

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

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file from your tip or other file sharing website.					
Contact and Authorization Information					
Applicant D Owner Name, Firm and Address:	Business phone # Mobile phone # (optional) E-mail:				
Authorized Legal Agent, Name and Address (if different): Business phone # Mobile phone # (optional) E-mail:				
I either own the property described below or I have legal authority property for the purpose of confirming the information in the repo	y to allow access to the property. I authorize the Department to access the rt, after prior notification to the primary contact.				
Typed/Printed Name:	Signature:				
Date: Special instructions regarding s	site access:				
Project and Site Information					
Project Name:	Latitude: Longitude: decimal degree - centroid of site or start & end points of linear project				
Proposed Use:	Tax Map #				
	Tax Lot(s)				
	Tax Map #				
Project Street Address (or other descriptive location):	Tax Lot(s)				
	Township Range Section QQ				
Use separate sheet for additional tax and location informati					
City: County: Waterway: River Mile:					
Wetland Delineation Information	Waterway: River Mile:				
	Waterway: River Mile: Phone # Mobile phone # (if applicable)				
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SW Corridor Project

Wetland Delineation Report

Prepared for: **Metro** 600 NE Grand Avenue Portland, OR 97232

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November 2020

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1.0 Introduction

Metro and its partners (TriMet, Oregon Department of Transportation, Washington County and the cities of Durham, Portland, Tigard and Tualatin) are conducting the Southwest Corridor Light Rail Project (SWCLRP or Project). The SWCLRP will bring high-capacity transit to one of the most congested travel corridors in the Portland metro region. The project will reduce the strain on roads and trains, getting people to jobs, schools and other destinations more quickly and reliably. The new light rail line will run from Downtown Portland to Tualatin, connecting regional centers including West Portland Town Center, Tigard Triangle, Downtown Tigard and Bridgeport Village.

The purpose of this wetland delineation is to define the boundaries of wetlands and other waters (e.g. streams, ponds) that are regulated by the U.S. Army Corps of Engineers (Corps) and the Oregon Department of State Lands (DSL) in accordance with Section 404 of the Clean Water Act and the Oregon Removal Fill Law, respectively.

1.1 Wetland Delineation Study Area (WSA)

The majority of the Project occurs in highly developed urban and suburban land. As part of the National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) process, an area of potential affect (APE) was developed to cover the extents of potential project impacts within the overall project area. A subset of the NEPA APE was used to develop a smaller wetland delineation study area (WSA) to focus on areas where wetlands and other regulated waters (e.g. streams and ponds) might actually occur in the overall APE.

The WSA includes the following types of areas within the greater NEPA APE:

- Public right of way
- Parcels with areas of naturalized vegetation where rights of entry were granted. (Naturalized vegetation refers to both native and non-native plant communities that occur naturally on the landscape, as opposed to areas such as maintained lawns, planter strips, and the like.)

The project study area is shown in Appendix A, Figure 1. The NEPA APE has been broken down into three segments –Segments A, B, and C –from north to south respectively. The WSA follows this same breakdown.

1.2 Report Organization and Nomenclature

This report is organized in accordance with DSL's requirements for wetland delineation reports (Oregon Administrative Rule 141-090) and DSL's guidance for large and linear projects (DSL 2017). In following with the large and linear project guidance, most of the delineation findings are summarized in a series of figures, data sheets, and tables, rather than in detailed report text. These materials are organized into the following appendices, with findings further subdivided by project Segment within each appendix as appropriate.

- Appendix A: Wetland delineation figures
- Appendix B: Data sheets
- Appendix C: Photos
- Appendix D: Delineation results tables
- Appendix E: WETS table

Documentation of delineated features follows the nomenclature provided in Table 1.

Table 1. Mapping and Documentation Terms and Nomenclature

Nomenclature	Meaning
	W = wetland, S = stream, D = ditch
W-##, S-##, D-##	The first # describes the project segment, which was used to divide the study area
w- m , 3- m , D-m	The second # is the consecutive number assigned to each feature. For example, feature W-C3 refers to a wetland in Segment C with an ID number of 3.

2.0 Landscape Setting and Land Use

The Project corridor runs from Portland's urban core and heads southward to the Cities of Tigard and Tualatin, running through a highly developed urban and suburban landscape (Appendix A, Figure 1). A description of each Project segment is provided below.

2.1 Segment A

Segment A starts near the Portland State University Campus in downtown Portland, around the intersections of SW 5th Avenue and SW Lincoln Street. The segment continues to the south and is generally centered on SW Barbur Boulevard. The area around the Ross Island Bridge western ramps and SW Naito Parkway is also included in the WSA. The southern extent of Segment A occurs along SW Barbur Boulevard near the intersection of SW Florida Street and SW 2nd Avenue (note this intersection is just west of the WSA).

Areas east of SW Barbur Boulevard are fully developed with all natural drainages having been piped underground and into Portland's combined storm/sanitary sewer system many years ago. The area west of SW Barbur Boulevard consists of a mix of developed areas and relatively large tracts of park land comprised of second growth forests along steep hillsides. Several drainages flow down these hill sides; however, all flow into pipes prior to entering the WSA, then flow into City of Portland sewer infrastructure. Most roads in the Segment A WSA had curb and gutters, and no roadside drainage ditches were observed. A single wetland was delineated in this segment of the WSA.

2.2 Segment B

Segment B continues from the southern extent of Segment A and continues southwest along SW Barbur Boulevard to roughly the intersection with SW 68th Avenue. This segment is fully developed; however, two short remnant sections of drainageways were observed in the WSA and are described further in the results tables provided in Appendix D. Most roads in the Segment B WSA have curb and gutters; however, a few roadside drainage ditches were observed and are also described in Appendix D.

2.3 Segment C

Segment C continues from the southern end of Segment B to the southwest along the SW Barbur Boulevard and I-5 corridor but then veers southward near the intersection of SW Pacific Highway and SW 68th Parkway. The segment WSA then heads west and crosses I-5 near the Knez Wetlands. It eventually heads southward again to Bridgeport Village and Lower Boones Ferry Road. Segment C is highly developed; however, it contains by far the greatest amount of wetland resources in the WSA. The wetlands are associated with streams such as Red Rock Creek, Ball Creek and Fanno Creek in level areas near Tigard. The Knez Wetlands, managed by The Wetlands Conservancy, occurs in this Segment. Wetland and waterway resources are described further in the results tables provided in Appendix D.

3.0 Site Alterations

As described in Section 2.0, the WSA segments occur in highly developed areas. Many of the historical natural drainageways have been highly altered, realigned, and in many instances piped into local storm sewer systems.

4.0 Precipitation Data and Analysis

Precipitation data is provided for each of the different field date periods. Field work occurred in 2019 on April 25, June 6 and 7, and July 11 and in 2020 on May 15 and June 23. As described below, precipitation during the 2019 field work dates was typically within the range of normal and no change in delineation methods was needed. For the 2020 dates, precipitation ranged from normal to below normal. Despite the below normal conditions changes in methods were not needed since there were typically clear breaks in other wetland indicators (i.e. soils and plant communities) that allowed for easy delineation of wetland and waterway boundaries, and secondary indicators of wetland hydrology were also present.

4.1 Spring 2019 (Field Work for Segments A and B)

Table 2 shows the two-week precipitation total for the closest available station for which daily values were available (Portland, Oregon) prior to the fieldwork which occurred on April 25, 2019. Fieldwork for this period focused on all of the Segment B study area and readily accessible areas of right of way in the Segment A WSA. The precipitation record reveals that precipitation was low and generally below the range of normal for the short and medium term prior to the site

visit. Percent of normal precipitation for the water year for the field date was 79 percent (Table 4). Therefore, it was assumed that hydrologic conditions were relatively normal and no change in methods was needed.

April 12	April 13	April 14	April 15	April 16	April 17	April 18		
Trace	0.12	0.04	0.11	0.03	Trace	0.00		
April 19	April 20	April 21	April 22	April 23	April 24	April 25*		
0.18	0.00	0.00	0.01	Trace	0.00	0.00		
Total over 2 w	Total over 2 weeks							
0.49								

Table 2. Precipitation for Field Investigation and Two Weeks Prior, in Inches

*Day of field investigation. Source: (NWS 2019)

Table 3. Percent of Normal Precipitation for the 3 Months Preceding the Field Investigation

Month	Observed Precipitation for Month ¹ (Inches)	Normal Precipitation for Month ² (Inches)	Percent Normal Precipitation	WETS Table 30% Range of Normal	Within Normal WETS range?
Jan 2019	2.79	5.07	55%	2.98 – 6.15	No
Feb 2019	4.10	4.18	98%	2.84 – 4.98	Yes
March 2019	1.54	3.71	42%	2.85- 4.31	No

¹ Observed precipitation data from from Portland Airport gage location. Source: (NWS 2019)

² Monthly normal values from the Portland Airport NRCS WETS table data. Source: (NRCS 2019)

Table 4. Percent of Normal Precipitation for the Water	r Year Preceding the Field Investigation
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Month	Observed Precipitation (Inches)	Normal Precipitation (Inches)	Departure from Normal (inches)	Within 30% of Normal Precipitation for Water Year?
April 25, 2019	22.77	28.68	-5.91	Yes (79%)

¹ Water year data for Portland, Oregon based on October 1 start date. Source: (NWS 2019)

4.2 Spring 2019 (Field Work for Segment C)

Table 5 shows the two-week precipitation total for the closest available station for which daily values were available (Portland, Oregon) prior to the field work which occurred on June 6 and 7, 2019. Fieldwork for this period focused on the Segment C WSA right of way and properties with rights of entry. The precipitation record reveals that precipitation was low but within the range of normal for the short and medium term prior to the site visit. Although March 2019 was below normal, April and May were at or near normal (Table 6), and percent of normal precipitation for

the water year for the field date was 75 percent (Table 7). Therefore, it was assumed that hydrologic conditions were relatively normal and no change in methods was needed.

May 24	May 25	May 26	May 27	May 28	May 29	May 30
0.05	0.37	0.00	trace	0.00	0.00	0.00
May 31	June 1	June 2	June 3	June 4	June 5	June 6*
trace	0.00	0.00	0.00	0.00	trace	0.01
June 7*	Total over 2 weeks					
0.15	0.58 inches					

Table 5. Precipitation for Field Investigation and Two Weeks Prior, in Inches

*Day of field investigation. Source: (NWS 2019)

Table 6. Percent of Normal Precipitation for the 3 Months Preceding the Field Investigation

Month	Observed Precipitation for Month ¹ (Inches)	Normal Precipitation for Month ² (Inches)	Percent Normal Precipitation	WETS Table 30% Range of Normal	Within Normal WETS range?
March 2019	1.54	3.71	42%	2.85- 4.31	No
April 2019	2.98	2.64	113%	1.93- 3.10	Yes
May 2019	1.51	2.38	64%	1.44- 2.88	Yes

¹ Observed precipitation data from from Portland Airport gage location. Source: (NWS 2019)

² Monthly normal values from the Portland Airport NRCS WETS table data. Source: (NRCS 2019)

Date	Observed Precipitation (Inches)	Normal Precipitation (Inches)	Departure from Normal (inches)	Within 30% of Normal Precipitation for Water Year?
June 7, 2019	24.30	32.00	-7.70	Yes (75% of normal)

¹ Water year data for Portland, Oregon based on October 1 start date. Source: (NWS 2019)

4.3 Summer 2019 (Field Work for Segment A)

Table 8 shows the two-week precipitation total for the closest available station for which daily values were available (Portland, Oregon) prior to the field work which occurred on July 11, 2019. Fieldwork for this period focused on the Segment A WSA, particularly properties with rights of entry and more difficult to access portions of the right of way. The precipitation record reveals that precipitation was low but generally within the range of normal for the short and medium term prior to the site visit. Precipitation for the preceding 3 months was within the range of normal for 2 out of 3 months (Table 9). Precipitation for the water year was low, but just within the range of normal at 76 percent (Table 10). Therefore, it was assumed that hydrologic conditions were relatively normal and no change in methods was needed.

June 28	June 29	June 30	July 1	July 2	July 3	July 4
0.00	0.00	0.00	0.00	Trace	0.02	0.00
July 5	July 6	July 7	July 8	July 9	July 10	July 11 *
0.03	0.02	0.04	0.01	0.37	0.47	Trace
Total over 2 we	eks					
0.96						

Table 8. Precipitation on Day of Field Investigations and Two Weeks Prior in Inches

*Day of field investigation. Source: (NWS 2019)

Date	Observed Precipitation for Month ¹ (Inches)	Normal Precipitation for Month ² (Inches)	Percent Normal Precipitation	WETS Table 30% Range of Normal	Within Normal WETS range?
April 2019	2.98	2.64	113%	1.93 3.10	Yes
May 2019	1.51	2.38	64%	1.44 2.88	Yes
June 2019	0.45	1.59	28%	0.94 – 1.93	No

¹ Observed precipitation data from Portland International Airport gage location. Source: (NWS 2019) ² Monthly normal values from the Portland international Airport NRCS WETS table data. Source: (NRCS 2019)

		X A A	
Table 10. Percent of Normal Preci	pitation for the Water	Year through Da	ay of Field Work

Date	Te Precipitation	Normal Precipitation (Inches)	Departure from Normal (inches)	Within 30% of Normal Precipitation for Water Year?
July 11, 2019	25.52	33.54	-8.02	Yes (76%)

¹ Water year data for Portland, Oregon based on October 1 start date. Source: (NWS 2019)

4.4 Spring 2020 (Field Work for Segment C-Rail ROW)

Table 11 shows the two-week precipitation total for the closest available station for which daily values were available (Portland, Oregon) prior to the field work which occurred on May 15, 2020. Fieldwork for this period focused on the Segment C WSA that occurs along existing rail right of way. The precipitation record reveals that a little over an inch of rain fell in the immediate period leading up to the site visit, but was notably below the range of normal for the medium term prior to the site visit (Table 12). Precipitation for the water year was low, but just below the range of normal at 69 percent (Table 13). Hydrologic conditions were relatively normal to below normal and no change in methods were needed.

May 2	May 3	May 4	May 5	May 6	May 7	May 8
0.21	0.23	0.02	trace	0.05	0.00	0.00
May 9	May 10	May 11	May 12	May 13	May 14	May15 *
0.00	0.00	0.13	0.05	0.03	0.20	0.16
Total over 2 we	eks			-		
1.08						

Table 11. Precipitation on Day of Field Investigations and Two Weeks Prior in Inches

*Day of field investigation. Source: (NWS 2019)

Date	Observed Precipitation for Month ¹ (Inches)	Normal Precipitation for Month ² (Inches)	Percent Normal Precipitation	WETS Table 30% Range of Normal	Within Normal WETS range?
February 2020	1.55	4.18	37%	2.84 - 4.98	No
March 2020	2.43	3.71	65%	2.85 – 4.31	No
April 2020	0.79	2.64	30%	1.93 – 3.10	No

¹ Observed precipitation data from Portland International Airport gage location. Source: (NWS 2020) ² Monthly normal values from the Portland international Airport NRCS WETS table data. Source: (NRCS 2019)

Table 13. Percent of Normal Precipitation for the Water Year through Day of Fie	Vd Work
TADIE 13. FEICEIIL UI NUTITAI FIECIDILALIUTI TUI LITE WALET TEAT LITTUUUTI DAV UT FIE	

Date	Observed Precipitation (Inches)	Normal Precipitation (Inches)	Departure from Normal (inches)	Within 30% of Normal Precipitation for Water Year?
May 15, 2020	20.92	30.24	-9.32	No (69%)

¹ Water year data for Portland, Oregon based on October 1 start date. Source: (NWS 2020)

4.5 Spring 2020 (Field Work for Segments B and C— Additional Parcels)

Table 14 shows the two-week precipitation total for the closest available station for which daily values were available (Portland, Oregon) prior to the field work which occurred on June 23, 2020. Fieldwork for this period focused on the Segment C WSA where new right of entry had been granted. The precipitation record reveals that a little over an inch of rain fell in the immediate period leading up to the site visit, but was below to within the range of normal for the medium term prior to the site visit (Table 15). Precipitation for the water year was within the range of normal for the water year (Table 16). Hydrologic conditions were relatively normal to below normal and no change in methods were needed.

June 10	June 11	June 12	June 13	June 14	June 15	June 16
Trace	0.03	0.04	0.21	0.01	0.35	0.19
June 17	June 18	June 19	June 20	June 21	June 22	June 23*
0.00	0.00	0.00	0.33	0.00	0.00	0.00
Total over 2 w	veeks					
1.16						

Table 14. Precipitation on	Dav of Field Investigations a	and Two Weeks Prior in Inches
	Eug er i feru mit eenganeme e	

*Day of field investigation. Source: (NWS 2020)

Table 15. Percent of Norma	I Precinitation for the Thr	ree Months Precedina the	Field Investigation
		ce monais i receang are	, i icia investigation

Date	Observed Precipitation for Month ¹ (Inches)	Normal Precipitation for Month ² (Inches)	Percent Normal Precipitation	WETS Table 30% Range of Normal	Within Normal WETS range?
March 2020	2.43	3.71	65	2.85 – 4.31	No
April 2020	0.79	2.64	30	1.93 – 3.10	No
May 2020	2.21	2.38	93	1.44 – 2.88	Yes

¹ Observed precipitation data from Portland International Airport gage location. Source: (NWS 2020) ² Monthly normal values from the Portland international Airport NRCS WETS table data. Source: (NRCS 2019)

Table 16. Percent of Normal Preci	initation for the Water	Vear through Day of Field Work	
		real unough Day of Field Work	<u>۱</u>

Date	Observed Precipitation (Inches)	Normal Precipitation (Inches)	Departure from Normal (inches)	Within 30% of Normal Precipitation for Water Year?
June 23, 2020	25.47	32.99	-7.52	Yes (77%)

¹ Water year data for Portland, Oregon based on October 1 start date. Source: (NWS 2020)

5.0 Methods

5.1 Preliminary Resource Review

Reference materials were reviewed prior to the field investigation to provide information regarding the possible presence of wetlands, water features, hydric soils, wetland hydrology, and site topography. The materials reviewed included:

- ESRI. USA Topographic Maps:
 - o 1984. Beaverton, Oregon.
 - o 1984. Gladstone, Oregon.
 - o 1984. Lake Oswego, Oregon.
 - o 1990. Linnton, Oregon.
 - o 1990. Mount Tabor, Oregon-Washington.
 - o 1990. Portland, Oregon-Washington.
- The Metro Data Resource Center Regional Land Information System (RLIS). 2019. Tax Lots.
- US Fish and Wildlife Service. 2019. National Wetlands Inventory (1977 to present). Branch of Habitat Assessment.
- U.S. Geological Survey. 2017. National Hydrography Dataset.
- Natural Resource Conservation Service (NCRS). 2016. Soil Survey Geographic (SSURGO) database for Clackamas, Multnomah, and Washington Counties, Oregon.
- ESRI. 2019. ArcGIS Online, USA area World Imagery, DigitalGlobe.

The topographic maps were examined to determine water features and topography of the site, and adjacent properties that might influence on-site conditions (Appendix A, Figure 1 – Vicinity Map). Tax lots maps are included in Figure 2 of Appendix A. The National Wetlands Inventory (NWI) (Appendix A, Figure 3) was examined to determine if wetlands are mapped on site. The Soil Survey map (Appendix A, Figure 4) was reviewed for hydric soils. Aerial photographs of the project corridor were reviewed and are included in Figure 5 of Appendix A.

5.2 Field Methods

The wetland delineation field work occurred in 2019 on April 25, June 6 and 7, and July 11 and in 2020 on May 15 and June 23. The wetland delineation was conducted using the Level 2 Routine Delineation Method described in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and further supported by the Regional Supplement (Supplement) to the Corps of Engineers Wetland Delineation Manual, Western Mountains, Valleys, and Coast Region (USACE 2010). This method requires the simultaneous presence of hydrophytic vegetation, hydric soils, and positive wetland hydrology in wetland delineations.

Areas in which wetland hydrology, hydric soils, and hydrophytic vegetation were all present were considered wetlands. Precipitation considerations were discussed in the previous section. Data sheets were completed at each sample plot documenting the vegetation, soils, and

hydrology. Paired sample plots were chosen that represent typical wetland and upland plant communities encountered on the site. Wetland data sheets are included in Appendix C. As required by the Oregon Department of State Lands (DSL), all mapped hydric soil units were sampled, except where no native soil was present within the study area (such as road fill prisms).

Streams and ditches were delineated based on the presence of an ordinary high water mark (OHWM). This included OHWM indicators such as presence/absence of persistent vegetation along the bank, scour, and material sorting.

5.2.1 Use of DSL Guidance for Large or Linear Projects

Due to the size of the project, the delineation was conducted and has been documented following guidance provided in "Delineations for Large or Linear Projects" (DSL 2017). Based on this guidance, delineation findings are described in the tables in Appendix D.

5.2.2 Identification of Stream Flow Regime

The Streamflow Duration Assessment for the Pacific Northwest (Nadeau, 2015) was used as a guide in determining whether each stream would be considered perennial, intermittent, or ephemeral. While scoring sheets were not formally completed, the field crew reviewed several channels following the method in order to recognize characteristics that would define a channel as perennial, intermittent, or ephemeral. This knowledge was then used to assign a flow designation to each mapped stream (Appendix D).

5.2.3 Jurisdictional Determinations

The Corps and DSL regulate wetlands and other non-wetland waters at the federal and state levels, respectively. The Corps administers the compliance with the Section 404 of the Clean Water Act. DSL administers compliance with Oregon's Removal-Fill law. Jurisdiction to regulate these features between these two agencies is similar in most instances, but different in some instances due to differing laws, regulations, and court rulings. Relevant distinctions are provided below and were used to determine potential jurisdiction of delineated resources by both agencies.

5.2.3.1 Clean Water Act Section 404 Jurisdiction

According to the U.S. Environmental Protection Agency (EPA)(2020), on April 21, 2020, the EPA and the Corps published the Navigable Waters Protection Rule in the Federal Register to finalize a revised definition of "waters of the United States" under the Clean Water Act. For the first time, the agencies have streamlined the definition so that it includes four simple categories of jurisdictional waters, provides clear exclusions for many water features that traditionally have not been regulated, and defines terms in the regulatory text that have never been defined before. Congress, in the Clean Water Act, explicitly directed the Agencies to protect "navigable waters." The Navigable Waters Protection Rule regulates the nation's navigable waters and the core tributary systems that provide perennial or intermittent flow into them.

The Navigable Waters Protection Rule is the second step in a two-step process to review and revise the definition of "waters of the United States" consistent with the February 2017 Presidential Executive Order entitled "Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the 'Waters of the United States.'" This final rule became effective on June 22, 2020. On June 19, 2020, the District Court for the District of Colorado stayed the effective date of the Rule only in the State of Colorado. The rule is being implemented by EPA and the Army in all other states and jurisdictions.

Under the final Navigable Waters Protection Rule, four clear categories of waters are federally regulated:

- The territorial seas and traditional navigable waters,
- Perennial and intermittent tributaries to those waters,
- Certain lakes, ponds, and impoundments, and
- Wetlands adjacent to jurisdictional waters

The final rule also details 12 categories of exclusions (i.e., features that are not "waters of the United States"), such as features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems.

5.2.3.2 Oregon Removal-Fill Law Jurisdiction

Preliminary Jurisdictional determinations for DSL were made based on Oregon Administrative Rules (OAR) 141-085-0515. Review of DSL jurisdiction of roadside ditches followed OAR 141-085-515 (8) Jurisdictional Ditches, which states that ditches "are jurisdictional if they are: (a) Created in wetlands, estuaries, tidal rivers or other waters of this state; or (b) Created from upland and meet the following conditions: (A) Contain food and game fish; and (B) Have a free and open connection to waters of this state. A "free and open connection" means a connection by any means, including but not limited to culverts, to or between natural waterways and other navigable and non-navigable bodies of water that allows the interchange of surface flow at bankfull stage or ordinary high water, or at or below mean higher high tide between tidal waterways."

Exemptions are provided for roadside ditches, as specified in OAR 141-085-0515 (10) as follows. "Non-Jurisdictional Roadside and Railroad Ditches. Roadside and railroad ditches that meet the following tests are not jurisdictional: (a) Ten feet wide or less at the ordinary high water line; (b) Artificially created from upland or from wetlands; (c) Not adjacent and connected or contiguous with other wetlands; and (d) Do not contain food or game fish."

6.0 Description of All Wetlands and Other Non-Wetland Waters

Following the DSL guidance for "large or linear projects," delineated wetlands and non-wetland waters descriptions are summarized in table format (Appendix D), including the size of the resources mapped in Figure 6 of Appendix A. Types of wetlands found within the WSA included palustrine emergent, scrub-shrub, and forested wetlands, all of which have experienced alteration and degradation to varying degrees as a result of surrounding development. Similarly, natural drainageways have also been considerably altered, with many streams piped through the study area and into storm sewer systems. No WSA streams are mapped by DSL as providing Essential Salmonid Habitat (DSL 2010-2015). A summary of the number of features delineated in each WSA segment is provided in Table 17.

	Feature Count			
Feature Type	Segment A	Segment B	Segment C	Total
Wetlands	1	1	10	2
Streams	0	2	6	8
Ditches ¹	0	3	8	11

Table 17. Number of Resources Delineated by Segment

¹ Aside from ditch D-Ca, all mapped ditches assumed to not be in Corps jurisdiction. Aside from ditch D-Ca, all mapped ditches are assumed to be exempt from DSL jurisdiction.

7.0 Deviation from NWI or LWI

All wetlands mapped by the NWI and LWI were found to occur within the project WSA and were delineated as shown in Figure 6. Streams mapped by the NWI and LWI, as well as NHD layer, were often observed in the vicinity; however, as previously noted, many of the streams are now piped through the WSA and enter storm sewer systems. This was particularly the case in Segments A and B.

8.0 Mapping Method

Wetland boundaries, data points, and all other features were mapped using a Trimble R1 resource-grade Global Positioning System (GPS) unit synced to an iPad running ESRI ArcCollector software. GPS data was imported into the project Geographic Information System (GIS). Map accuracy was typically three feet or better.

9.0 Additional Information

Local municipality storm sewer system GIS data was reviewed to aid understanding of alterations to the local stream systems.

10.0 Results and Conclusions

Detailed listings of delineated features are provided in the tables in Appendix D and correspond to the features mapped in Figure 6 of Appendix A. Table 18 provides a summary of overall findings.

Feature Type	Quantity
Wetlands (acres)	4.76
Streams (linear feet)	2,707
Ditches (linear feet) ¹	3,903

Table 18. Summary of Resources Delineated in the Study Area

¹ Aside from ditch D-Ca, all mapped ditches assumed to not be in Corps jurisdiction. Aside from ditch D-Ca, all mapped ditches are assumed to be exempt from DSL jurisdiction.

11.0 Disclaimer

This report documents the investigation, best professional judgment, and conclusions of the investigator. It is correct and complete to the best of my knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State Lands in Accordance with OAR 141-090-0005 through OAR 141-090-0555.

12.0 Preparers and Contributors

DEA Ecologists Ethan Rosenthal and Phil Rickus, and DEA Environmental Specialist Valerie Thompson performed the wetland delineation. Mr. Rosenthal is the primary author of this report, and Bill Hall, DEA Project Manager, provided quality control review. Corie Peters, DEA Project Assistant, provided editing assistance. Melissa Foltz and Sara Gilbert, DEA Graphics Specialist, prepared report graphics.

13.0Literature Citations

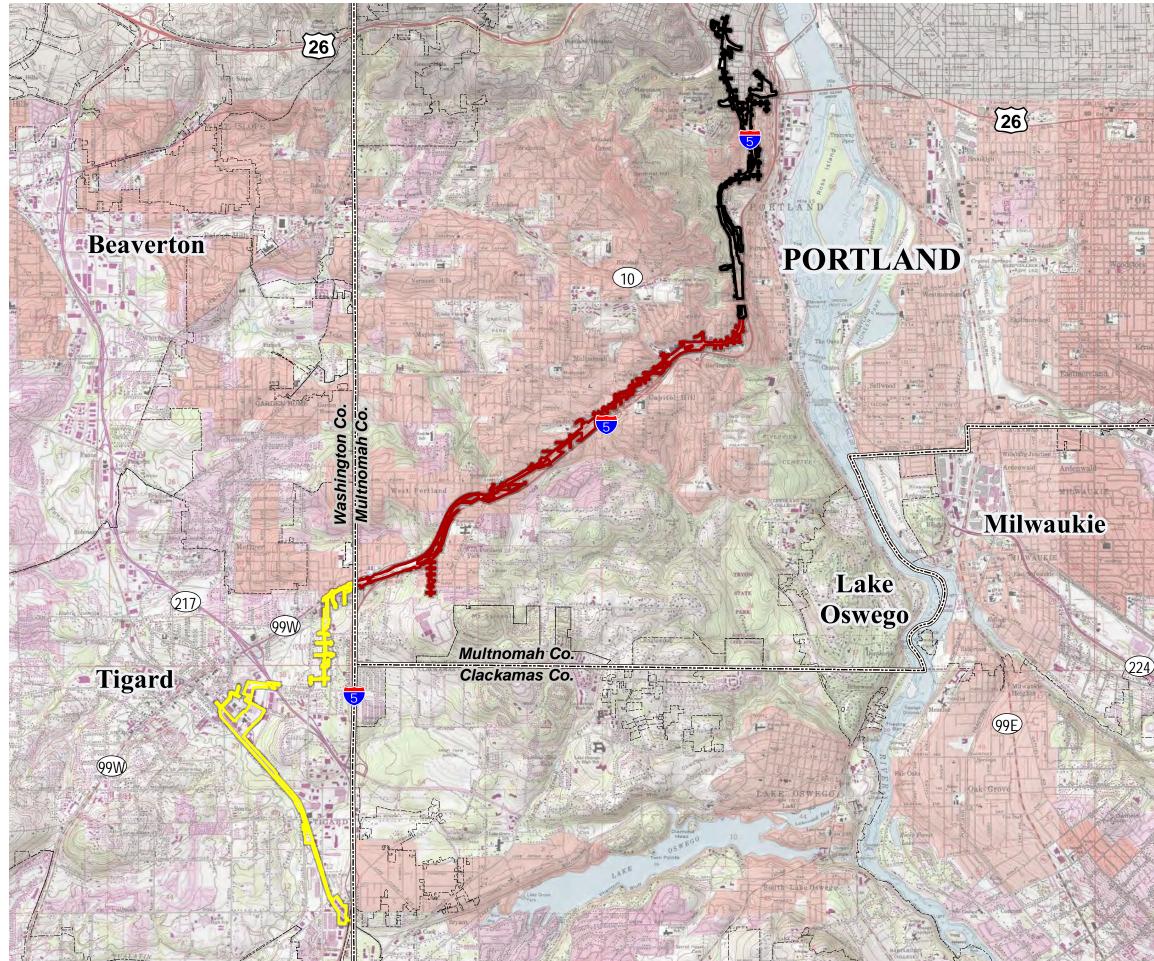
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- US Fish and Wildlife Service. 2017. National Wetlands Inventory (1977 to present). Branch of Habitat Assessment.
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Appendices

APPENDIX A: Figures

- Figure 1: Vicinity Map
- Figure 2: Tax Lots Map
- Figure 3: National Wetlands Inventory
- Figure 4: Soil Survey Map
- Figure 5: Aerial Photographs
- Figure 6: Wetland Delineation



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Southwest Corridor Light Rail Project Figure 1: Vicinity Map

Legend

Wetland Study Area Segment A

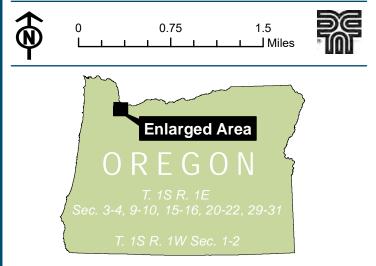
Wetland Study Area Segment B

Wetland Study Area Segment C

City Limit

County Boundary

- ESRI, ArcGIS Online, USA Topographic Maps: 1984. Beaverton, Oregon. 1984. Gladstone, Oregon. 1984. Lake Oswego, Oregon. 1990. Linnton, Oregon. 1990. Mount Tabor, Oregon-Washington. 1990. Portland, Oregon-Washington.





Southwest Corridor Light Rail Project

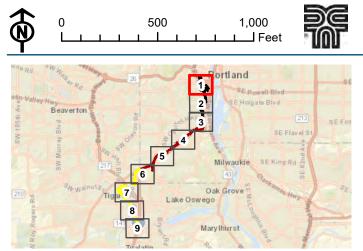
Figure 2: Tax Lots Sheet 1 of 9

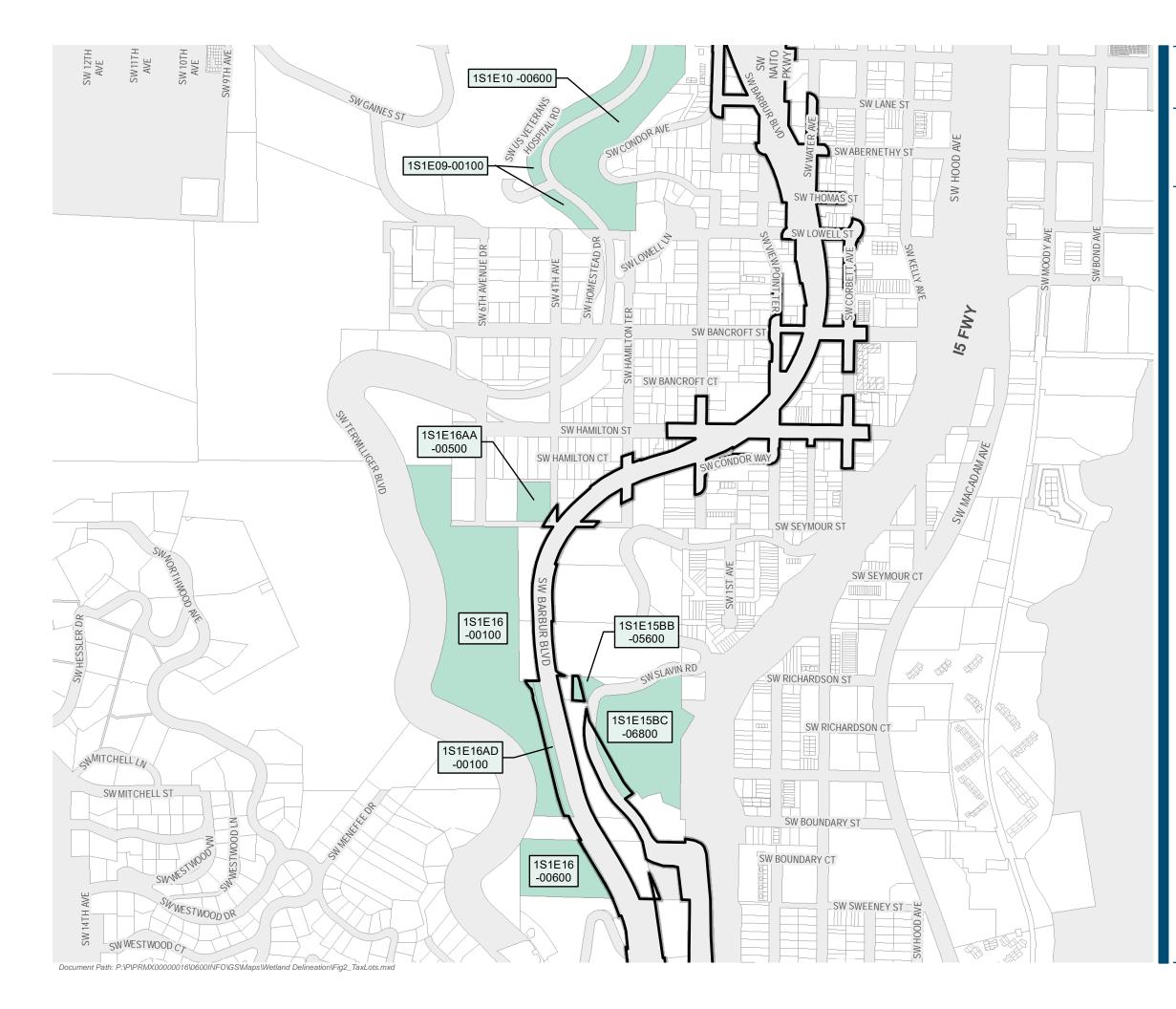
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Wetland Study Area Segment A

Metro RLIS Tax Lot

Tax Lot within Study Area





Southwest Corridor Light Rail Project

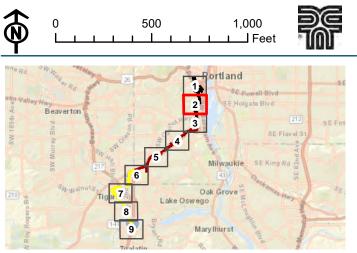
Figure 2: Tax Lots Sheet 2 of 9

Legend

Wetland Study Area Segment A

Metro RLIS Tax Lot

Tax Lot within Study Area





Southwest Corridor Light Rail Project Figure 2: Tax Lots Sheet 3 of 9

Legend

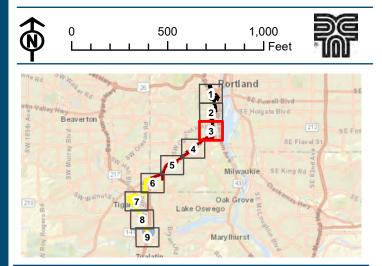
Wetland Study Area Segment A

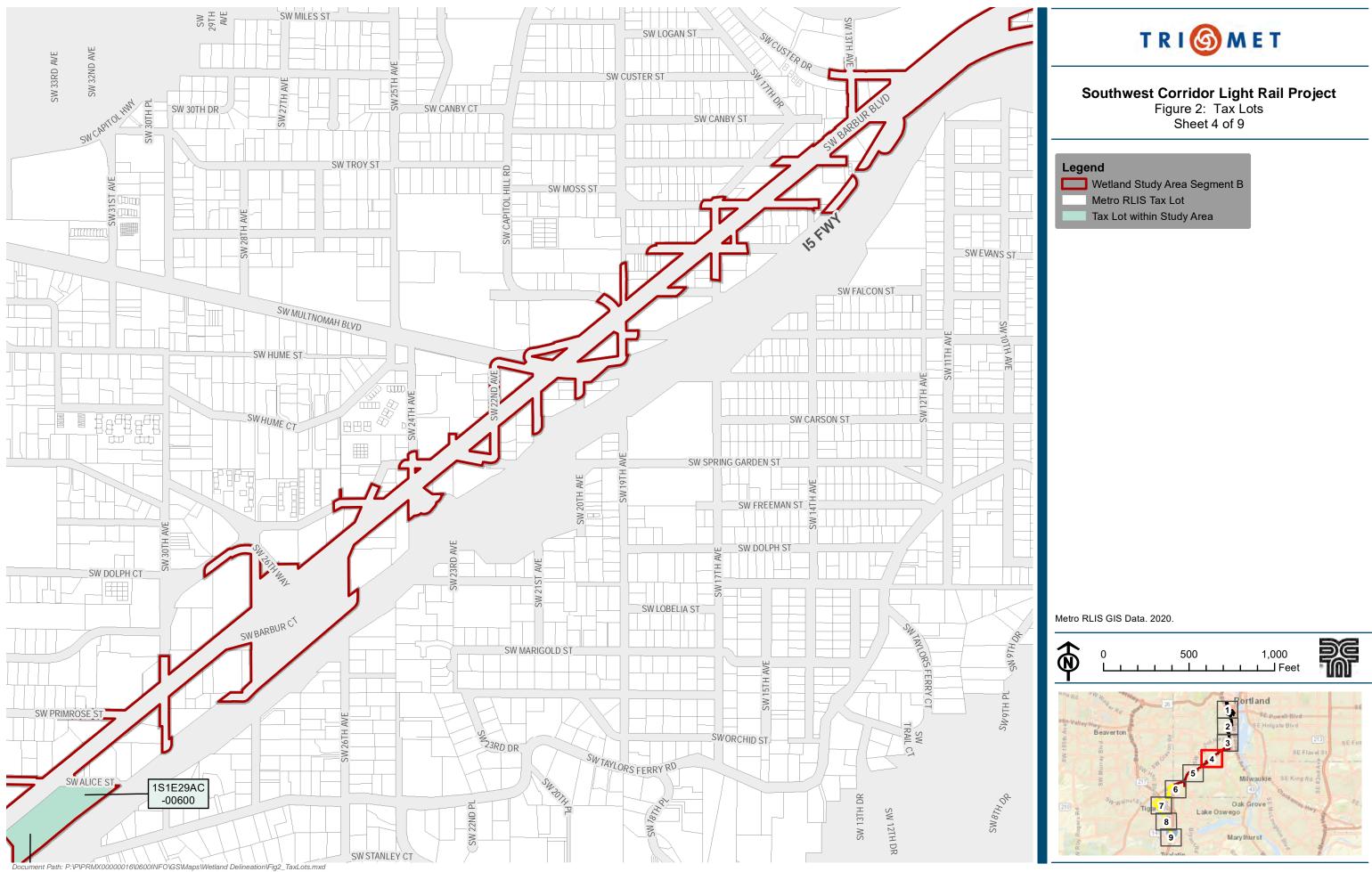
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Metro RLIS Tax Lot

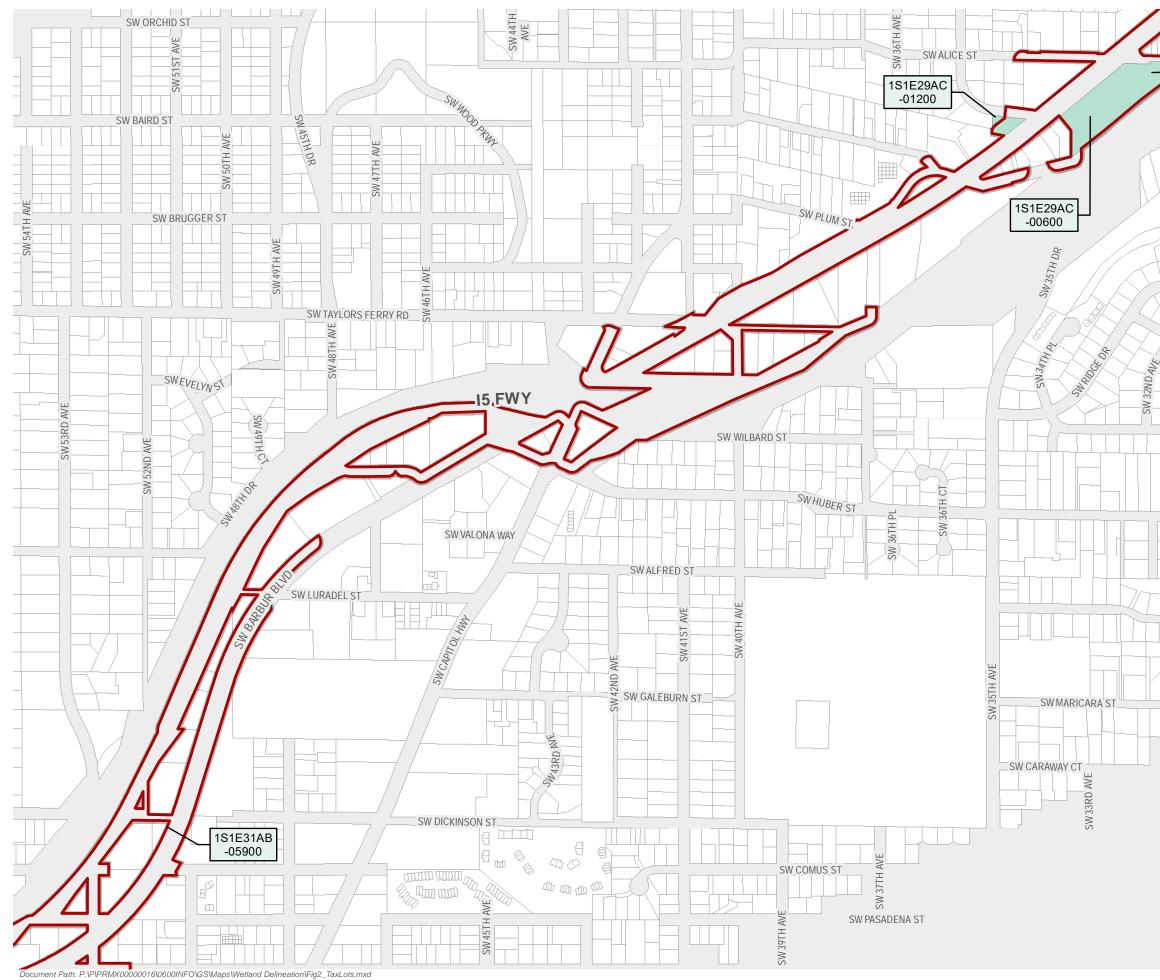
Tax Lot within Study Area











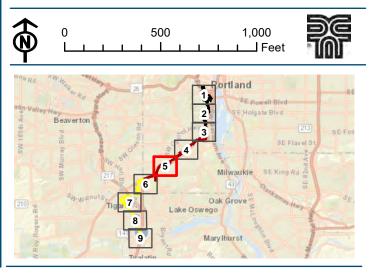


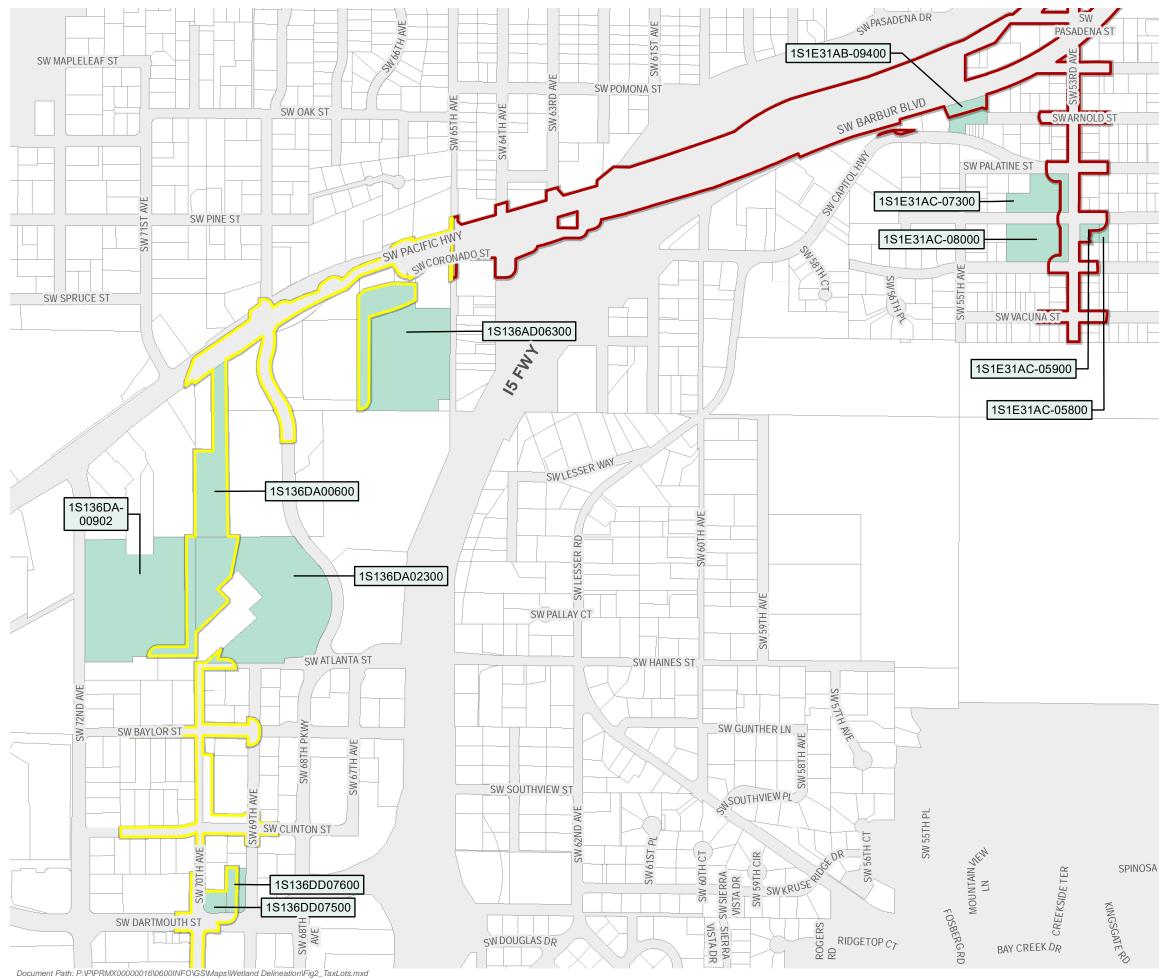
Southwest Corridor Light Rail Project

Figure 2: Tax Lots Sheet 5 of 9

Legend

- Wetland Study Area Segment B
 - Metro RLIS Tax Lot
 - Tax Lot within Study Area





