer to replace than herbaceous vegetation, and will occur in the dry season with active measures to preserve the existing site drainage and hydrologic regime, the existing condition will be replaced following pipeline installation. Consequently, there is no cumulative impact to the system. Claims related to cumulative impacts from blasting or drilling along the raw water alignment are addressed in a separate groundwater and geologic hazard memo.

The standard that applies to facility and pipeline operation may be different than the state and federal regulations that apply to the temporary wetland impact that will occur during construction. However, that does not alter my conclusion that based upon the limited temporary impact and the functional improvement to the wetland area over existing conditions through native vegetation restoration that will be implemented following installation of the finished water pipeline, the project will not result in adverse effects to wetland habitat or function along Dodge Park Boulevard. Nor does it alter my conclusion that retention of the hardened road structure in combination with supplemental planting following construction will not adversely affect pond or wetland habitat or function on the raw water alignment.

Comments in Exhibit S.11

Comment: *“Water quality in nearby wetlands and streams may be impaired by runoff, vehicle emissions, or chemical leakage.” (page 1)*

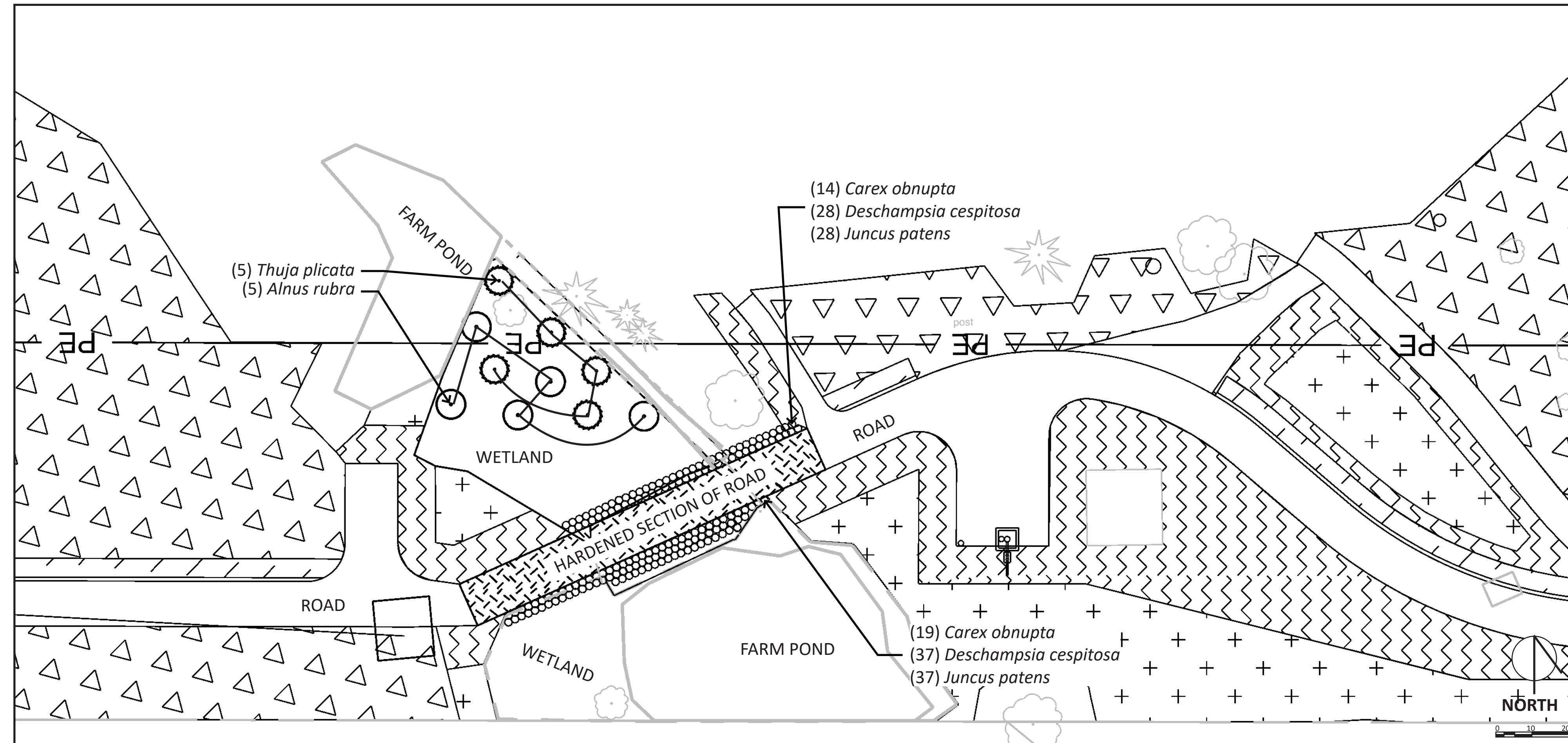
Response: This comment is seemingly intended to address facility operation impacts but fails to identify any specific wetland or stream. There are no wetlands located on the filtration facility site. (See, Exhibit S.33 wetland delineation documents). As described above, the wetland along Dodge Park Boulevard is located directly adjacent to an active County Road. Facility operation will not generate sufficient vehicle traffic along Dodge Park Boulevard to impact water quality of the wetland beyond existing impacts due to the location of the wetland between active travel lanes and a managed agricultural field. Along the raw water pipeline alignment, once construction is complete PWB staff will visit the site just once a month for routine maintenance inspections. The property owner is expected to continue to use the structured surface for vehicle access through the property in the same way they used the two-track dirt road between the wetlands prior to construction. As discussed in detail in Exhibit S.33, overall water quality of the wetlands and pond will be improved by the bridge structure (compared with pre-construction road sediment discharge into wetlands) and by runoff filtration by proposed native plantings. Finally, no chemicals will be used or stored in any of the delineated wetland areas during facility operation. Chemical containment generally during facility operation is addressed elsewhere in the record.