Southwest Corridor Light Rail Project

Figure 2: Tax Lots Sheet 6 of 9

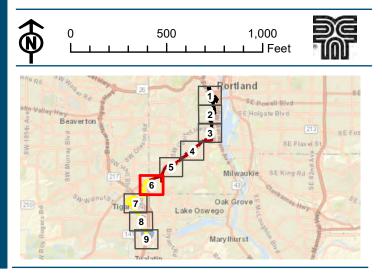
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Wetland Study Area Segment B

Wetland Study Area Segment C

Metro RLIS Tax Lot

Tax Lot within Study Area



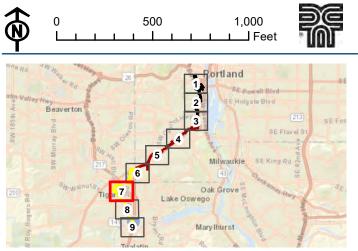


Southwest Corridor Light Rail Project

Figure 2: Tax Lots Sheet 7 of 9

Legend

- Wetland Study Area Segment C
 - Metro RLIS Tax Lot
 - Tax Lot within Study Area



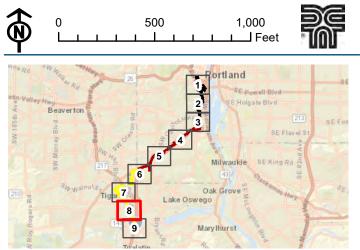


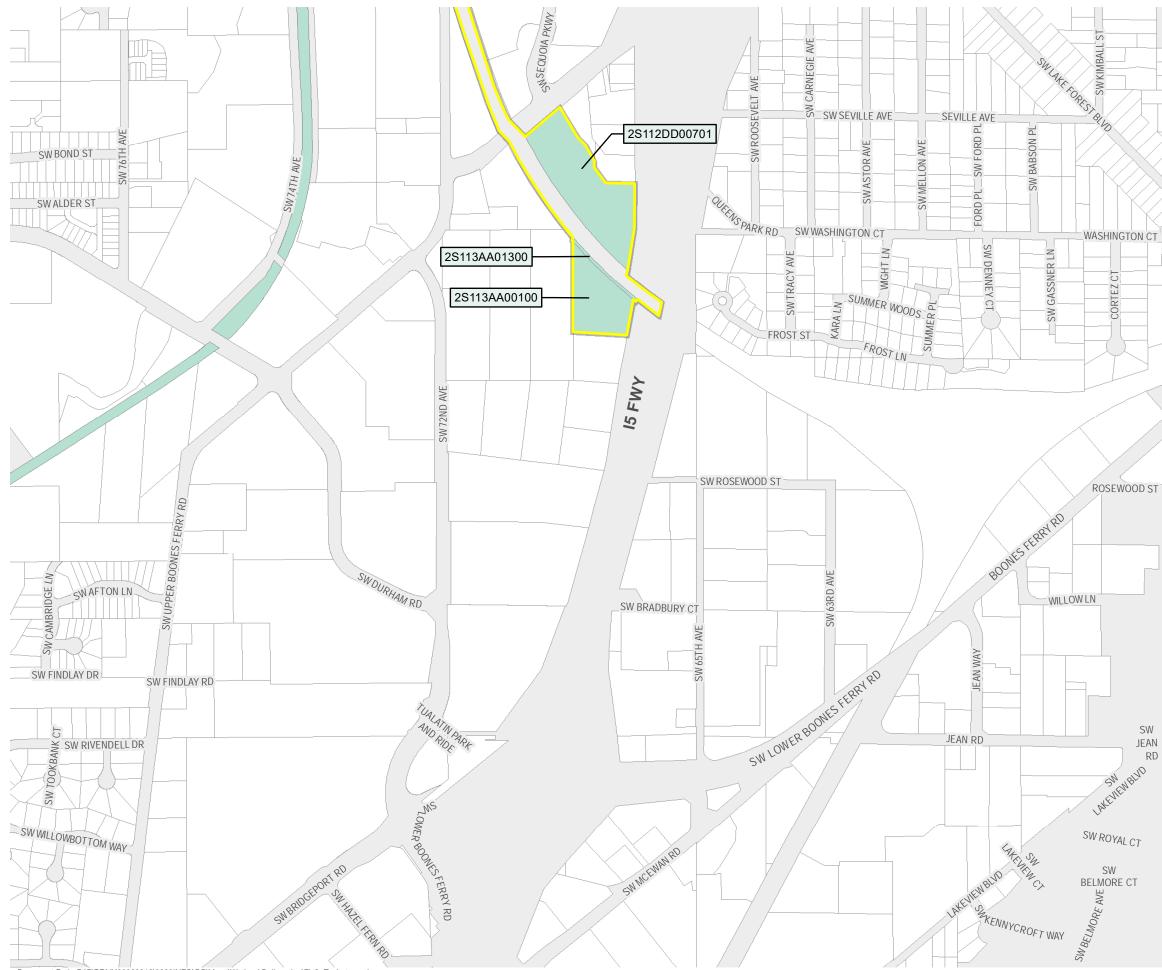
Southwest Corridor Light Rail Project

Figure 2: Tax Lots Sheet 8 of 9

Legend

- Wetland Study Area Segment C
 - Metro RLIS Tax Lot
 - Tax Lot within Study Area







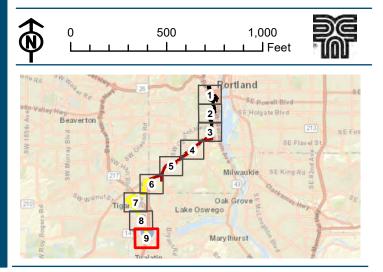


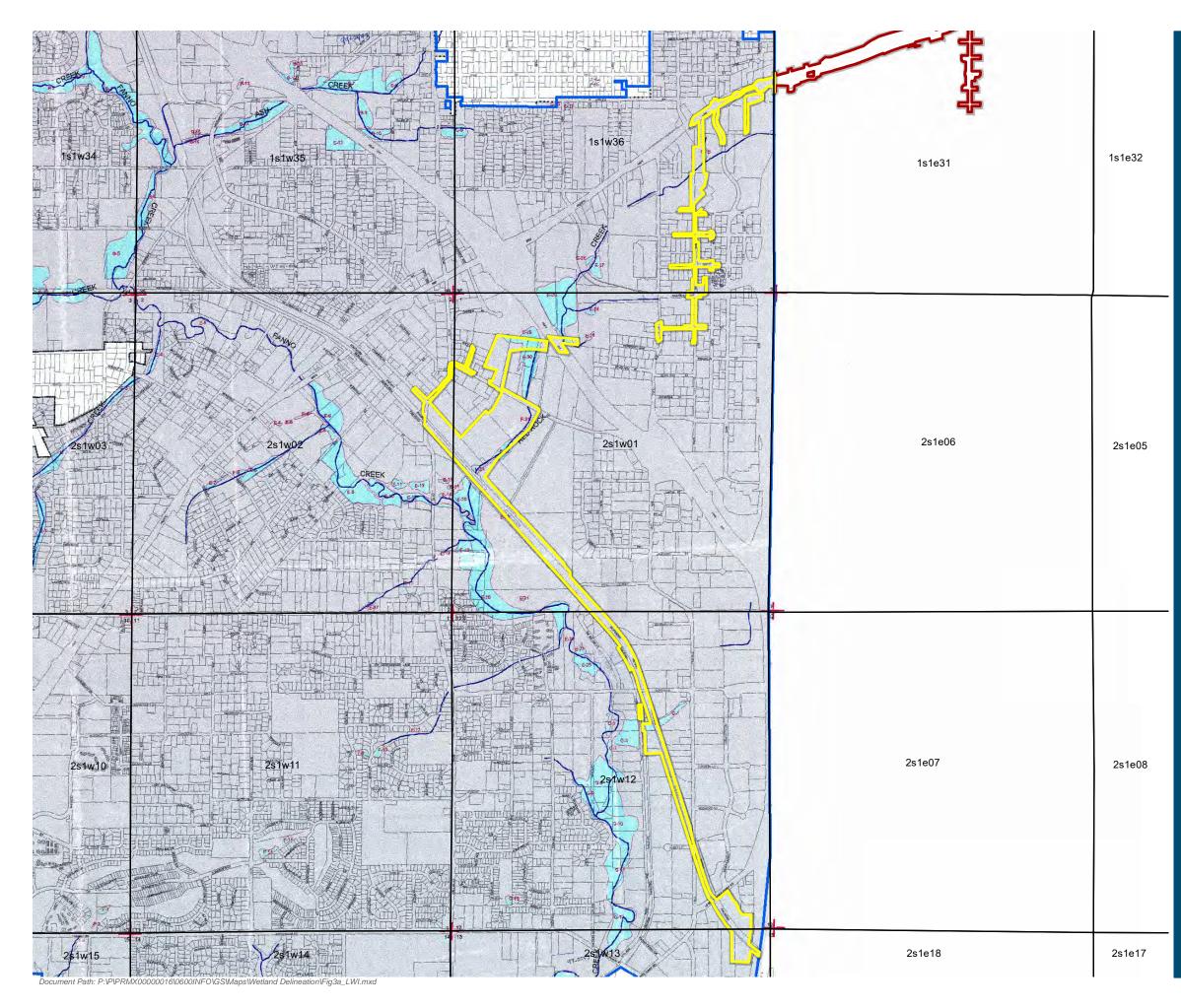
Southwest Corridor Light Rail Project

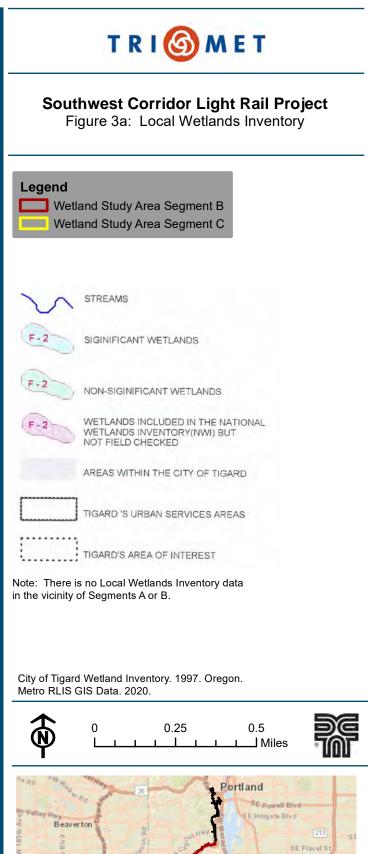
Figure 2: Tax Lots Sheet 9 of 9

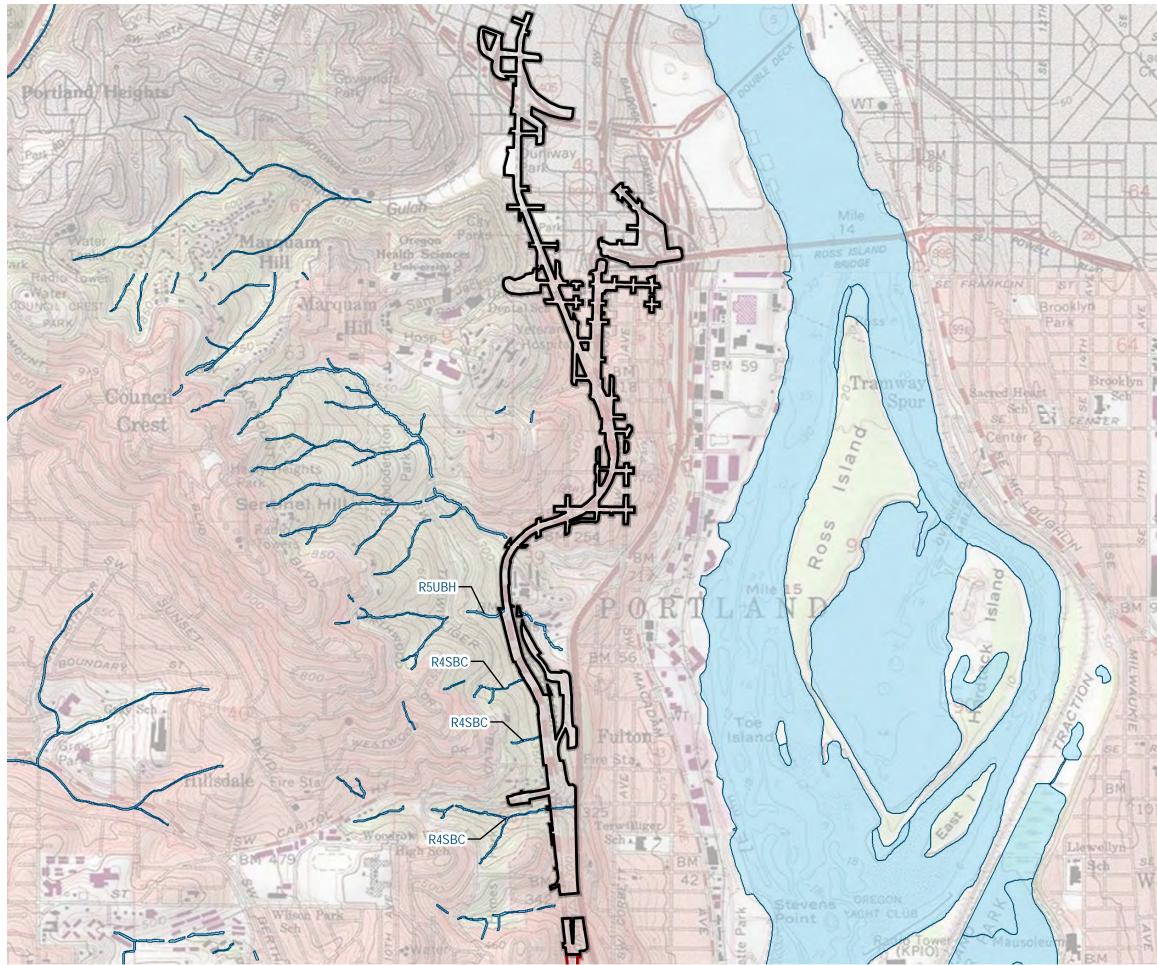
Legend

- Wetland Study Area Segment C
 - Metro RLIS Tax Lot
 - Tax Lot within Study Area









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Southwest Corridor Light Rail Project Figure 3b: National Wetlands Inventory Sheet 1 of 4

Legend

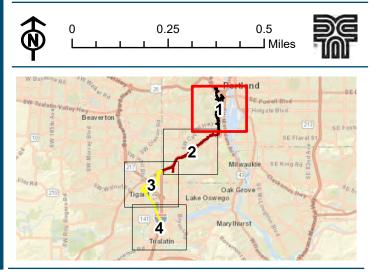
Wetland Study Area Segment A

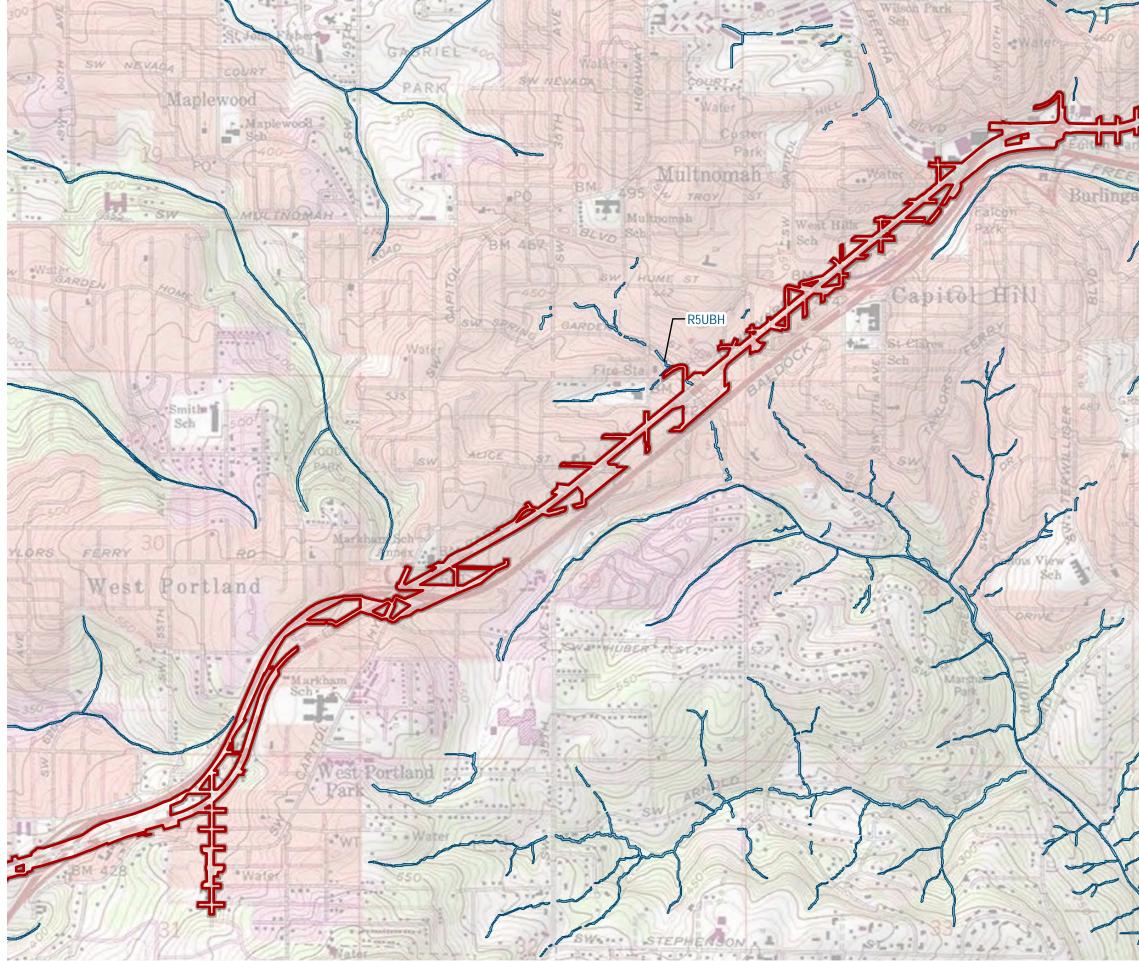
Wetland Study Area Segment B

NWI Wetlands

Wetland Types within Study Area

Palustrine, emergent, persistent, seasonally flooded
Palustrine, forested, broad-leaved deciduous,
seasonally flooded
Palustrine, scrub-shrub, emergent, persistent,
seasonally flooded
Palustrine, unconsolidated bottom, permanently flooded, diked/impounded
Palustrine, unconsolidated bottom, artificially flooded
Riverine, intermittent, streambed, seasonally flooded
Riverine, unknown perennial, unconsolidated bottom, permanently flooded





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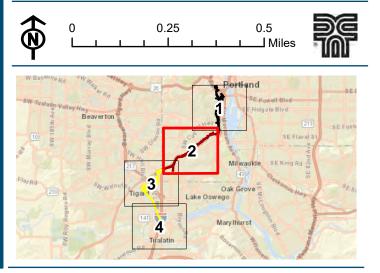


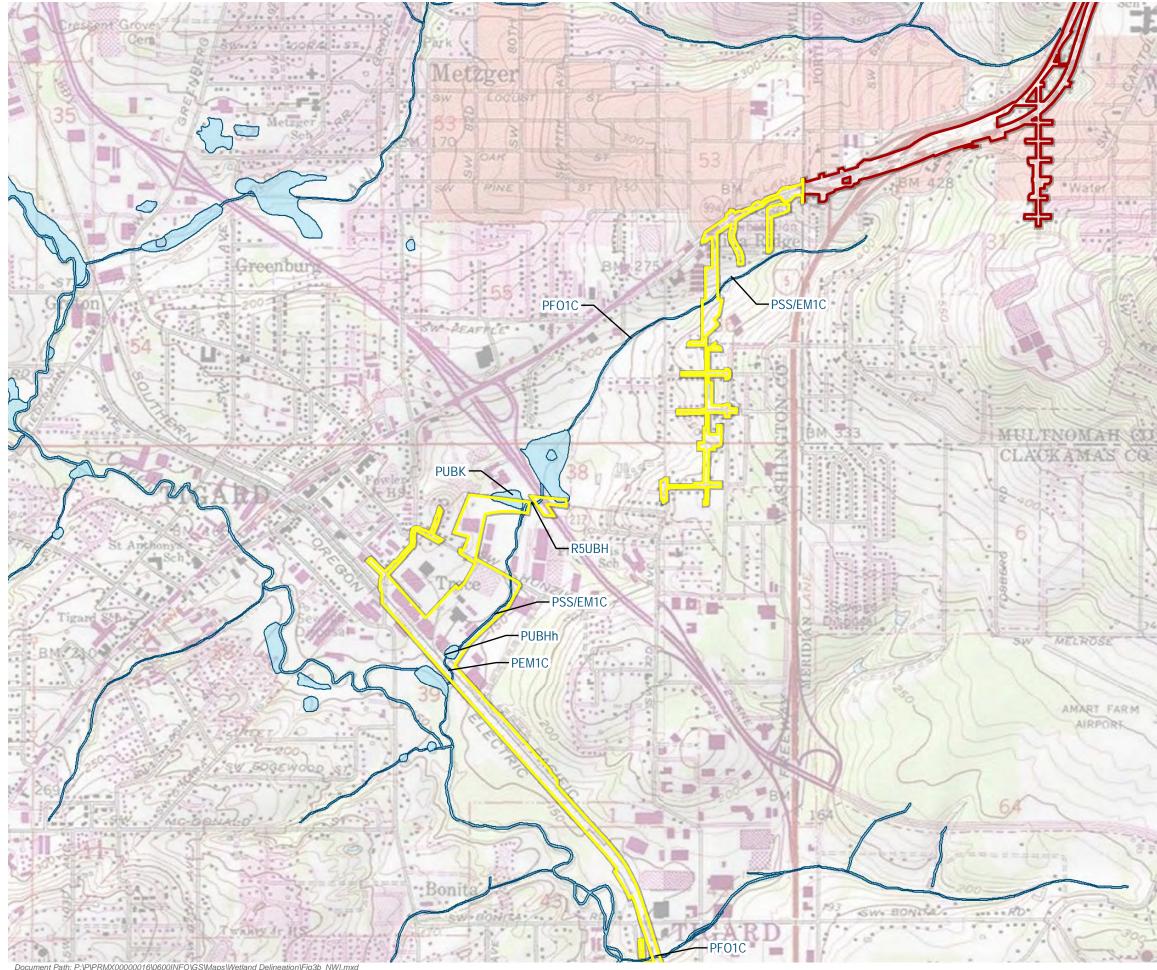
Southwest Corridor Light Rail Project Figure 3b: National Wetlands Inventory Sheet 2 of 4

Wetland Study Area Segment B NWI Wetlands

Wetland Types within Study Area

PEM1C	Palustrine, emergent, persistent, seasonally flooded
PFO1C	Palustrine, forested, broad-leaved deciduous,
	seasonally flooded
PSS/EM1C	Palustrine, scrub-shrub, emergent, persistent,
	seasonally flooded
PUBHh	Palustrine, unconsolidated bottom, permanently flooded,
	diked/impounded
PUBK	Palustrine, unconsolidated bottom, artificially flooded
R4SBC	Riverine, intermittent, streambed, seasonally flooded
R5UBH	Riverine, unknown perennial, unconsolidated bottom,
	permanently flooded









Southwest Corridor Light Rail Project Figure 3b: National Wetlands Inventory Sheet 3 of 4

Legend

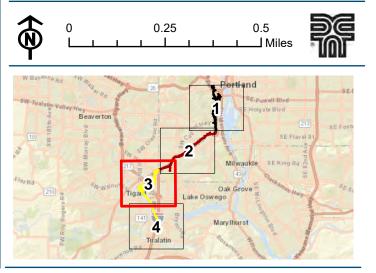
Wetland Study Area Segment B

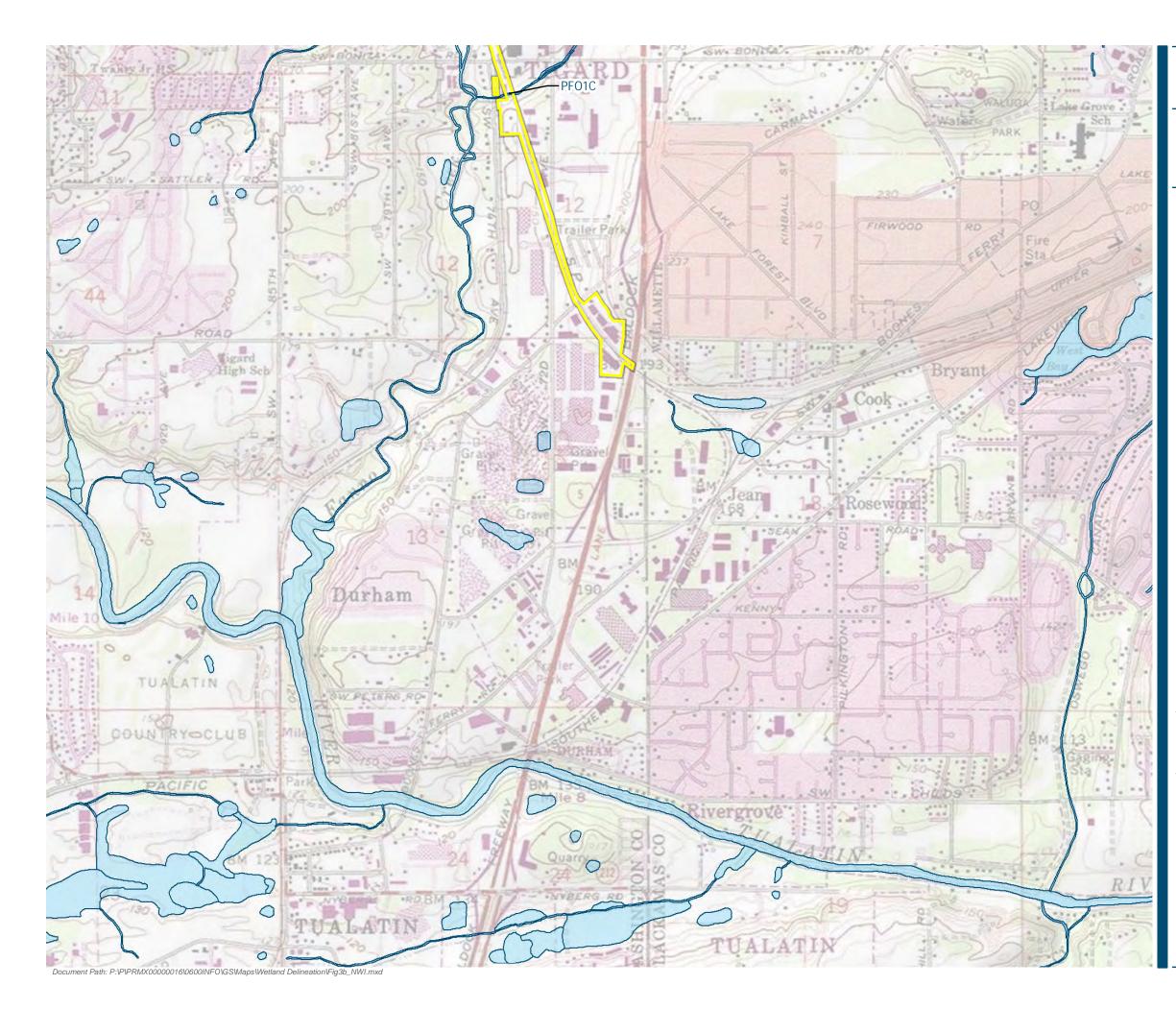
Wetland Study Area Segment C

NWI Wetlands

Wetland Types within Study Area

Palustrine, emergent, persistent, seasonally flooded
Palustrine, forested, broad-leaved deciduous,
seasonally flooded
Palustrine, scrub-shrub, emergent, persistent,
seasonally flooded
Palustrine, unconsolidated bottom, permanently flooded,
diked/impounded
Palustrine, unconsolidated bottom, artificially flooded
Riverine, intermittent, streambed, seasonally flooded
Riverine, unknown perennial, unconsolidated bottom,
permanently flooded







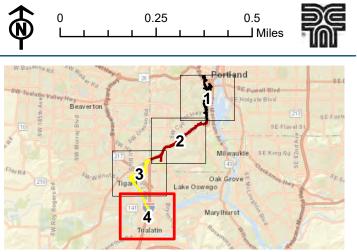
Southwest Corridor Light Rail Project Figure 3b: National Wetlands Inventory Sheet 4 of 4

Legend

Wetland Study Area Segment C NWI Wetlands

Wetland Types within Study Area

PEM1C	Palustrine, emergent, persistent, seasonally flooded
PFO1C	Palustrine, forested, broad-leaved deciduous,
	seasonally flooded
PSS/EM1C	Palustrine, scrub-shrub, emergent, persistent,
	seasonally flooded
PUBHh	Palustrine, unconsolidated bottom, permanently flooded,
	diked/impounded
PUBK	Palustrine, unconsolidated bottom, artificially flooded
R4SBC	Riverine, intermittent, streambed, seasonally flooded
R5UBH	Riverine, unknown perennial, unconsolidated bottom,
	permanently flooded





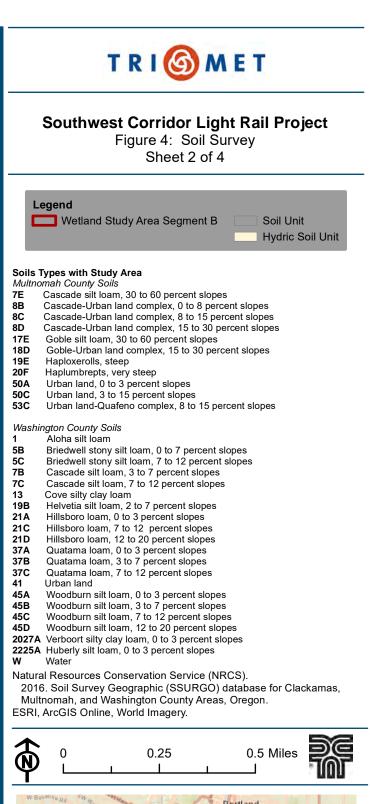
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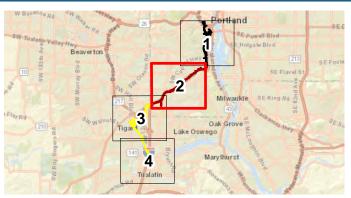
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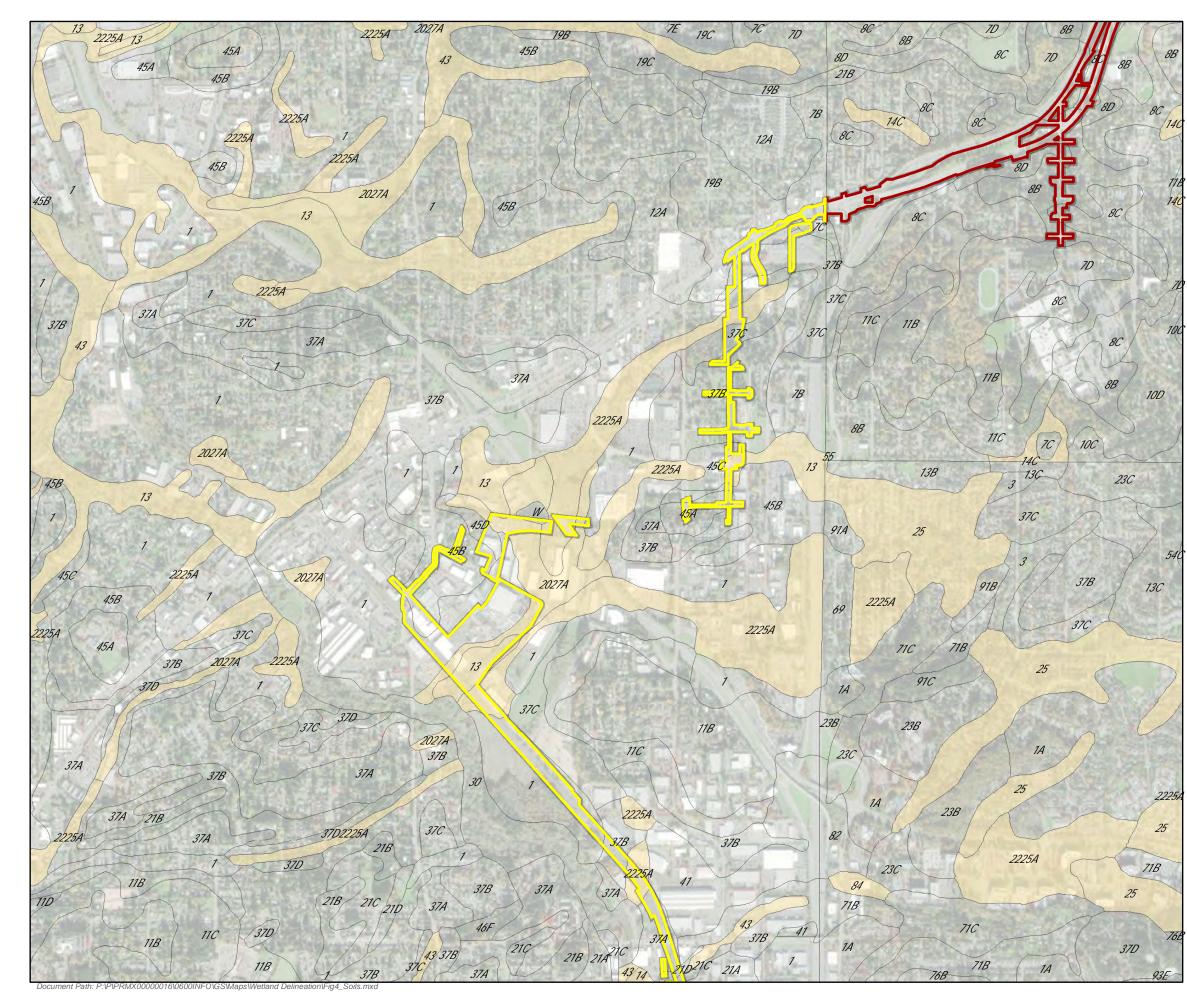
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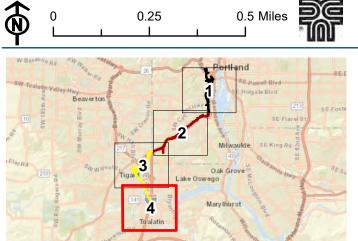


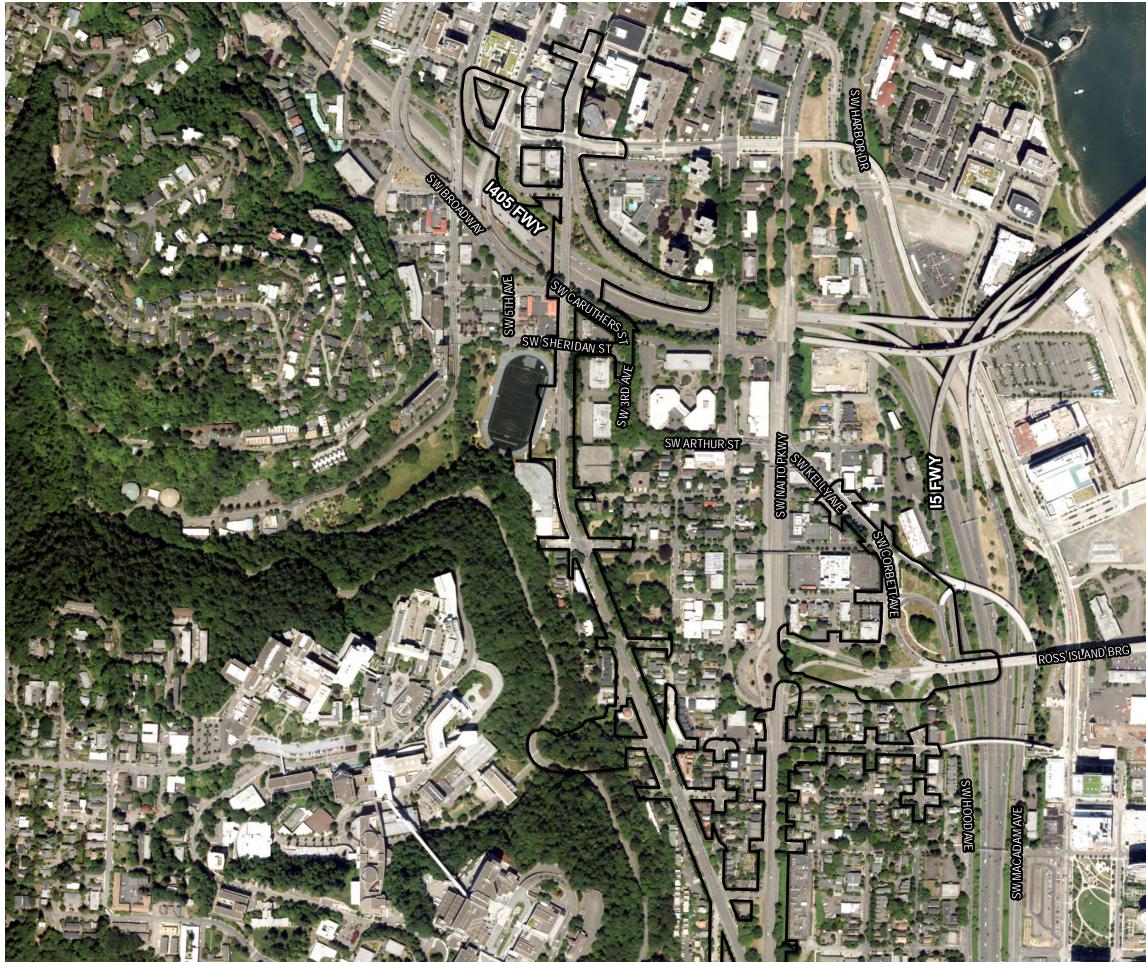
 8B Cascade-Urban land complex, 0 to 8 percent slopes 8C Cascade-Urban land complex, 8 to 15 percent slopes 8D Cascade-Urban land complex, 15 to 30 percent slopes 8D Goble-Urban land complex, 15 to 30 percent slopes 9D Goble-Urban land complex, 15 to 30 percent slopes 9D Goble-Urban land complex, 15 to 30 percent slopes 9D Goble-Urban land complex, 15 to 30 percent slopes 9D Goble-Urban land complex, 15 to 30 percent slopes 9D Goble-Urban land complex, 15 to 30 percent slopes 9D Goble-Urban land, 0 to 3 percent slopes 9D Urban land, 0 to 3 percent slopes 9D Urban land, 0 to 3 percent slopes 9D Urban land-Quafeno complex, 8 to 15 percent slopes 9D Urban land-Quafeno complex, 8 to 15 percent slopes 9D Urban land-Quafeno complex, 8 to 15 percent slopes 9D Urban land-Quafeno complex, 8 to 15 percent slopes 9D Urban land Slit loam 9D B Briedwell stony silt loam, 0 to 7 percent slopes 9D Cascade silt loam, 3 to 7 percent slopes 9D Cascade silt loam, 7 to 12 percent slopes 9D Cove sity clay loam 9D Helvetia silt loam, 2 to 7 percent slopes 9D Hillsboro loam, 12 to 20 percent slopes 9D Hillsboro loam, 7 to 12 percent slopes 9D Houtama loam, 3 to 7 percent slopes 9D Woodburn silt loam, 7 to 12 percent slopes 9D Woodburn silt loam, 7	Figure 4: Soil Survey				
Wetland Study Area Segment B Soil Unit Wetland Study Area Segment C Hydric Soil Unit Soils Types with Study Area Multromah County Soils 7E Cascade-Urban land complex, 0 to 8 percent slopes 8B Cascade-Urban land complex, 10 to 5 percent slopes 8D Cascade-Urban land complex, 15 to 30 percent slopes 8D Cascade-Urban land complex, 15 to 30 percent slopes 8D Cascade-Urban land complex, 15 to 30 percent slopes 8D Goble-Urban land complex, 15 to 30 percent slopes 8D Goble-Urban land complex, 15 to 30 percent slopes 9E Haploxerolls, steep 20F Haploxerolls, steep 20F Haploxerolls, steep 20F Urban land, 0 to 3 percent slopes 50C Urban land, Quafeno complex, 8 to 15 percent slopes 51C Urban land, 3 to 7 percent slopes 52C Urban land, 3 to 7 percent slopes 53E B ariedwell stony silt loam, 7 to 12 percent slopes 52 Cascade silt loam, 7 to 12 percent slopes 53 Cascade silt loam, 7 to 12 percent slopes 54 Hillsboro loam, 12 to 20 percent slopes 57 Quatama loam, 6 to 3 per					
Multinomah County Soils 7E Cascade silt loam, 30 to 60 percent slopes 8B Cascade-Urban land complex, 0 to 8 percent slopes 8D Cascade-Urban land complex, 8 to 15 percent slopes 8D Cascade-Urban land complex, 15 to 30 percent slopes 8D Goble silt loam, 30 to 60 percent slopes 8D Goble-Urban land complex, 15 to 30 percent slopes 17E Goble-Urban land complex, 15 to 30 percent slopes 18D Goble-Urban land complex, 15 to 30 percent slopes 19E Haploxerolls, steep 50A Urban land, 0 to 3 percent slopes 50C Urban land, 3 to 15 percent slopes 50C Urban land-Quafeno complex, 8 to 15 percent slopes 50C Urban land-Quafeno complex, 8 to 15 percent slopes 50C Urban land, 3 to 15 percent slopes 50C Urban land, 20 to 7 percent slopes 50C Urban land, 20 to 7 percent slopes 50C Briedwell stony silt loam, 7 to 12 percent slopes 7C Cascade silt loam, 2 to 7 percent slopes 7C Cascade silt loam, 2 to 7 percent slopes 7A Quatama loam, 0 to 3 percent slopes 7A Quatama loam, 3 to 7 percent slopes </th <th></th> <th>Wetland Study Area Segment B Soil Unit</th>		Wetland Study Area Segment B Soil Unit			
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ESRI, ArcGIS Unline, World Imagery.	1 5B 5C 7B 7C 13 19B 21A 21D 37A 37B 37C 41 45A 45B 45C 45D 2027A 2225A W Natura 2016 Mult	Aloha silt loam Briedwell stony silt loam, 0 to 7 percent slopes Briedwell stony silt loam, 7 to 12 percent slopes Cascade silt loam, 3 to 7 percent slopes Cascade silt loam, 7 to 12 percent slopes Cove silty clay loam Helvetia silt loam, 2 to 7 percent slopes Hillsboro loam, 0 to 3 percent slopes Hillsboro loam, 7 to 12 percent slopes Quatama loam, 7 to 12 percent slopes Quatama loam, 7 to 12 percent slopes Quatama loam, 7 to 12 percent slopes Urban land Woodburn silt loam, 1 to 3 percent slopes Woodburn silt loam, 7 to 12 percent slopes Woodburn silt loam, 12 to 20 percent slopes Verboort silty clay loam, 0 to 3 percent slopes Huberly silt loam, 0 to 3 percent slopes Water al Resources Conservation Service (NRCS). 5. Soil Survey Geographic (SSURGO) database for Clackamas, nomah, and Washington County Areas, Oregon.			





T R I 🙆 M E T Southwest Corridor Light Rail Project Figure 4: Soil Survey Sheet 4 of 4 Legend Wetland Study Area Segment C Soil Unit Hydric Soil Unit Soils Types with Study Area Multnomah County Soils Cascade silt loam, 30 to 60 percent slopes 7E 8B 8C Cascade-Urban land complex, 0 to 8 percent slopes Cascade-Urban land complex, 8 to 15 percent slopes 8D Cascade-Urban land complex, 15 to 30 percent slopes 17E Goble silt loam, 30 to 60 percent slopes Goble-Urban land complex, 15 to 30 percent slopes 18D 19E 20F Haploxerolls, steep Haplumbrepts, very steep 50A Urban land, 0 to 3 percent slopes 50C Urban land, 3 to 15 percent slopes 53C Urban land-Quafeno complex, 8 to 15 percent slopes Washington County Soils Aloha silt loam 5B Briedwell stony silt loam, 0 to 7 percent slopes 5C Briedwell stony silt loam, 7 to 12 percent slopes 7B Cascade silt loam, 3 to 7 percent slopes 7C Cascade silt loam, 7 to 12 percent slopes Cove silty clay loam Helvetia silt loam, 2 to 7 percent slopes 13 19B Hillsboro loam, 0 to 3 percent slopes 21A 21C Hillsboro loam, 7 to 12 percent slopes 21D Hillsboro loam, 12 to 20 percent slopes Quatama loam, 0 to 3 percent slopes 37A Quatama loam, 3 to 7 percent slopes 37B Quatama loam, 7 to 12 percent slopes 37C 41 Urban land Woodburn silt loam, 0 to 3 percent slopes 45A 45B Woodburn silt loam, 3 to 7 percent slopes 45C Woodburn silt loam, 7 to 12 percent slopes 45D Woodburn silt loam, 12 to 20 percent slopes **2027A** Verboort silty clay loam, 0 to 3 percent slopes **2025A** Huberly silt loam, 0 to 3 percent slopes w Water Natural Resources Conservation Service (NRCS). 2016. Soil Survey Geographic (SSURGO) database for Clackamas, Multnomah, and Washington County Areas, Oregon. ESRI, ArcGIS Online, World Imagery.

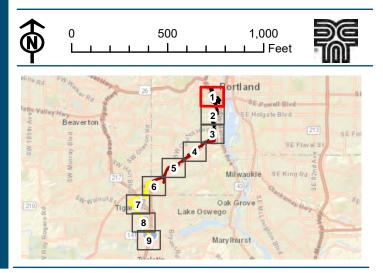






Southwest Corridor Light Rail Project Figure 5: Aerial Photographs Sheet 1 of 9

Legend Wetland Study Area Segment A



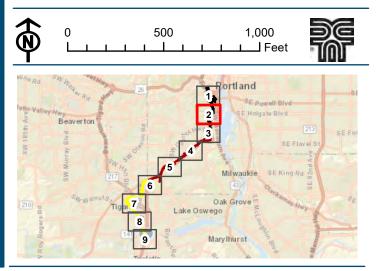


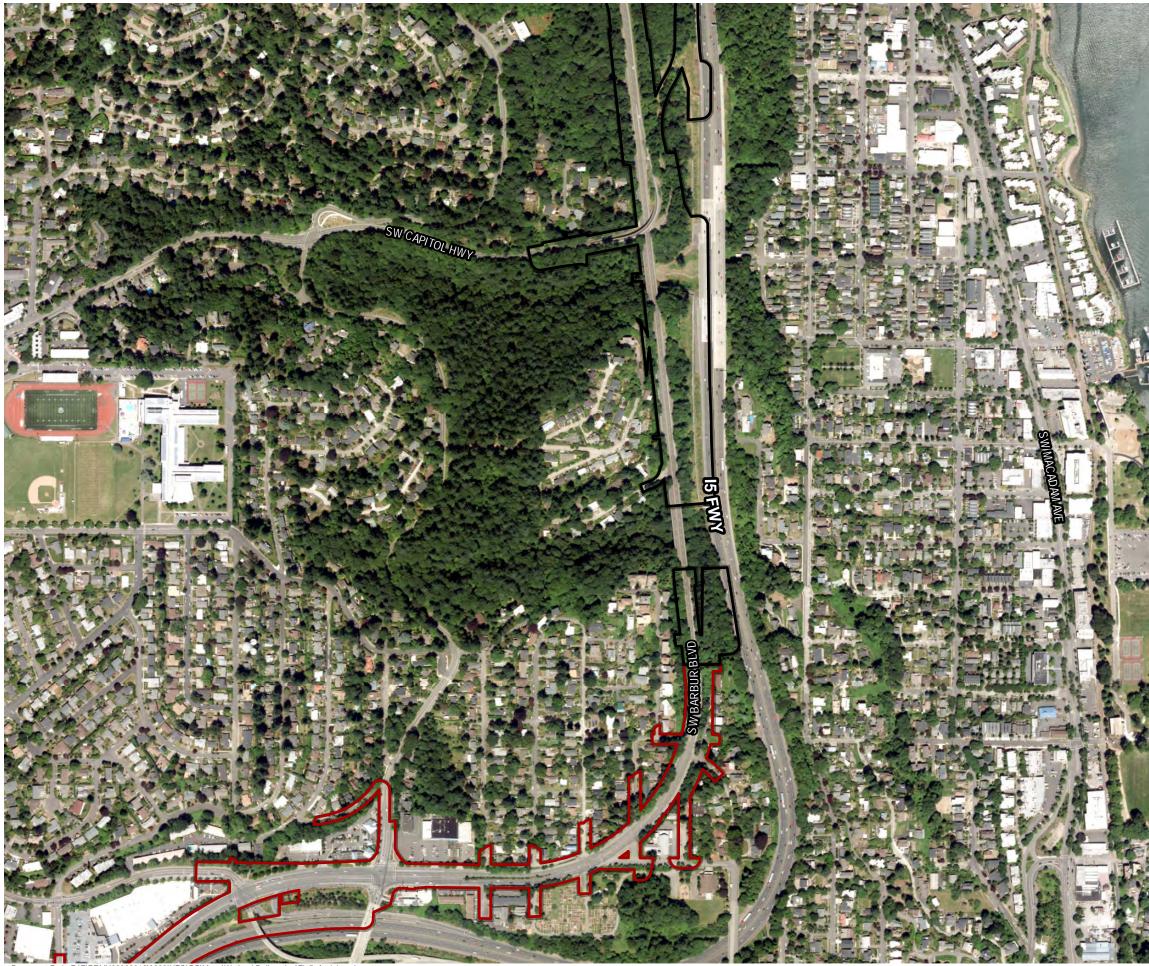




Southwest Corridor Light Rail Project Figure 5: Aerial Photographs Sheet 2 of 9

Legend Wetland Study Area Segment A



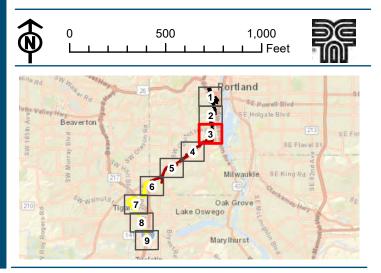


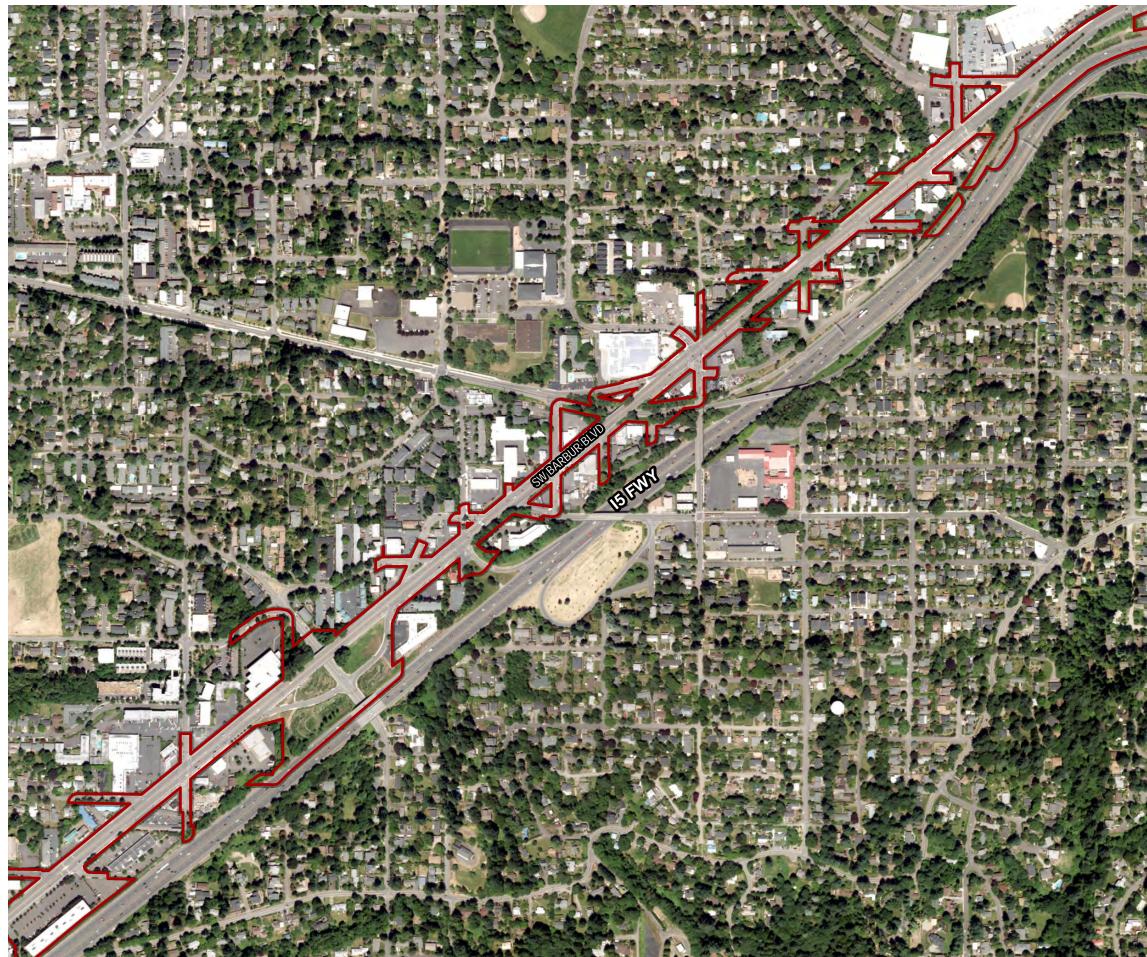
n\Fig5 Aerial



Southwest Corridor Light Rail Project Figure 5: Aerial Photographs Sheet 3 of 9

Legend Wetland Study Area Segment A Wetland Study Area Segment B



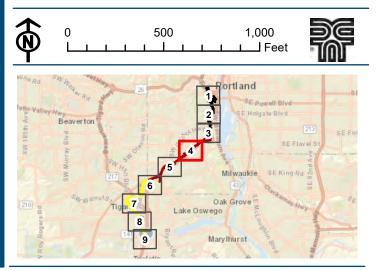






Southwest Corridor Light Rail Project Figure 5: Aerial Photographs Sheet 4 of 9

Legend
Wetland Study Area Segment B



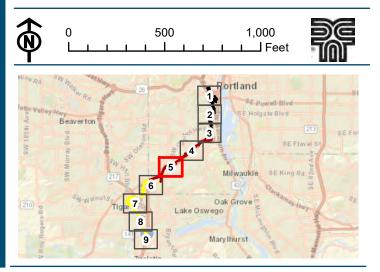


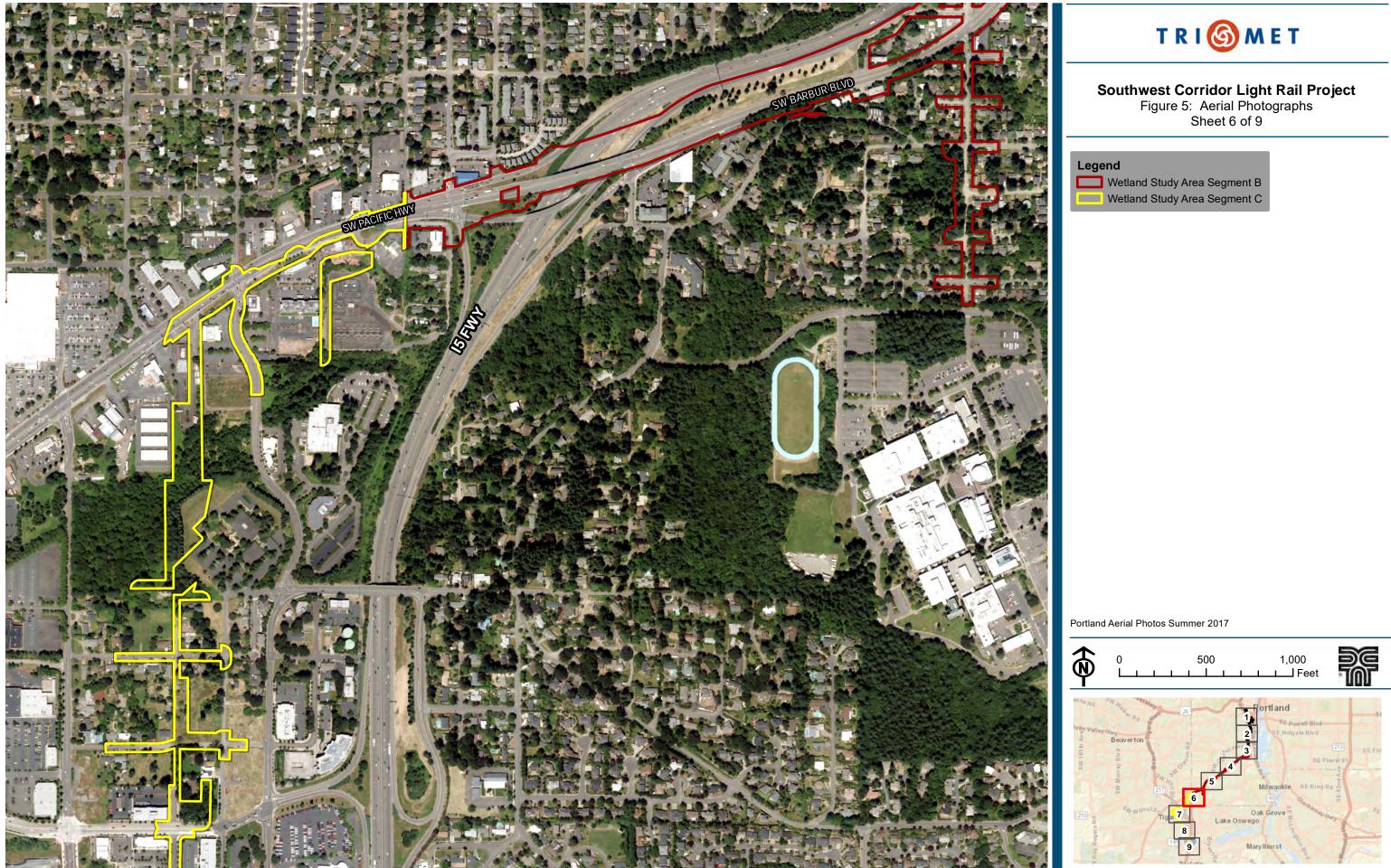




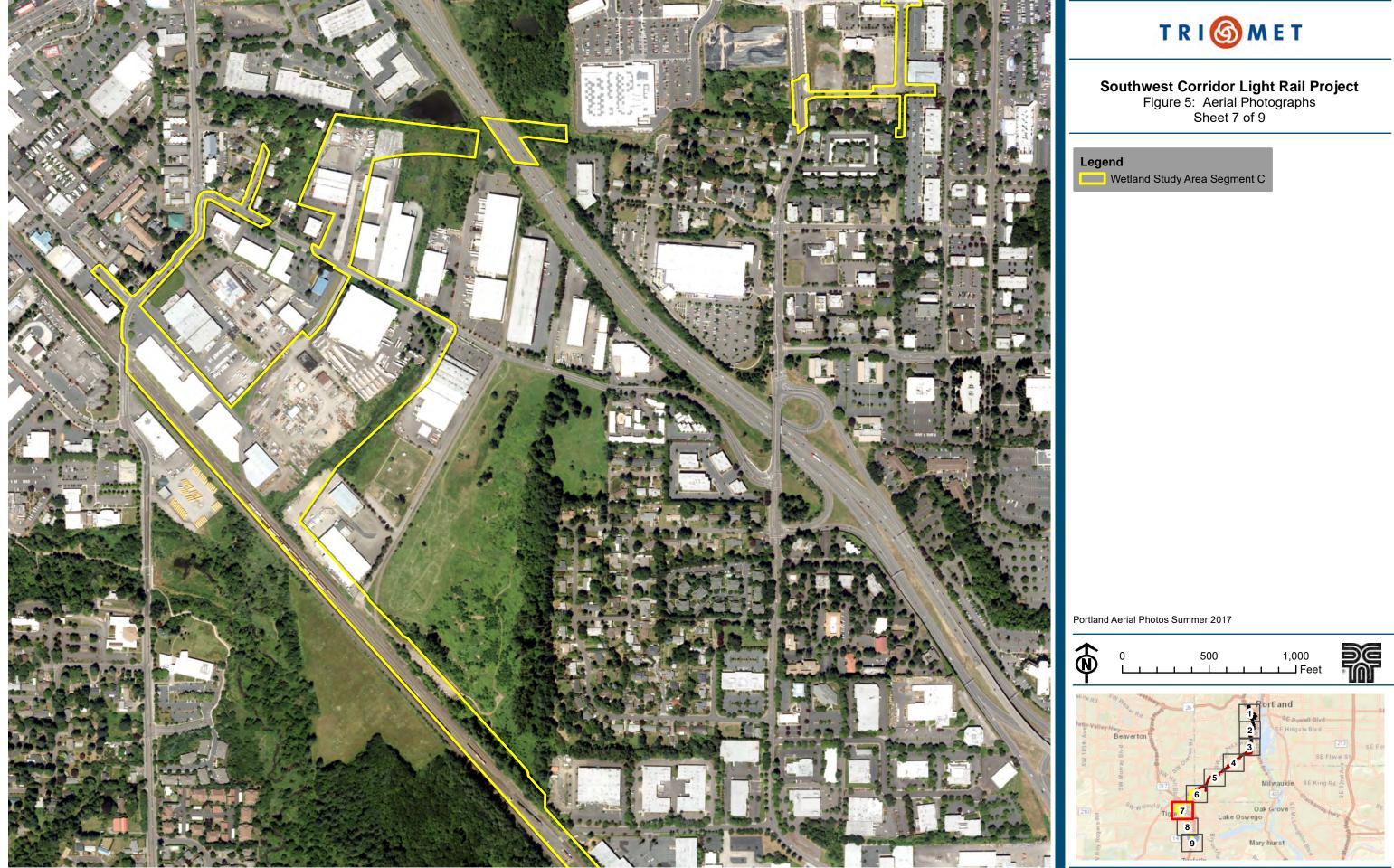
Southwest Corridor Light Rail Project Figure 5: Aerial Photographs Sheet 5 of 9

Legend
Wetland Study Area Segment B











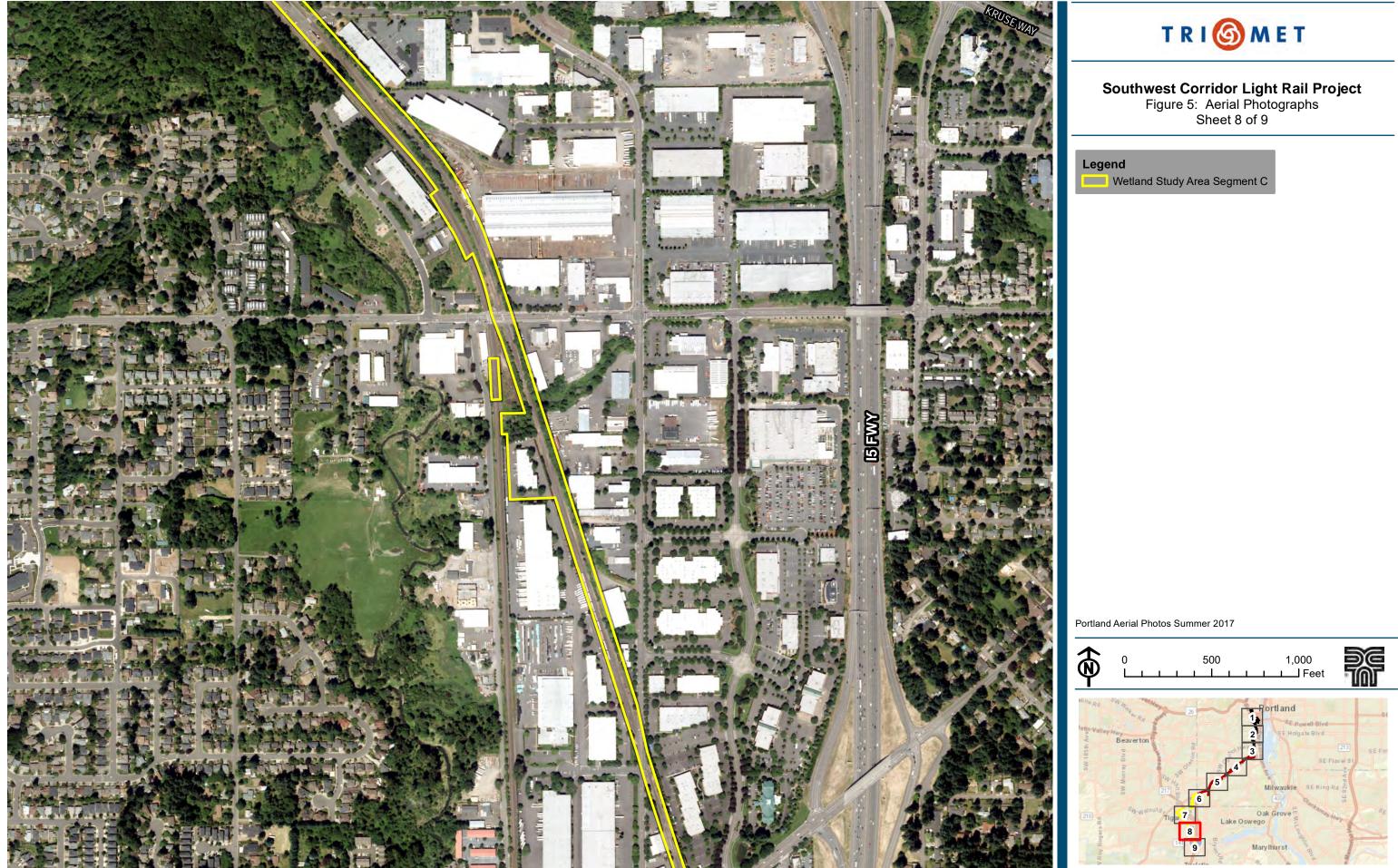




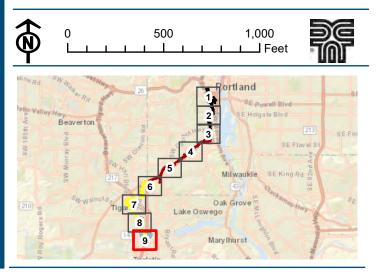


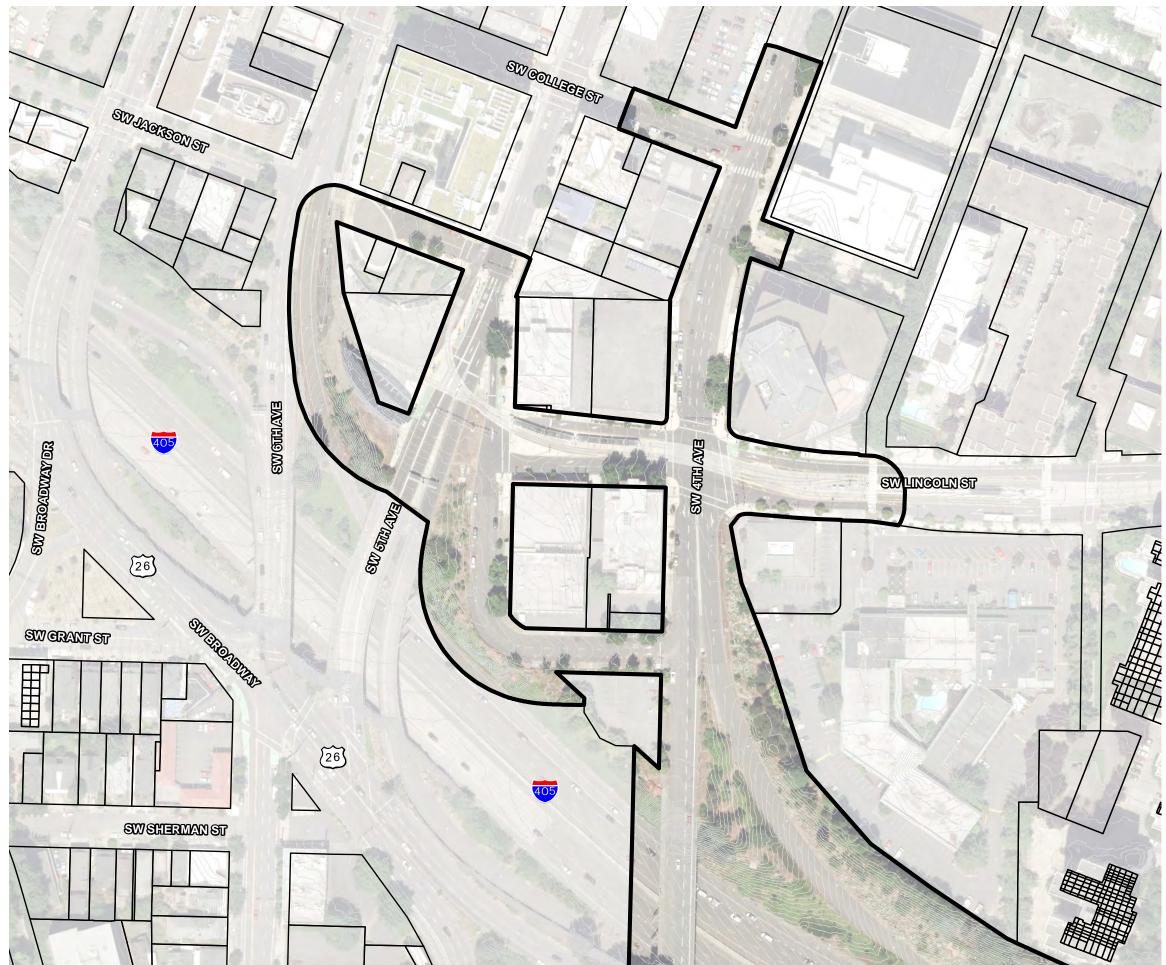
Fig5 Aerial mxd



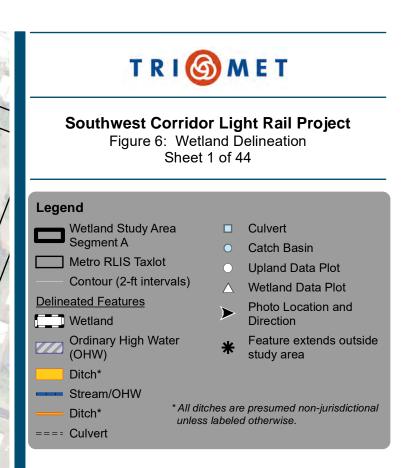
Southwest Corridor Light Rail Project Figure 5: Aerial Photographs Sheet 9 of 9

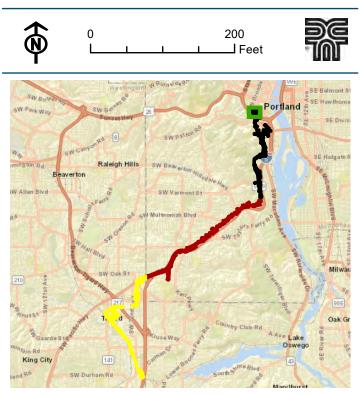
Legend Wetland Study Area Segment C

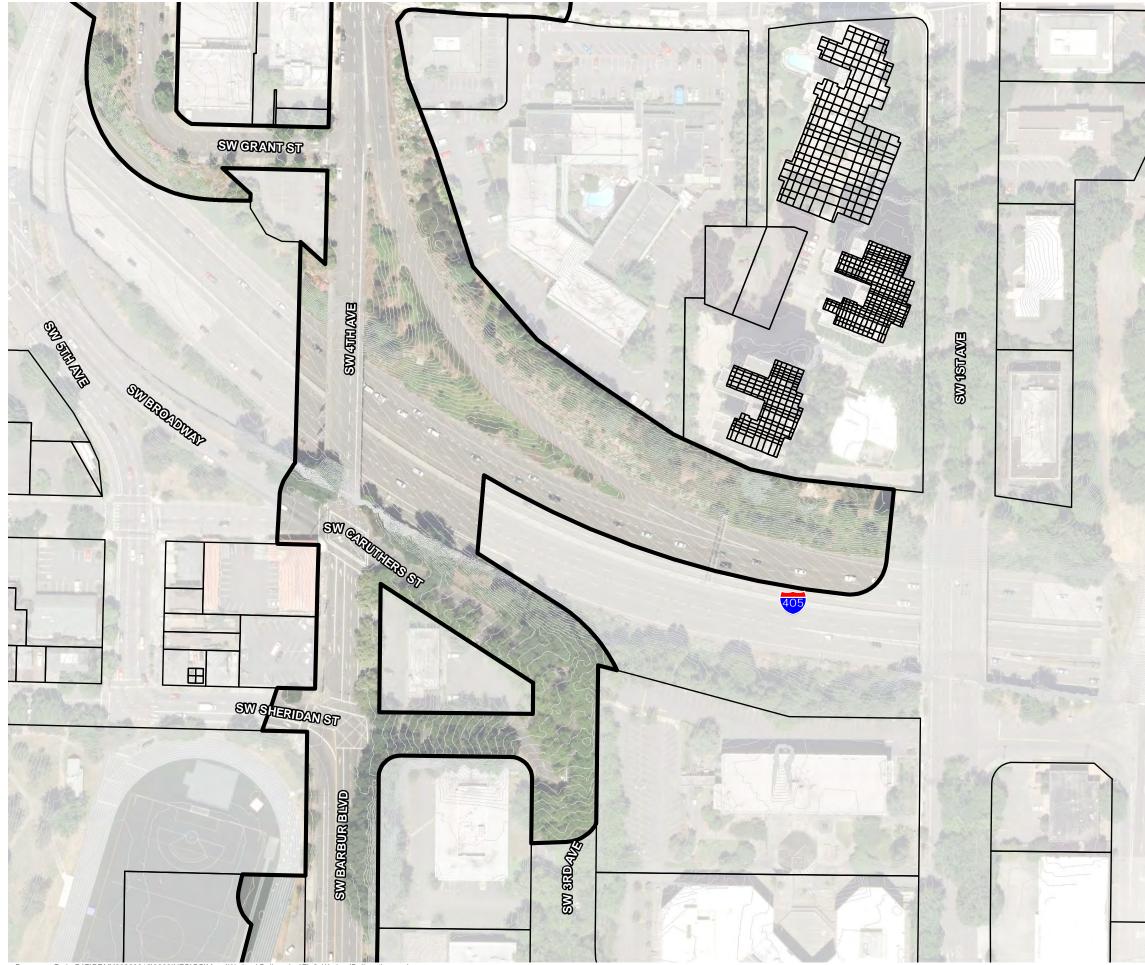


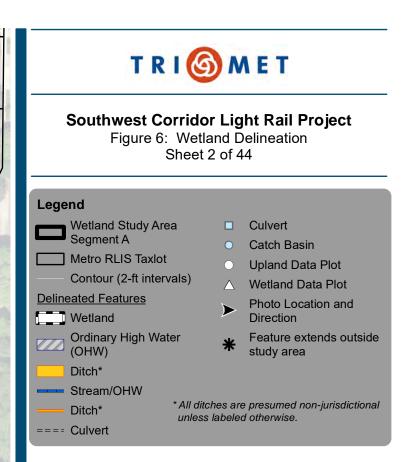


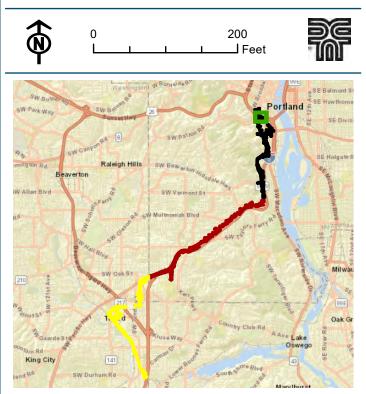
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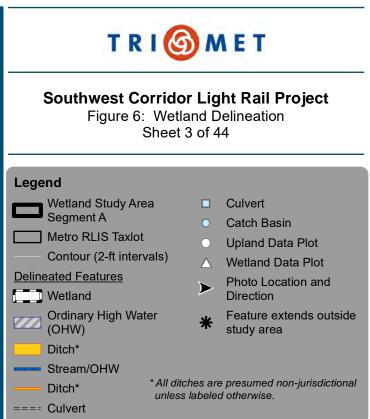