Comments in Exhibit S.26

Comment: *Seasonal waterway and wetlands should have been assessed; mitigation bank discussion. The impacted habitats that should have been quantitatively assessed include the seasonal waterway and wetlands within the construction zone, the agricultural fields, hedgerows and forest edge habitats. A significant component of the Wetland Mitigation Bank program is the establishment of habitat conditions prior to development impacts, and the creation of stewardship funds to ensure long-term maintenance and monitoring of the mitigation site. (pg. 6)*

Response: Waterways and wetlands were documented in detail, and this documentation was reviewed and approved by the Department of State Lands (Exhibit S.33). It appears that the wetland mitigation bank concept discussed in Exhibit S.26 was provided as an example rather than a specific comment on project related wetland impacts. In any case, wetland mitigation banking is not applicable to the project as there is no permanent impact to jurisdictional resources requiring off-site compensatory mitigation.

WETLAND ENHANCEMENT AT 36910 SE LUSTED ROAD



PLAN
1"=20'-0"

	Forest Shrub Mix		
	Botanical Name	Common Name	Planting Size
	<i>Holodiscus discolor</i>	Oceanspray	Bare Root 1+1
	<i>Mahonia aquifolium</i>	Tall Oregon Grape	Bare Root 1+1
	<i>Oemleria cerasiformis</i>	OsoBerry	Bare Root 1+1
	<i>Philadelphus lewisii</i>	Mock Orange	Bare Root 1+1
	<i>Ribes sanguineum</i>	Redflowering Currant	Bare Root 1+1
	<i>Rubus parviflorus</i>	Thimbleberry	Bare Root 1+1
	<i>Sambucus racemosa</i>	Red Elderberry	Bare Root 1+1
	<i>Symphoricarpos albus</i>	Snowberry	Bare Root 1+1








1. Seed area With Forest Seeding Mix prior to planting shrubs, see 32 92 00 Seeding for seed mix.
2. Install bareroot plant material using the Slit Planting Method/Detail 3293-002 or the Side Hole Planting Method/Detail 3293-003 sheet STD-L-0001,
3. For typical layout, see Forest Restoration Shrub Layout, STD-L-0001 See Detail 3293-001

Plant List			
Species	Common Name	Size	Spacing
TREES			
<i>Alnus rubra</i>	Red Alder	Bareroot	See Plan
<i>Thuja plicata</i>	Western Red Cedar	Bareroot	See Plan
GRASSES			
<i>Carex obnupta</i>	Slough Sedge	1 gallon	24" O.C.
<i>Deschampsia cespitosa</i>	Tufted Hair Grass	1 gallon	24" O.C.
<i>Juncus patens</i>	California Gray Rush	1 gallon	24" O.C.

GENERAL SHEET NOTES

1. ALL WORK AREAS RESTORED TO EXISTING GRADE
2. REFER TO SEC RW-01 (APPENDIX A.3) FOR DETAILS FOR SEC WORK.

LEGEND

	Pasture Seeding
	SEC Seeding
	Forest Shrub Mix with Native Understory Seeding
	Filter Strip Seeding
	Proposed Grasses
	Proposed Trees
	Existing Trees



CONFIDENTIAL











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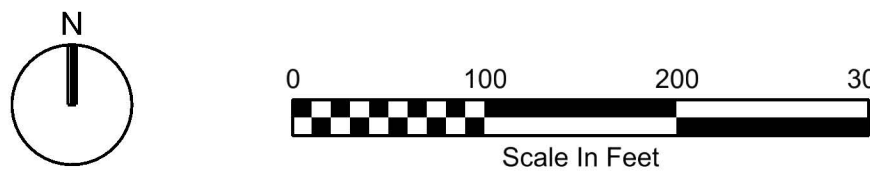
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1. ALL WORK AREAS RESTORED TO EXISTING GRADE
2. REFER TO SEC RW-01 (APPENDIX A.3) FOR DETAILS FOR SEC WORK.
3. SEE SHEET GEN-L-061 FOR PLANT SCHEDULE AND SPEC 32 92 00 FOR SEEDING INFORMATION.

- ## LEGEND

- | | |
|---|----------------------------------|
|  | EXISTING STRUCTURES |
|  | CONTOURS |
|  | PIPELINE |
|  | SEC ZONE |
|  | CONIFEROUS TREE |
|  | DECIDUOUS TREE |
|  | EASEMENT |
|  | PROPERTY LINE |
|  | RIGHT OF WAY |
|  | PIPELINE ACCESS VAULT - AT GRADE |



REGISTERED
767
David S. Goodyke
OREGON
05/11/12
LANDSCAPE ARCHITECT
RENEWALS: 5-11-25

WARNING

0 1"



If this bar does not measure 1" then the drawing is not to scale



PROPOSED CONDITIONS PLAN
GRID 1, GRID 2, GRID 3

SAP Project No
W02563

1/4 Section

Sheet No
LU-200