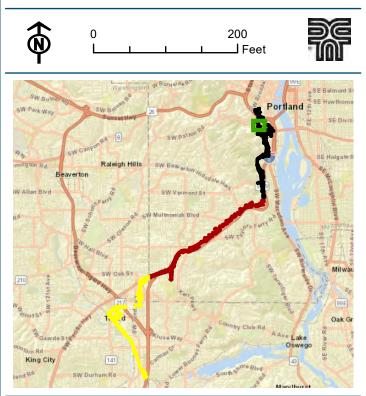


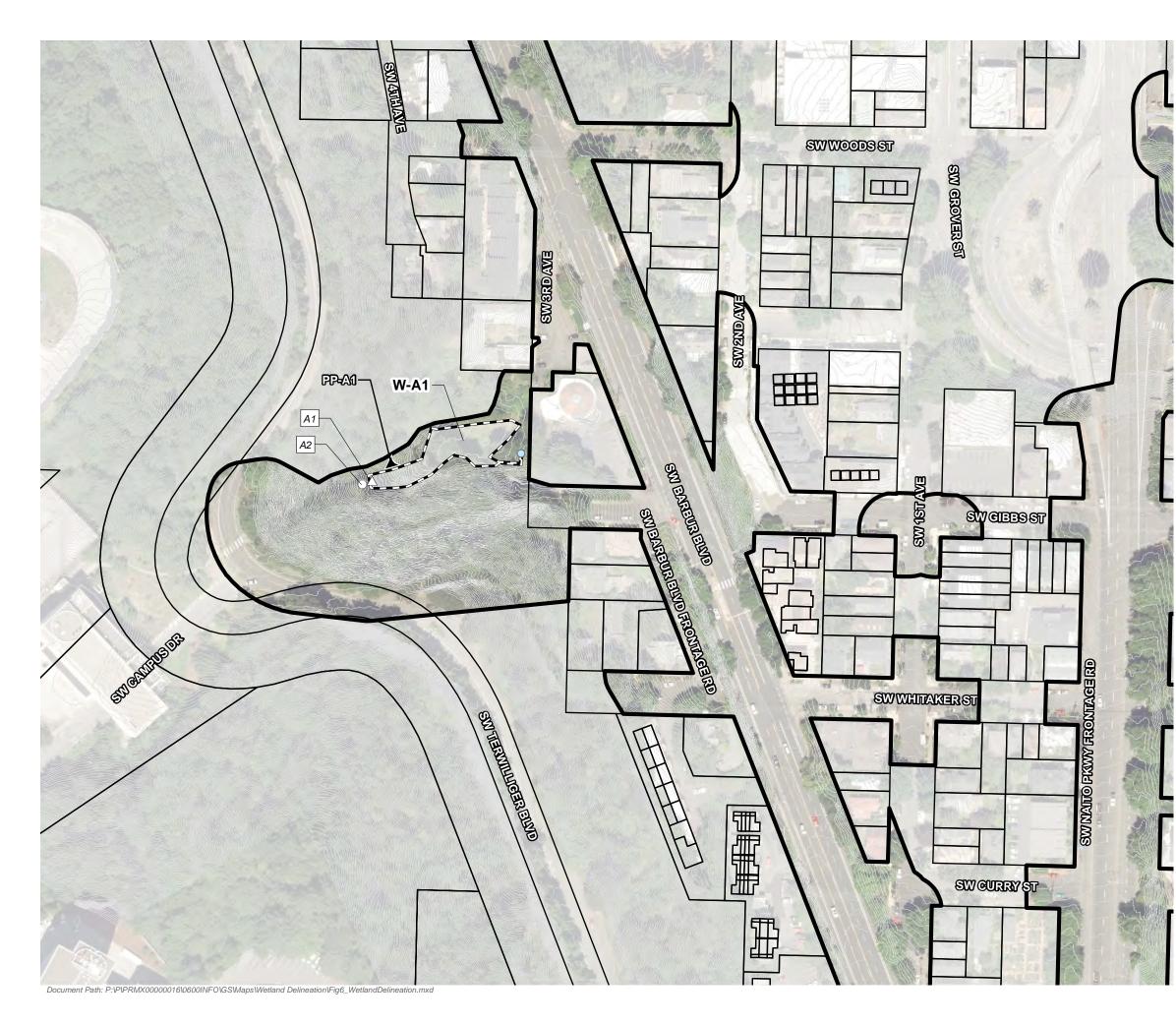


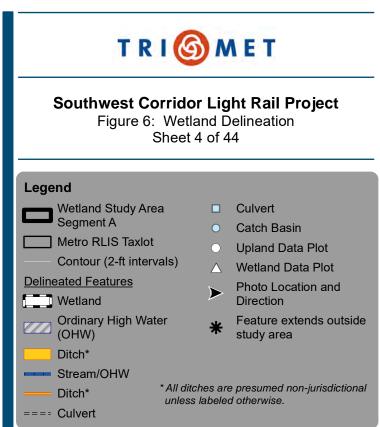


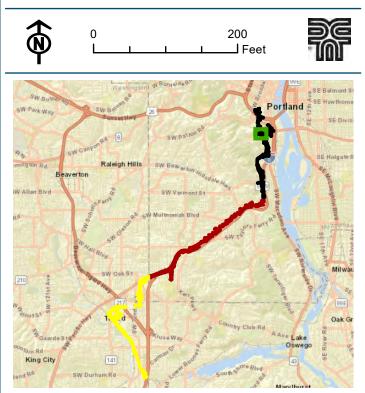


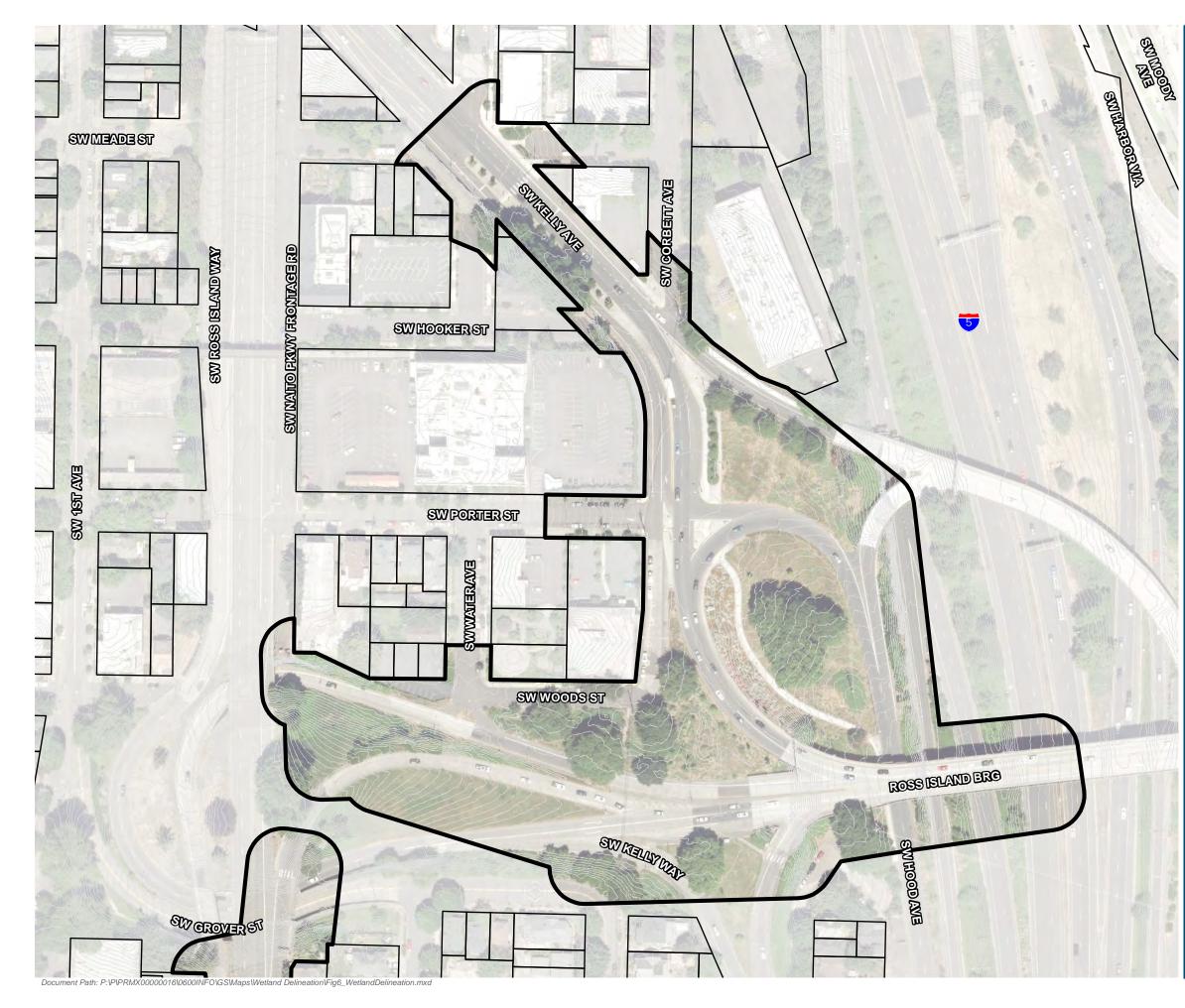


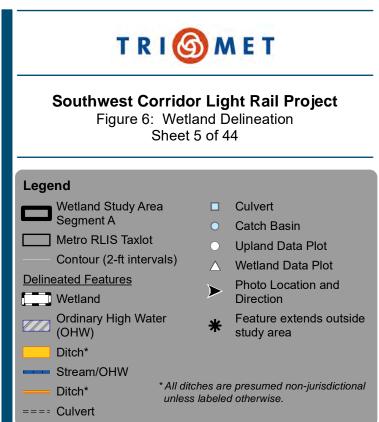


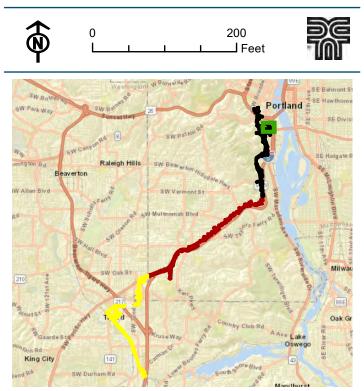


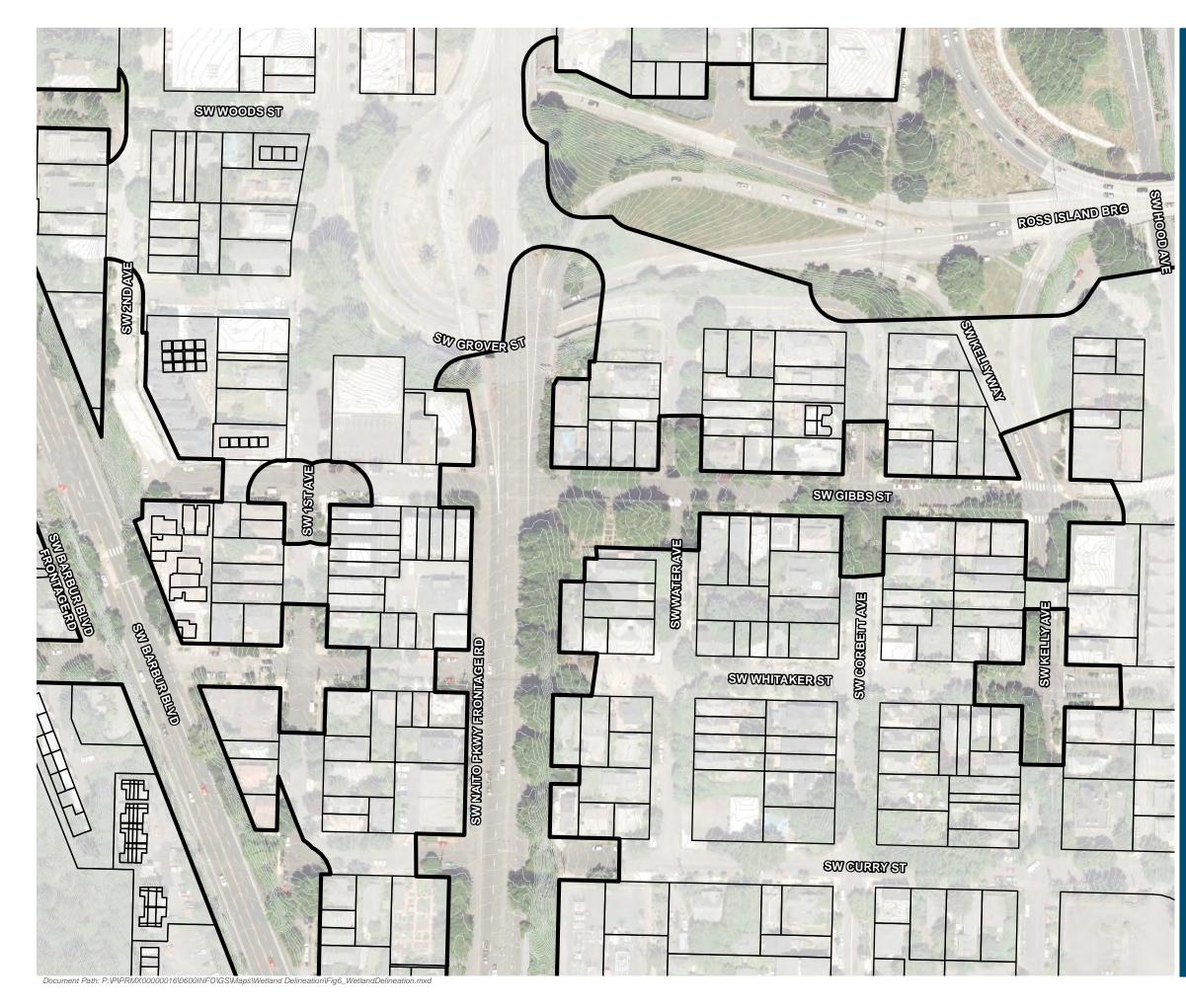


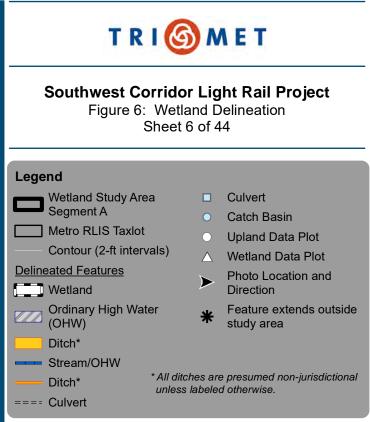


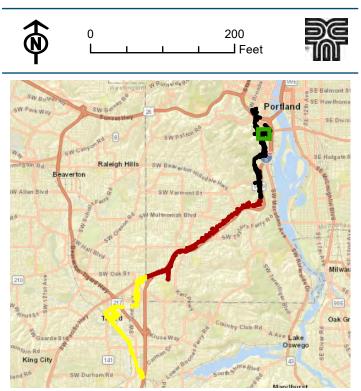


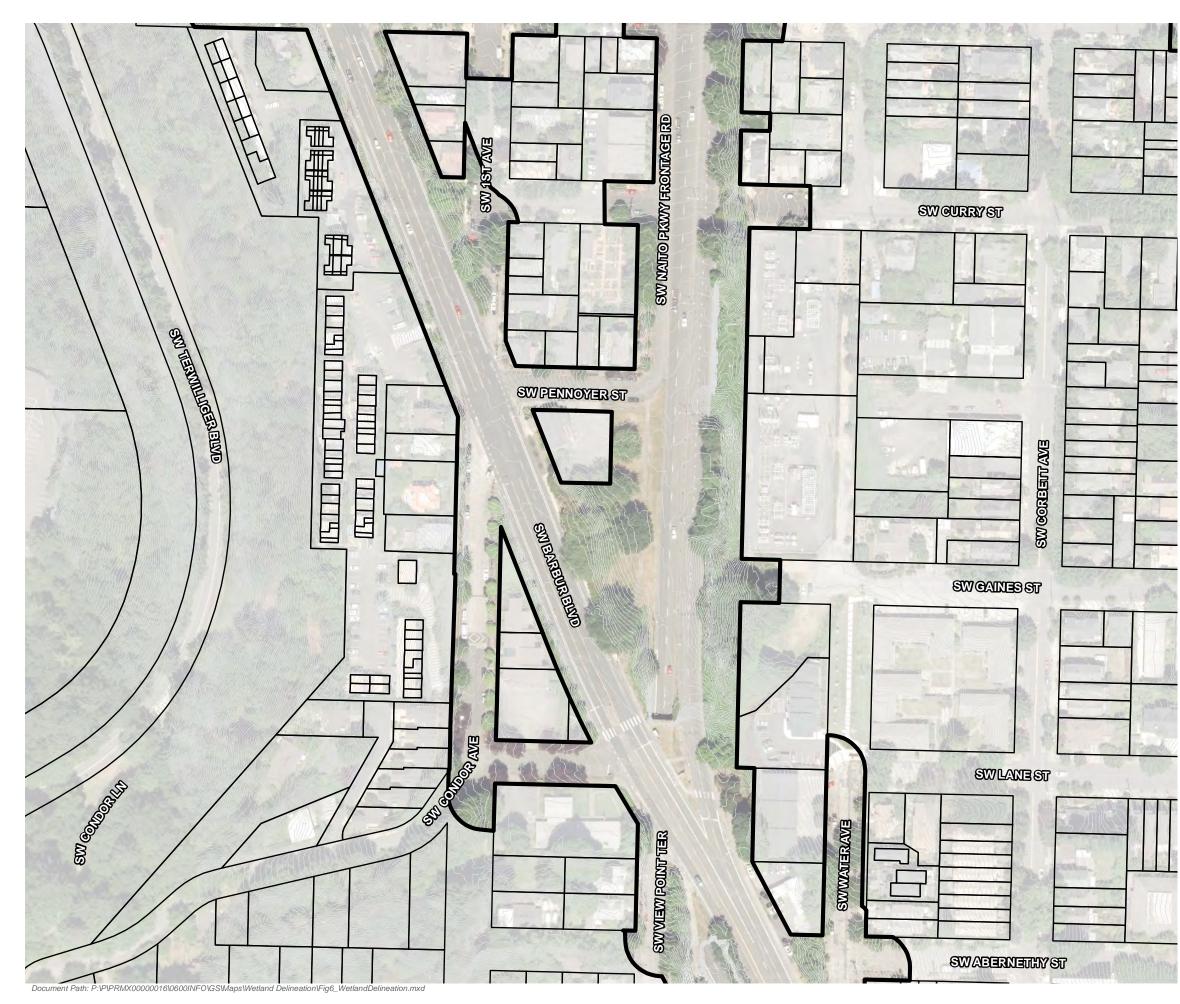


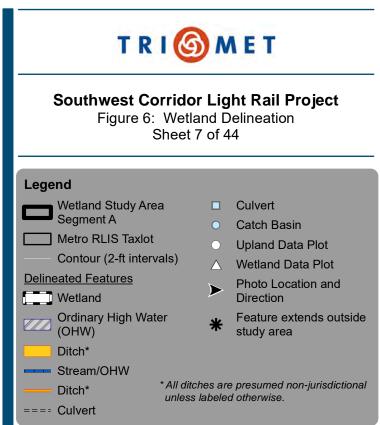


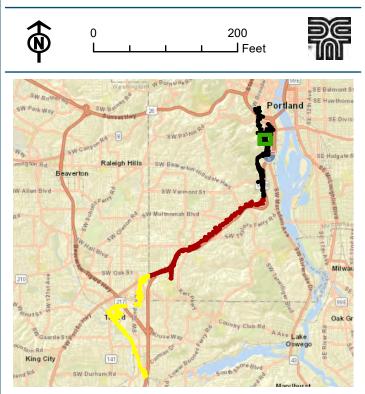


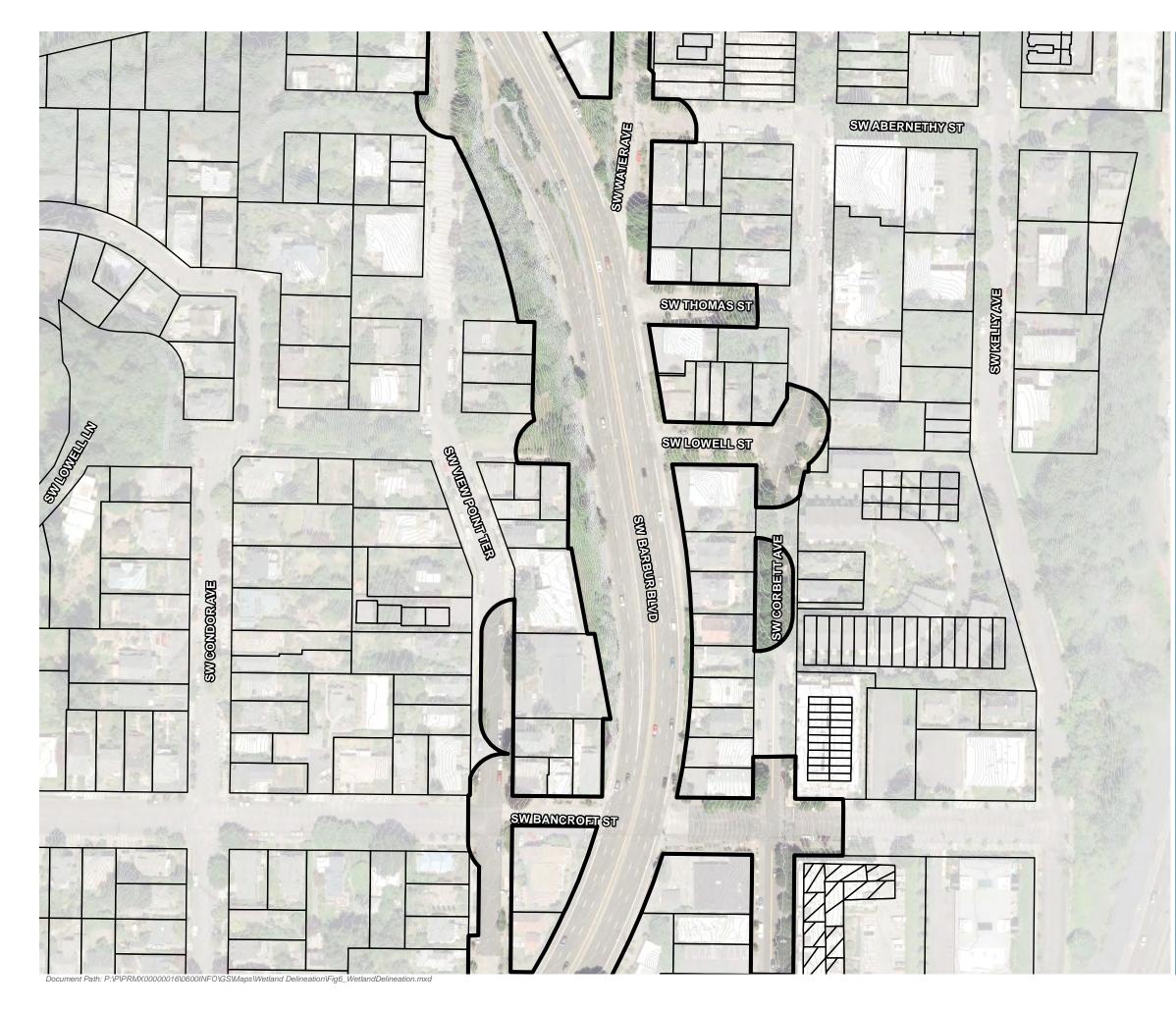


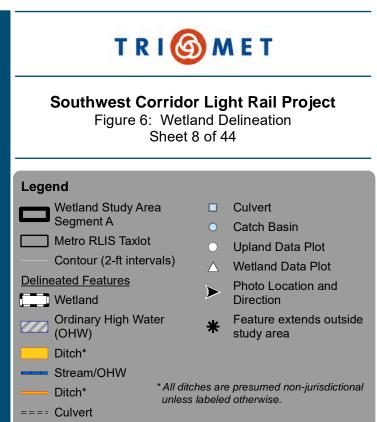


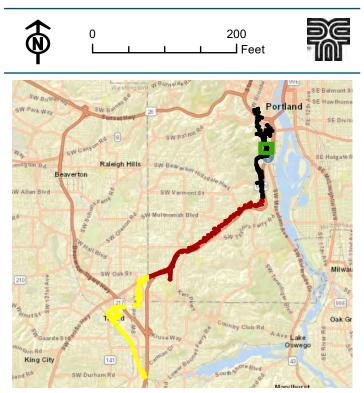






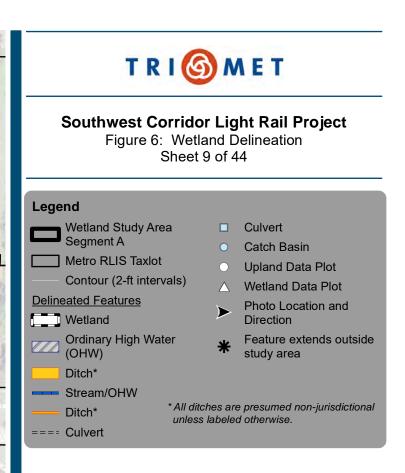


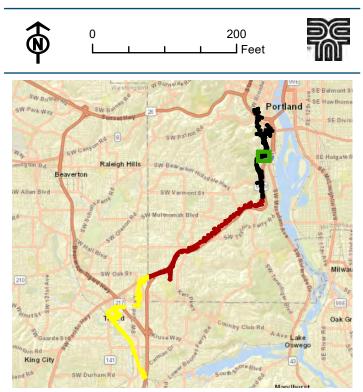


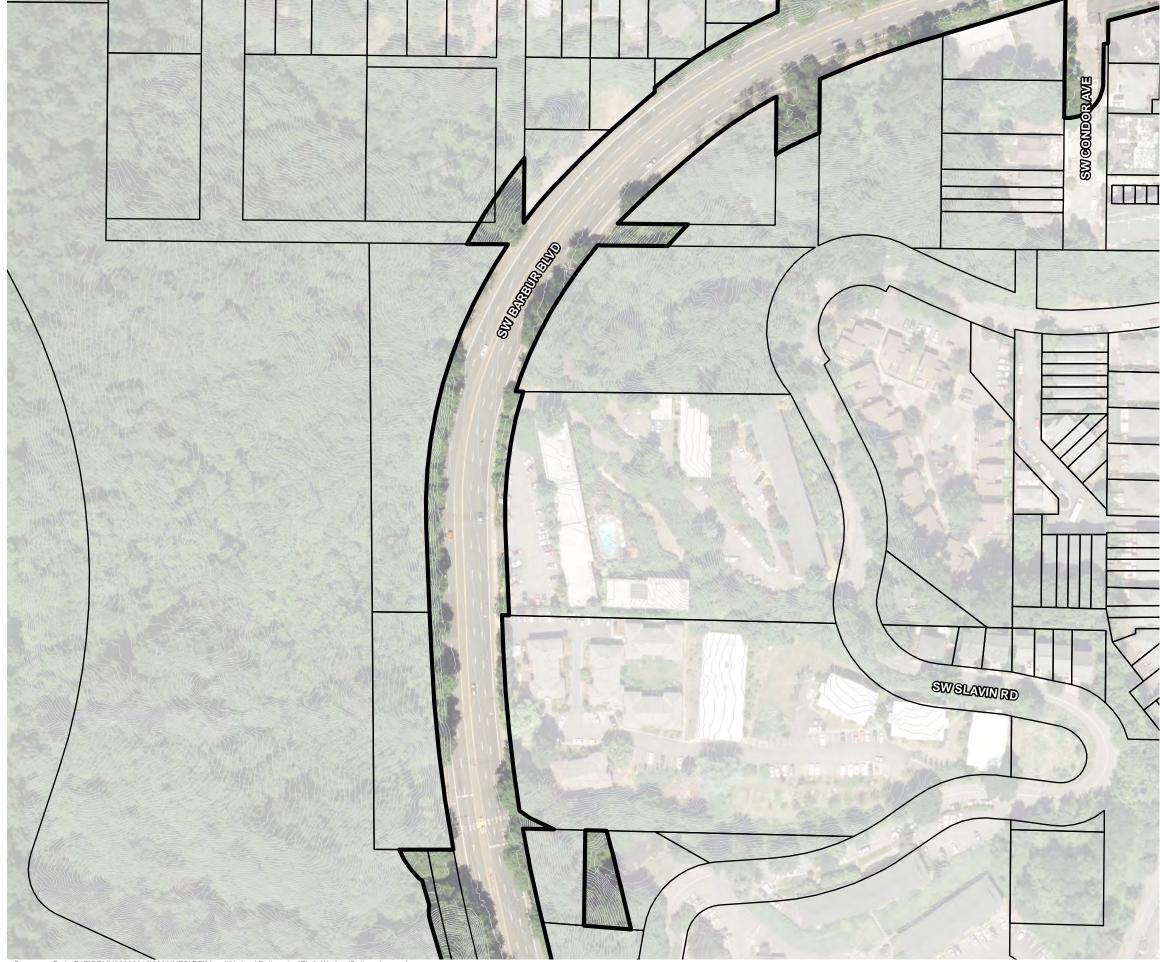




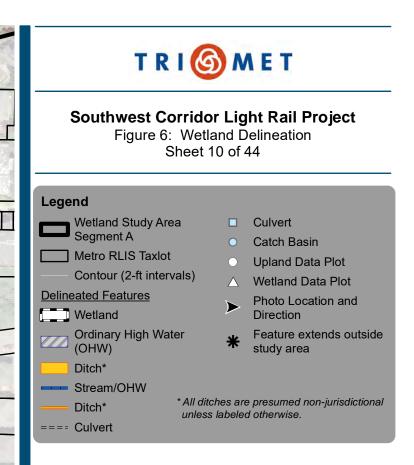
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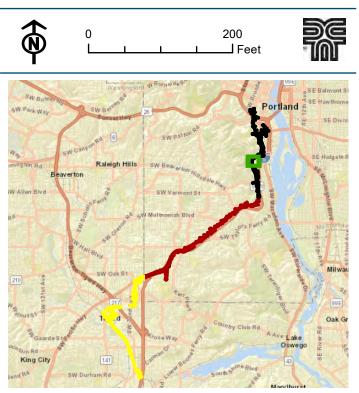






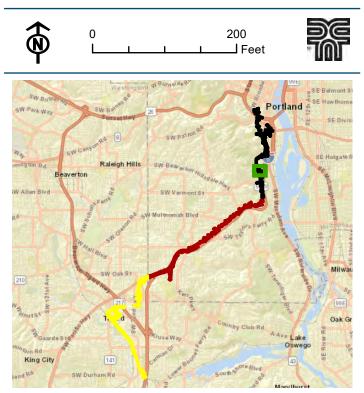
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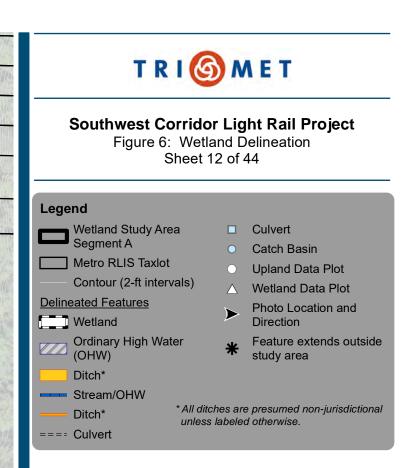


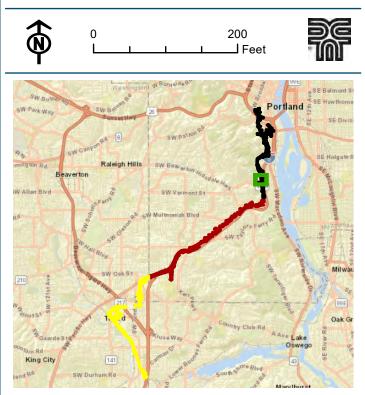




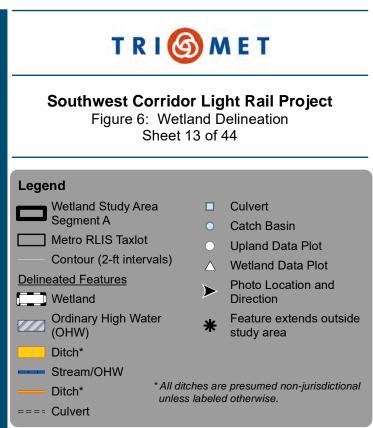


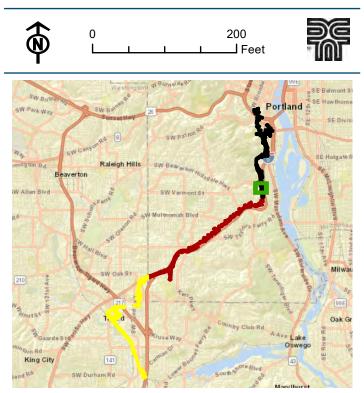




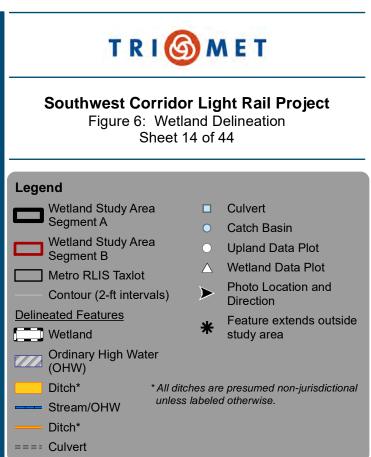


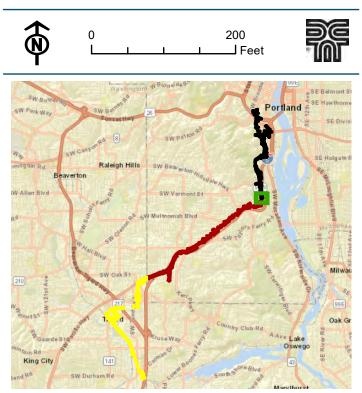


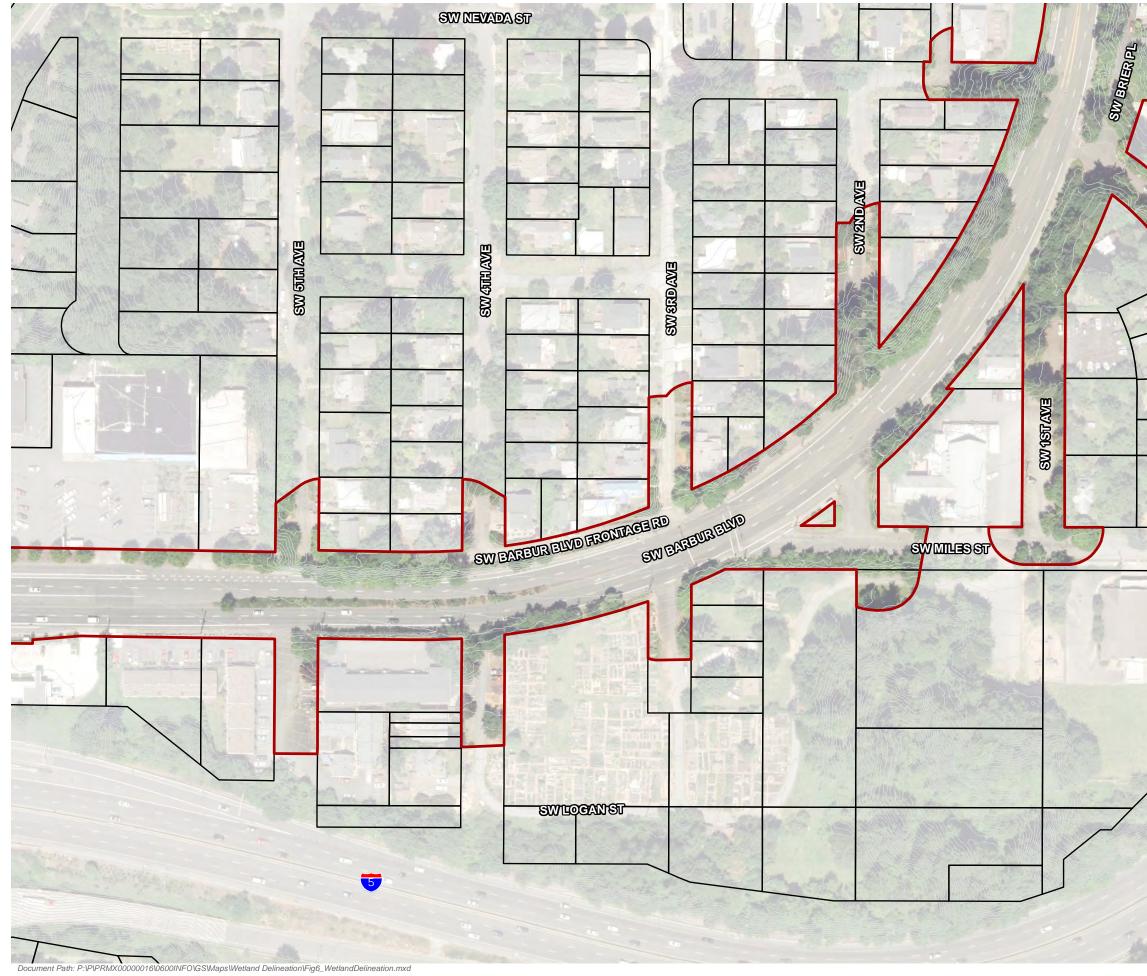


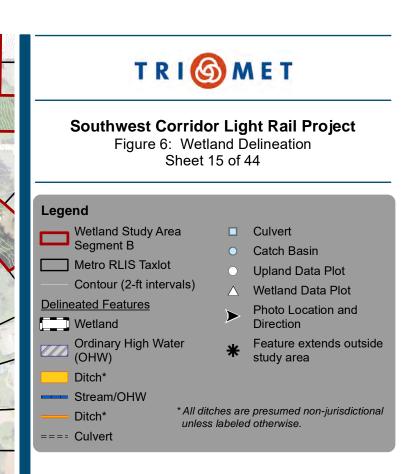


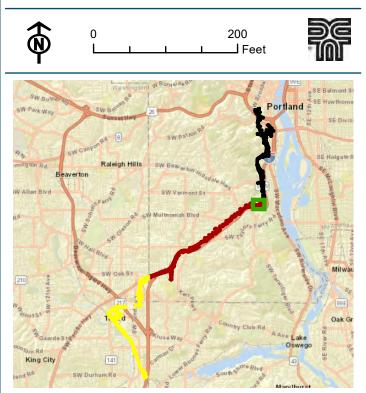


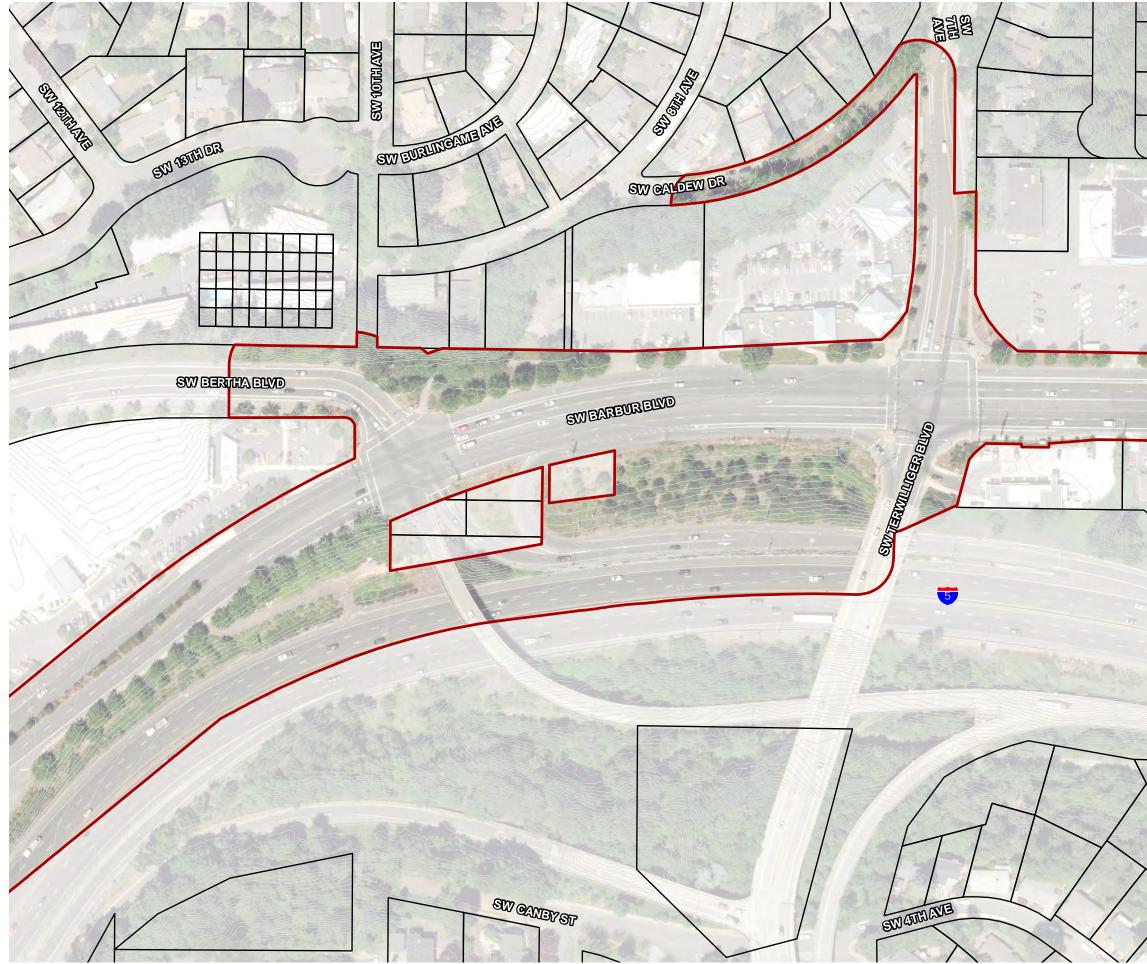


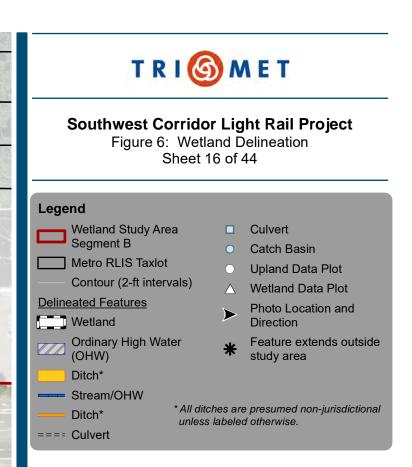


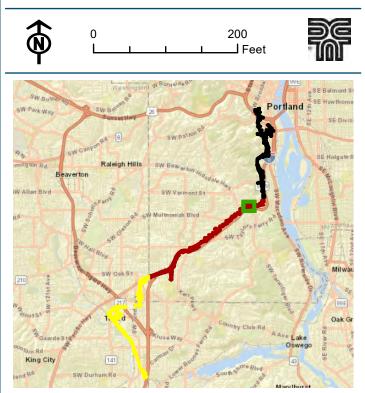


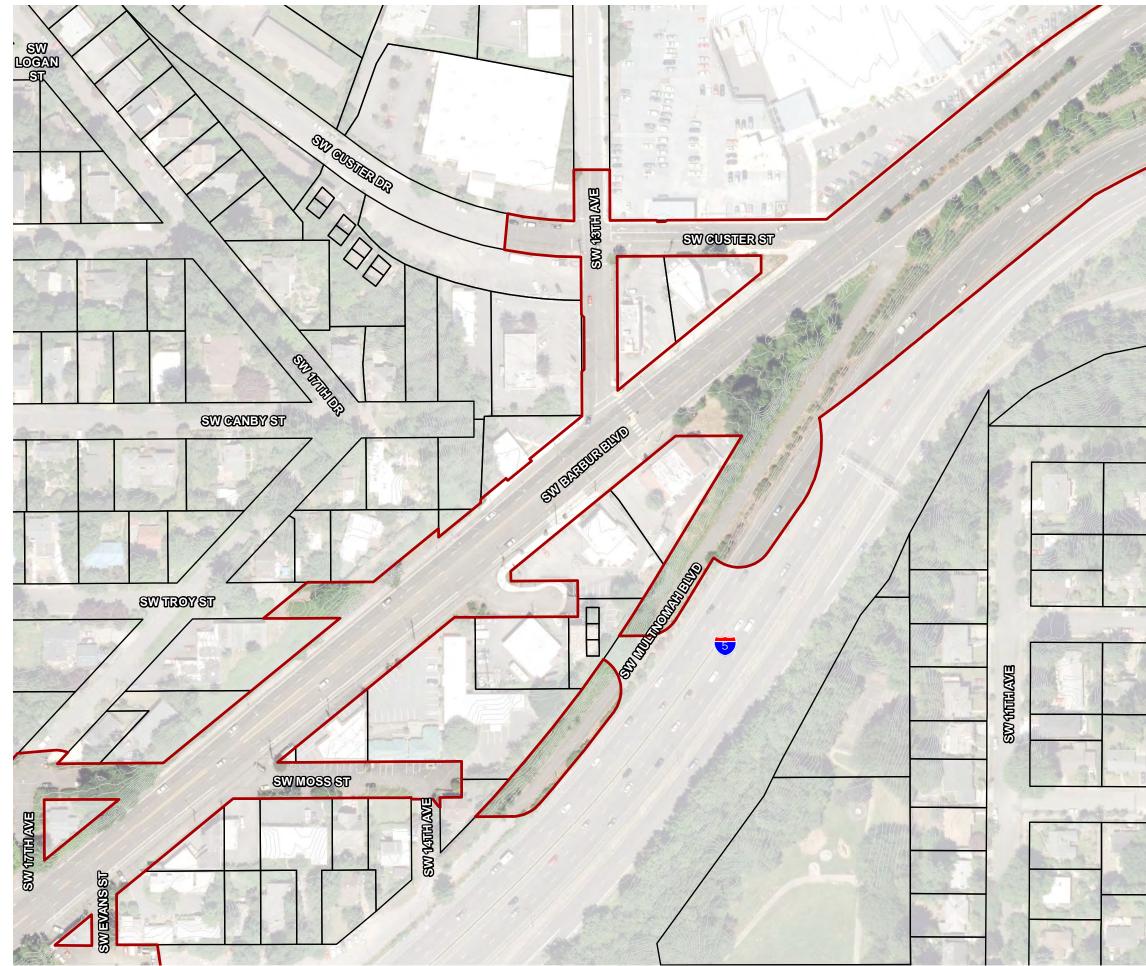




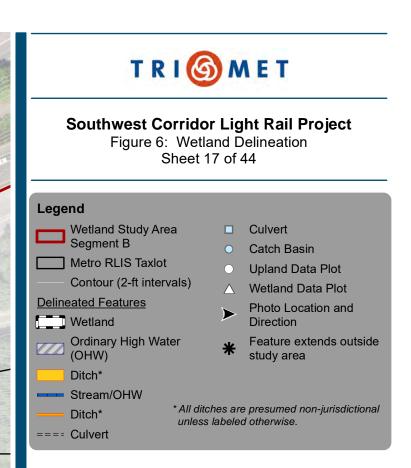


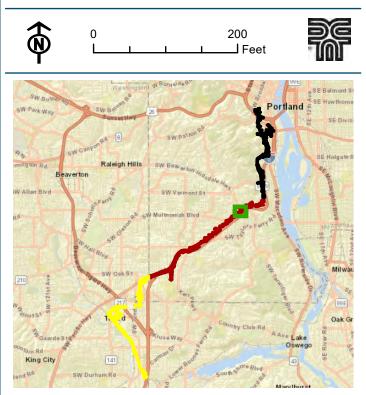


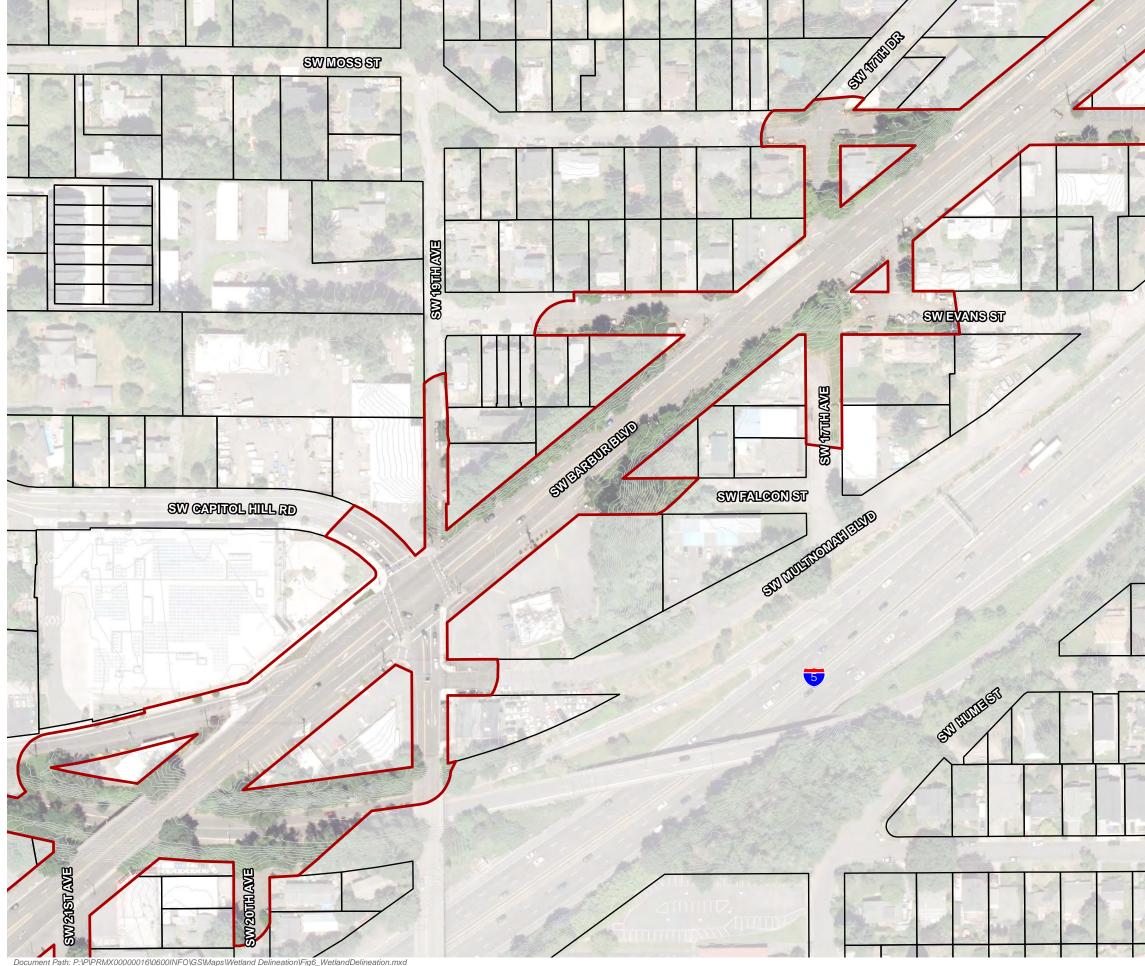


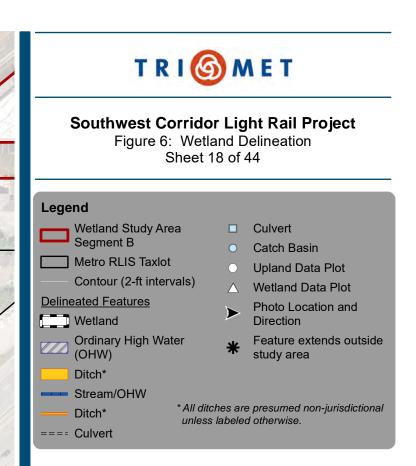


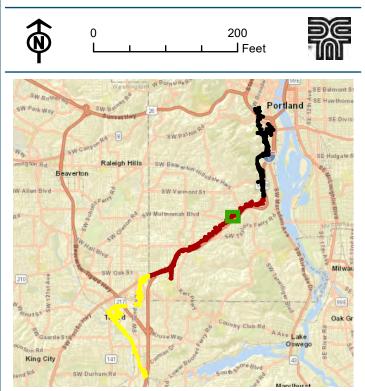
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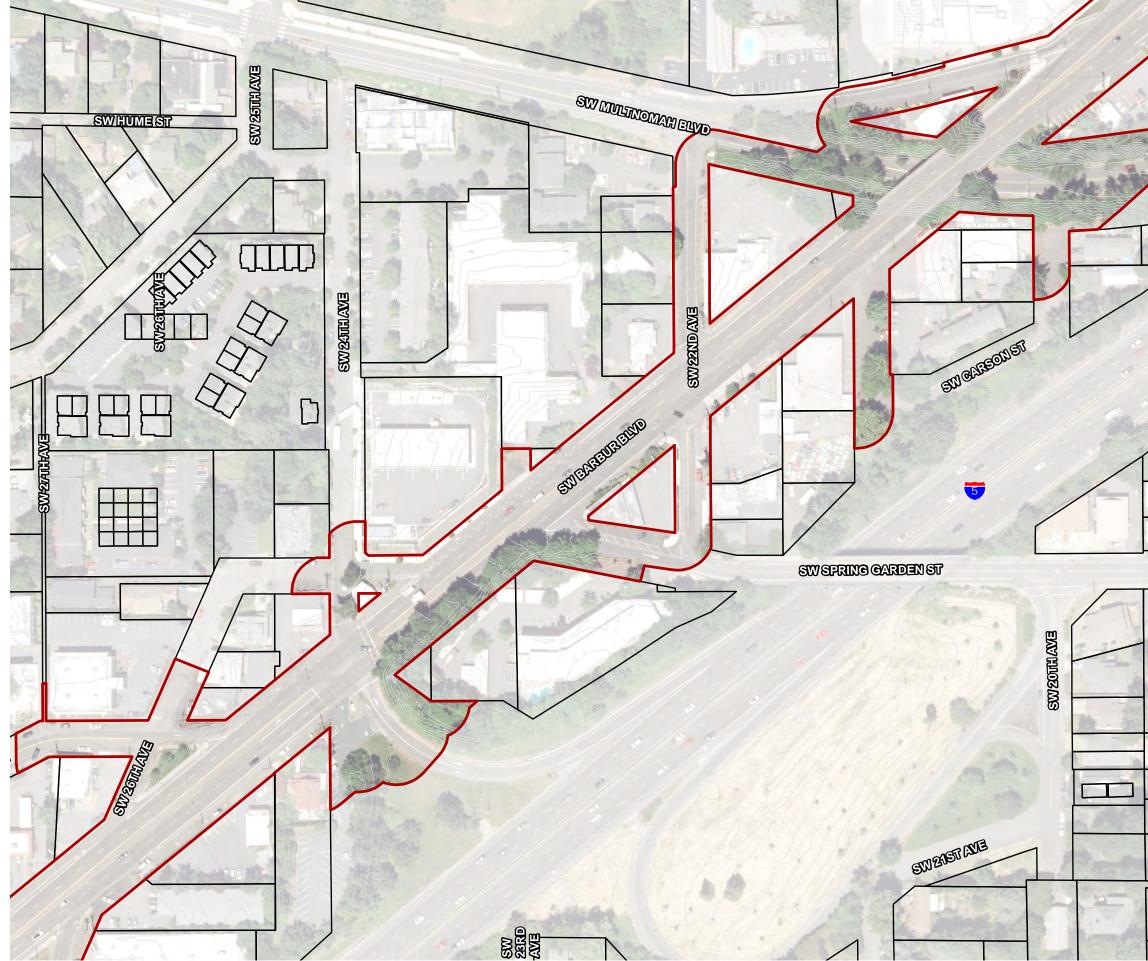




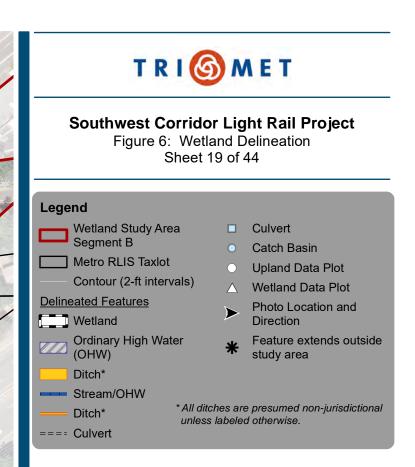


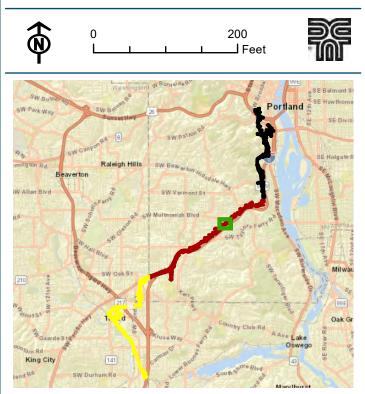


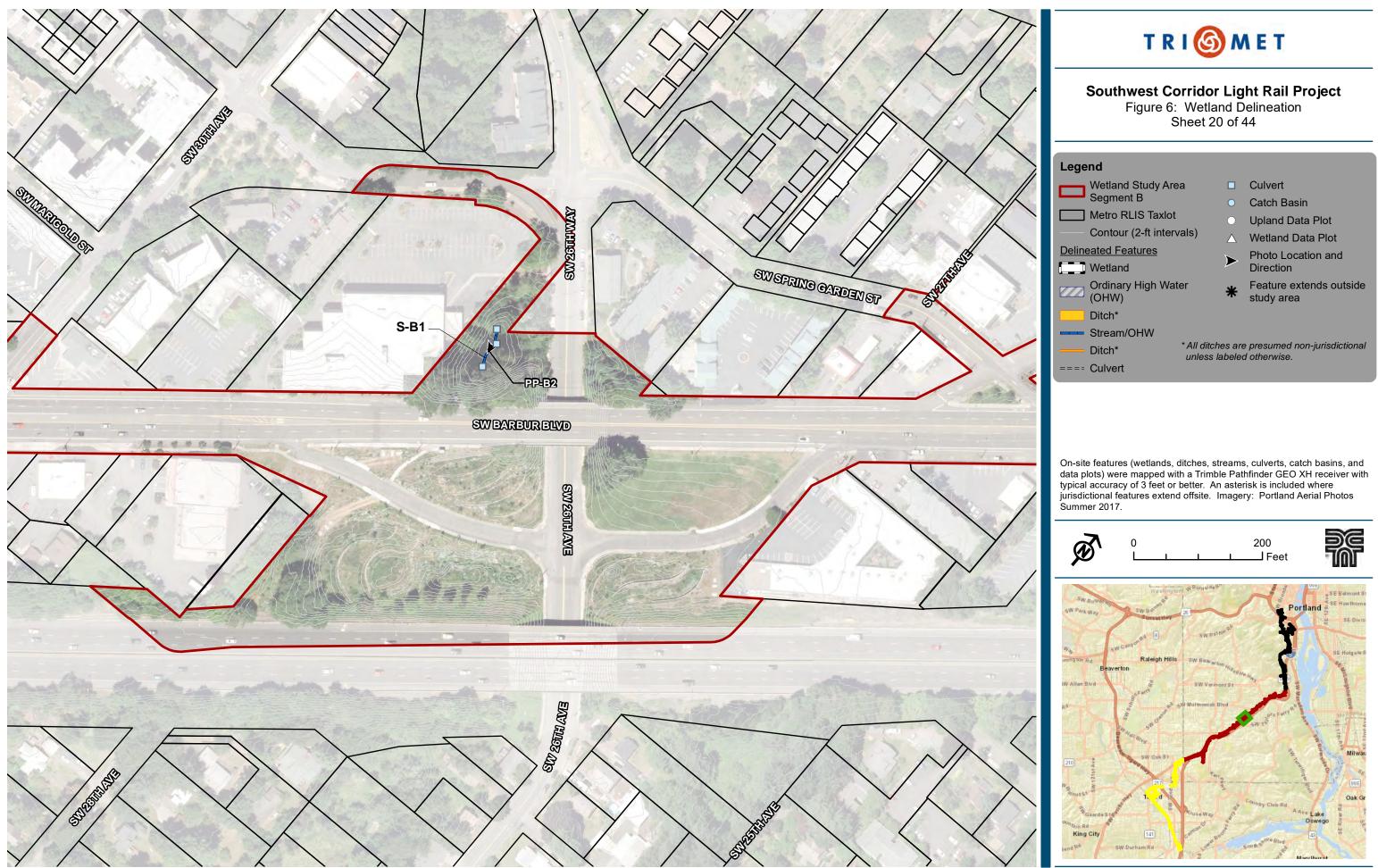




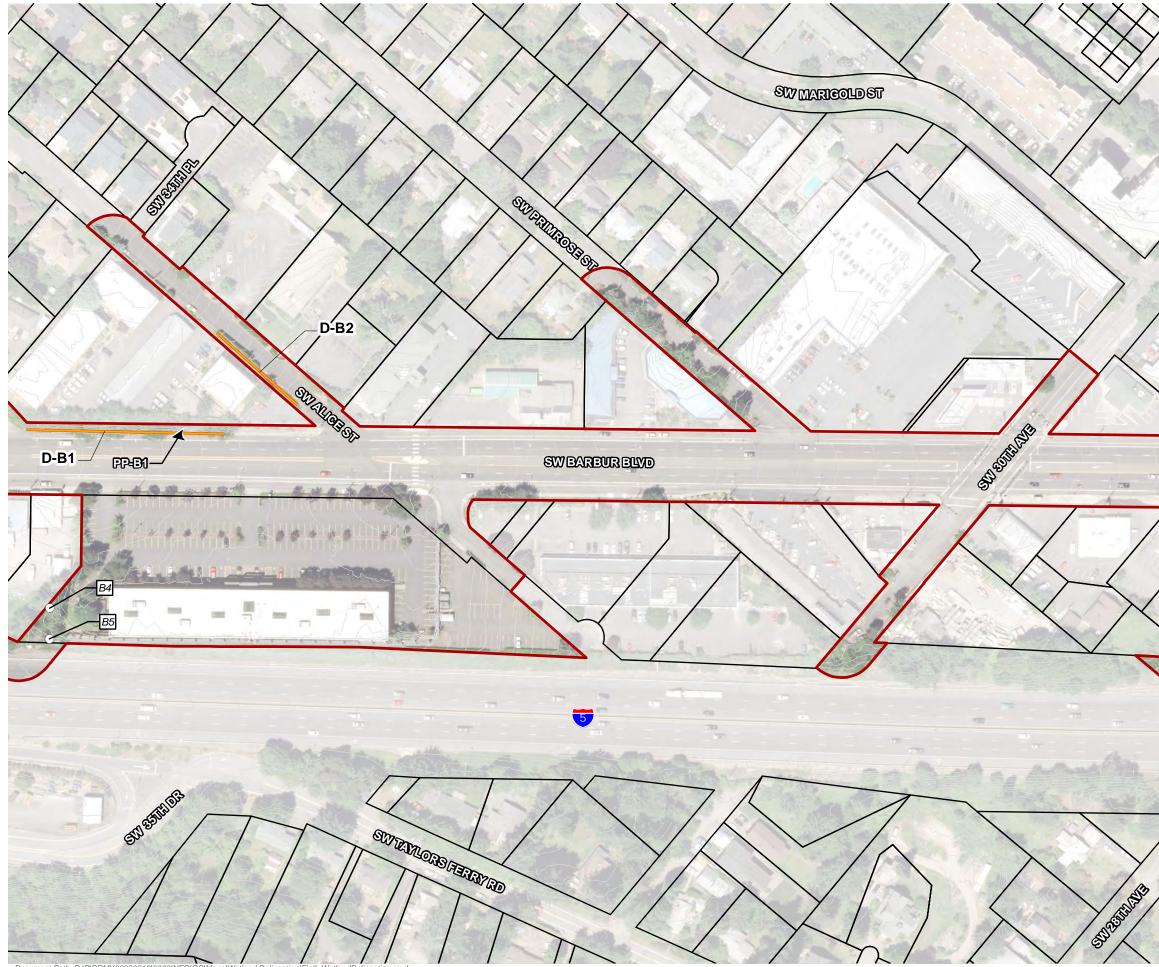
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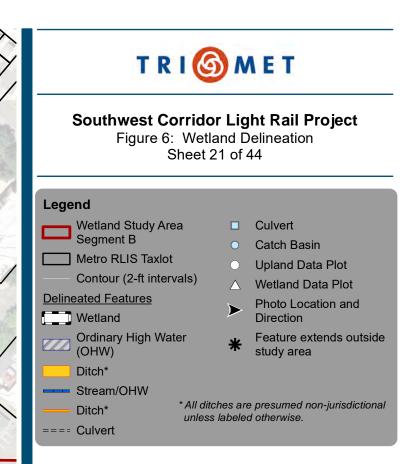


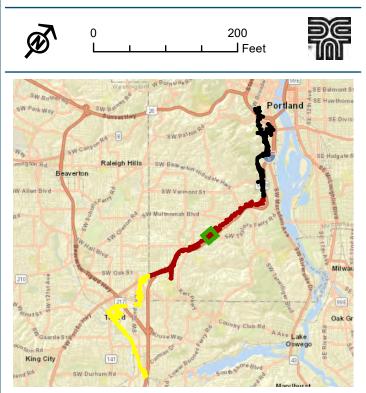


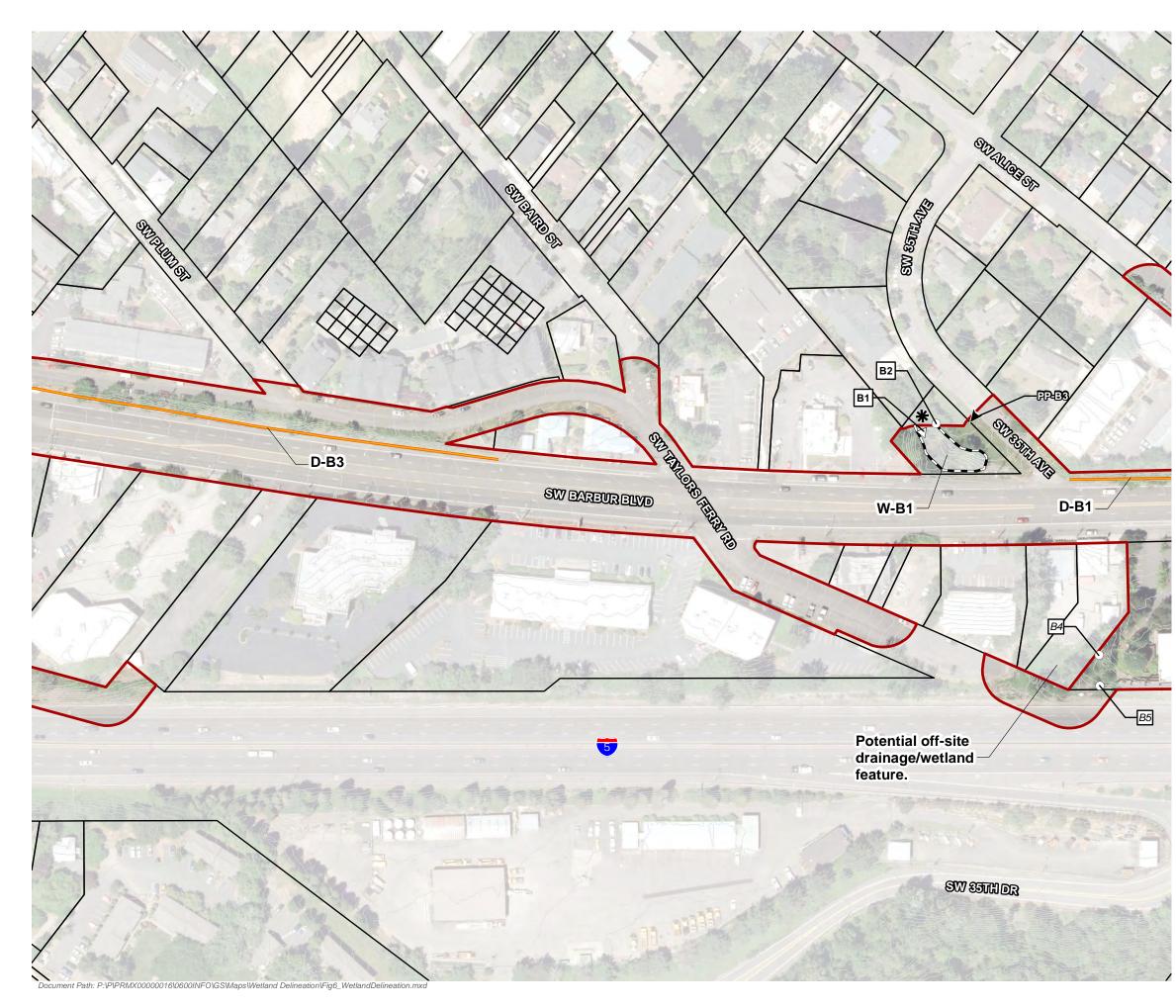


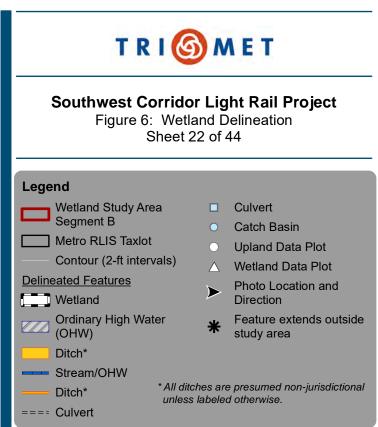
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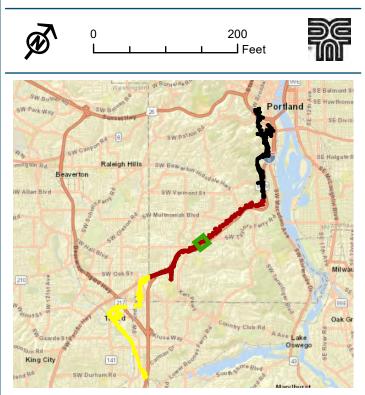


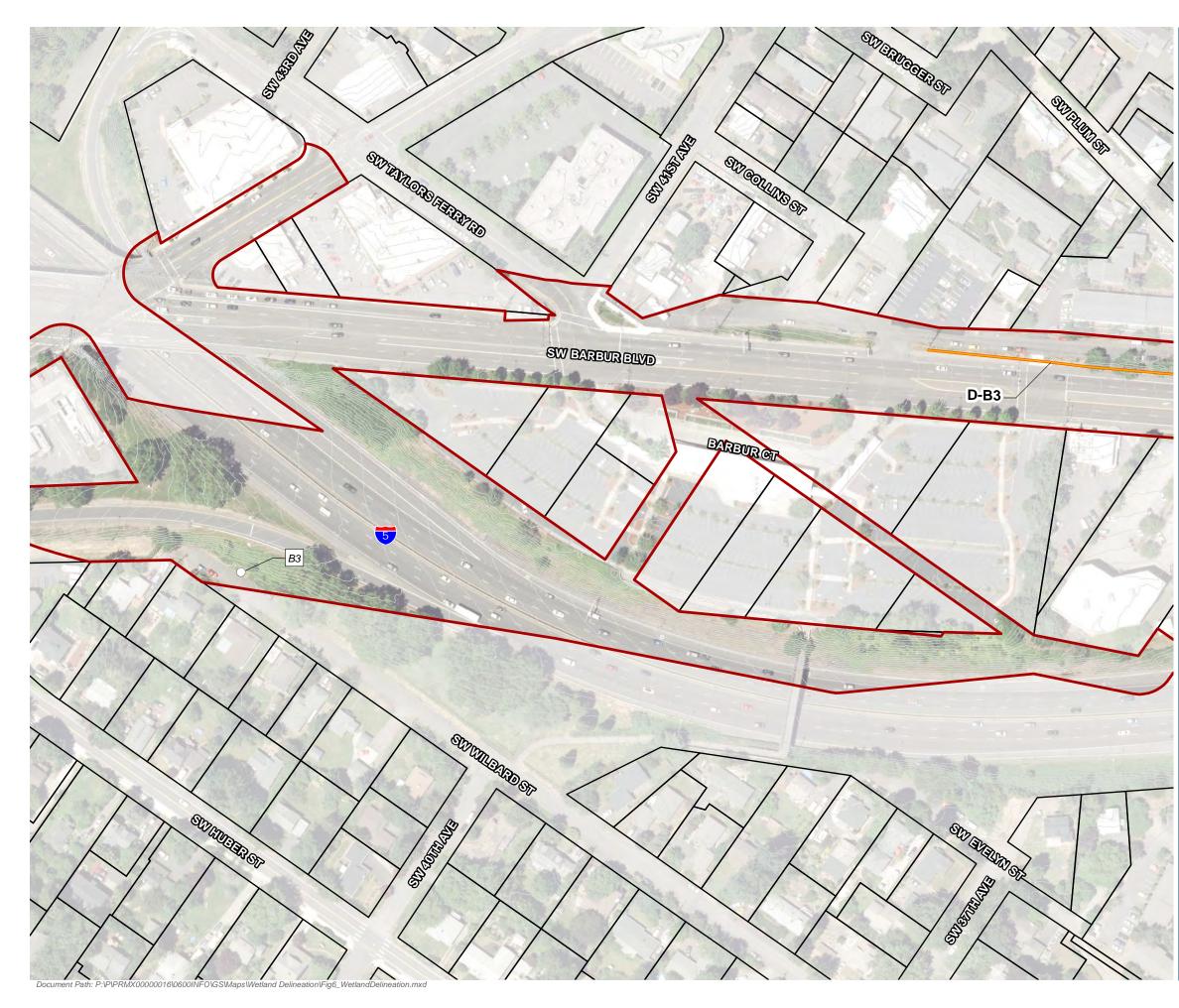


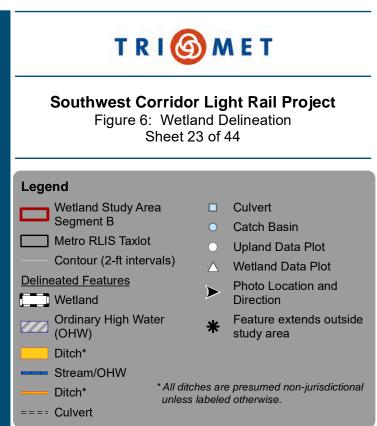


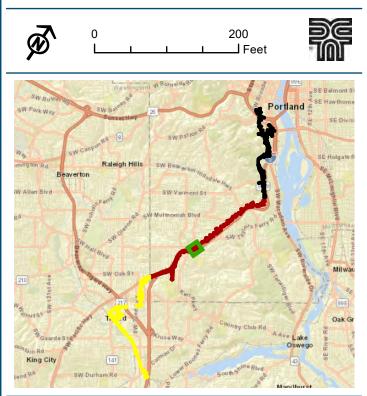






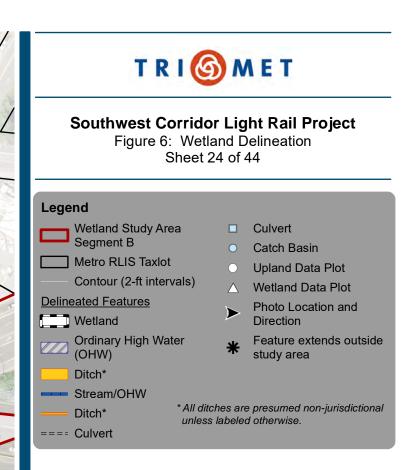


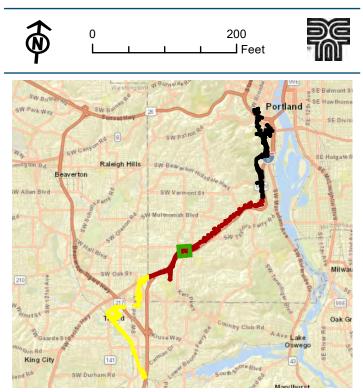


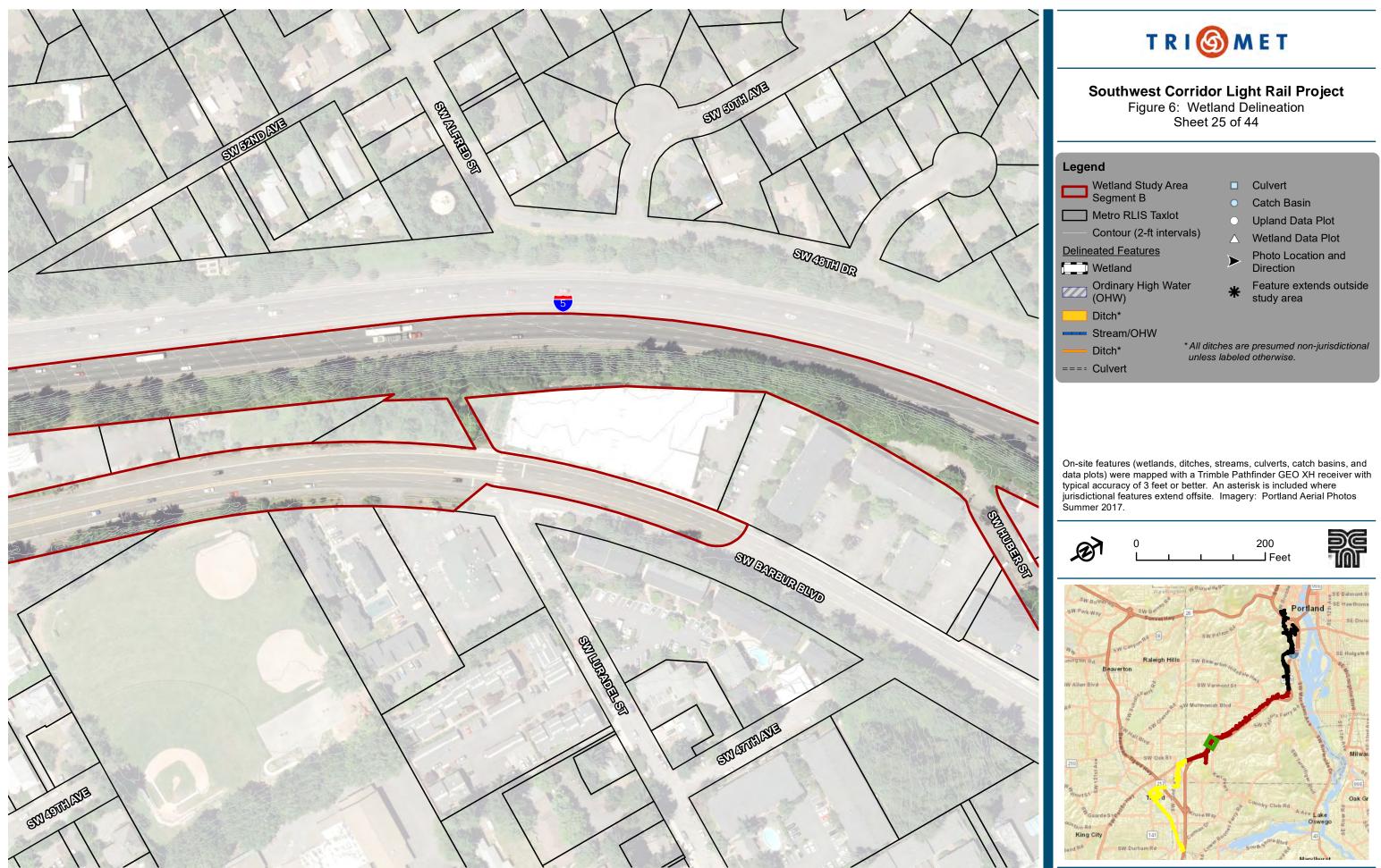


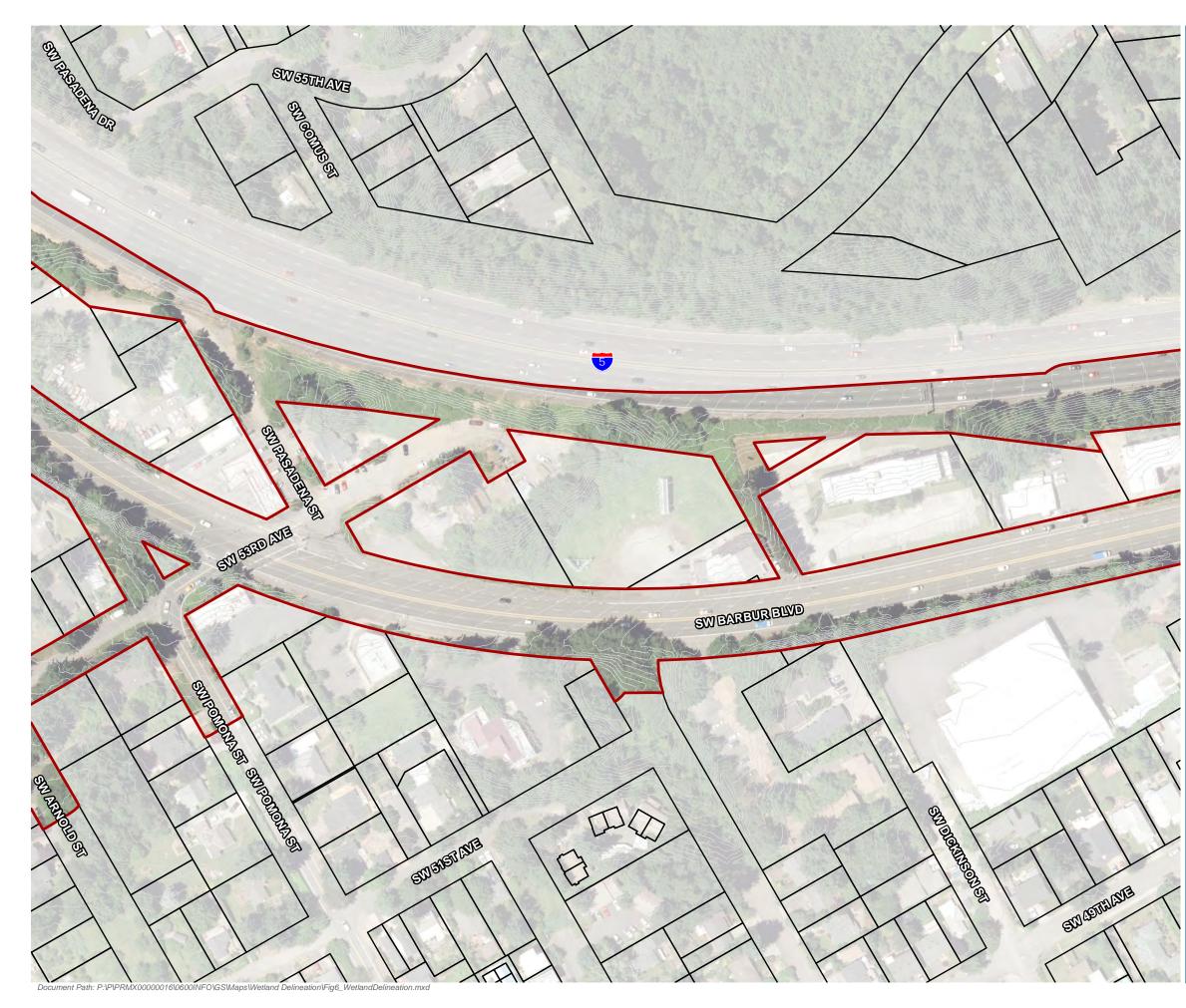


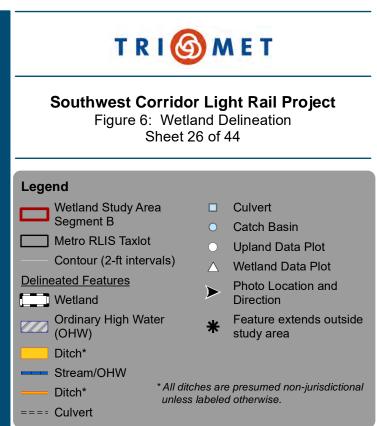
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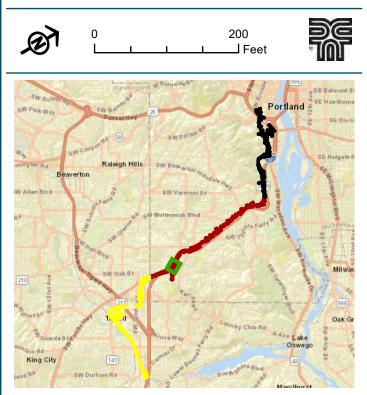


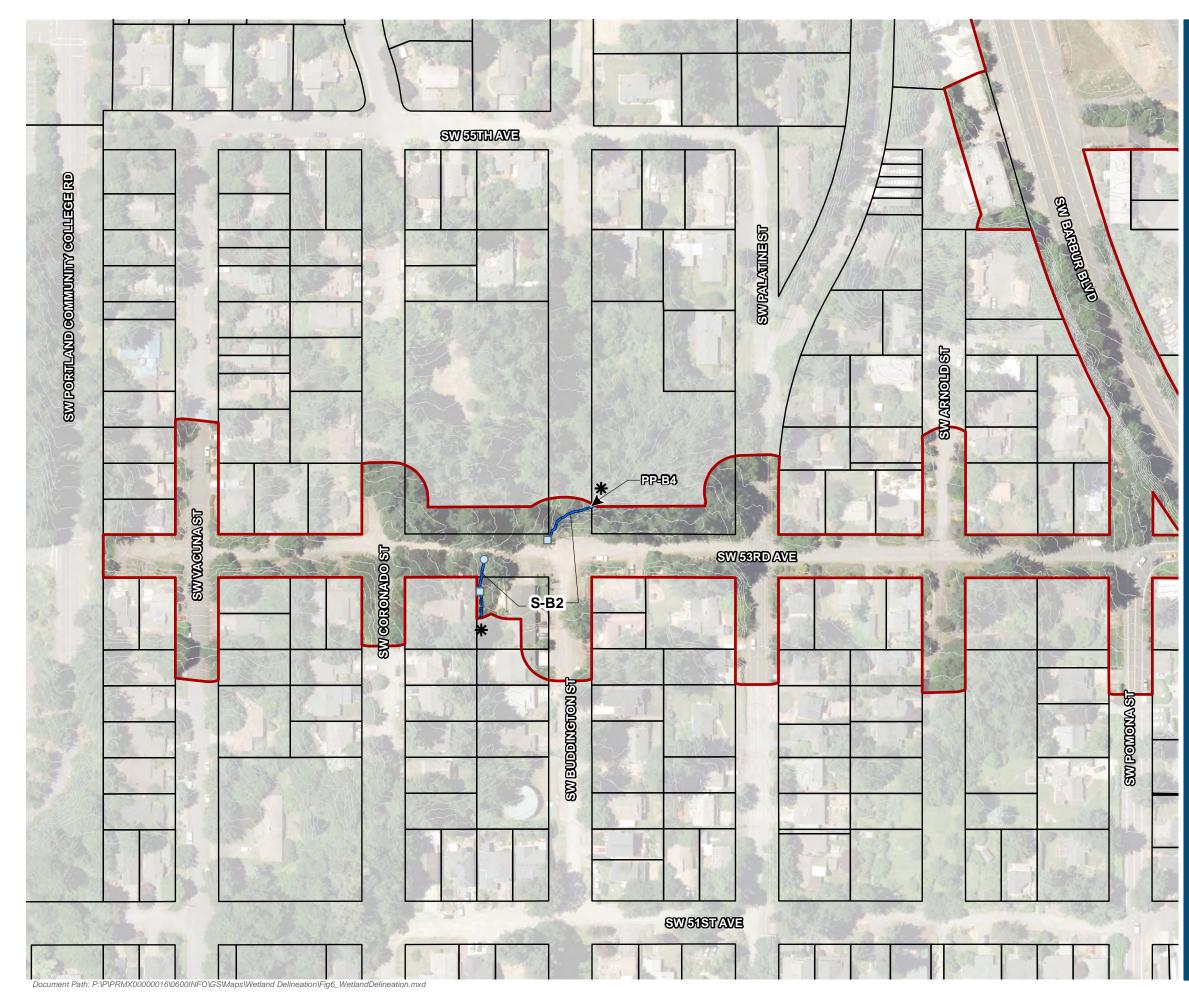


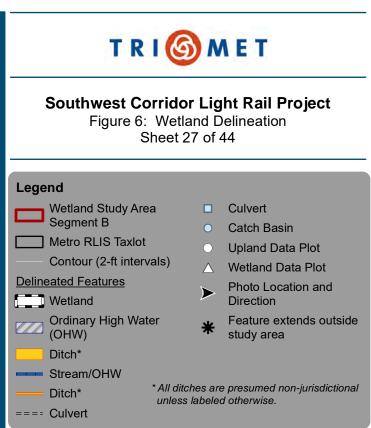


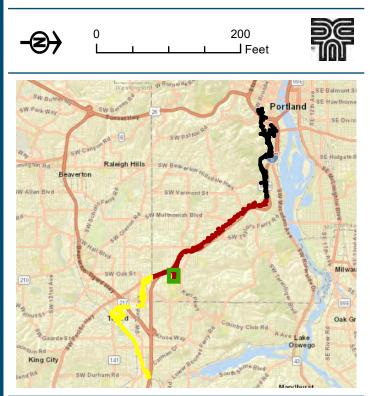


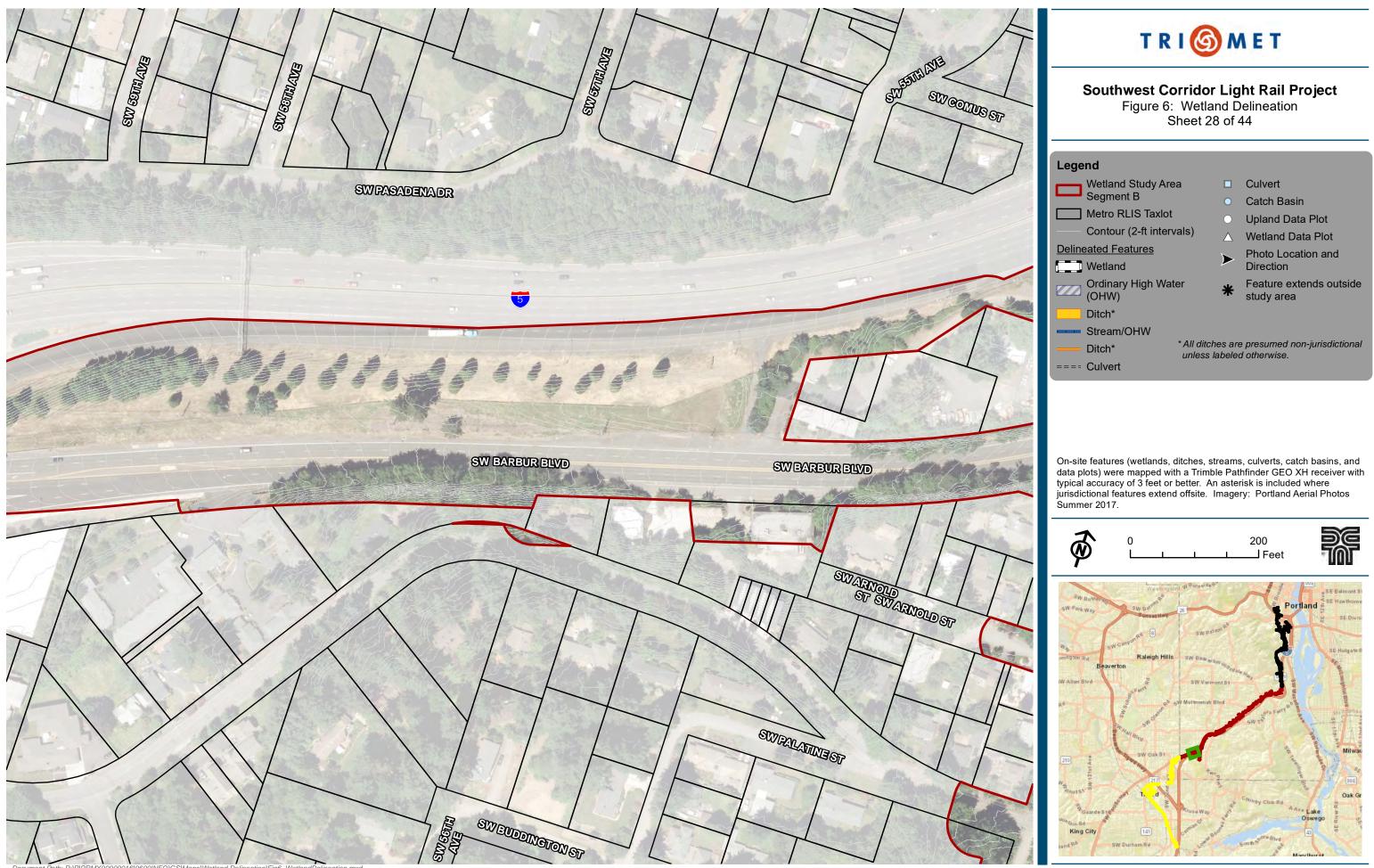




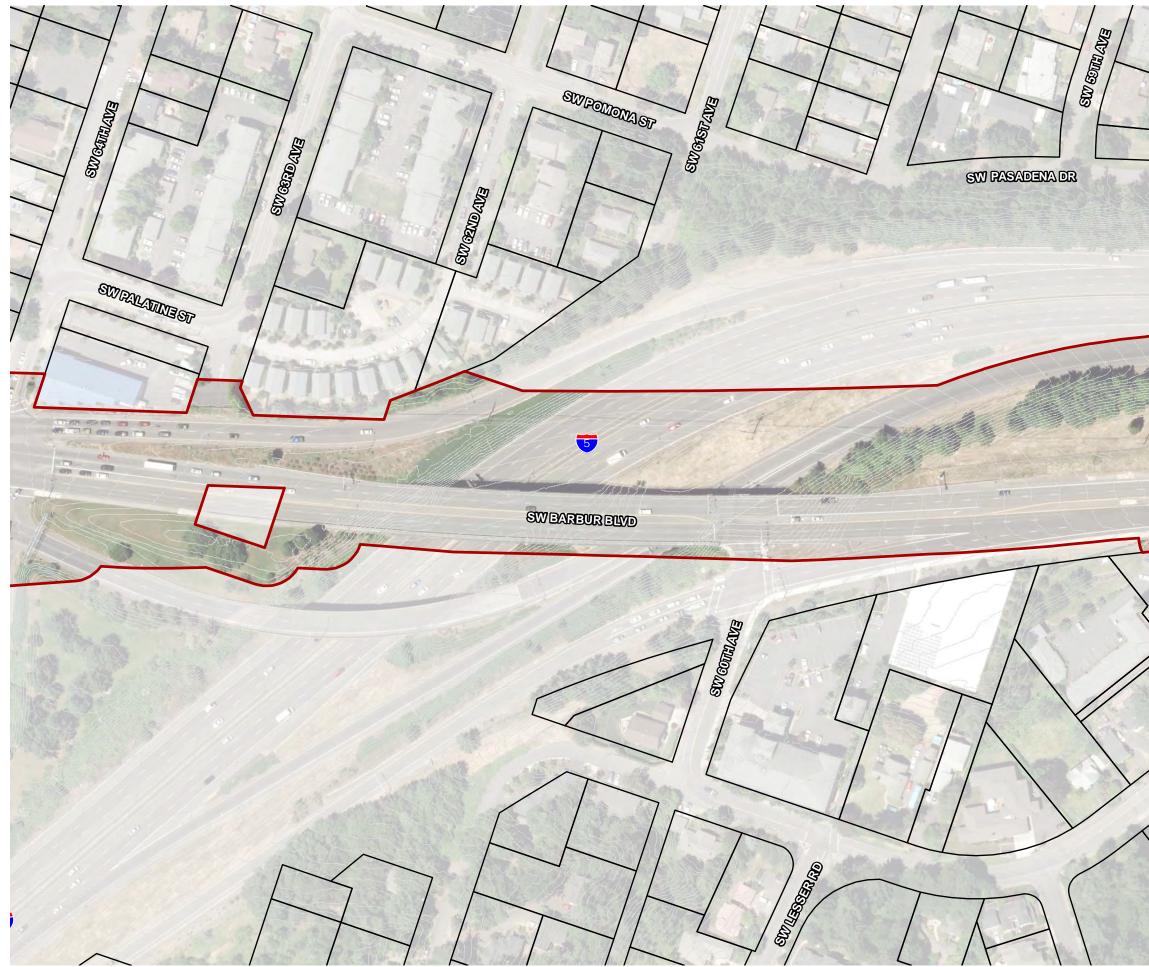


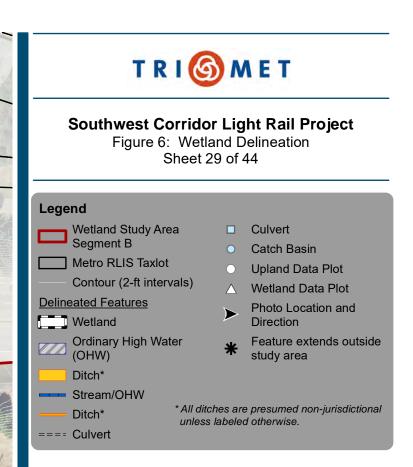


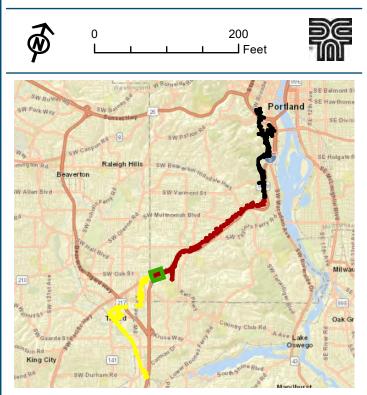


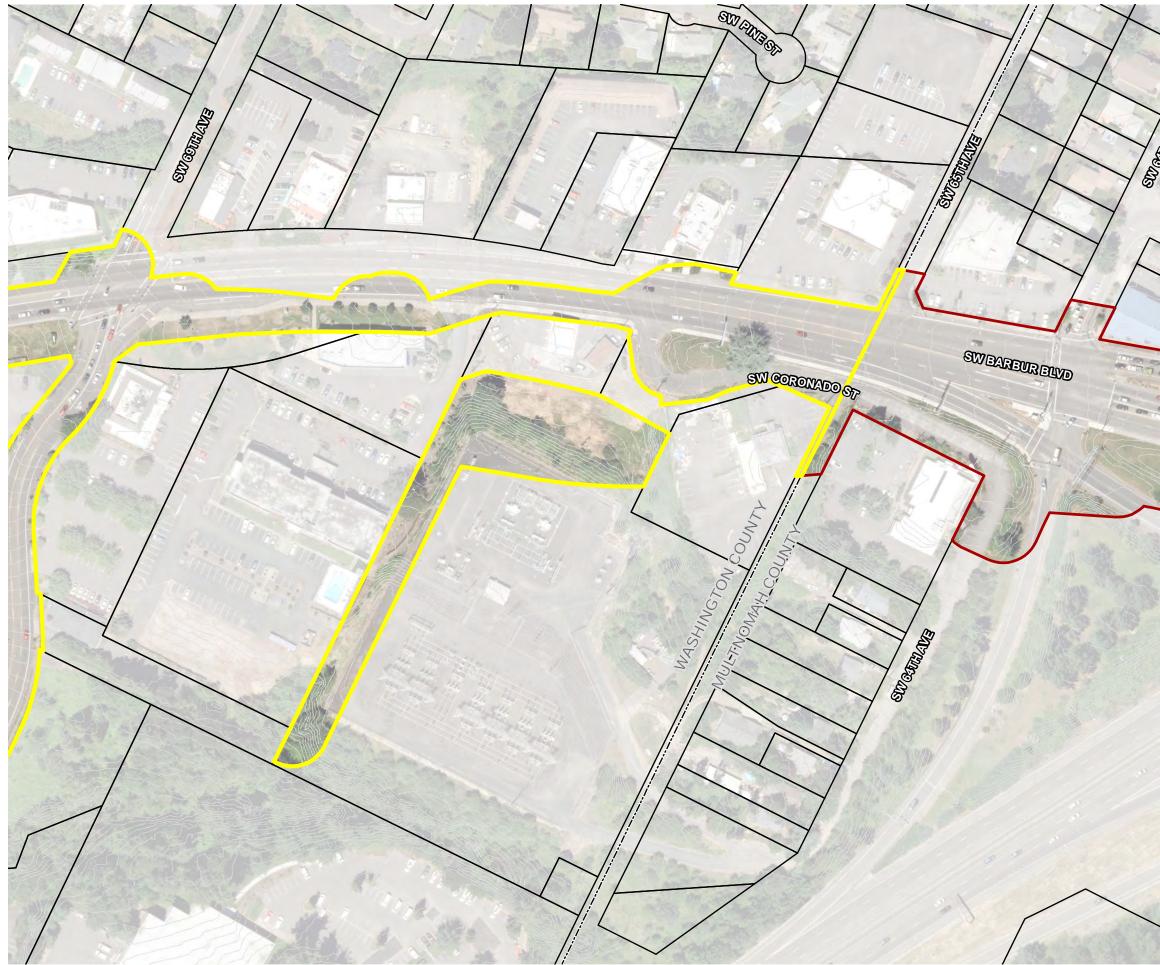


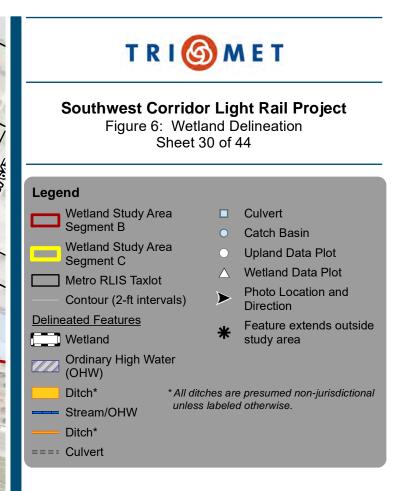
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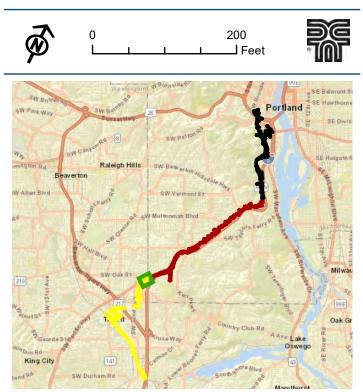


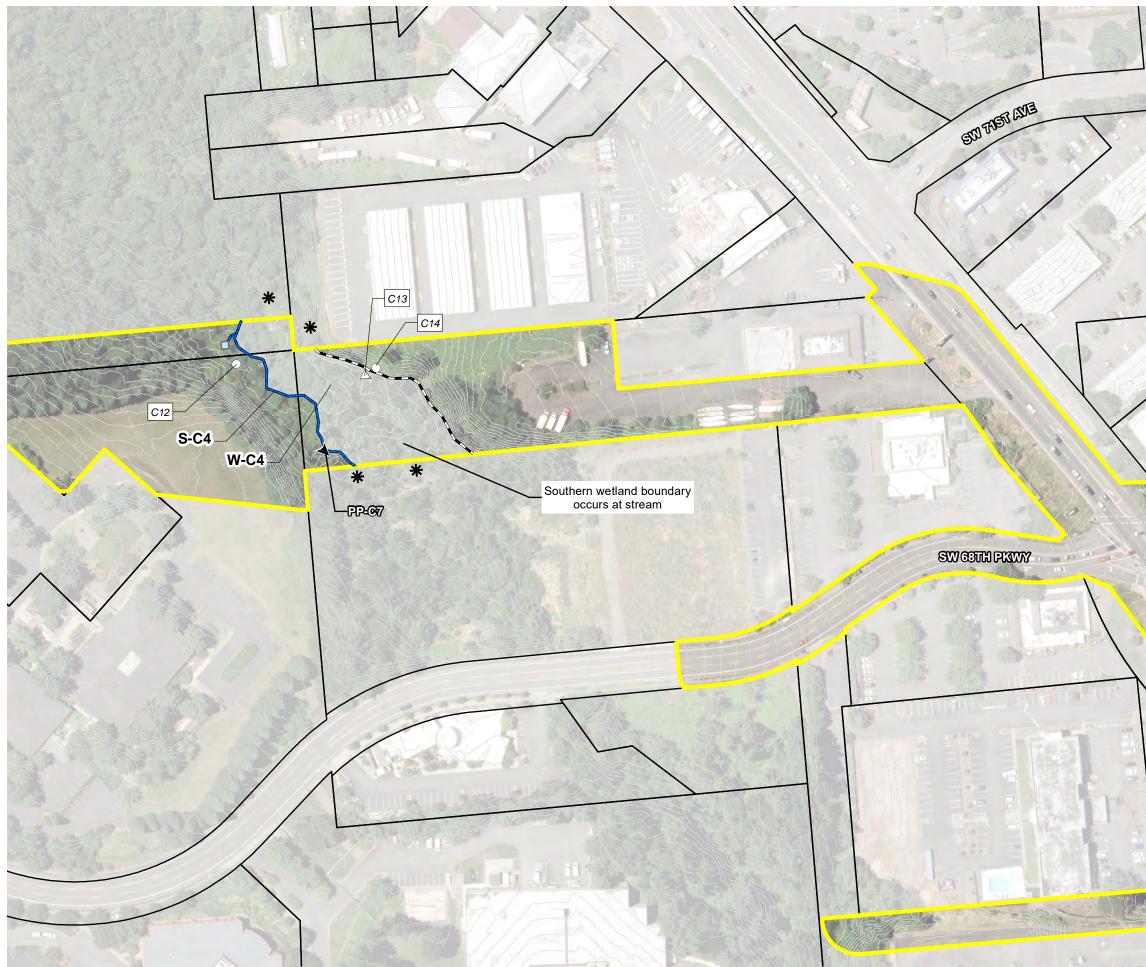




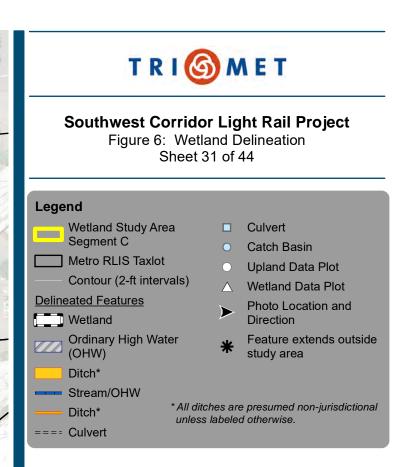


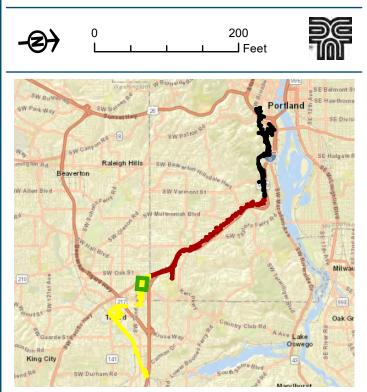


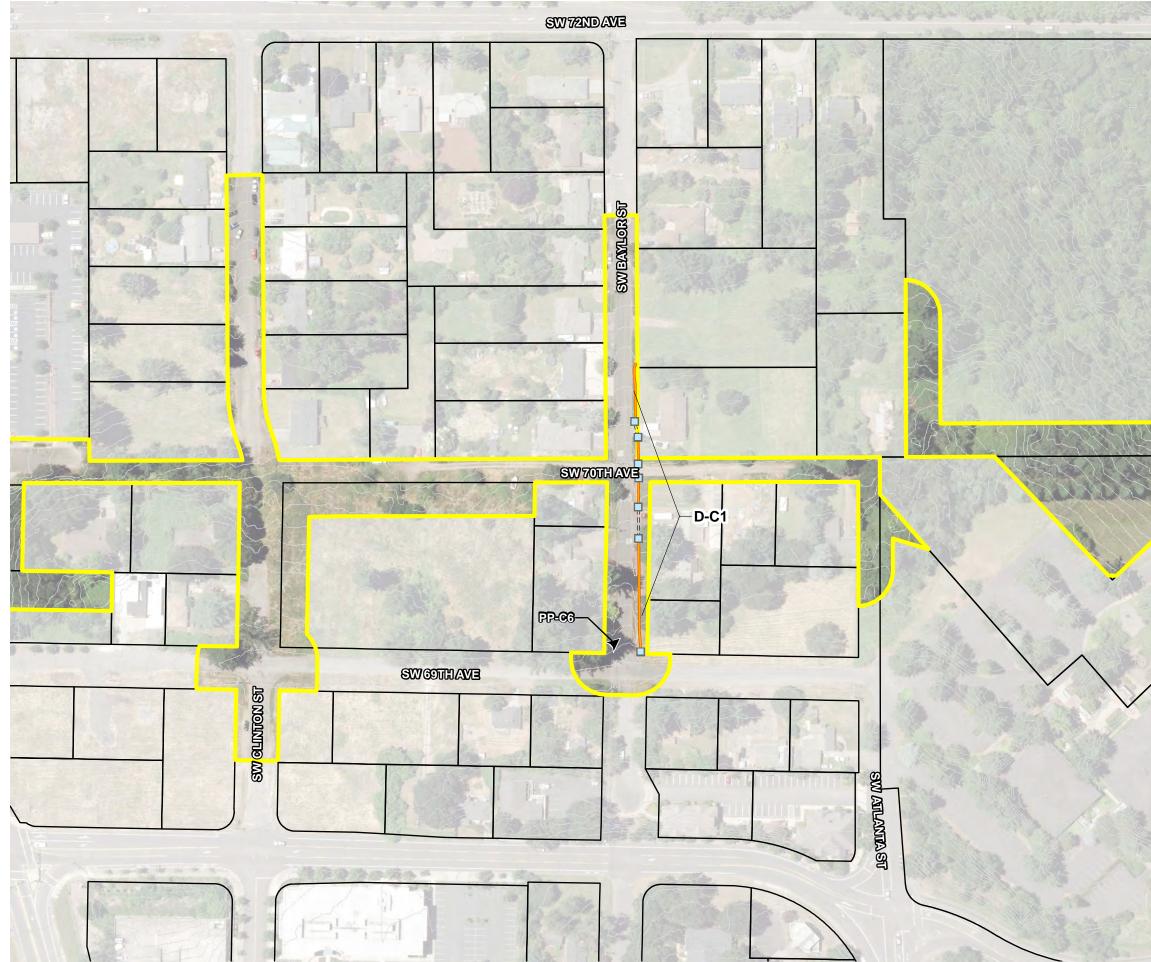




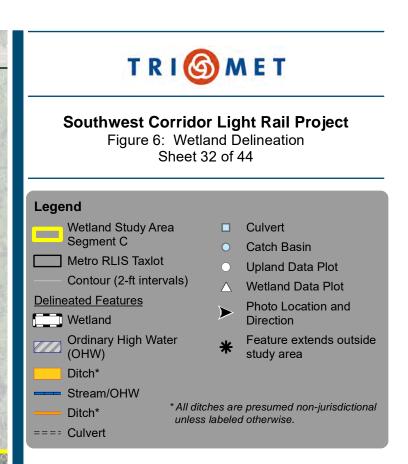
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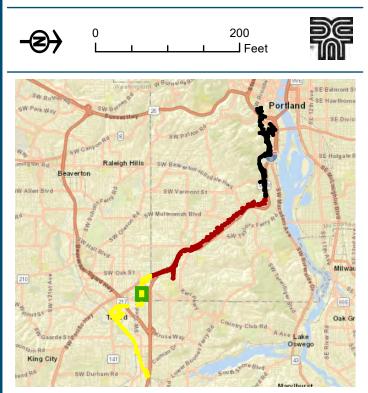


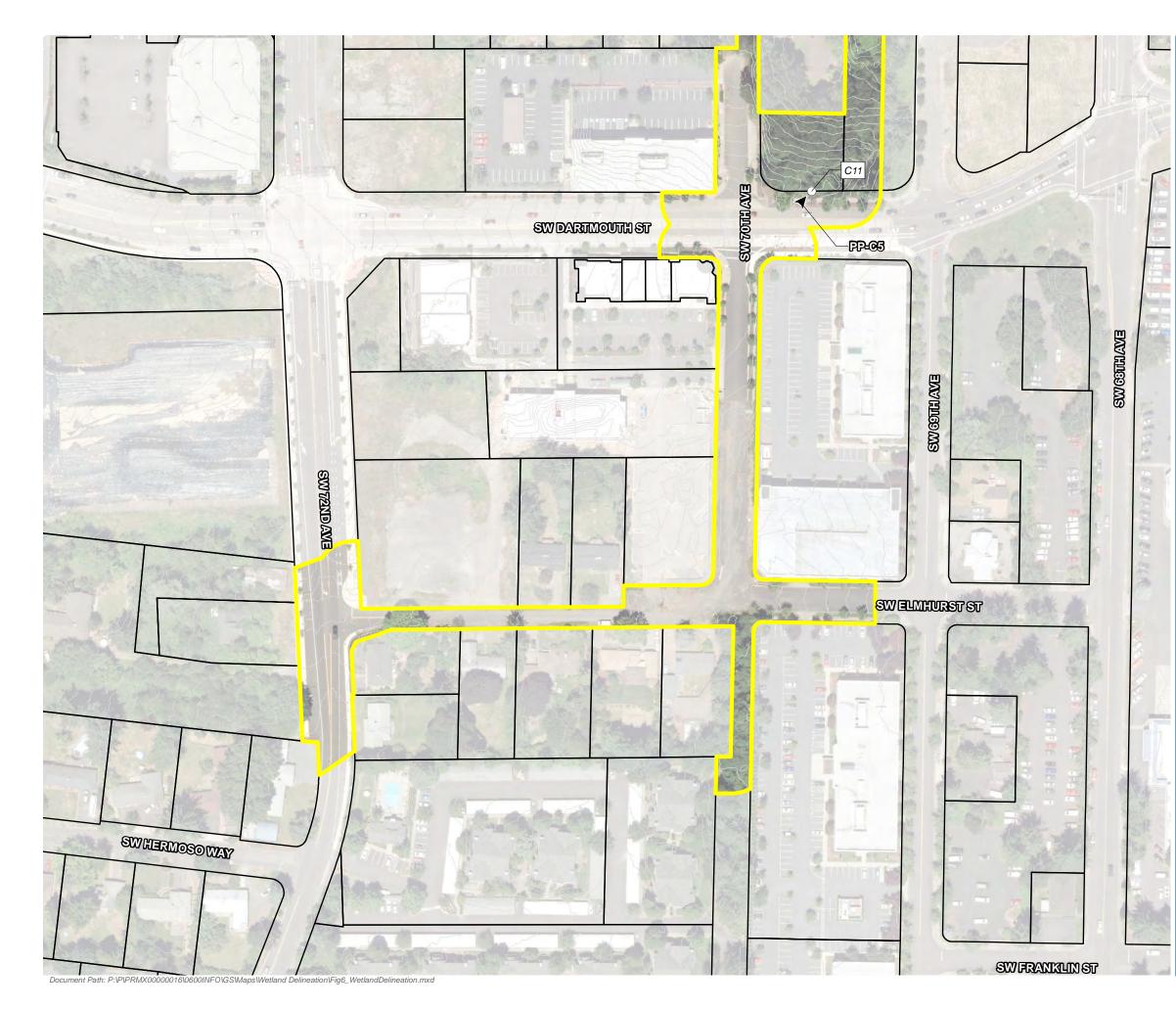




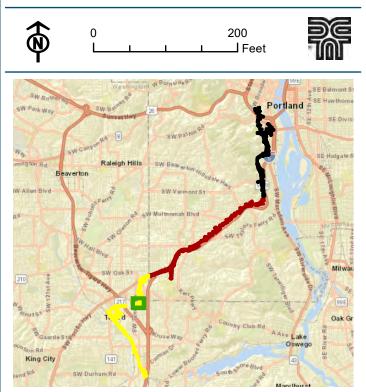
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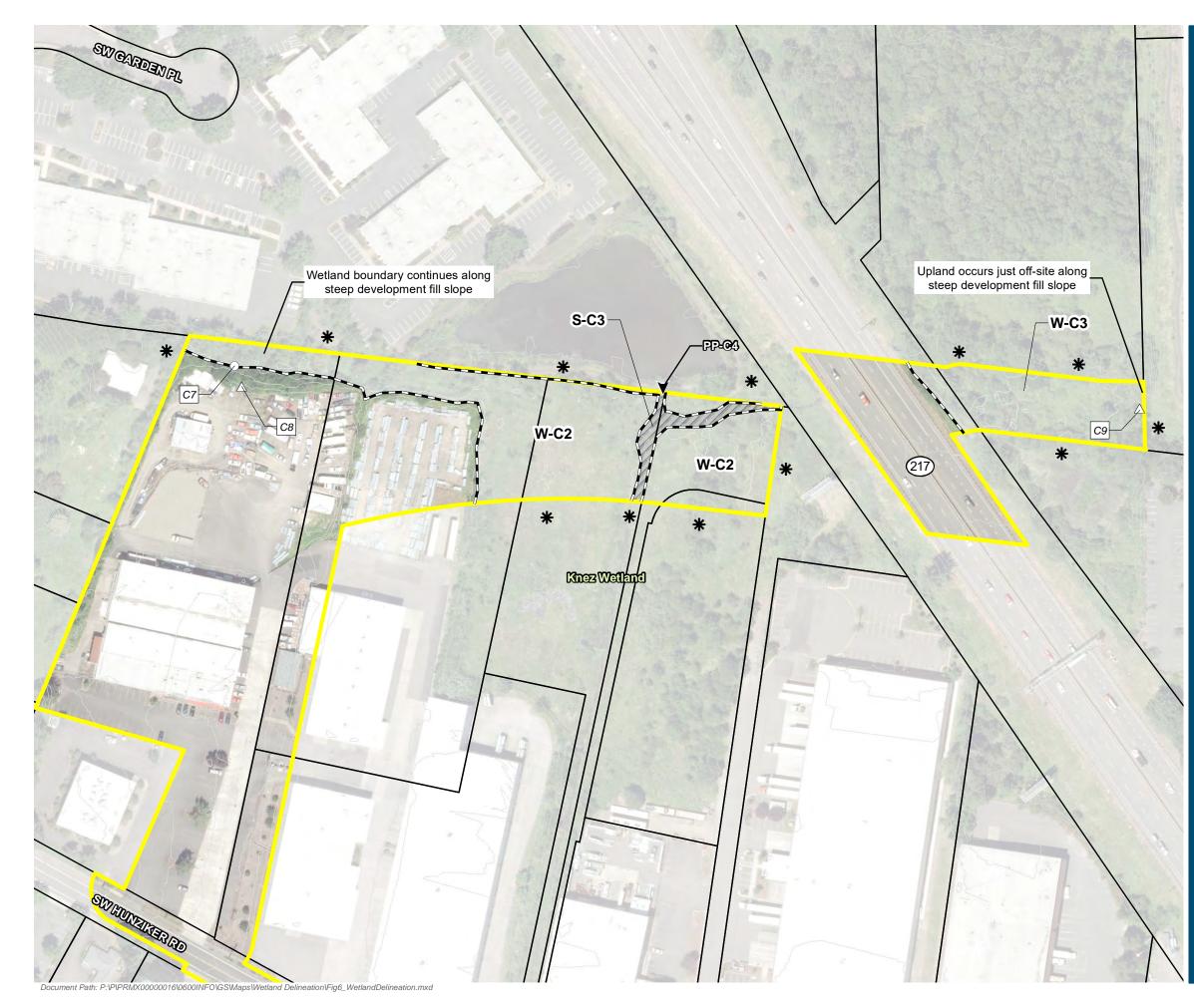


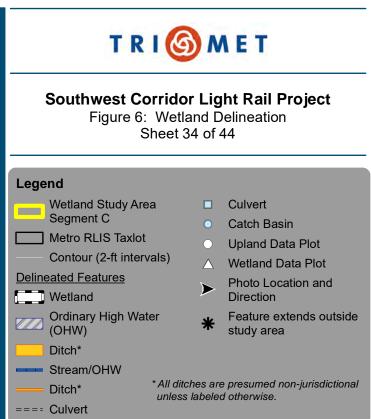


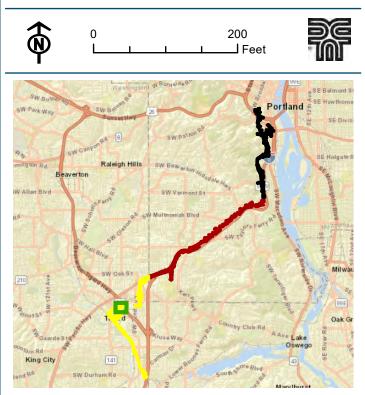


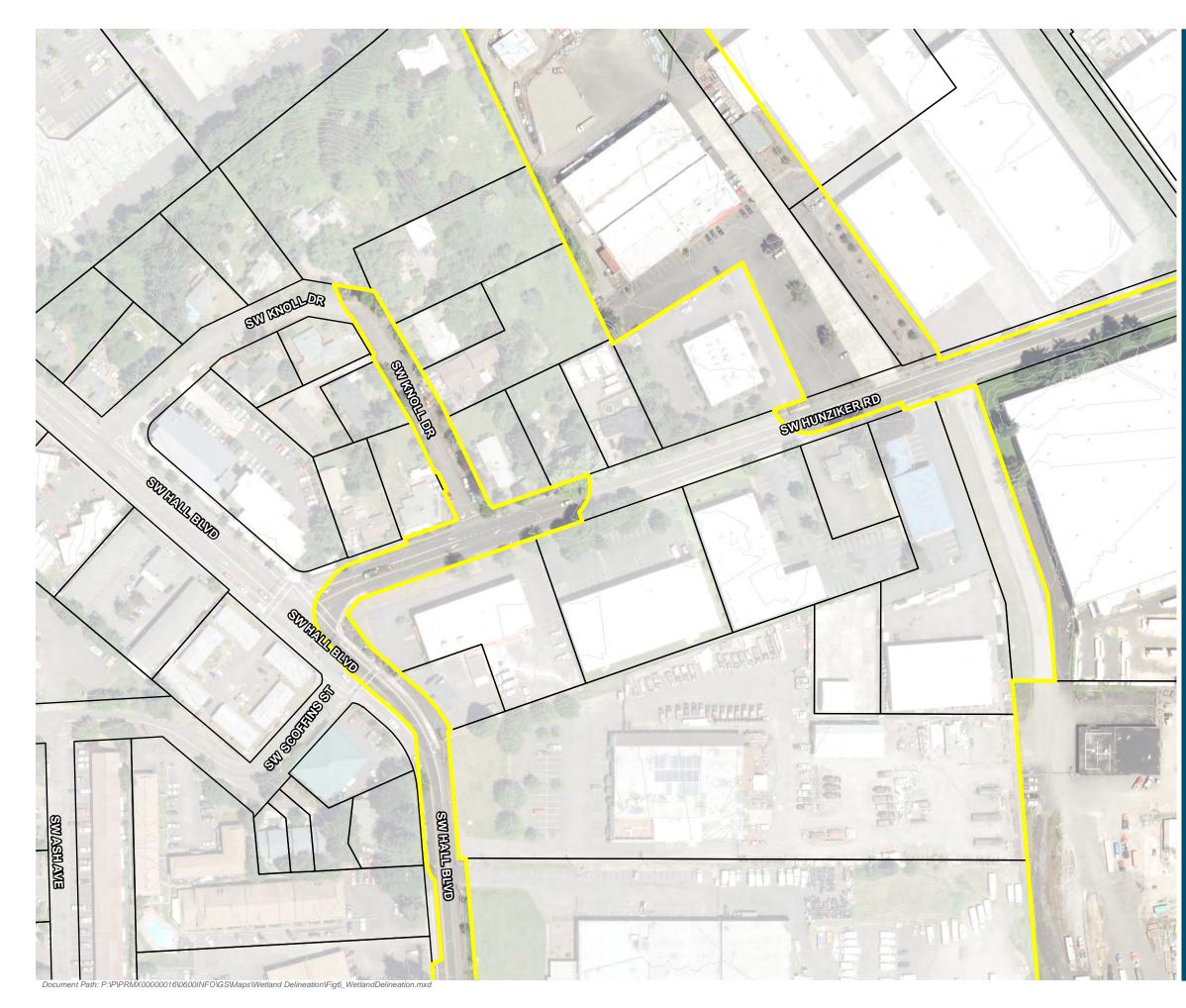


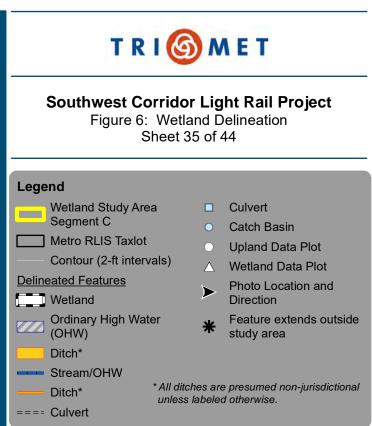


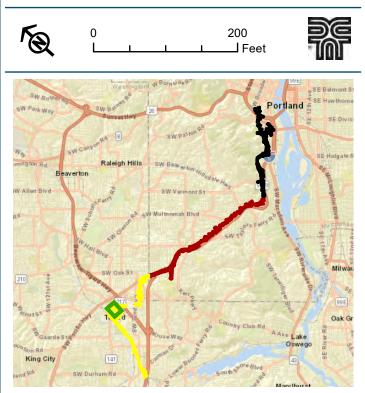


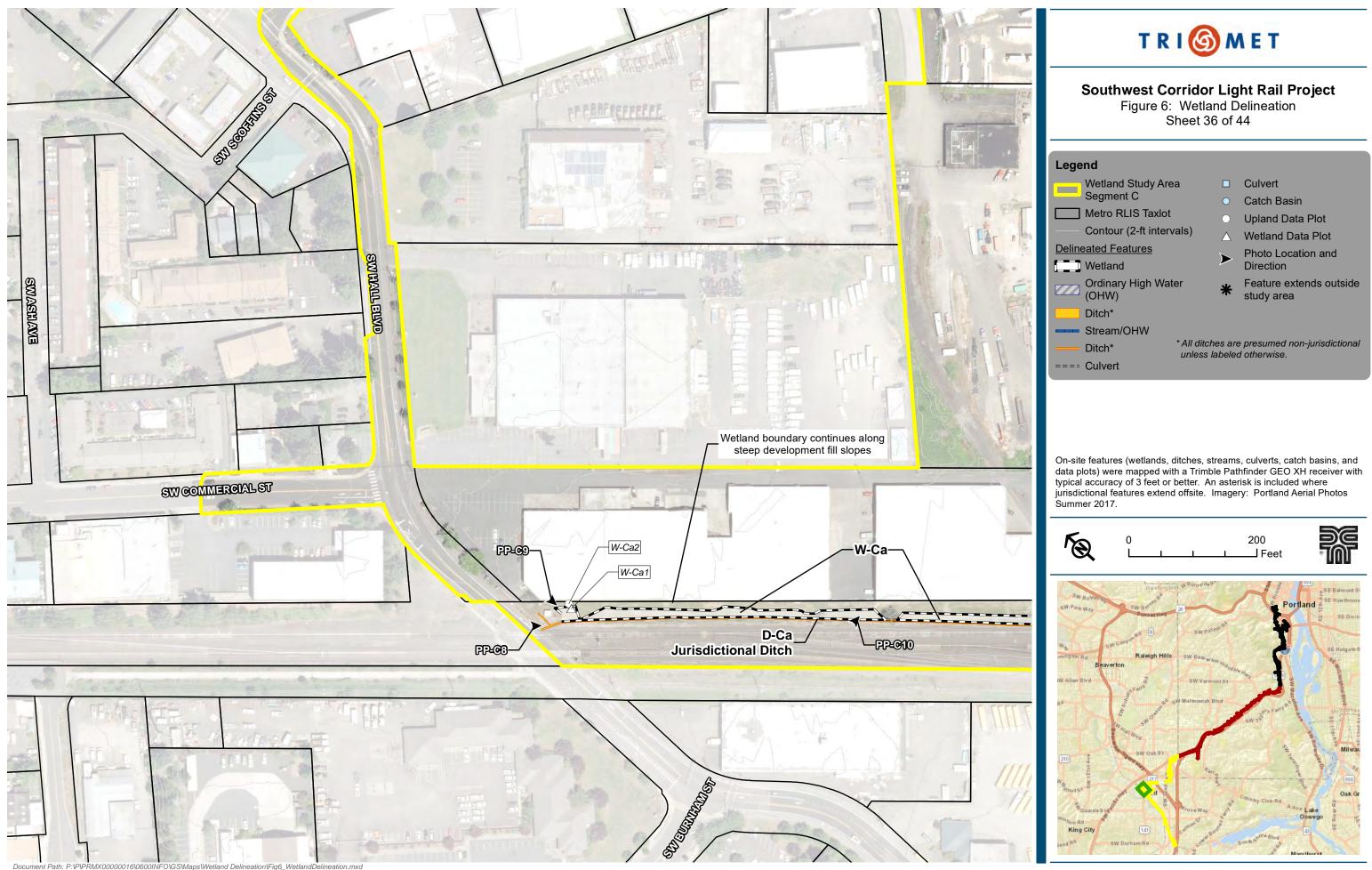


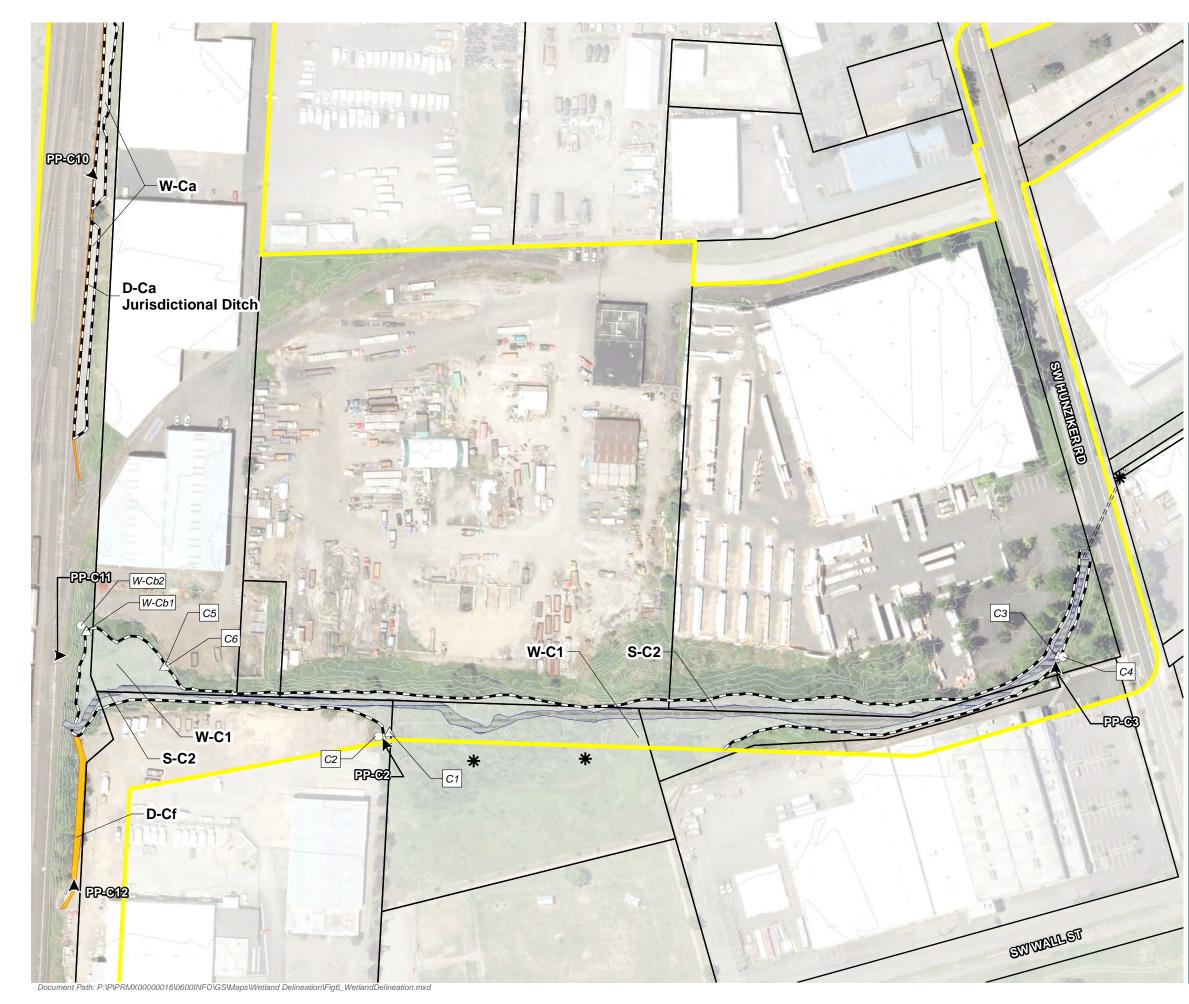


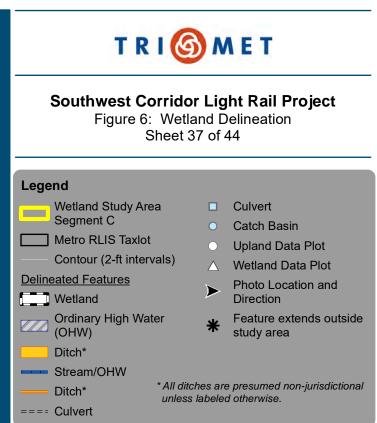


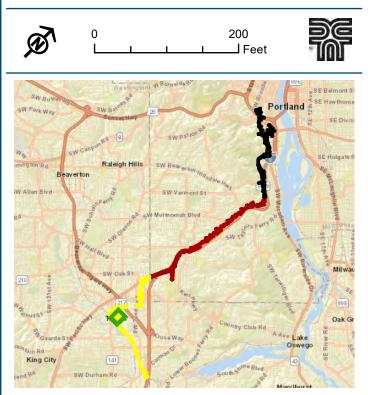


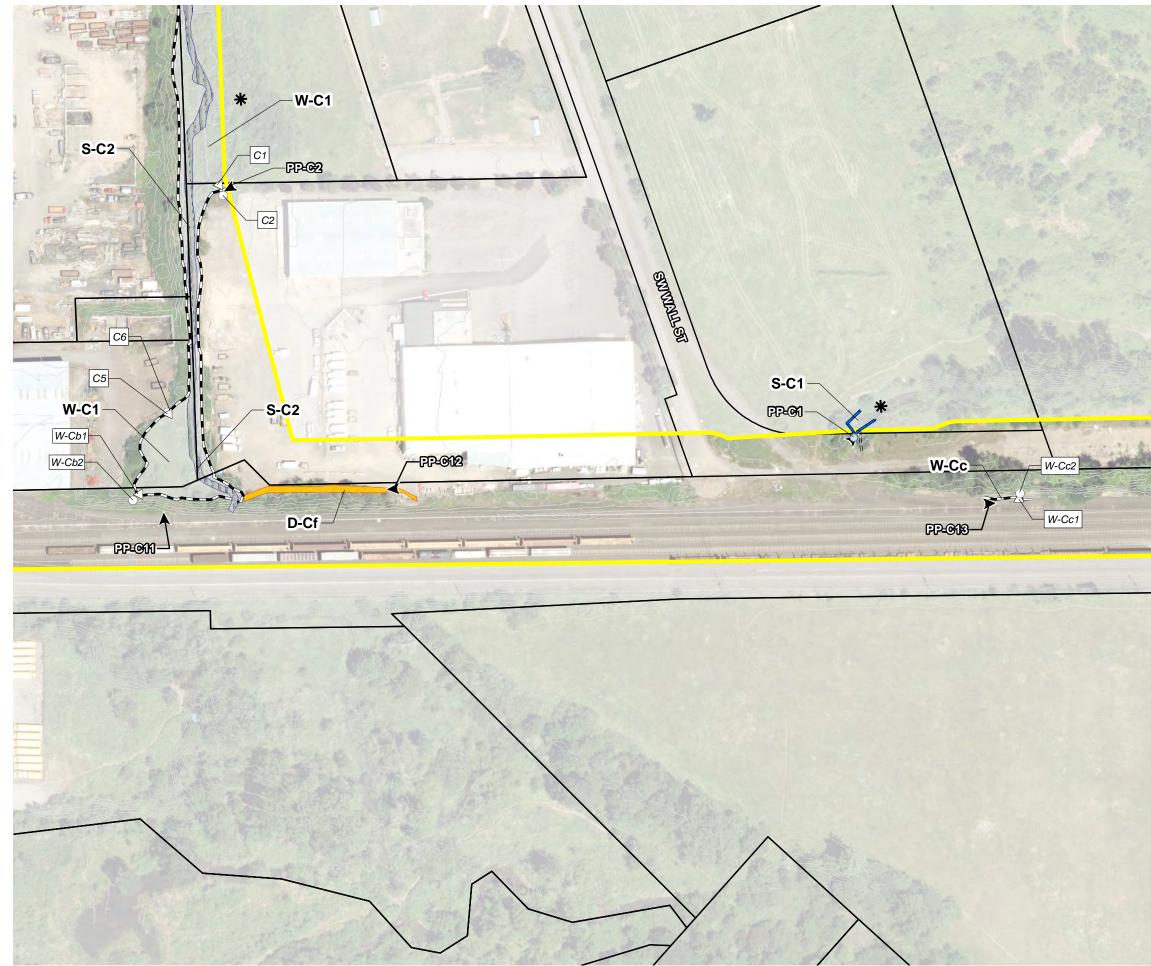


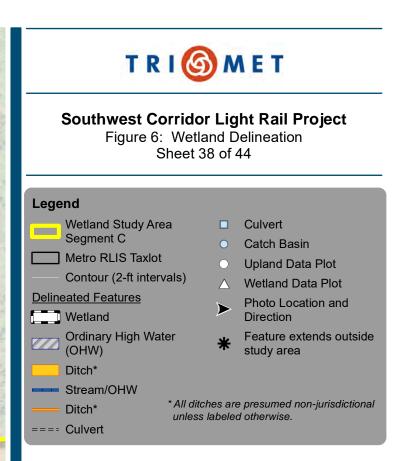


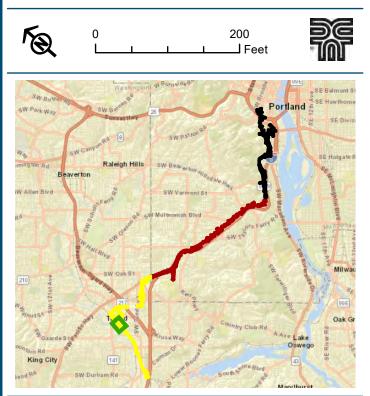


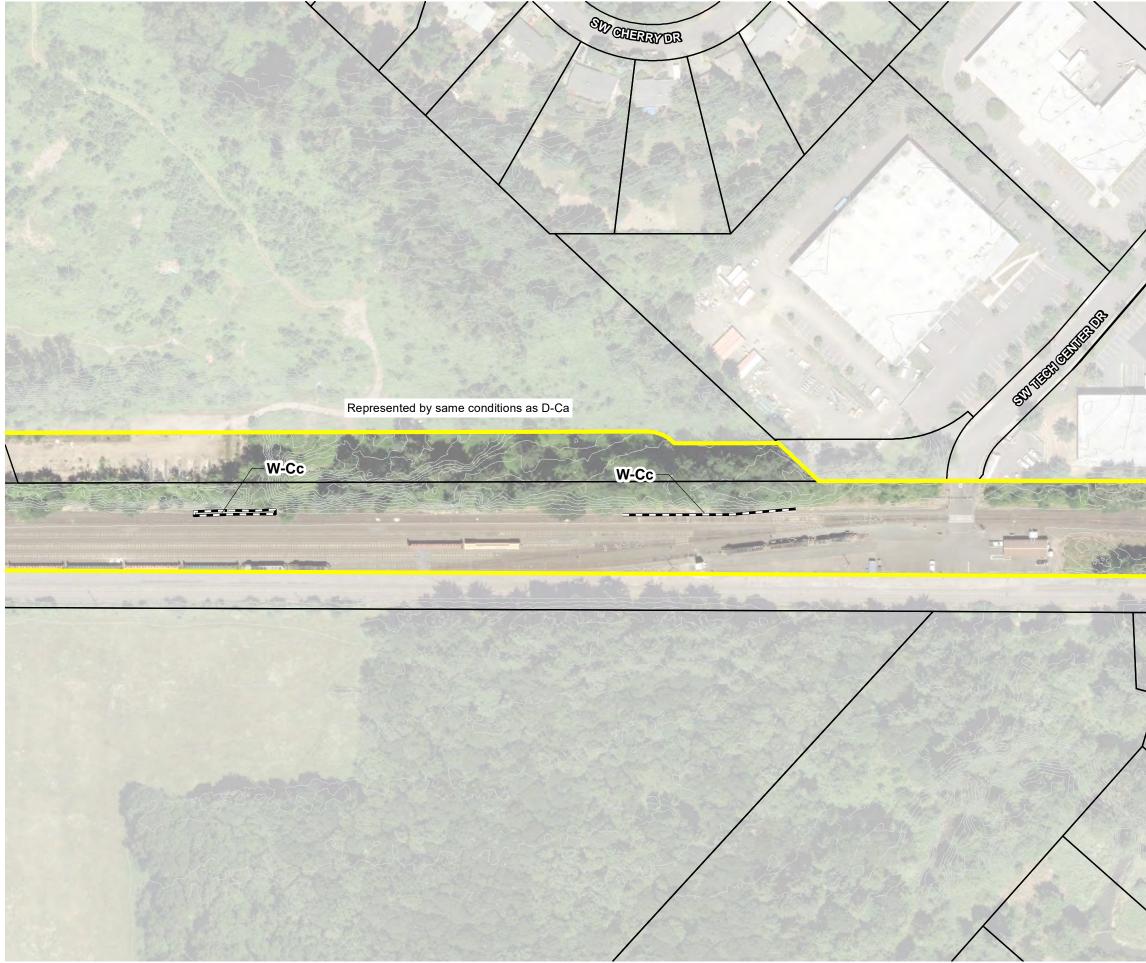


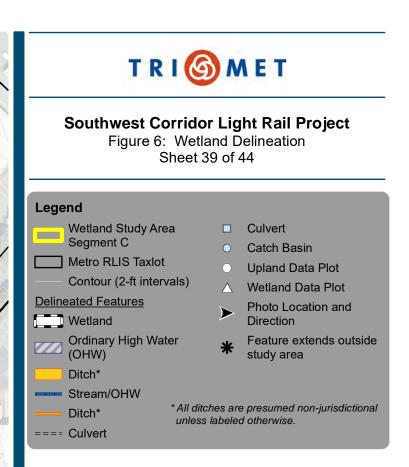


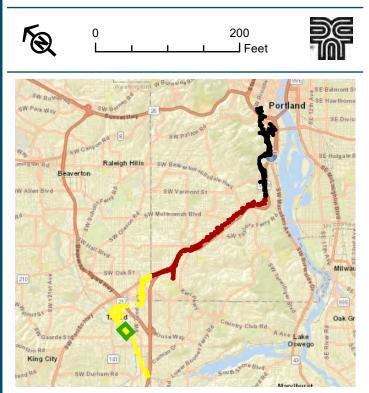


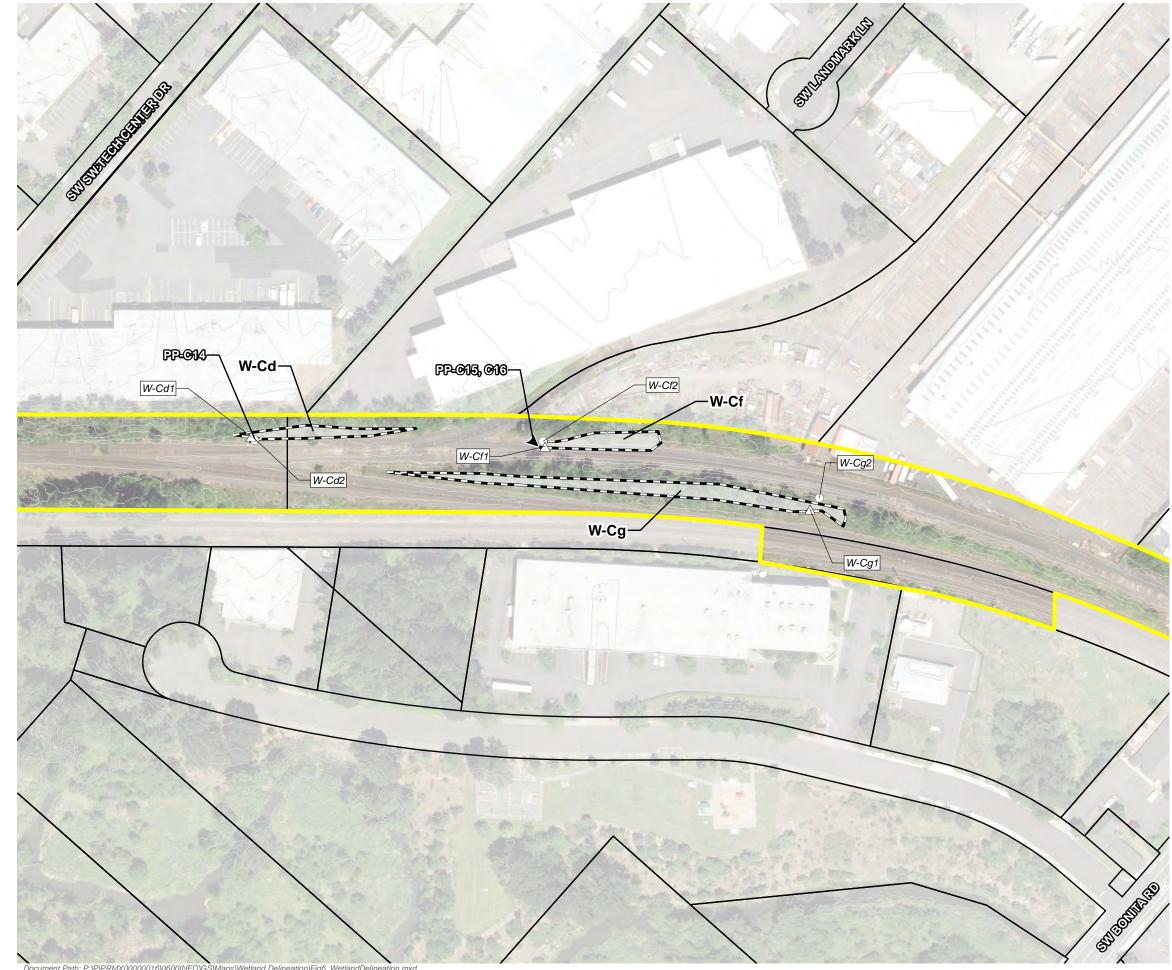


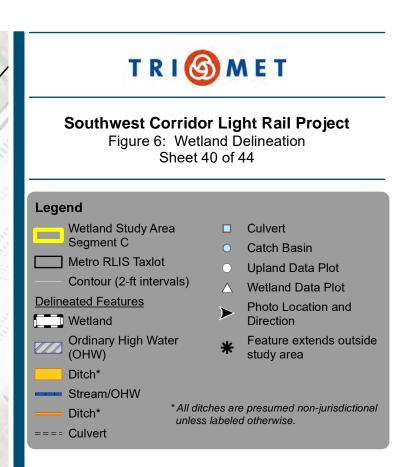


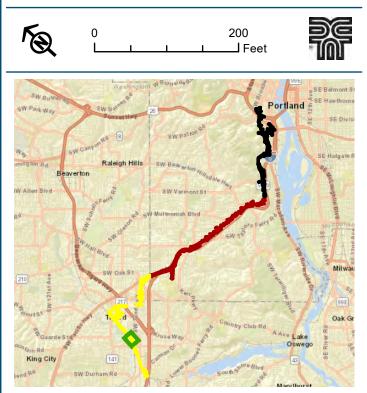


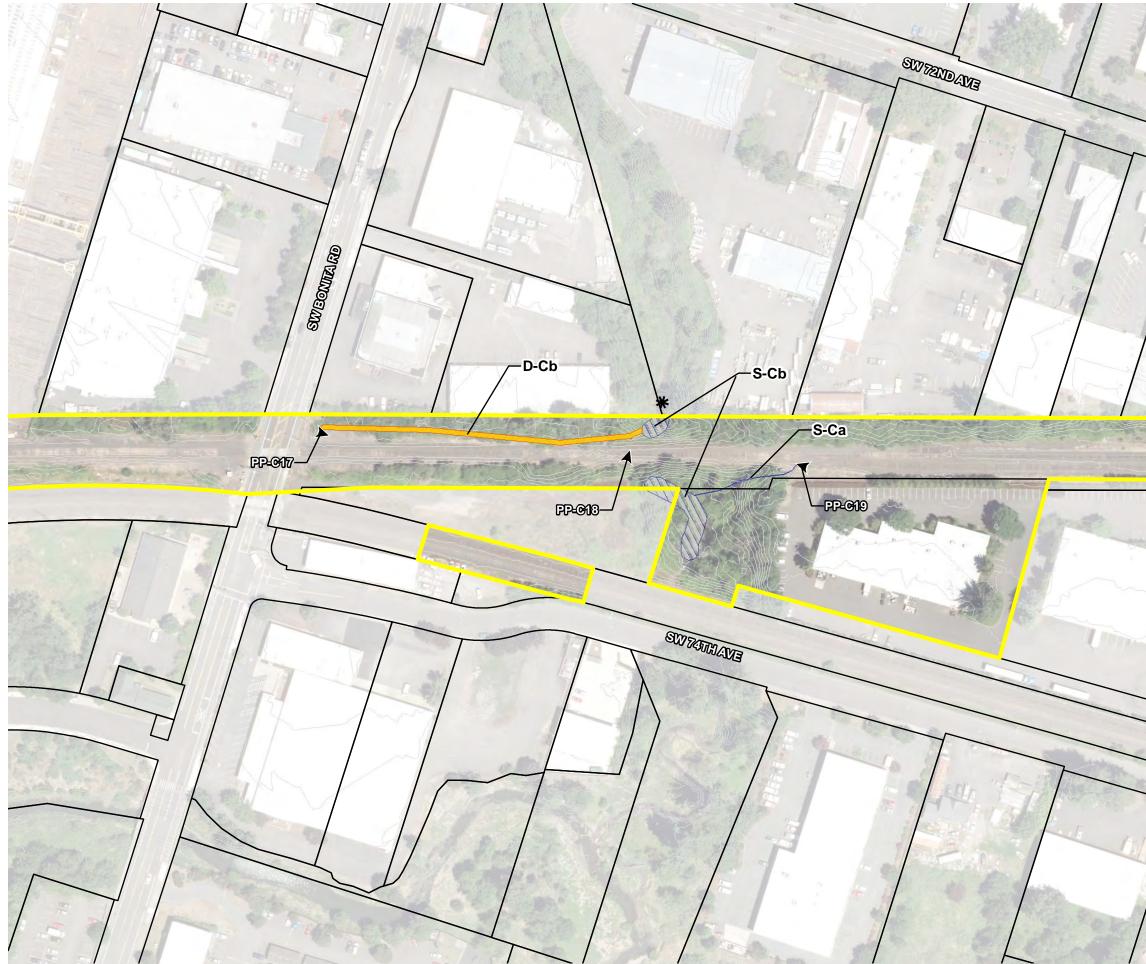




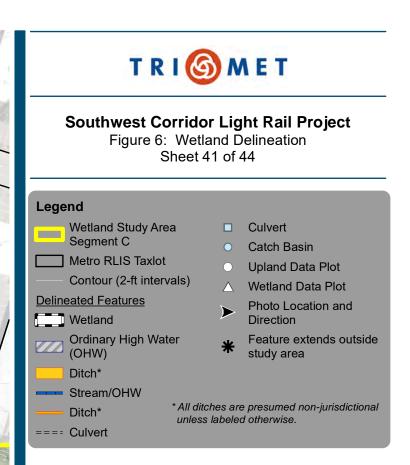


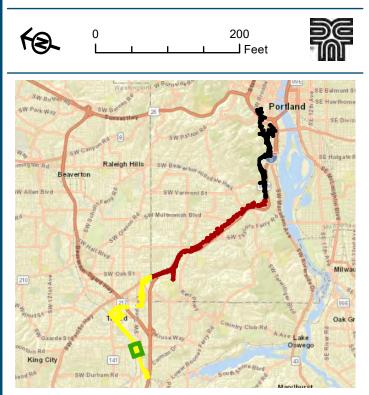


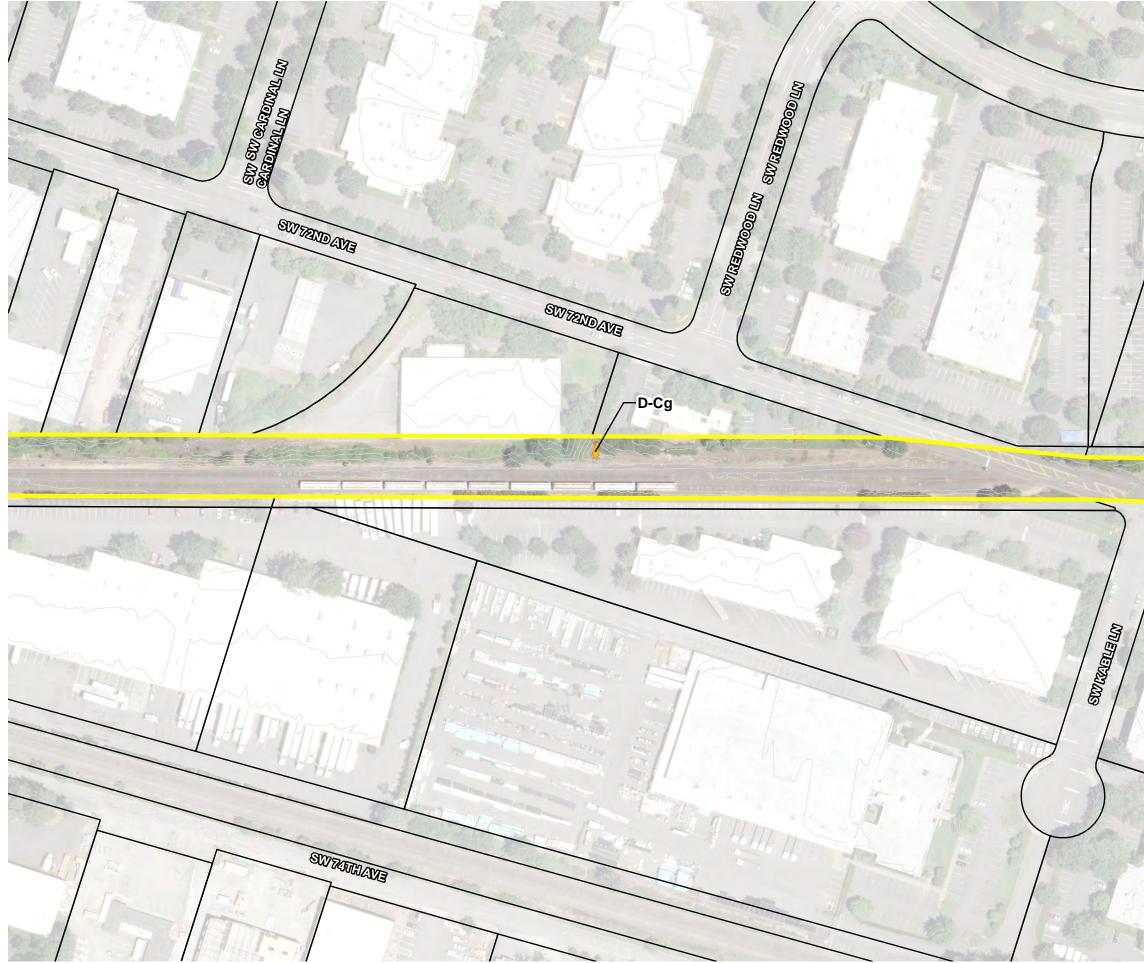




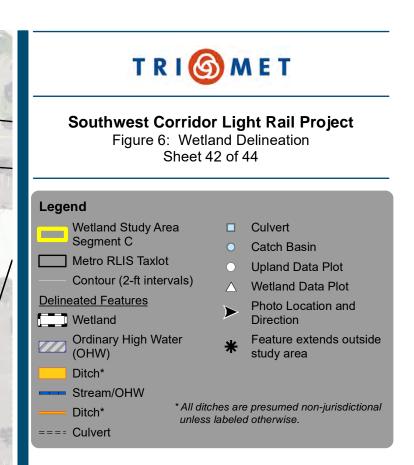
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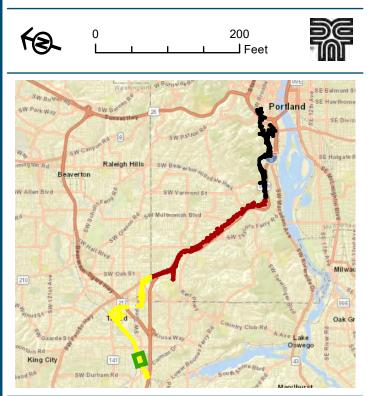


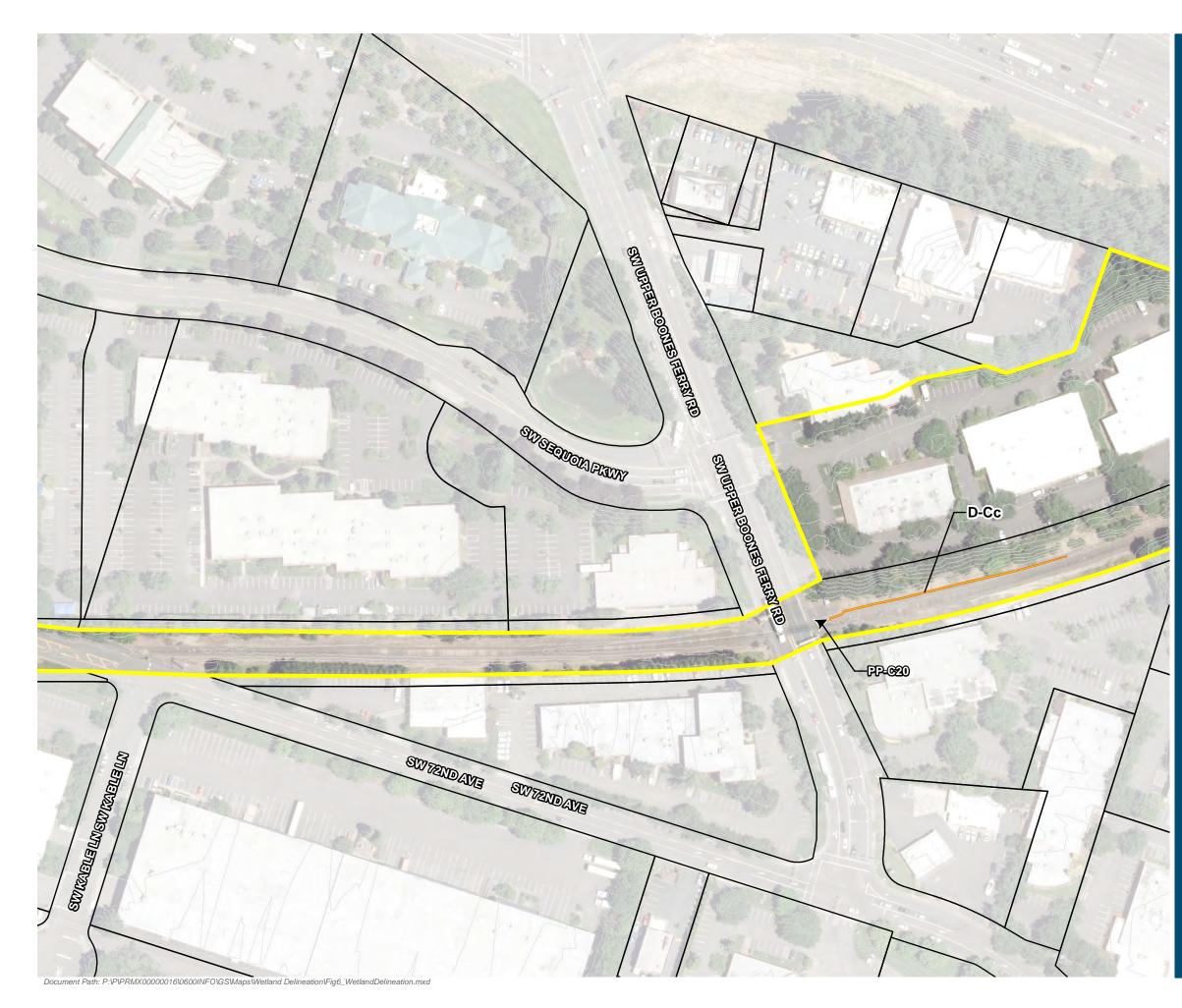


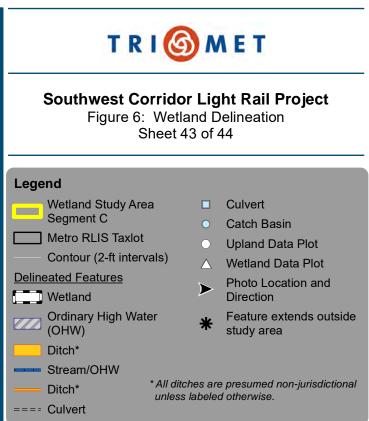


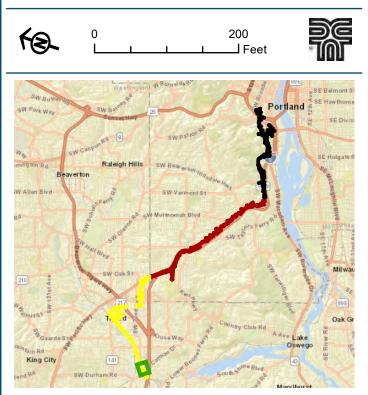
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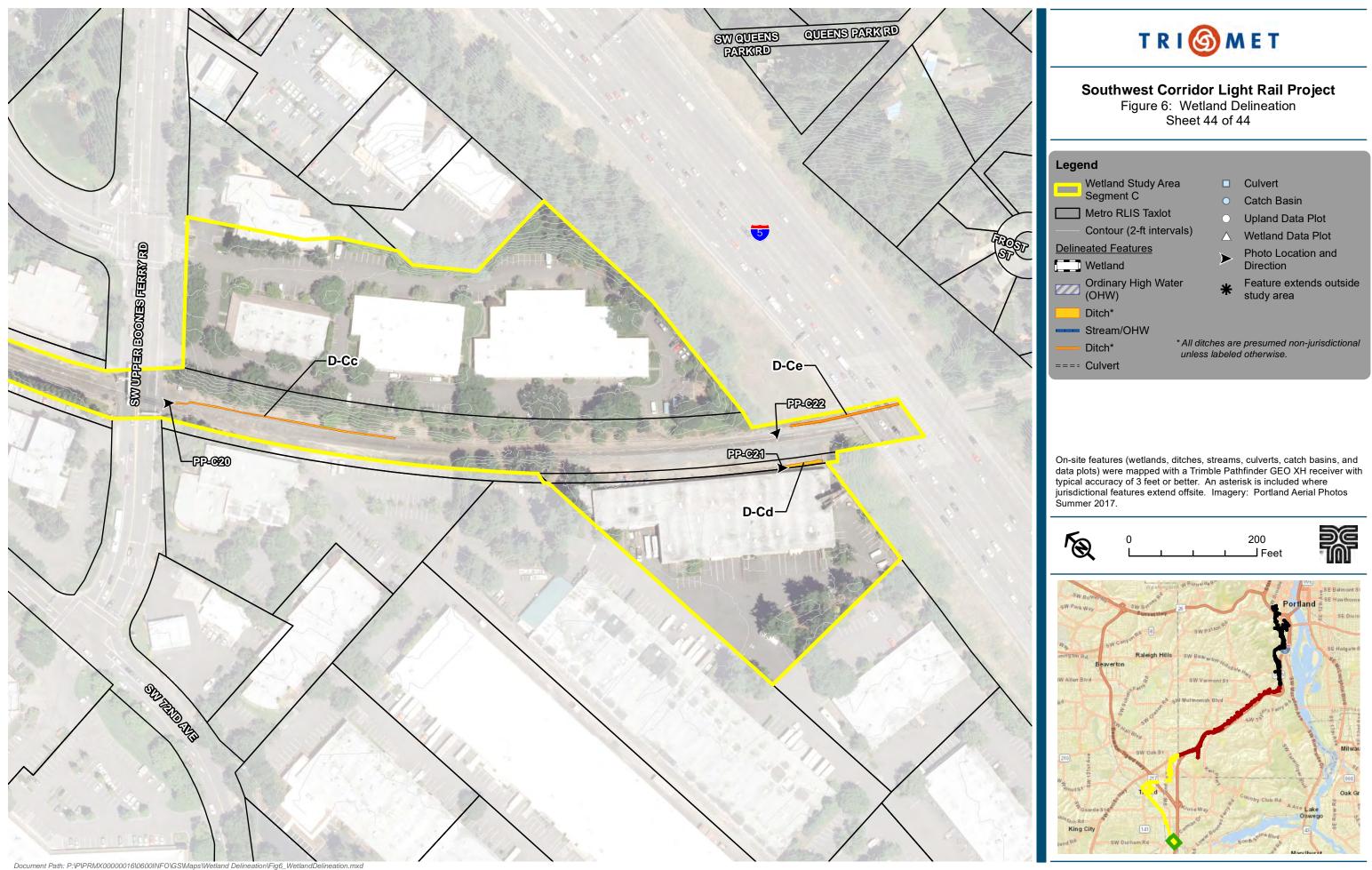












APPENDIX B: DATA SHEETS

Data Plot #	Lat	Long	Soil ID	Soil Description	PLSS	NWI Wetland
A1	45.499552	-122.681899	53C	Urban land-Quafeno complex, 8 to 15 percent slopes	T1S R1E S10	
A2	45.499537	-122.681952	53C	Urban land-Quafeno complex, 8 to 15 percent slopes	T1S R1E S10	
B1	45.457415	-122.712705	8C	Cascade-Urban land complex, 8 to 15 percent slopes	T1S R1E S29	
B2	45.457468	-122.712676	8C	Cascade-Urban land complex, 8 to 15 percent slopes	T1S R1E S29	
B3	45.453043	-122.719685	8B	Cascade-Urban land complex, 0 to 8 percent slopes	T1S R1E S29	
B4	45.457151	-122.711195	8B	Cascade-Urban land complex, 0 to 8 percent slopes	T1S R1E S29	
B5	45.457060	-122.711089	8B	Cascade-Urban land complex, 0 to 8 percent slopes	T1S R1E S29	
C1	45.425753	-122.761560	13	Cove silty clay loam	T2S R1W S2	
C2	45.425711	-122.761584	13	Cove silty clay loam	T2S R1W S2	
C3	45.427764	-122.759297	2027A	Verboort silty clay loam, 0 to 3 percent slopes	T2S R1W S2	PSS/EM1C
C4	45.427769	-122.759271	2027A	Verboort silty clay loam, 0 to 3 percent slopes	T2S R1W S2	PSS/EM1C
C5	45.425325	-122.762673	13	Cove silty clay loam	T2S R1W S2	PUBHh
C6	45.425327	-122.762664	13	Cove silty clay loam	T2S R1W S2	PUBHh
C7	45.431134	-122.761246	2027A	Verboort silty clay loam, 0 to 3 percent slopes	T2S R1W S2	
C8	45.431213	-122.761284	2027A	Verboort silty clay loam, 0 to 3 percent slopes	T2S R1W S2	
C9	45.431051	-122.756377	1	Aloha silt loam	T2S R1W S2	
C11	45.433309	-122.748437	13	Cove silty clay loam	T1S R1W S36	
C12	45.438459	-122.748833	37C	Quatama loam, 7 to 12 percent slopes	T1S R1W S36	
C13	45.438950	-122.748706	2225A	Huberly silt loam, 0 to 3 percent slopes	T1S R1W S36	
C14	45.438988	-122.748746	2225A	Huberly silt loam, 0 to 3 percent slopes	T1S R1W S36	
W-Ca1	45.427393	-122.765925	1	Aloha silt loam	T2S R1W S2	
W-Ca2	45.427415	-122.765913	1	Aloha silt loam	T2S R1W S2	
W-Cb1	45.425209	-122.763106	13	Cove silty clay loam	T2S R1W S2	
W-Cb2	45.425208	-122.763146	13	Cove silty clay loam	T2S R1W S2	
W-Cc1	45.422668	-122.759991	1	Aloha silt loam	T2S R1W S2	
W-Cc2	45.422676	-122.759969	1	Aloha silt loam	T2S R1W S2	
W-Cd1	45.418886	-122.755099	37B	Quatama loam, 3 to 7 percent slopes	T2S R1W S1	
W-Cd2	45.418868	-122.755096	37B	Quatama loam, 3 to 7 percent slopes	T2S R1W S1	
W-Cf1	45.418027	-122.754075	2225A	Huberly silt loam, 0 to 3 percent slopes	T2S R1W S12	
W-Cf2	45.418047	-122.754062	2225A	Huberly silt loam, 0 to 3 percent slopes	T2S R1W S12	
W-Cg1	45.417116	-122.753370	2225A	Huberly silt loam, 0 to 3 percent slopes	T2S R1W S12	
W-Cg2	45.417120	-122.753290	2225A	Huberly silt loam, 0 to 3 percent slopes	T2S R1W S12	

Project/Site: SW Corridor Project	City/County: Was	shington	Sampling	Sampling Date: July 11, 2019	
Applicant/Owner: Trimet		State: C	regon Sampling	Point: A1	
Investigator(s): Thompson, Rosenthal	Section, Townsh	ip, Range: <u>see sprea</u>	dsheet		
Landform (hillslope, terrace, etc.): Hillslope	Local relief (con	cave, convex, none): _	concave	Slope	(%): <u>30</u>
Subregion (LRR): <u>A</u> Lat: <u>s</u>	see spreadsheet	Long: see spi	eadsheet	_ Datum:	NAD 83 (2011)
Soil Map Unit Name: <u>see spreadsheet</u>		NV	/I classification: see	spreadshe	et
Are climatic / hydrologic conditions on the site typical for this time of	i year? Yes 🗾	No (If no, e>	plain in Remarks.)		
Are Vegetation, Soil, or Hydrology significan	ntly disturbed?	Are "Normal Circum	stances" present? Y	′es 🖌	No
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain a	ny answers in Rema	rks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🖌 No	
Hydric Soil Present?	Yes 🖌 No	Is the Sampled Area
Wetland Hydrology Present?	Yes _ 🖌 No	within a Wetland? Yes No
Remarks:		

Plot is located near toe of slope. Sewer infrastructure runs beneath this drainage, and associated rock fill material is present beneath the surface of the soil, resulting in shovel refusal at 4 inches.

VEGETATION – Use scientific names of plants.

N1/A	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>N/A</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>3</u> (A)
2				Total Number of Demain and
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				
		- Tatal Ca		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: <u>10x20'</u>)		= Total Co	ver	That Are OBL, FACW, or FAC: <u>75</u> (A/B)
1 Sambucus racemosa	30	Y	FACU	Prevalence Index worksheet:
2 Fraxinus latifolia	5	N	FACW	Total % Cover of: Multiply by:
				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				
	35	= Total Co	ver	FACU species x 4 =
<u>Herb Stratum</u> (Plot size: <u>5'</u>)		-		UPL species x 5 =
1. Equisetum arvense	30	Y	FAC	Column Totals: (A) (B)
2. Ranunculus repens	45	Y	FAC	Prevalence Index = B/A =
3. Geranium lucidum	15	N	UPL	Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				∠ 2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
···		= Total Cov		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 10x20')			/ei	
1. Rubus armeniacus	5	Y	FAC	the beaute de
				Hydrophytic Vegetation
2	-		·	Present? Yes <u>V</u> No
% Bare Ground in Herb Stratum10		= Total Cov	/er	
Remarks:				
nomano.				

Profile Desc	ription: (Describe t	o the de	oth needed to docum	nent the i	indicator	or confirm	n the absence	of indicators.)	
Depth	Matrix			x Feature					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-2	10YR 4/2	100	-	-	-		Silty clay loam		
2-4	10YR 4/2	98	10YR 4/6	2	С	М	Silty clay loam		
4+								shovel refusal in rock	
					·				
				· · ·	·				
					·	······			
						. <u></u>			
¹ Type: C=Co	oncentration, D=Deple	etion, RM	Reduced Matrix, CS	S=Covere	d or Coate	ed Sand G		cation: PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators: (Applica	ble to al	I LRRs, unless other	rwise not	ed.)		Indicato	ors for Problematic Hydric Soils ³ :	
- Histosol	(A1)		Sandy Redox (S	S5)			2 cr	n Muck (A10)	
Histic Ep	oipedon (A2)		Stripped Matrix	(S6)			Red	l Parent Material (TF2)	
Black His	stic (A3)		Loamy Mucky N	/lineral (F	1) (excep	t MLRA 1)	Ver	y Shallow Dark Surface (TF12)	
_ Hydroge	n Sulfide (A4)		Loamy Gleyed I	Matrix (F2	2)		Oth	er (Explain in Remarks)	
_ Depleted	Below Dark Surface	e (A11)	 Depleted Matrix 	(F3)					
_ Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)	1		³ Indicato	ors of hydrophytic vegetation and	
Sandy M	lucky Mineral (S1)		Depleted Dark S	Surface (F	-7)		wetland hydrology must be present,		
_ Sandy G	ileyed Matrix (S4)		Redox Depress	ions (F8)			unles	ss disturbed or problematic.	
Restrictive L	ayer (if present):								
Туре:									
Depth (inc	ches):						Hydric Soil	Present? Yes <u> </u>	
Remarks:									
- · ·	• · ·								

Sewer infrastructure runs beneath this drainage, and associated rock fill material is present beneath the surface of the soil, resulting in shovel refusal at 4 inches.

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; ch	<u>e</u> ck al <u>l that apply)</u>	Secondary Indicators (2 or more required)		
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)		
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3)			
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)		
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6	6) FAC-Neutral Test (D5)		
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)		
Sparsely Vegetated Concave Surface (B8)				
Field Observations:				
Surface Water Present? Yes No	✓ Depth (inches):			
Water Table Present? Yes No	✓ Depth (inches):			
Saturation Present? Yes No _ (includes capillary fringe)	✓ Depth (inches): WetI	and Hydrology Present? Yes <u><!--</u--> No</u>		
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous inspections),	if available:		
Remarks:				
Since the plot data was collected	during a below normal water	year, hydrology was assumed		
because of hydric soil and hydro	phytic vegetation. Soil saturation	on was observed in the body of the		

wetland.

Project/Site: SW Corridor Project	City/County: M	ultnomah	Sampling Date: July 11, 2019
Applicant/Owner: Trimet		State: Oregon	Sampling Point: <u>A2</u>
Investigator(s): Thompson, Rosenthal	Section, Towns	hip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (co	ncave, convex, none): <u>Concave</u>	Slope (%): 50
Subregion (LRR): <u>A</u> Lat: <u>set</u>	e spreadsheet	Long: see spreadsheet	Datum: <u>NAD 83 (2011)</u>
Soil Map Unit Name: see spreadsheet		NWI classifica	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of ye	ear?Yes 🔽	_ No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	(If needed, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS - Attach site man showing	a samnlina n	oint locations transects	important features etc

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No				
Remarks: Plot is located on towards base of slope, 2 ft above wetland Plot A1.									

VEGETATION – Use scientific names of plants.

10,20	Absolute		Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>10x30'</u>)		Species?		Number of Dominant Species
1. Acer macrophyllum	10	Y	FACU	That Are OBL, FACW, or FAC: <u>3</u> (A)
2				Total New Long & Dansing of
3				Total Number of Dominant Species Across All Strata: ⁶ (B)
4	10			Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 10x30')	10	= Total Co	over	That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1 Oemleria cerasiformis	15	Y	FACU	Prevalence Index worksheet:
			1,400	Total % Cover of: Multiply by:
2				OBL species x 1 =
3				
4				FACW species x 2 =
5				FAC species x 3 =
···	15	= Total Co		FACU species x 4 =
<u>Herb Stratum</u> (Plot size: <u>5'</u>)			over	UPL species x 5 =
1 Equisetum arvense	25	Y	FAC	Column Totals: (A) (B)
2. Schedonorous arundinaceus	10	N	FAC	
3. Geranium lucidum	60	Y	FACU	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is $≤3.0^1$
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must
11	~ -			be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: <u>10x30'</u>)	30	= Total Co	ver	
A Rubus armeniacus	10	v	FAC	
1. Rubus armeniacus	10	Y	FAC	Hydrophytic
1. Rubus armeniacus 2. Clematis vitalba	10	Y Y	FAC FAC	Vegetation
2. Clematis vitalba	10		FAC	
2. Clematis vitalba % Bare Ground in Herb Stratum25	10	Y	FAC	Vegetation
2. Clematis vitalba	10	Y	FAC	Vegetation

Profile Desc	cription: (Describe te	o the dep	th needed to docun	nent the i	ndicator	or confirm	n the absence	of indicato	rs.)	
Depth	Matrix		Redo	x Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-4	10YR 3/2	100	-	-	-	-	Silty clay loam			
4+								Rock fill		
	·			·						
				·						
	. <u> </u>					. <u> </u>				
¹ Tvpe: C=C	oncentration, D=Deple	etion. RM=	Reduced Matrix. CS	=Covered	d or Coate	d Sand G	rains. ² Loca	ation: PL=F	Pore Lining, N	M=Matrix.
	Indicators: (Applica								lematic Hyd	^
- Histosol	(A1)		Sandy Redox (S	65)			2 cm	Muck (A10)	
Histic E	pipedon (A2)		Stripped Matrix	(S6)			Red	Parent Mate	erial (TF2)	
Black H	istic (A3)		Loamy Mucky M	/lineral (F	I) (except	MLRA 1)	Very	Shallow Da	ark Surface (TF12)
_ Hydroge	en Sulfide (A4)		Loamy Gleyed I	Matrix (F2)		Othe	r (Explain ir	n Remarks)	
_ Deplete	d Below Dark Surface	(A11)	Depleted Matrix	(F3)						
_ Thick D	ark Surface (A12)		Redox Dark Su	face (F6)			³ Indicator	s of hydrop	hytic vegetat	tion and
Sandy M	/lucky Mineral (S1)		Depleted Dark S	Surface (F	7)		wetlar	nd hydrolog	y must be pre	esent,
_ Sandy C	Gleyed Matrix (S4)		Redox Depress	ions (F8)			unless	disturbed	or problemat	ic.
Restrictive	Layer (if present):									
Туре:										
Depth (in	ches):						Hydric Soil	Present?	Yes	No
Remarks:							•			

Rock fill prevented us from seeing the soil profile below 4", so we could not confirm if hydric soil indicators began in a lower horizon.

HYDROLOGY

Wetland Hydrology Indicators	:							
Primary Indicators (minimum of	one required; o	<u>he</u> ck	al <u>l that apply)</u>		Secondary Indicators (2 or more required)			
Surface Water (A1)			Water-Stained Leaves (B9) (exce	pt	Water-Stained Leaves (B9) (MLRA 1, 2,			
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)			
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)			
Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)			
Sediment Deposits (B2)			Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Drift Deposits (B3) Oxidized Rhizospheres along				Geomorphic Position (D2)			
Algal Mat or Crust (B4)					Shallow Aquitard (D3)			
Iron Deposits (B5)	Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)				FAC-Neutral Test (D5)			
Surface Soil Cracks (B6)	Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A)			LRR A)	Raised Ant Mounds (D6) (LRR A)			
Inundation Visible on Aeria	Imagery (B7)		Other (Explain in Remarks)		Frost-Heave Hummocks (D7)			
Sparsely Vegetated Conca	ve Surface (B8							
Field Observations:								
Surface Water Present?	Yes No	~	_ Depth (inches):					
Water Table Present?	Yes No	~	_ Depth (inches):					
Saturation Present? (includes capillary fringe)	Yes No	~	_ Depth (inches):	Wetland Hyd	drology Present? Yes No			
	n gauge, moni	oring	well, aerial photos, previous inspec	tions), if availa	ble:			
Remarks:	Remarks:							
Because we could no	t dig belov	v 4"	we could not see if prin	nary hydro	blogy indicators existed below			

that point. It is assumed there is no hydrology in this plot based on the change in topography and plant community from the paired wetland plot.

Project/Site: Southwest Corridor Light Rail	_ City/County: Mult	tnomah	Sampling Date: April 25, 2019
Applicant/Owner: Trimet			Sampling Point: <u>B1</u>
Investigator(s): Rickus, Rosenthal	_ Section, Townshi	p, Range: see spreadsheet	
Landform (hillslope, terrace, etc.): <u>swale</u>		cave, convex, none): <u>concave</u>	Slope (%): <u>8</u>
Subregion (LRR): <u>A</u> Lat: <u>Se</u>	ee spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: see spreadsheet		NWI classifica	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of y	year?Yes 🖌	No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrologysignificant	ly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	oroblematic?	(If needed, explain any answer	s in Remarks.)
SUMMARY OF EINDINGS Attach site man showin	a complina no	int locations transacts	important factures ato

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	Is the Sampled Area within a Wetland?	Yes No
Remarks: Plot lies on the edge of a narrow	wetland adjacent to a small u	innamed drainage in a de	ep depression within developed areas.

VEGETATION – Use scientific names of plants.

201	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species	
1	<u> </u>			That Are OBL, FACW, or FAC: <u>3</u> (A))
2					
				Total Number of Dominant Species Across All Strata: ³ (B)	`
3				Species Across Air Strata (B))
4				Percent of Dominant Species	
		= Total Co	ver	That Are OBL, FACW, or FAC: 100 (A/	/B)
Sapling/Shrub Stratum (Plot size: <u>30'</u>)			E 1 01 1/	Prevalence Index worksheet:	
1. Salix lasiandra	30	у	FACW	Total % Cover of: Multiply by:	
2. Rubus armeniacus	10	n	FAC		
3. Cornus sericea	30	у	FACW	OBL species x 1 =	
				FACW species x 2 =	
4				FAC species x 3 =	
5				FACU species x 4 =	
	70	= Total Co	ver	UPL species x 5 =	
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	10		F AQ		ים
1. Ranunculus repens	10	у	FAC	Column Totals: (A) (E	D)
2				Prevalence Index = B/A =	
3				Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				✓ 2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 ¹	
7				4 - Morphological Adaptations ¹ (Provide supporti	ling
8				data in Remarks or on a separate sheet)	
9				5 - Wetland Non-Vascular Plants ¹	
10				Problematic Hydrophytic Vegetation ¹ (Explain)	
11				¹ Indicators of hydric soil and wetland hydrology must	t
· · · ·				be present, unless disturbed or problematic.	
5	10	T-+			
Woody Vine Stratum (Plot size: 3	10	= Total Co	/er		
<u>Woody Vine Stratum</u> (Plot size: <u>5</u>)	-				
1/				Hydrophytic	
· · · · · · · · · · · · · · · · · · ·				Vegetation	
1.					
1, 2 % Bare Ground in Herb Stratum90 mud				Vegetation	
1.				Vegetation	

Depth	Matrix		Redo	ox Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10	10YR 3/2	90	10YR 4/4	10	С	Μ	sitly clay loam	
10-20	10YR 3/2	80	10YR 4/6	20	С	М	sitly clay loam	
							·	
							·	
	oncentration, D=Depl					d Sand G		: PL=Pore Lining, M=Matrix.
•	Indicators: (Applica	able to all			ea.)			r Problematic Hydric Soils ³ :
Histoso	· · ·		Sandy Redox (, ,			2 cm Mu	()
	pipedon (A2)		Stripped Matrix	. ,				ent Material (TF2)
	istic (A3)		Loamy Mucky	•	, .	MLRA 1)	· · ·	llow Dark Surface (TF12)
Hydrog	en Sulfide (A4)		Loamy Gleyed	Matrix (F2	2)		Other (Ex	kplain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Matri	x (F3)				
Thick D	ark Surface (A12)		 Redox Dark St 	urface (F6)			³ Indicators of	hydrophytic vegetation and
	Mucky Mineral (S1)		Depleted Dark	Surface (F	7)		wetland hy	/drology must be present,
Sandy I			Redox Depres	sions (F8)			unless dis	turbed or problematic.
	Gleyed Matrix (S4)							
Sandy (Gleyed Matrix (S4) Layer (if present):							
Sandy (
Sandy (Restrictive	Layer (if present):						Hydric Soil Pres	sent? Yes 🖌 No
Sandy (Restrictive Type:	Layer (if present):						Hydric Soil Pres	sent? Yes <u> </u>
Sandy (Restrictive Type: Depth (in	Layer (if present):						Hydric Soil Pres	sent? Yes 🖌 No
Sandy (Restrictive Type: Depth (in	Layer (if present):						Hydric Soil Pres	sent? Yes 🖌 No
Sandy (Restrictive Type: Depth (in	Layer (if present):						Hydric Soil Pres	sent? Yes 🖌 No

Wetland Hydrology Indica	tors:				
Primary Indicators (minimun	<u>n of one required</u>	<u>d; che</u> ck	al <u>l that apply)</u>		Secondary Indicators (2 or more required)
Surface Water (A1)	Surface Water (A1) Water-Stained Leaves (B9) (exce				Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)					Dry-Season Water Table (C2)
Sediment Deposits (B2)	Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)				Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)			Oxidized Rhizospheres along L	iving Roots (C3)	 Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4))	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)				Soils (C6)	FAC-Neutral Test (D5)
Surface Soil Cracks (B6	Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LR				Raised Ant Mounds (D6) (LRR A)
Inundation Visible on A	ərial Imagery (B [.]	7)	Other (Explain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated Col	ncave Surface (B8)			
Field Observations:					
Surface Water Present?	Yes	No 🖌	_ Depth (inches):	_	
Water Table Present?	Yes 🖌	No	_ Depth (inches): <u>6</u>	_	
Saturation Present? (includes capillary fringe)	Yes 🖌 🖊	No	_ Depth (inches): <u>5</u>	Wetland Hy	drology Present? Yes <u> No</u>
Describe Recorded Data (st	ream gauge, mo	onitoring	well, aerial photos, previous insp	ections), if availa	able:
Remarks:					

Project/Site: Southwest Corridor Light Rail	_ City/County: Multre	omah	Sampling Date: <u>April 25, 2019</u>
Applicant/Owner: Trimet			Sampling Point: <u>B2</u>
Investigator(s): Rickus, Rosenthal	Section, Township	, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): slope		ive, convex, none): <u>none</u>	Slope (%): <u>100</u>
Subregion (LRR): A Lat: St	ee spreadsheet	Long: see spreadsheet	
Soil Map Unit Name: see spreadsheet		NWI classific	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🔽 N	lo (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrologysignificant		Are "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any answe	rs in Remarks.)
			• • • • • •

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No 🖌								
Hydric Soil Present?	Yes	No _ 🖌	Is the Sampled Area	. .						
Wetland Hydrology Present?	Yes	_ No _ 🖌 _	within a Wetland?	Yes	No					
Remarks:			·							
Plot lies on a steep slope a	Plot lies on a steep slope and above a narrow wetland swale.									

VEGETATION – Use scientific names of plants.

201	Absolute			Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Tatal New Arrange Damin and
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 30')		= Total Co	ver	That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1 Rubus armeniacus	10	y	FAC	Prevalence Index worksheet:
		у		Total % Cover of: Multiply by:
2. Crataegus douglasii (planted)	10	у	FAC	OBL species x 1 =
3. Ribes sanguineum (planted)	10	у	FACU	
4				FACW species x 2 =
5				FAC species x 3 =
··		= Total Co		FACU species x 4 =
Herb Stratum (Plot size: 5')			vei	UPL species x 5 =
				Column Totals: (A) (B)
1				
2				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				
				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8				5 - Wetland Non-Vascular Plants ¹
9				
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
		= Total Cov	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 5')		-		
1. Hedera helix	10	у	FACU	Hydrophytic
2				Vegetation
	10	= Total Cov		Present? Yes No 🗸
% Bare Ground in Herb Stratum ⁹⁰		_ 10tal C01		
Remarks:				1

I

Depth	Matrix		Redo	x Feature	s				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remar	ks
0-20	10YR 3/2	100					silt loam		
<u> </u>				• •		·			
	·								
<u> </u>									
Type: C=C	oncentration, D=Deple	tion RM=	Reduced Matrix CS		d or Coate	d Sand Gr	ains ² Location	PL=Pore Linin	a M=Matrix
71	Indicators: (Applical	,	,					Problematic H	<u>.</u>
- Histosol			Sandy Redox (2 cm Muc	k (A10)	•
	bipedon (A2)		Stripped Matrix	,				nt Material (TF2)
Black H	stic (A3)		Loamy Mucky M	/ineral (F	1) (except	MLRA 1)	Very Shal	low Dark Surfac	e (TF12)
Hydroge	en Sulfide (A4)		Loamy Gleyed	Matrix (F2	2)		Other (Ex	plain in Remark	s)
Deplete	d Below Dark Surface	(A11)	Depleted Matrix	(F3)					-
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			³ Indicators of I	nydrophytic vege	etation and
Sandy N	lucky Mineral (S1)		Depleted Dark	Surface (F	7)		wetland hydrology must be present,		
Sandy C	Gleyed Matrix (S4)		Redox Depress	ions (F8)	,		unless dist	urbed or probler	natic.
Restrictive	Layer (if present):							-	
Туре:									
Depth (in	ches):						Hydric Soil Prese	ent? Yes	No

HYDROLOGY

Wetland Hydrology Indicat	ors:				
Primary Indicators (minimum	<u>ı of one requi</u>	Secondary Indicators (2 or more required)			
Surface Water (A1)		ept	Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)
Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (B2)			Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		ing Roots (C3)	Geomorphic Position (D2)		
Algal Mat or Crust (B4)			Shallow Aquitard (D3)		
Iron Deposits (B5)		oils (C6)	FAC-Neutral Test (D5)		
Surface Soil Cracks (B6)		Stunted or Stressed Plants (D1)	(LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on A	erial Imagery	(B7)	Other (Explain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated Cor	ncave Surface	e (B8)			
Field Observations:					
Surface Water Present?	Yes	No 🖌	Depth (inches):		
Water Table Present?	Yes	No 🖌	Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes	No 🖌	Depth (inches):	Wetland Hyd	drology Present? Yes No
Describe Recorded Data (st	ream gauge,	monitoring v	vell, aerial photos, previous inspe	ctions), if availa	ble:
Remarks:					

Project/Site: Southwest Corridor Light Rail	City/County: Mu	Itnomah	Sampling Date: April 25, 2019
Applicant/Owner: Trimet			Sampling Point: B3
Investigator(s): Rickus, Rosenthal	Section, Townsh	nip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): terrace		cave, convex, none): <u>concave</u>	Slope (%): <u>20</u>
Subregion (LRR): <u>A</u> Lat:	see spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: see spreadsheet		NWI classifica	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time o	of year? Yes 🔽	No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significa	antly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally	y problematic?	(If needed, explain any answer	s in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	No No 🗸		Is the Sampled Area within a Wetland?	Yes	No			
Remarks:				·					
Plot lies in a shallow roadside swale.									

VEGETATION – Use scientific names of plants.

201	Absolute	Dominant		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species	
1				That Are OBL, FACW, or FAC: 3	(A)
2				Tabl New Loss of Dansie and	
3				Total Number of Dominant Species Across All Strata:	(B)
					(8)
4				Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: <u>30'</u>)		= Total Co	ver	That Are OBL, FACW, or FAC: 75	(A/B)
Rubus armeniacus	20	у	FAC	Prevalence Index worksheet:	
				Total % Cover of: Multiply by:	
2				OBL species x 1 =	
3					
4				FACW species x 2 =	
5				FAC species x 3 =	
··	20	= Total Co	vor	FACU species x 4 =	
<u>Herb Stratum</u> (Plot size: ^{5'})		- 10tal C0		UPL species x 5 =	
1 Phalaris arundinacea	20	n	FACW	Column Totals: (A)	(B)
2. Poa pratensis	55	у	FAC		
3. Holcus lanatus	25	V	FAC	Prevalence Index = B/A =	-
4 Senecio jacobaea	5	<u>,</u>	FACU	Hydrophytic Vegetation Indicators:	
	5			1 - Rapid Test for Hydrophytic Vegetation	
5. Geranium dissectum	5	n	UPL	<u> </u> 2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 ¹	
7				4 - Morphological Adaptations ¹ (Provide support	orting
8				data in Remarks or on a separate sheet)	•
9				5 - Wetland Non-Vascular Plants ¹	
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology mu	
· · · · ·	110			be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: <u>5'</u>)		= Total Cov	/er		
1. Hedera helix	30	v	FACU		
		,		Hydrophytic	
2				Vegetation Present? Yes <u> Ves</u> No	
	30	= Total Cov	/er		
% Bare Ground in Herb Stratum0					
Remarks:					

Jepin	epth Matrix Redox Features									
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remai	rks	
0-20	10YR 3/2	100					silt loam			
		·								
		. <u> </u>		<u></u>						
		·								
		·								
		·								
		·								
Type: C=C	oncentration, D=Depl	letion, RM=	Reduced Matrix, CS	S=Covered	d or Coate	d Sand Gr	rains. ² Location:	PL=Pore Linin	g, M=Matrix.	
lydric Soil	Indicators: (Applica	able to all	LRRs, unless other	wise not	ed.)		Indicators for	Problematic H	lydric Soils ³ :	
Histosol	(A1)		Sandy Redox (S5)			2 cm Muck	(A10)		
Histic Ep	pipedon (A2)		Stripped Matrix	(S6)			Red Paren	Material (TF2)	
Black Hi	istic (A3)		Loamy Mucky N	/lineral (F	I) (except	MLRA 1)	Very Shallo	w Dark Surfac	e (TF12)	
	en Sulfide (A4)		Loamy Gleyed	•	, , ,	,	Other (Explain in Remarks)			
, ,	d Below Dark Surface	e (A11)	Depleted Matrix		/				-,	
•	ark Surface (A12)	0 (/ (1 1)	Redox Dark Su	· · /			³ Indicators of b	drophytic yea	etation and	
	lucky Mineral (S1)		Depleted Dark	· · ·			³ Indicators of hydrophytic vegetation and wetland hydrology must be present,			
	Gleyed Matrix (S4)		Redox Depress		7)		unless disturbed or problematic.			
	Laver (if present):		Redox Depress	1011S (FO)					nauc.	
Type:										
··	ches):						Hydric Soil Prese	nt? Yes	No	
Remarks:										

HYDROLOGY

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; cheo	Secondary Indicators (2 or more required)			
Surface Water (A1)	Water-Stained Leaves (B9) (MLRA 1, 2,			
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)		
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	 Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)		
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)		
Iron Deposits (B5)	Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)			
Surface Soil Cracks (B6)	Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)		
Sparsely Vegetated Concave Surface (B8)				
Field Observations:				
Surface Water Present? Yes No _	Depth (inches):			
Water Table Present? Yes No _	<pre>_ Depth (inches):</pre>			
	Depth (inches): Wetland	Wetland Hydrology Present? Yes No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	a well aerial photos, provious inspections), if a	vailable:		
Describe Recorded Data (stream gauge, monitorii	ig well, aerial priotos, previous inspections), il a			
Remarks:				
soil dry.				

Project/Site: Southwest Corridor Light Rail	City/County: Mu	//County: <u>Multnomah</u> Sampling Date: ^{June 2}				
Applicant/Owner: Trimet		State: Oregon Sa	mpling Point: <u>B4</u>			
Investigator(s): Resenthal	hip, Range: <u>see spreadsheet</u>					
Landform (hillslope, terrace, etc.): ravine bottom	(concave, convex, none): <u>concave</u> Slope (%): <u>15</u>					
Subregion (LRR): <u>A</u> Lat: <u>s</u>	see spreadsheet	Long: see spreadsheet	Datum: NAD 83			
Soil Map Unit Name: see spreadsheet		NWI classification	n: none			
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🔽	No (If no, explain in Rema	arks.)			
Are Vegetation, Soil, or Hydrology significan	itly disturbed?	Are "Normal Circumstances" prese	ent? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain any answers in	Remarks.)			
SUMMARY OF FINDINGS Attach site man showin	na complina n	aint leastions transacts in	anortant factures ato			

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ ✔ Yes Yes	No No No 🖌	Is the Sampled Area within a Wetland?	Yes	No
Remarks: Plot lies at upper end of a	ravine.				

VEGETATION – Use scientific names of plants.

	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>) 1)		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: $\underline{1}$ (A)
2 3				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
4		= Total Cov		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Pubus armeniacus	100	у	FAC	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
Herb Stratum (Plot size: ^{5'})	100	= Total Cov	er	UPL species x 5 =
				Column Totals: (A) (B)
1				
2				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6		<u> </u>		3 - Prevalence Index is $\leq 3.0^1$
7				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
		= Total Cove		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 5')			51	
1				Hydrophytic
2				Vegetation
		= Total Cove		Present? Yes <u>V</u> No
% Bare Ground in Herb Stratum0				

Remarks:

Cottonwood and English Hawthorn found on adjacent side slopes but not included in plot which was located on the narrow ravine bottom.

epth	Matrix		Redox	K Feature	S				
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	arks
0-20	10YR 3/2	100					silty clay loam		
	·								
							······		
						<u> </u>	·		
	- <u> </u>								
	Concentration, D=Deple	tion RM-	Reduced Matrix CS		d or Coate	d Sand Gr	rains ² Location	n: PL=Pore Lini	na M-Matrix
71	Indicators: (Applicat	,						r Problematic	
Histoso			Sandy Redox (S		,		2 cm Mu		,
	pipedon (A2)		Stripped Matrix	,				ent Material (TF:	2)
	listic (A3)		Loamy Mucky M		1) (except	MLRA 1)		allow Dark Surfa	,
	en Sulfide (A4)		Loamy Gleyed N	``	, .	,	,	xplain in Remarl	()
, ,	ed Below Dark Surface	(A11)	Depleted Matrix	,	/			· · · · · · · · · · · · · · · · · · ·	
•	Park Surface (A12)	(,)	Redox Dark Sur	· /			³ Indicators of	hydrophytic veg	etation and
	Mucky Mineral (S1)		Depleted Dark S	()				vdrology must b	•
_ ,	Gleyed Matrix (S4)		Redox Depressi	`	/		•	turbed or proble	. ,
	Layer (if present):			· · · ·				•	
Type:									
Depth (ir	nches):						Hydric Soil Pres	sent? Yes	No

HYDROLOGY

Wetland Hydrology Indica	tors:					
Primary Indicators (minimun	<u>ı of one requi</u>	Secondary Indicators (2 or more required)				
Surface Water (A1) Water-Stained Leaves (B9) (except				Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)	
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)	
Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)	
Sediment Deposits (B2))		Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)	
Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3)				ing Roots (C3)	Geomorphic Position (D2)	
Algal Mat or Crust (B4)	Algal Mat or Crust (B4) Presence of Reduced Iron (C4)				Shallow Aquitard (D3)	
Iron Deposits (B5)	Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)				FAC-Neutral Test (D5)	
Surface Soil Cracks (B6	Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A)			(LRR A)	Raised Ant Mounds (D6) (LRR A)	
Inundation Visible on A	erial Imagery	(B7)	Other (Explain in Remarks)		Frost-Heave Hummocks (D7)	
Sparsely Vegetated Co	ncave Surface	e (B8)				
Field Observations:						
Surface Water Present?	Yes	No	Depth (inches):			
Water Table Present?	Yes	No 🖌	Depth (inches):			
Saturation Present? (includes capillary fringe)	Yes	_ No _✔	Depth (inches):	Wetland Hyd	rology Present? Yes No	
Describe Recorded Data (st	ream gauge, i	monitoring v	vell, aerial photos, previous inspe	ctions), if availab	le:	
Remarks:						

Project/Site: Southwest Corridor Light Rail	City/County: M	ultnomah s	Sampling Date: <u>June 23, 2020</u>			
Applicant/Owner: Trimet			Sampling Point: B5			
Investigator(s): Rosenthal	Section, Towns	hip, Range: see spreadsheet				
Landform (hillslope, terrace, etc.): depression	Local relief (co	ocal relief (concave, convex, none): <u>concave</u> Slope (%): <u>0</u>				
Subregion (LRR): <u>A</u> Lat: <u>set</u>	e spreadsheet	Long: see spreadsheet	Datum: NAD 83			
Soil Map Unit Name: see spreadsheet		NWI classificat	ion: none			
Are climatic / hydrologic conditions on the site typical for this time of ye	ear?Yes 🔽	_ No (If no, explain in Rer	marks.)			
Are Vegetation, Soil, or Hydrologysignificantly	y disturbed?	Are "Normal Circumstances" pre	esent? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	(If needed, explain any answers	in Remarks.)			
SUMMARY OF FINDINGS – Attach site man showing	a samplina n	oint locations transects i	important features etc			

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No ✓ No ✔	Is the Sampled Area within a Wetland?	Yes 🔽	No			
Remarks: Plot lies in a depression formed in a ravine and I-5 road fill								

VEGETATION – Use scientific names of plants.

201	Absolute		Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 3 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: ³ (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 30')		= Total Co	over	That Are OBL, FACW, or FAC: 100 (A/B)
1 Rubus armeniacus	20	y	FAC	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				
4				FACW species x 2 =
5				FAC species x 3 =
	~~	= Total Co	vor	FACU species x 4 =
Herb Stratum (Plot size: ^{5'})		10tai 0t		UPL species x 5 =
1 Phalaris arundinacea	65	у	FACW	Column Totals: (A) (B)
2. Equisetum arvense	25	y	FAC	
		<u> </u>		Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must
11	00	T 1 1 0		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: ^{5'})		= Total Co	ver	
1				Hydrophytic
2				Vegetation Present? Yes V No
% Bare Ground in Herb Stratum0		= Total Co	ver	
Remarks:				1

Depth	Matrix		Redo	x Feature	s					
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Ren	narks	
0-20	10YR 3/2	100					silty clay loam			
							<u> </u>			
	<u></u>			·			<u> </u>			
	<u> </u>			·						
							<u> </u>			
Type: C=C	Concentration, D=Depl	letion, RM=	Reduced Matrix, CS	=Covere	d or Coate	d Sand G	rains. ² Locati	on: PL=Pore Li	ning, M=Ma	atrix.
	Indicators: (Applica							for Problemation	-	
Histoso	l (A1)		Sandy Redox (S	65)			2 cm M	luck (A10)		
Histic E	pipedon (A2)		Stripped Matrix	(S6)			Red Pa	arent Material (T	F2)	
Black H	listic (A3)		Loamy Mucky N	lineral (F	1) (except	MLRA 1)	Very SI	hallow Dark Sur	face (TF12	2)
Hydrog	en Sulfide (A4)		Loamy Gleyed I	Matrix (F2	2)		Other (Explain in Rema	ırks)	
Deplete	ed Below Dark Surface	e (A11)	Depleted Matrix	(F3)						
Thick D	ark Surface (A12)		Redox Dark Su	face (F6)			³ Indicators	of hydrophytic ve	egetation a	and
Sandy I	Mucky Mineral (S1)		Depleted Dark S	Surface (F	7)		wetland hydrology must be present,			
Sandy	Gleyed Matrix (S4)		Redox Depress	ions (F8)			unless d	isturbed or prob	lematic.	
estrictive	Layer (if present):									
Туре:										
Depth (ir	nches):						Hydric Soil Pr	esent? Yes_	N	lo
Bopai (ii										

HYDROLOGY

Wetland Hydrology Indica	tors:				
Primary Indicators (minimun	n of one requ	Secondary Indicators (2 or more required)			
Surface Water (A1) Water-Stained Leaves (B9) (except				Water-Stained Leaves (B9) (MLRA 1, 2,	
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)
Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (B2))		Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3)				Geomorphic Position (D2)
Algal Mat or Crust (B4)	Algal Mat or Crust (B4) Presence of Reduced Iron (C4)				Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)				Soils (C6)	FAC-Neutral Test (D5)
Surface Soil Cracks (B6	Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A)				Raised Ant Mounds (D6) (LRR A)
Inundation Visible on A	erial Imagery	′ (B7)	Other (Explain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated Col	ncave Surfac	ce (B8)			
Field Observations:					
Surface Water Present?	Yes	No 🔽	Depth (inches):		
Water Table Present?	Yes	No 🔽	Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes	No∕	_ Depth (inches):	Wetland Hyd	Irology Present? Yes No
Describe Recorded Data (st	ream gauge,	, monitoring v	well, aerial photos, previous inspe	ctions), if availal	ble:
Remarks:					

Project/Site: Southwest Corridor Light Rail	_ City/County: <u>Washington</u> Sampling Date: <u>June 6, 2019</u>
Applicant/Owner: Trimet	State: <u>Oregon</u> Sampling Point: <u>C1</u>
Investigator(s): <u>Rickus</u> , Thompson	Section, Township, Range: see spreadsheet
Landform (hillslope, terrace, etc.): <u>terrace</u>	_ Local relief (concave, convex, none): <u>concave</u> Slope (%): <u>4</u>
Subregion (LRR): <u>A</u> Lat: <u>Se</u>	ee spreadsheet Long: see spreadsheet Datum: NAD 83
Soil Map Unit Name: see spreadsheet	NWI classification: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of y	/ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantl	ly disturbed? Are "Normal Circumstances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🖌	No			
Hydric Soil Present?	Yes 🖌	No	Is the Sampled Area		
Wetland Hydrology Present?	Yes 🖌	No	within a Wetland?	Yes	No
Remarks:			•		

Plot lies on the edge of a large wetland which extends to a tributary to Fanno Creek. The only upland areas within the study area consist of historic gravel fill pads.

	Absolute	Dominant		Dominance Test workshe	et:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Specie		
1				That Are OBL, FACW, or F	AC: 2	(A)
2						
3				Total Number of Dominant Species Across All Strata:	2	(B)
				Species Across Air Strata.		(D)
4				Percent of Dominant Specie		
Sapling/Shrub Stratum (Plot size: 30')		= Total Co	ver	That Are OBL, FACW, or FA	AC: 100	(A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30</u>) 1. Salix lasiandra	35		FACW	Prevalence Index worksho	eet:	
		У		Total % Cover of:	Multiply by:	
2				OBL species		
3						
4				FACW species		
5				FAC species	x 3 =	_
· · · · · · · · · · · · · · · · · · ·	35	Tatal O		FACU species	x 4 =	_
Herb Stratum (Plot size: ^{5'})		= Total Co	ver	UPL species	x 5 =	
1 Phalaris arundinacea	100	v	FACW	Column Totals:		
2. Juncus effusus	5	<u> </u>	FACW			
		n		Prevalence Index = B	3/A =	_
3				Hydrophytic Vegetation Ir	ndicators:	
4				1 - Rapid Test for Hydro	ophytic Vegetation	
5				✓ 2 - Dominance Test is :	>50%	
6				3 - Prevalence Index is		
7				4 - Morphological Adap		porting
8					on a separate sheet)	p =
9				5 - Wetland Non-Vascu	ılar Plants ¹	
10				Problematic Hydrophyt	ic Vegetation ¹ (Expla	in)
				¹ Indicators of hydric soil and	d wetland hvdrology r	nust
11		= Total Cov		be present, unless disturbe		
Woody Vine Stratum (Plot size:)			/er			
1				Hydrophytic		
2				Vegetation Present? Yes	<u>No</u>	
% Bare Ground in Herb Stratum <u>none</u>		= Total Cov	/er			
Remarks:				1		

	Color (moist) 10YR 4/2	%	Color (moist)	0/				
0-2 2-20	10VP 4/2			%	Type ¹	Loc ²	Texture	Remarks
2-20	101R 4/2	100					Silt loam	
	10YR 4/1	91	7.5YR 4/4	7	С	М	Silty clay loam	
			5Y 4/1	2	D	М	Silty clay loam	
		·		·				
·								
					·			
Type: C=Cor	ncentration, D=Dep	letion, RM	I=Reduced Matrix, CS	S=Covere	d or Coate	ed Sand G	rains. ² Location:	PL=Pore Lining, M=Matrix.
lydric Soil Ir	ndicators: (Applic	able to al	I LRRs, unless othe	wise not	ed.)		Indicators for	Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Redox (S5)			2 cm Muc	k (A10)
Histic Epi	ipedon (A2)		Stripped Matrix	(S6)			Red Parer	nt Material (TF2)
Black Hist	tic (A3)		Loamy Mucky M	, /ineral (F	1) (excep	t MLRA 1) Very Shall	low Dark Surface (TF12)
	n Sulfide (A4)		Loamy Gleyed	•	,	,	•	plain in Remarks)
, ,	Below Dark Surface	e (A11)	 Depleted Matrix 	•	-,			
•	rk Surface (A12)	0 (/ (11)	Redox Dark Su	· · /	1		³ Indicators of k	ydrophytic vegetation and
	ucky Mineral (S1)		Depleted Dark	• •				drology must be present,
	• • • • •		Redox Depress	`	7)		-	
	eyed Matrix (S4)		Redox Depress	ions (Fo)			uniess dist	urbed or problematic.
	ayer (if present):							
Туре:								,
Depth (inch	hes):						Hydric Soil Prese	ent? Yes 📕 No 🔄
Remarks:								

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (exce	pt Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Livir	ng Roots (C3) 🦯 🖌 Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled So	ils (C6) YAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (L	_RR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes <u>No</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes <u> No No</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	tions), if available:
Remarks:	
Procinitation was at the low and of normal. The time of year	r and gonoral low lovel of groundwater

Precipitation was at the low end of normal. The time of year and general low level of groundwater indicate that primary indicators of hydrology would be present during the wet season in a normal year.

Project/Site: Southwest Corridor Light Rail	_ City/County: Wash	Washington Sampling Date: June		
Applicant/Owner: Trimet			Sampling Point: <u>C2</u>	
Investigator(s): Rickus, Thompson	Section, Township	o, Range: see spreadsheet		
Landform (hillslope, terrace, etc.): <u>fill pad</u>		ave, convex, none): <u>none</u>	Slope (%): <u>2</u>	
Subregion (LRR): <u>A</u> Lat: <u>s</u>	ee spreadsheet	Long: see spreadsheet	Datum: NAD 83	
Soil Map Unit Name: see spreadsheet		NWI classifica	ation: see spreadsheet	
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🔽 I	No (If no, explain in Re	emarks.)	
Are Vegetation, Soil, or Hydrologysignifican	tly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No	
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain any answer	s in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No _ 🖌 _			
Hydric Soil Present?	Yes	No <u> </u>	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No 🖌	within a Wetland?	Yes	No
Remarks:			·		
Plot lice on the odge of a large w	otland Tha	only unland aroos	within this side of the stur	ly area aana	ist of historia groupl fill pade

Plot lies on the edge of a large wetland. The only upland areas within this side of the study area consist of historic gravel fill pads.

201	Absolute		Indicator	Dominance Test worksh	neet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Spe	cies	
1				That Are OBL, FACW, or	FAC: 1	(A)
2				TatalNingham	4	
3				Total Number of Dominar Species Across All Strata	0	(B)
				opeoles Across Air otrata		(0)
4				Percent of Dominant Spe		
Sapling/Shrub Stratum (Plot size: ^{30'})		= Total Co	over	That Are OBL, FACW, or	FAC: 50	(A/B)
				Prevalence Index works	heet:	
1				Total % Cover of:	Multiply by:	
2				OBL species		_
3						
4				FACW species		
5				FAC species	x 3 =	-
· · ·				FACU species	x 4 =	_
Herb Stratum (Plot size: 5')			ivei	UPL species	x 5 =	_
· Sonchus anyongis	2	у	FACU	Column Totals:	(A)	(B)
		y	FAC			
				Prevalence Index =	= B/A =	_
3				Hydrophytic Vegetation	Indicators:	
3 4				Hydrophytic Vegetation 1 - Rapid Test for Hy		
4					drophytic Vegetation	
				1 - Rapid Test for Hy	drophytic Vegetation s >50%	
4 5 6				 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 	drophytic Vegetation s >50% is ≤3.0 ¹	porting
4 5 6 7				 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Additional Additiona Additional Additional Addi	drophytic Vegetation s >50% is ≤3.0 ¹	porting
4 5 6 7 8				 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Additional Additiona Additional Additional Addi	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet)	porting
4 5 6 7 8 9	 			 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addata in Remarks of 	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹	-
4				 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addata in Remarks of 5 - Wetland Non-Vas Problematic Hydroph 	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹ ytic Vegetation ¹ (Explain	n)
4 5 6 7 8 9				 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addata in Remarks of 5 - Wetland Non-Vas 	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹ lytic Vegetation ¹ (Explain and wetland hydrology m	n)
4				1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addition Remarks of 5 - Wetland Non-Vas Problematic Hydroph ¹ Indicators of hydric soil a	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹ lytic Vegetation ¹ (Explain and wetland hydrology m	n)
4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size:)				 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addata in Remarks of 5 - Wetland Non-Vas Problematic Hydroph ¹Indicators of hydric soil a be present, unless disturb 	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹ lytic Vegetation ¹ (Explain and wetland hydrology m	n)
4		 = Total Co		 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addata in Remarks of 5 - Wetland Non-Vas Problematic Hydroph ¹Indicators of hydric soil a be present, unless disturb 	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹ lytic Vegetation ¹ (Explain and wetland hydrology m	n)
4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size:)	5	 = Total Cor		 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addata in Remarks of 5 - Wetland Non-Vas Problematic Hydroph ¹Indicators of hydric soil a be present, unless disturb Hydrophytic Vegetation 	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹ cular Plants ¹ iytic Vegetation ¹ (Explain and wetland hydrology m bed or problematic.	n)
4	5	 = Total Co		 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addata in Remarks of 5 - Wetland Non-Vas Problematic Hydroph ¹Indicators of hydric soil a be present, unless disturb Hydrophytic Vegetation 	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹ lytic Vegetation ¹ (Explain and wetland hydrology m	n)
4	5	 = Total Cor		 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addata in Remarks of 5 - Wetland Non-Vas Problematic Hydroph ¹Indicators of hydric soil a be present, unless disturb Hydrophytic Vegetation 	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹ cular Plants ¹ iytic Vegetation ¹ (Explain and wetland hydrology m bed or problematic.	n)
4.	5	 = Total Cor		 1 - Rapid Test for Hy 2 - Dominance Test i 3 - Prevalence Index 4 - Morphological Addata in Remarks of 5 - Wetland Non-Vas Problematic Hydroph ¹Indicators of hydric soil a be present, unless disturb Hydrophytic Vegetation 	drophytic Vegetation s >50% is ≤3.0 ¹ aptations ¹ (Provide supp or on a separate sheet) cular Plants ¹ cular Plants ¹ iytic Vegetation ¹ (Explain and wetland hydrology m bed or problematic.	n)

Profile Desc	ription: (Describe to	o the depth	needed to docun	nent the i	ndicator o	or confirm	the absence	of indicator	s.)	
Depth	Matrix		Redo	x Features	6					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0	gravel							gravel fill	pad- no soil	
				·						
				·						
1				·						
	ncentration, D=Deple ndicators: (Applica					d Sand Gra		cation: PL=P	-	
•					.u.)					
Histosol	· · /		Sandy Redox (S	,				n Muck (A10)		
	ipedon (A2)		_ Stripped Matrix	· · ·				Parent Mate	· · ·	
Black His	. ,		Loamy Mucky N	•		MLRA 1)				
_ Hydroge	n Sulfide (A4)		Loamy Gleyed I	Matrix (F2)		Oth	er (Explain in	Remarks)	
_ Depleted	Below Dark Surface	(A11)	Depleted Matrix	(F3)						
Thick Da	rk Surface (A12)		Redox Dark Su	rface (F6)			³ Indicato	ors of hydroph	nytic vegetat	ion and
Sandy M	ucky Mineral (S1)		Depleted Dark S	Surface (F	7)		wetla	nd hydrology	must be pre	esent,
	leyed Matrix (S4)	_	Redox Depress	•	,			s disturbed o	•	
Restrictive L	ayer (if present):									
Туре:										
Depth (inc	:hes):						Hydric Soil	Present?	Yes	No 🖌
Remarks:							1			
	upland areas	within th	via aida af the	a atudu	oroc	onaict	of biotoric	arovalf	ill node	it was not
THE UNIV	upland areas	within the	แร รเนย บา เกย	e sludy	area	UNSISU		giavell	m paus-	it was no

possible to dig through the gravel, so no soil pit dug.

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (exce	pt Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Livi	ng Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled Sc	bils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (I	LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No <u>′</u> Depth (inches):	
Water Table Present? Yes No <u>r</u> Depth (inches):	
Saturation Present? Yes No _ 	Wetland Hydrology Present? Yes No <u></u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

Project/Site: Southwest Corridor Light Rail	City/County: W	ashington	Sampling	Date: June 6, 2019
Applicant/Owner: Trimet		State: Ore	egon Sampling	Point: C3
Investigator(s): Rickus, Thompson	_ Section, Towns	ship, Range: <u>see spreads</u>	heet	
Landform (hillslope, terrace, etc.): terrace	_ Local relief (co	ncave, convex, none): <u>C</u>	oncave	Slope (%): <u>10</u>
Subregion (LRR): <u>A</u> Lat: <u>se</u>	e spreadsheet	Long: see spre	adsheet	Datum: NAD 83
Soil Map Unit Name: see spreadsheet		NWI	classification: see	spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of y	/ear?Yes 🔽	_ No (If no, exp	lain in Remarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed?	Are "Normal Circumst	ances" present?	Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic?	(If needed, explain an	y answers in Rema	arks.)
SUMMARY OF FINDINGS – Attach site map showing	a samplina p	oint locations. trai	nsects, import	ant features. etc.

	Vee V				
Hydrophytic Vegetation Present?	Yes 🖌	No			
Hydric Soil Present?	Yes 🖌	No	 Is the Sampled Area		
Wetland Hydrology Present?	Yes _ 🖌	No	 within a Wetland?	Yes	No

Plot lies within a narrow fringe wetland adjacent to a tributary to Fanno Creek.

VEGETATION – Use scientific names of plants.

Remarks:

201	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>3</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				Percent of Dominant Species
		= Total Co		That Are OBL, FACW, or FAC: ¹⁰⁰ (A/B)
Sapling/Shrub Stratum (Plot size: 30')				Prevalence Index worksheet:
1				
2				
3				OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
		= Total Co	ver	FACU species x 4 =
Herb Stratum (Plot size: 5')		10tal 00	VCI	UPL species x 5 =
1. Phalaris arundinacea	30	у	FACW	Column Totals: (A) (B)
2. Juncus effusus	10	n	FACW	Prevalence Index = B/A =
3. Impatiens capensis	25	у	FACW	Hydrophytic Vegetation Indicators:
4 Lotus corniculatus	25	у	FAC	1 - Rapid Test for Hydrophytic Vegetation
5. Galium aparine	10	n	FACU	✓ 2 - Dominance Test is >50%
6				3 - Prevalence Index is $\leq 3.0^{1}$
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
		= Total Cov	/er	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)				
1				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes <u>V</u> No
% Bare Ground in Herb Stratum none				
Remarks:				

			pth needed to docu					,
Depth (inches)	Matrix Color (moist)	%	Color (moist)	<u>x Feature</u> %	es Type ¹	Loc ²	Texture	Remarks
0-4.5	10YR 4/2						Silt loam	Komano
4.5-20	10YR 4/1	92	7.5YR 4/4	5	С	М	Silty clay loam	
			5Y 4/1	2	 D	M	Silty clay loam	
						101		
							<u> </u>	
							<u> </u>	
¹ Type: C=Co	oncentration D=Depl	etion RM	I=Reduced Matrix, C	S=Covere	d or Coate	ed Sand G	Grains ² Locatio	on: PL=Pore Lining, M=Matrix.
			I LRRs, unless othe					for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Redox (S5)			2 cm M	uck (A10)
Histic Ep	pipedon (A2)		Stripped Matrix	(S6)			Red Pa	rent Material (TF2)
Black Hi	stic (A3)		Loamy Mucky N	/lineral (F	1) (excep	t MLRA 1) Very SI	nallow Dark Surface (TF12)
_ Hydroge	n Sulfide (A4)		Loamy Gleyed	Matrix (F2	2)		Other (Explain in Remarks)
Depleted	d Below Dark Surface	e (A11)	 Depleted Matrix 	(F3)				
_ Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)		³ Indicators of	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (I	F7)		wetland	hydrology must be present,
_ Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)			unless d	isturbed or problematic.
Restrictive L	_ayer (if present):							
Туре:								
Depth (ind	ches):						Hydric Soil Pro	esent? Yes 🖌 No
Remarks:								

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (exce	ept Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Liv	ing Roots (C3) 🧨 Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled S	oils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1)	(LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No _ 	Wetland Hydrology Present? Yes <u>~</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe-	ctions), if available:
Remarks:	
Dracinitation was at the law and of some al. The time of was	we have been a well been loved of any subsectory

Precipitation was at the low end of normal. The time of year and general low level of groundwater indicate that primary indicators of hydrology would be present during the wet season in a normal year.

Project/Site: Southwest Corridor Light Rail	City/County: W	/ashington	Sampling Date: June 6, 2019		
Applicant/Owner: Trimet			Sampling Point: C4		
Investigator(s): Rickus, Thompson	Section, Towns	ship, Range: see spreadsheet			
Landform (hillslope, terrace, etc.): terrace		ncave, convex, none): <u>none</u>	Slope (%): <u>30</u>		
Subregion (LRR): <u>A</u> Lat:	see spreadsheet	Long: see spreadsheet	Datum: NAD 83		
Soil Map Unit Name: <u>see spreadsheet</u>		NWI classifica	ation: see spreadsheet		
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes 🗡	_ No (If no, explain in Re	emarks.)		
Are Vegetation, Soil, or Hydrology significa	antly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology naturall	y problematic?	(If needed, explain any answer	s in Remarks.)		
		• • • • • •	• • • • • •		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No 🖌								
Hydric Soil Present?	Yes	No 🖌	Is the Sampled Area							
Wetland Hydrology Present?	Yes	No 🖌	within a Wetland?	Yes	No					
Remarks:										
Plot lies 2 feet above a fri	Plot lies 2 feet above a fringe wetland.									

201	Absolute	Dominant		Dominance Test workshe	et:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Speci	es	
1				That Are OBL, FACW, or F	AC: 1	(A)
2				Tatal New York Consistent		
3				Total Number of Dominant Species Across All Strata:	2	(B)
				Species Across Air Strata.		(D)
4				Percent of Dominant Specie		
Sapling/Shrub Stratum (Plot size: 30')		= Total Co	ver	That Are OBL, FACW, or F.	AC: 50	(A/B)
	10	V	FAC	Prevalence Index worksh	eet:	
···		у		Total % Cover of:	Multiply by:	
2				OBL species		
3				FACW species		
4						
5				FAC species		
		= Total Co	Ver	FACU species	x 4 =	_
Herb Stratum (Plot size: 5')		10tal 00	VCI	UPL species	x 5 =	_
1				Column Totals:	(A)	(B)
2				Drovolonco Indov. – D	2/4 -	
3				Prevalence Index = E		_
4				1 - Rapid Test for Hydr		
5				2 - Dominance Test is		
6				3 - Prevalence Index is	s ≤3.0 ¹	
7				4 - Morphological Adap	otations ¹ (Provide sup	porting
8				data in Remarks or	on a separate sheet)	
9				5 - Wetland Non-Vascu	ular Plants ¹	
10				Problematic Hydrophyt	ic Vegetation ¹ (Expla	in)
				¹ Indicators of hydric soil and	d wetland hydrology i	nust
11				be present, unless disturbe		
Woody Vine Stratum (Plot size: 5')		= Total Cov	ver			
	100	у	FACU			
		<u>y</u>		Hydrophytic		
2				Vegetation Present? Yes	No 🖌	
% Bare Ground in Herb Stratum 20	100	= Total Cov	/er			
Remarks:						

pth	Matrix		Redo	x Feature	S					
iches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	;
-4	10YR 4/2	100					silt loam	with grave	el	
+								shovel ref	ⁱ usal in grav	rel
					·					
	·			·	·			·		
				<u> </u>	·					
				<u> </u>						
be: C=C	Concentration, D=Depl	etion, RM=		G=Covere	d or Coate	d Sand G	rains. ² Lo	cation: PL=F	Pore Lining,	M=Matrix.
Iric Soil	Indicators: (Applica	able to all	LRRs, unless other	rwise not	ed.)		Indicat	ors for Prob	lematic Hyd	dric Soils ³ :
Histoso	l (A1)		Sandy Redox (S5)	•		2 c	m Muck (A10)	
	pipedon (A2)		Stripped Matrix	,				d Parent Mat	,	
	listic (A3)		Loamy Mucky M	· · /	1) (except	MLRA 1)		ry Shallow Da	()	(TF12)
	en Sulfide (A4)		Loamy Gleyed	•	, .			ner (Explain ir		()
	ed Below Dark Surface	e (A11)	Depleted Matrix	•	-/					
•	ark Surface (A12)		Redox Dark Su	· · /			³ Indicat	ors of hydron	hytic vegeta	ation and
	Mucky Mineral (S1)		Depleted Dark	, ,			³ Indicators of hydrophytic vegetation and wetland hydrology must be present,			
•	Gleyed Matrix (S4)		Redox Depress	•	.,		unless disturbed or problematic.			
	Layer (if present):		<u> </u>	(-)						
Type:										
Depth (ir	nches):						Hydric Soi	il Present?	Yes	No

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; cl	Secondary Indicators (2 or more required)	
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Ro	bots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C	C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR /	A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes No	✓ Depth (inches):	
Water Table Present? Yes <u>No</u>	✓ Depth (inches):	
Saturation Present? Yes No (includes capillary fringe)	_ ✓ Depth (inches): Wet	tland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspections)), if available:
Remarks:		
Although shovel refusal occurre	d at 4 inches in gravel, the slor	be of the area and location above the

Although shovel refusal occurred at 4 inches in gravel, the slope of the area and location above the adjacent wetland indicated that water would not occur near the surface in a normal precipitation year.

Project/Site: Southwest Corridor Light Rail	City/County: Wash	ington	Sampling Date: June 6, 2019			
Applicant/Owner: Trimet		State: Oregon	Sampling Point: <u>C5</u>			
Investigator(s): Rickus, Thompson	_ Section, Township,	Section, Township, Range: see spreadsheet				
Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave S						
Subregion (LRR): <u>A</u> Lat: <u>Se</u>	e spreadsheet	Long: see spreadsheet	Datum: NAD 83			
Soil Map Unit Name: <u>see spreadsheet</u>		NWI classific	ation: see spreadsheet			
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes 🗾 N	lo (If no, explain in R	emarks.)			
Are Vegetation, Soil, or Hydrologysignificant	ly disturbed? A	Are "Normal Circumstances" p	resent? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showin	iq sampling poir	nt locations, transects	, important features, etc.			

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>✓</u> No Yes <u>✓</u> No Yes <u>✓</u> No	Is the Sampled Area within a Wetland? Yes <u></u> No
Remarks: Plot lies on the north side of	of wetland adjace	nt to a tributary to Fanno Creek.

001	Absolute	Dominant		Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species		
1				That Are OBL, FACW, or FAC	2	(A)
2						
3				Total Number of Dominant Species Across All Strata:	2	(B)
				Species Across All Strata.		(D)
4				Percent of Dominant Species		
Sapling/Shrub Stratum (Plot size: ^{30'})		= Total Co	ver	That Are OBL, FACW, or FAC	<u>; 100</u>	(A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30'</u>) 1 Salix lasiandra	FF		FACW	Prevalence Index worksheet	t:	
		у		Total % Cover of:	Multiply by:	
2				OBL species		
3						
4				FACW species		
				FAC species	x 3 =	_
5	55			FACU species	x 4 =	_
Herb Stratum (Plot size: ^{5'})		= Total Co	ver	UPL species	x 5 =	
Dhelerie erundingese	100	у	FACW	Column Totals:		
···					(,,)	_ (2)
2				Prevalence Index = B/A	. =	_
3				Hydrophytic Vegetation Indi	icators:	
4				1 - Rapid Test for Hydrop	hytic Vegetation	
5				2 - Dominance Test is >5		
6				3 - Prevalence Index is ≤		
7				4 - Morphological Adapta		norting
8				data in Remarks or on		porting
9				5 - Wetland Non-Vascular	r Plants ¹	
10				Problematic Hydrophytic	Vegetation ¹ (Expla	in)
				¹ Indicators of hydric soil and w		
11				be present, unless disturbed of		
Woody Vine Stratum (Plot size: 5')	100	= Total Cov	/er		•	
1				Hydrophytic		
2				Vegetation Present? Yes	No	
% Bare Ground in Herb Stratum none		= Total Cov	/er			
Remarks:						

Profile Desc	ription: (Describe t	o the dept	h needed to docun	nent the	indicator	or confirr	n the absence of	indicators.)	
Depth	Matrix		Redo	x Feature	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-2	10YR 4/2	100					Silt loam		
2-20	10YR 4/1	95	10YR 4/4	5	С	М	Silty clay loam		
		·							,
		<u> </u>					<u> </u>		
¹ Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, CS	S=Covere	d or Coate	ed Sand G	rains. ² Locati	on: PL=Pore Lining, I	M=Matrix.
Hydric Soil I	ndicators: (Applica	able to all L	RRs, unless other	wise not	ted.)		Indicators	for Problematic Hyd	ric Soils ³ :
- Histosol	(A1)		Sandy Redox (S	S5)			2 cm N	1uck (A10)	
Histic Ep	pipedon (A2)	-	Stripped Matrix	(S6)			Red Pa	arent Material (TF2)	
Black His	stic (A3)		Loamy Mucky N	/lineral (F	1) (excep	t MLRA 1)) Very S	hallow Dark Surface (TF12)
_ Hydroge	n Sulfide (A4)		Loamy Gleyed I	Matrix (F2	2)		Other (Explain in Remarks)	
_ Depleted	Below Dark Surface	e (A11)	 Depleted Matrix 	(F3)					
Thick Da	ark Surface (A12)		Redox Dark Su	face (F6)		³ Indicators	of hydrophytic vegeta	tion and
Sandy M	lucky Mineral (S1)		Depleted Dark \$	Surface (I	F7)		wetland	hydrology must be pro	esent,
_ Sandy G	ileyed Matrix (S4)	-	Redox Depress	ions (F8)			unless d	listurbed or problemat	ic.
Restrictive L	ayer (if present):								
Туре:									
Depth (inc	ches):						Hydric Soil Pr	esent? Yes 🖌	No
Remarks:									

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Le	aves (B9) (except Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4	A, and 4B) 4A, and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebr	ates (B13) Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide	Odor (C1) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizosp	heres along Living Roots (C3) 🖌 Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Red	uced Iron (C4) Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Redu	uction in Tilled Soils (C6) 🛛 🗹 FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stress	ed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Other (Explain in	Remarks) Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes <u>No</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos	previous inspections), if available:
Remarks:	
Provinitation was at the low and of normal. The	time of year and general low lovel of groundwater

Precipitation was at the low end of normal. The time of year and general low level of groundwater indicate that primary indicators of hydrology would be present during the wet season in a normal year.

Project/Site: Southwest Corridor Light Rail	City/County: Was	shington	Sampling Da	te: June 6, 2019
Applicant/Owner: Trimet		State: Orec		
Investigator(s): Rickus, Thompson	Section, Townshi	ip, Range: <u>see spreadsh</u>		
Landform (hillslope, terrace, etc.): terrace		cave, convex, none): <u>no</u>		Slope (%): <u>30</u>
Subregion (LRR): <u>A</u> Lat: <u>St</u>	ee spreadsheet	Long: see sprea	dsheet [Datum: NAD 83
Soil Map Unit Name: <u>see spreadsheet</u>		NWI c	lassification: see spr	readsheet
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🔽	No (If no, expla	ain in Remarks.)	
Are Vegetation, Soil, or Hydrology significant		Are "Normal Circumsta	nces" present? Yes	✓ No
Are Vegetation, Soil, or Hydrology naturally p	problematic?	(If needed, explain any	answers in Remarks	.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No 🖌					
Hydric Soil Present?	Yes	No <u> </u>	Is the Sampled Area				
Wetland Hydrology Present?	Yes	No _ 🖌 _	within a Wetland?	Yes	No		
Remarks:							
Plot lies on a soil and gravel fill slope 2 feet above a wetland.							

201	Absolute		Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				
				Total Number of Dominant Species Across All Strata: 4 (B)
3				Species Across All Strata. (B)
4				Percent of Dominant Species
		= Total Co	over	That Are OBL, FACW, or FAC: <u>50</u> (A/B)
Sapling/Shrub Stratum (Plot size: <u>30'</u>)				Prevalence Index worksheet:
1. Rubus armeniacus	30	У	FAC	Total % Cover of: Multiply by:
2				
3				OBL species x 1 =
				FACW species x 2 =
4			·	FAC species x 3 =
5			·	FACU species x 4 =
Libert Otrations (Distains 5	30	= Total Co	over	UPL species x 5 =
<u>Herb Stratum</u> (Plot size: <u>5'</u>)	00			
1. Bromus carinatus	20	у	UPL	Column Totals: (A) (B)
2. Sonchus arvensis	10	у	FACU	Prevalence Index = B/A =
3. Dipsacus fullonum	10	у	FAC	Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7 8				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants ¹
9				Problematic Hydrophytic Vegetation ¹ (Explain)
10			·	
11				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	40	= Total Co	ver	
Woody Vine Stratum (Plot size:)				
1			·	Hydrophytic
2				Vegetation
		= Total Co		Present? Yes No V
% Bare Ground in Herb Stratum60				
Remarks:				1

Depth	Matrix		Redo	x Feature	s					
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	3
0-14	10YR 4/2	100					silt loam	with grave	el	
14+								shovel refusal in gravel		
				·						
				·						
Гуре: С=С	oncentration, D=Deple	etion, RM=	Reduced Matrix, CS	S=Covered	d or Coate	d Sand Gi		ocation: PL=I		
ydric Soil	Indicators: (Applica	ble to all	LRRs, unless other	wise not	ed.)		Indicat	ors for Prob	lematic Hyd	dric Soils ³ :
Histoso	(A1)		Sandy Redox (S	S5)			2 c	m Muck (A10))	
Histic E	pipedon (A2)		Stripped Matrix	(S6)			Re	l Parent Material (TF2)		
Black H	istic (A3)		Loamy Mucky N	Loamy Mucky Mineral (F1) (except MLRA 1)			MLRA 1) Very Shallow Dark Surface (TF12)		(TF12)	
Hydroge	en Sulfide (A4)		Loamy Gleved Matrix (F2)			Oth	ner (Explain i	n Remarks)	· · ·	
, ,	d Below Dark Surface	(A11)	Depleted Matrix	•	/			、 1	/	
•	ark Surface (A12)	()	Redox Dark Surface (F6)			³ Indicat	ors of hydrop	hvtic vegeta	ation and	
	Aucky Mineral (S1)		Depleted Dark S	. ,			wetland hydrology must be present,			
	Gleyed Matrix (S4)		Redox Depress		.,		unless disturbed or problematic.			
•	Layer (if present):			()						
Type:										
	ches):						Hydric So	I Present?	Yes	No

Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; che	Secondary Indicators (2 or more required)			
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)		
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Oxidized Rhizospheres along Living Roots (C	3) Geomorphic Position (D2)		
Algal Mat or Crust (B4)	Algal Mat or Crust (B4) Presence of Reduced Iron (C4)			
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6)	FAC-Neutral Test (D5)		
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)		
Sparsely Vegetated Concave Surface (B8)				
Field Observations:				
Surface Water Present? Yes No	Depth (inches):			
Water Table Present? Yes No	✓ Depth (inches):			
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): Wetland H	lydrology Present? Yes No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspections), if ava	ilable:		
Remarks:				
Although shovel refusal occurred	at 14 inches in gravel, the slope of	of the area and location above the		

Although shovel refusal occurred at 14 inches in gravel, the slope of the area and location above the adjacent wetland indicated that water would not occur near the surface in a normal precipitation year.

Project/Site: Southwest Corridor Light Rail	City/County: Washington Sampling Date: June 6, 2019
Applicant/Owner: Trimet	State: Oregon Sampling Point: C7
Investigator(s): Rickus, Thompson	Section, Township, Range: see spreadsheet
Landform (hillslope, terrace, etc.): <u>terrace</u>	_ Local relief (concave, convex, none): <u>concave</u> Slope (%): <u>5</u>
Subregion (LRR): <u>A</u> Lat: <u>Se</u>	e spreadsheet Long: see spreadsheet Datum: NAD 83
Soil Map Unit Name: _see spreadsheet	NWI classification: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificant	y disturbed? Are "Normal Circumstances" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🖌	No			
Hydric Soil Present?	Yes 🖌	No	Is the Sampled Area		
Wetland Hydrology Present?	Yes 🖌	No	within a Wetland?	Yes	No
Remarks:			·		

Plot lies on the edge of a finger of a large wetland which extends to the KNEZ wetlands, which are primarily emergent outside the study area.

001	Absolute	Dominant		Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species		
1. Fraxinus latifolia	35	у	FACW	That Are OBL, FACW, or FAC	4	(A)
2						
3.				Total Number of Dominant Species Across All Strata:	4	(B)
				opeoles Across Air otrata.		(0)
4	05			Percent of Dominant Species	100	
Sapling/Shrub Stratum (Plot size: 30')		= Total Co	over	That Are OBL, FACW, or FAC	: 100	(A/B)
1. Fraxinus latifolia	10	y	FACW	Prevalence Index worksheet	t:	
2 Rubus armeniacus	10	<u>y</u>	FAC	Total % Cover of:	Multiply by:	_
		-		OBL species	x 1 =	
3				FACW species		
4				FAC species		
5						
	~~	= Total Co	ver	FACU species		
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				UPL species		
1. Phalaris arundinacea	90	у	FACW	Column Totals:	(A)	_ (B)
2				Prevalence Index = B/A	_	
3.				Hydrophytic Vegetation Indi		
4						
				1 - Rapid Test for Hydrop	, ,	
5				2 - Dominance Test is >50		
6				3 - Prevalence Index is ≤3		
7				4 - Morphological Adaptat data in Remarks or on		porting
8					• • •	
9				5 - Wetland Non-Vascular		
10				Problematic Hydrophytic		
11				¹ Indicators of hydric soil and w		nust
	90	= Total Co	ver	be present, unless disturbed o	or problematic.	
Woody Vine Stratum (Plot size:)						
1				Hydrophytic		
2				Vegetation		
% Bare Ground in Herb Stratum10 mud		= Total Co	ver	Present? Yes <u>v</u>	No	
Remarks:				1		

Depth	Matrix		Redo	x Feature	s				
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6	2.5Y 4/1	90	7.5Y 4/4	10	С	М	clay		
6-20	5Y 5/1	40	10YR 5/4	60	С	Μ	clay		
		otion PN	/=Reduced Matrix, CS		d or Coat			: PL=Pore Lining, M	-Motrix
			II LRRs, unless othe			su Sanu C		Problematic Hydr	<u>ـ</u>
Histosol			Sandy Redox (,		2 cm Muc	-	
	pipedon (A2)		Stripped Matrix	,				nt Material (TF2)	
Black Hi	• • • •		Loamy Mucky N	· /	1) (excep	t MLRA 1		low Dark Surface (T	F12)
	n Sulfide (A4)		Loamy Gleyed	•			, ,	plain in Remarks)	,
	d Below Dark Surface	e (A11)	 Depleted Matrix 		,			, ,	
•	ark Surface (A12)	、 ,	Redox Dark Su	. ,			³ Indicators of	hydrophytic vegetati	on and
	lucky Mineral (S1)		Depleted Dark	· · ·				drology must be pre	
	Bleyed Matrix (S4)		Redox Depress	•	,		•	urbed or problematio	
lestrictive l	_ayer (if present):			, ,					
Туре:									
Depth (ind	ches):						Hydric Soil Pres	ent? Yes 🖌	No
Remarks:							1		

Wetland Hydrology Indicate	ors:		
Primary Indicators (minimum	Secondary Indicators (2 or more required)		
Surface Water (A1)		pt Water-Stained Leaves (B9) (MLRA 1, 2,	
High Water Table (A2)		MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)		Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)		Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		ng Roots (C3) 🦯 🖌 Geomorphic Position (D2)	
Algal Mat or Crust (B4)		Shallow Aquitard (D3)	
Iron Deposits (B5)		oils (C6) YAC-Neutral Test (D5)	
Surface Soil Cracks (B6))	LRR A) Raised Ant Mounds (D6) (LRR A)	
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Con	cave Surface (B8))	
Field Observations:			
Surface Water Present?	Yes No	✓ Depth (inches):	
Water Table Present?	Yes 🖌 No	Depth (inches): 6	
Saturation Present? (includes capillary fringe)	Yes 🖌 No	Depth (inches): <u>3</u>	Wetland Hydrology Present? Yes <u>✓</u> No
Describe Recorded Data (str	eam gauge, monite	oring well, aerial photos, previous inspec	tions), if available:
Remarks:			

Project/Site: Southwest Corridor Light Rail	City/County: W	ashington Sam	Sampling Date: June 6, 2019	
Applicant/Owner: Trimet			oling Point: <u>C8</u>	
Investigator(s): <u>Rickus, Thompson</u>	_ Section, Towns	ship, Range: see spreadsheet		
Landform (hillslope, terrace, etc.): <u>fill slope</u>		ncave, convex, none): <u>none</u>	Slope (%): <u>100</u>	
Subregion (LRR): <u>A</u> Lat: <u>Se</u>	e spreadsheet	Long: see spreadsheet	Datum: NAD 83	
Soil Map Unit Name: see spreadsheet	<u> </u>	NWI classification:	see spreadsheet	
Are climatic / hydrologic conditions on the site typical for this time of y	vear?Yes 🚩	_ No (If no, explain in Remark	xs.)	
Are Vegetation, Soil, or Hydrologysignificant	y disturbed?	Are "Normal Circumstances" presen	t? Yes 🖌 No	
Are Vegetation, Soil, or Hydrology naturally p	roblematic?	(If needed, explain any answers in F	Remarks.)	
SUMMARY OF FINDINGS - Attach site man showin	a samplina n	oint locations transacts imr	ortant features etc	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No	Is the Sampled Area within a Wetland?	Yes	No		
Remarks:			·				
Plot lies on a soil fill slope 2 feet above a wetland.							

201	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?		Number of Dominant Species
1. Quercus garryana	30	у	FACU	That Are OBL, FACW, or FAC: (A)
2. Fraxinus latifolia	20	у	FACW	Total Number of Dominant
3. Crataegus monogyna	40	у	FAC	Species Across All Strata: 7 (B)
4				
··	90	= Total Co	vor	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: <u>30</u>)		10tai 00	VCI	
1 Rubus armeniacus	30	у	FAC	Prevalence Index worksheet:
2 Crataegus monogyna	30	у	FAC	Total % Cover of:Multiply by:
	·			OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5	60			FACU species x 4 =
Herb Stratum (Plot size: 5')	00	= Total Co	ver	UPL species x 5 =
	5	у	FACU	Column Totals: (A) (B)
2				Prevalence Index = B/A =
3			<u> </u>	Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				 3 - Prevalence Index is ≤3.0° 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
78				4 - Morphological Adaptations ¹ (Provide supporting
7 8 9				 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
7 8 9 10				 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹
7 8 9				 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain)
7 8 9 10				 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
7. 8. 9. 10. 11.	5	 = Total Cov		 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.	5		 /er	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
7.	5	= Total Cov	/er FACU	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.	5	 = Total Cov	/er FACU	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.	5	= Total Cov	/er FACU	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Depth	Matrix		Redo	x Feature	S				
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remai	rks
0-20	10YR 4/2	100					clay		
				·	·				
							·		
					·				
				·	·				
	oncentration, D=Depl					d Sand Gr		PL=Pore Linin	
	Indicators: (Applica	able to all			ea.)		Indicators for I		iyaric Solis :
Histoso	()		Sandy Redox (S	,			2 cm Muck	· /	
Histic E	pipedon (A2)		Stripped Matrix	(S6)				Material (TF2	,
Black H	istic (A3)		Loamy Mucky N	lineral (F	1) (except	MLRA 1)	Very Shallo	w Dark Surfac	æ (TF12)
Hydroge	en Sulfide (A4)		Loamy Gleyed Matrix (F2)			Other (Expl	ain in Remark	s)	
Deplete	d Below Dark Surface	e (A11)	Depleted Matrix	(F3)					
Thick D	ark Surface (A12)		Redox Dark Su	face (F6)			³ Indicators of hy	drophytic veg	etation and
Sandy M	Mucky Mineral (S1)		Depleted Dark \$	epleted Dark Surface (F7)			wetland hydrology must be present,		
Sandy 0	Gleyed Matrix (S4)		Redox Depress	ions (F8)	,		unless disturbed or problematic.		
estrictive	Layer (if present):		-						
Type:									
Depth (in	ches):						Hydric Soil Preser	nt? Yes	No

Wetland Hydrology Indicat	ors:		
Primary Indicators (minimum	<u>n of one required; c</u>	Secondary Indicators (2 or more required)	
Surface Water (A1)		Water-Stained Leaves (B9) (exc	ept Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)		MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)		Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)		Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Oxidized Rhizospheres along Live	ing Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Algal Mat or Crust (B4) Presence of Reduced Iron (C4)		Shallow Aquitard (D3)
Iron Deposits (B5)	Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)		oils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1)	(LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on A	erial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Cor	ncave Surface (B8)	3)	
Field Observations:			
Surface Water Present?	Yes No	o 🖌 Depth (inches):	
Water Table Present?	Yes No	o 🖌 Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes No	o _ • _ Depth (inches):	Wetland Hydrology Present? Yes No <u>*</u>
Describe Recorded Data (st	ream gauge, monit	itoring well, aerial photos, previous inspe	ctions), if available:
Remarks:			

Project/Site: Southwest Corridor Light Rail	City/County: Washington Sampling Date: June 6, 2019
Applicant/Owner: Trimet	State: Oregon Sampling Point: C9
Investigator(s): Rickus, Thompson	Section, Township, Range: see spreadsheet
Landform (hillslope, terrace, etc.): terrace	_ Local relief (concave, convex, none): <u>concave</u> Slope (%): <u>4</u>
Subregion (LRR): <u>A</u> Lat: <u>Se</u>	e spreadsheet Long: see spreadsheet Datum: NAD 83
Soil Map Unit Name: see spreadsheet	NWI classification: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantl	
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🖌	No			
Hydric Soil Present?	Yes 🖌	No	Is the Sampled Area		
Wetland Hydrology Present?	Yes _ 🖌	No	within a Wetland?	Yes	No
Remarks:			•		

Plot lies on the edge of a large wetland with fill slopes adjacent to a Walmart. (Walmart fill slope located outside study area/no right of entry)

	Absolute	Dominant		Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species		
1				That Are OBL, FACW, or FAC:	4	(A)
2						
3				Total Number of Dominant Species Across All Strata:	4	(B)
				Species Across All Strata.	<u> </u>	(D)
4				Percent of Dominant Species		
Conting (Charthe Charthanne (Plat sizes 30)		= Total Co	ver	That Are OBL, FACW, or FAC:	100	(A/B)
Sapling/Shrub Stratum (Plot size: 30')	00		FACW	Prevalence Index worksheet:		
1. Cornus sericea	20	у		Total % Cover of:	Multiply by	
2. Rubus armeniacus	10	у	FAC			_
3				OBL species x 1		
4				FACW species x 2	2 =	_
				FAC species x 3	3 =	_
5	30			FACU species x 4	1 =	_
Herb Stratum (Plot size: ^{5'})		= Total Co	ver	UPL species x 5	5 =	
1 Phalaris arundinacea	20	v	FACW	Column Totals: (A)		
2. Typha latifolia	70	y	OBL			
3 Dipsacus fullonum	10	<u>,</u> n	FAC	Prevalence Index = B/A =		_
0.				Hydrophytic Vegetation Indicat	ors:	
4				1 - Rapid Test for Hydrophyti	ic Vegetation	
5				✓ 2 - Dominance Test is >50%		
6				3 - Prevalence Index is ≤3.0 ¹		
7				4 - Morphological Adaptation	s ¹ (Provide sup	porting
8				data in Remarks or on a s		Ū
9				5 - Wetland Non-Vascular Pla	ants ¹	
10				Problematic Hydrophytic Veg	etation ¹ (Explai	n)
11				¹ Indicators of hydric soil and wetla	and hydrology n	nust
· · · ·		= Total Co		be present, unless disturbed or pr	roblematic.	
<u>Woody Vine Stratum</u> (Plot size: <u>5'</u>)		- 10tal C0				
1,				the described is		
				Hydrophytic Vegetation		
2				Present? Yes	No	
% Bare Ground in Herb Stratum none		= Total Co	/er			
Remarks:				J		

Profile Des	cription: (Describe t	o the depth				or confiri	rm the absence of indicators.)	
Depth	Matrix			ox Features	\$		_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-20	2.5Y 3/1	90	10YR 4/3	5	С	Μ	clay loam	
			2.5Y 5/1	5	D	М	clay loam	
¹ Type: C=C	oncentration, D=Depl	etion, RM=R	educed Matrix, C	S=Covered	l or Coate	ed Sand G	Grains. ² Location: PL=Pore Lining, M=Matr	ix.
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless othe	erwise note	ed.)		Indicators for Problematic Hydric Soil	s³:
Histoso	l (A1)		Sandy Redox	(S5)			2 cm Muck (A10)	
Histic E	pipedon (A2)		_ Stripped Matri	x (S6)			Red Parent Material (TF2)	
Black H	istic (A3)		Loamy Mucky	Mineral (F1) (excep	t MLRA 1	I) Very Shallow Dark Surface (TF12)	
_ Hydroge	en Sulfide (A4)		Loamy Gleyed	Matrix (F2)		Other (Explain in Remarks)	
Deplete	d Below Dark Surface	e (A11)	Depleted Matr	ix (F3)				
Thick D	ark Surface (A12)	ŀ	Redox Dark S	urface (F6)			³ Indicators of hydrophytic vegetation and	t
Sandy M	Mucky Mineral (S1)		Depleted Dark	Surface (F	7)		wetland hydrology must be present,	
-	Gleyed Matrix (S4)	_	Redox Depres	sions (F8)			unless disturbed or problematic.	
Restrictive	Layer (if present):							
Type:								
Depth (in	iches):						Hydric Soil Present? Yes <u></u> No	
Remarks:								
HYDROLO	GY							

Wetland Hydrology Indica	tors:				
Primary Indicators (minimur	<u>n of one requi</u>	<u>red; che</u> ck a	l <u>l that apply)</u>		Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (except			except	Water-Stained Leaves (B9) (MLRA 1, 2,	
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)
Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (B2)		Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)			Oxidized Rhizospheres along	g Living Roots (C3)	 Geomorphic Position (D2)
Algal Mat or Crust (B4)	Algal Mat or Crust (B4) Presence of Reduced Iron (C4)			24)	Shallow Aquitard (D3)
Iron Deposits (B5)				FAC-Neutral Test (D5)	
Surface Soil Cracks (B6	Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A)			Raised Ant Mounds (D6) (LRR A)	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)			Frost-Heave Hummocks (D7)		
Sparsely Vegetated Co	ncave Surface	e (B8)			
Field Observations:					
Surface Water Present?	Yes	No 🖌	Depth (inches):		
Water Table Present?	Yes 🖌	No	Depth (inches): <u>6</u>		
Saturation Present? (includes capillary fringe)	Yes 🖌	_ No	Depth (inches): <u>3</u>	Wetland Hy	drology Present? Yes 🖌 No
Describe Recorded Data (st	tream gauge,	monitoring v	vell, aerial photos, previous ir	nspections), if availa	able:
Remarks:					

Project/Site: Southwest Corridor Light Rail	City/County: W	ashington Sa	ampling Date: <u>June 6, 2019</u>
Applicant/Owner: Trimet			ampling Point: <u>C11</u>
Investigator(s): Rickus, Rosenthal	_ Section, Towns	hip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): terrace		ncave, convex, none): <u>concave</u>	Slope (%): <u>5</u>
Subregion (LRR): <u>A</u> Lat: <u>Se</u>	e spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: <u>see spreadsheet</u>		NWI classificati	on: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of y	vear?Yes 🚩	_ No (If no, explain in Rem	narks.)
Are Vegetation, Soil, or Hydrologysignificant	y disturbed?	Are "Normal Circumstances" pres	sent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic?	(If needed, explain any answers i	in Remarks.)
SUMMARY OF FINDINGS - Attach site man showin	a complina p	oint locations transacts i	moortant foaturos atc

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important feature	res, etc.
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Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	No No✔ No✔	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					
Dist liss in a densaly years	totod low	araa halaw a f	airly atoon along on	d abaya a	aatah haain

Plot lies in a densely vegetated low area below a fairly steep slope and above a catch basin.

201	Absolute	Dominant		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?		Number of Dominant Species	
1. Quercus garryana	5	n	FACU	That Are OBL, FACW, or FAC: 2 (A	A)
2. Salix lasiandra	50	у	FACW	Total Number of Dominant	
3. Crataegus monogyna	5	n	FAC	2	B)
4				· · · · · · · · · · · · · · · · · · ·	,
	60	= Total Co	ver	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A	A/B)
Sapling/Shrub Stratum (Plot size: <u>30'</u>)	50		540	Prevalence Index worksheet:	
1. Rubus armeniacus	50	у	FAC	Total % Cover of: Multiply by:	
2. Toxicodendron diversiloba	10	n	FAC	OBL species x 1 =	
3					
4				FACW species x 2 =	
5				FAC species x 3 =	
	60	= Total Co	ver	FACU species x 4 =	
Herb Stratum (Plot size:)				UPL species x 5 =	
1				Column Totals: (A)	(B)
2				Prevalence Index = B/A =	
3				Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				✓ 2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 ¹	
7				4 - Morphological Adaptations ¹ (Provide suppor	rtina
8				data in Remarks or on a separate sheet)	
9				5 - Wetland Non-Vascular Plants ¹	
10				Problematic Hydrophytic Vegetation ¹ (Explain)	
11				¹ Indicators of hydric soil and wetland hydrology mus	st
	0	= Total Cov	/or	be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: 5')					
1. Hedera helix	90	у	FACU	Hydrophytic	
2				Vegetation	
		= Total Cov	/er	Present? Yes <u>V</u> No	
% Bare Ground in Herb Stratum10					
Remarks:					

	Matrix		Redo	x Feature	s				
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	rks
)-20	10YR 2/2	100					silt loam		
		·		·					
		·					·		
		·	-						
		·		·					
		·							
	, ,	,	Reduced Matrix, CS			d Sand Gr			ng, M=Matrix.
dric Soil I	ndicators: (Application	able to all	LRRs, unless other		ed.)		Indicators for P	roblematic H	lydric Soils':
Histosol	(A1)		Sandy Redox (S5)			2 cm Muck (A10)	
Histic Ep	ipedon (A2)		Stripped Matrix	(S6)			Red Parent	Material (TF2	2)
Black His	stic (A3)		Loamy Mucky N	/lineral (F	1) (except	MLRA 1)	Very Shallov	v Dark Surfac	ce (TF12)
Hydroge	n Sulfide (A4)		Loamy Gleyed	Matrix (F2	2)		Other (Expla	in in Remark	s)
Depleted	Below Dark Surface	e (A11)	Depleted Matrix	(F3)					
Thick Da	ark Surface (A12)	. ,	Redox Dark Su	rface (F6)			³ Indicators of hy	drophytic veg	etation and
_ Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F	7)		wetland hydro	ology must be	e present,
-	leyed Matrix (S4)		Redox Depress	ions (F8)	,		unless distur	ed or proble	matic.
strictive L	.ayer (if present):								
Туре:									
Depth (inc	ches):						Hydric Soil Presen	t? Yes	No
marks:									

Wetland Hydrology Indicat	ors:			
Primary Indicators (minimum	<u>ı of one requir</u>	Secondary Indicators (2 or more required)		
Surface Water (A1)		\	Water-Stained Leaves (B9) (exce	ept Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)		. 5	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)		. 4	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		. H	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Liv				ring Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)		. F	Shallow Aquitard (D3)	
Iron Deposits (B5)			Recent Iron Reduction in Tilled So	Soils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	5	Stunted or Stressed Plants (D1) ((LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Ae	rial Imagery ((B7) (Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Cor	ncave Surface	e (B8)		
Field Observations:				
Surface Water Present?	Yes	No 🖌	Depth (inches):	
Water Table Present?	Yes	No 🖌	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	No _✔	Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (str	eam gauge, r	monitoring we	ell, aerial photos, previous inspec	ctions), if available:
Remarks:				

Project/Site: Southwest Corridor Light Rail	City/County: Wa	ashington	Sampling Date: June 7, 2019
Applicant/Owner: Trimet			Sampling Point: <u>C12</u>
Investigator(s): Rickus, Rosenthal	Section, Townsh	nip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): terrace		ncave, convex, none): <u>none</u>	Slope (%): <u>7</u>
Subregion (LRR): AL	Lat: see spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: see spreadsheet		NWI classifica	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this tin	ne of year? Yes 🔽	No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrologysign	ificantly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natu	rally problematic?	(If needed, explain any answer	s in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No 🖌					
Hydric Soil Present?	Yes	No _ 🖌	Is the Sampled Area				
Wetland Hydrology Present?	Yes	No 🖌	within a Wetland?	Yes	No		
Remarks:			·				
Plot lies in a riparian area on a terrace above a small, incised stream.							

201	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)		Species?		Number of Dominant Species
1. Alnus rubra	30	у	FAC	That Are OBL, FACW, or FAC: 3 (A)
2. Fraxinus latifolia	50	у	FACW	Total Number of Dominant
3				Species Across All Strata: 8 (B)
4				
··	80	= Total Co	vor	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: <u>30'</u>)		10tai C0	VEI	
1 Rubus armeniacus	20	у	FAC	Prevalence Index worksheet:
2. Corylus cornuta	25	V	FACU	Total % Cover of:Multiply by:
3. Sambucus racemosa	15	<u>у</u>	FACU	OBL species x 1 =
				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	60	= Total Co	ver	UPL species x 5 =
<u>Herb Stratum</u> (Plot size: <u>5'</u>) 1. Polystichum munitum	10		FACU	Column Totals: (A) (B)
		у		
2				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants ¹
9				Problematic Hydrophytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric soil and wetland hydrology must
11	10			be present, unless disturbed or problematic.
<u>Woody Vine Stratum</u> (Plot size: ^{5'})	10	= Total Cov	/er	
1 Hedera helix	65	V	FACU	
2. Rubus ursinus	30	<u>v</u>	FACU	Hydrophytic
2. Rubus utsillus		<u> </u>		Vegetation Present? Yes <u>No </u>
% Bare Ground in Herb Stratum 10	95	= Total Cov	/er	
Remarks:				

epth	Matrix		Redo	x Feature	S				
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	rks
0-14	10YR 3/2	100					silt loam		
14-20	10YR 3/2	95	10YR 4/6	5	С	Μ	silty clay loam		
				<u></u>	<u> </u>				
							. <u></u>		
			-		·				
Type: C=C	oncentration. D=Dep	letion. RM	=Reduced Matrix, CS	S=Covere	d or Coate	ed Sand G	rains. ² Location	1: PL=Pore Linin	a. M=Matrix.
			LRRs, unless other					r Problematic H	•
Histosol	(A1)		Sandy Redox (S	S5)			2 cm Mu	ck (A10)	-
Histic Ep	bipedon (A2)		Stripped Matrix	(S6)			Red Pare	ent Material (TF2	?)
Black Hi	stic (A3)		Loamy Mucky N	, /ineral (F	1) (excep	t MLRA 1)	Very Sha	llow Dark Surfac	, ce (TF12)
Hydroge	n Sulfide (A4)		Loamy Gleyed	Matrix (F2	<u>2</u>)	,	Other (E:	xplain in Remark	s)
, ,	d Below Dark Surfac	e (A11)	Depleted Matrix	•	,		、	•	,
•	ark Surface (A12)	()	, Redox Dark Su	、 ,)		³ Indicators of	hydrophytic veg	etation and
	lucky Mineral (S1)		Depleted Dark	()				/drology must be	
	Bleyed Matrix (S4)		Redox Depress		- /			turbed or proble	•
	_ayer (if present):		<u> </u>	(-)				•	
Type:									
Depth (ind	ches):						Hydric Soil Pres	ent? Yes	No
Remarks:									

Wetland Hydrology Indicat	ors:				
Primary Indicators (minimum	<u>ı of one requir</u>		Secondary Indicators (2 or more required)		
Surface Water (A1)			Water-Stained Leaves (B9) (exce	ept	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)
Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (B2)			Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Li				ing Roots (C3)	Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)					Shallow Aquitard (D3)
Iron Deposits (B5)		•	Recent Iron Reduction in Tilled Second	oils (C6)	FAC-Neutral Test (D5)
Surface Soil Cracks (B6)		Stunted or Stressed Plants (D1) ((LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on A	rial Imagery ((B7)	Other (Explain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated Cor	ncave Surface	; (B8)			
Field Observations:					
Surface Water Present?	Yes	No 🖌	Depth (inches):		
Water Table Present?	Yes	No 🖌	Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes	_ No _ ✔	Depth (inches):	Wetland Hyd	rology Present? Yes No
Describe Recorded Data (st	ream gauge, r	monitoring w	vell, aerial photos, previous inspec	ctions), if availat	ole:
Remarks:					

Project/Site: Southwest Corridor Light Rail	City/County: W	ashington	Sampling Date: June 7, 2019		
Applicant/Owner: Trimet			Sampling Point: C13		
Investigator(s): Rickus, Rosenthal	Section, Towns	hip, Range: <u>see spreadsheet</u>			
Landform (hillslope, terrace, etc.): terrace	_ Local relief (concave, convex, none): <u>concave</u> Slope (%): <u>4</u>				
Subregion (LRR): <u>A</u> Lat: <u>se</u>	e spreadsheet	Long: see spreadsheet	Datum: NAD 83		
Soil Map Unit Name: see spreadsheet		NWI classifica	ation: see spreadsheet		
Are climatic / hydrologic conditions on the site typical for this time of ye	ear?Yes 🔽	_ No (If no, explain in Re	emarks.)		
Are Vegetation, Soil, or Hydrology significantly	y disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	(If needed, explain any answer	s in Remarks.)		
SUMMARY OF FINDINGS – Attach site man showing	a samplina p	oint locations transects	important features etc		

SUMMART OF FINDINGS – Attach site map sho	owing sampling point locations, transects, important reatures,	etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>/</u> No Yes <u>/</u> No Yes _/ No	Is the Sampled Area within a Wetland?	Yes 🧹 No
Remarks: Plot lies on the upper edge	of a forested wetland	at the base of a stee	ep slope.

201	Absolute	Dominant		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species	
1. Fraxinus latifolia	50	у	FACW	That Are OBL, FACW, or FAC: 6	(A)
2					
3				Total Number of Dominant Species Across All Strata: 6	(B)
					(0)
4	50		·	Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: 30')		= Total Co	ver	That Are OBL, FACW, or FAC: 100	(A/B)
1. Fraxinus latifolia	35	V	FACW	Prevalence Index worksheet:	
		у		Total % Cover of: Multiply by:	
2. Rubus armeniacus	35	у	FAC	OBL species x 1 =	
3					
4				FACW species x 2 =	
5				FAC species x 3 =	
···	70	= Total Co		FACU species x 4 =	
<u>Herb Stratum</u> (Plot size: <u>5'</u>)			ver	UPL species x 5 =	
1 Phalaris arundinacea	5	у	FACW	Column Totals: (A)	
2 Impatiens capensis	15	v	FACW		
3 Athyrium filix-femina	5	<u>v</u>	FAC	Prevalence Index = B/A =	
0		,		Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				✓ 2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 ¹	
7				4 - Morphological Adaptations ¹ (Provide su	oporting
8				data in Remarks or on a separate sheet	
9				5 - Wetland Non-Vascular Plants ¹	
10				Problematic Hydrophytic Vegetation ¹ (Expla	ain)
11				¹ Indicators of hydric soil and wetland hydrology	must
···	05	= Total Cov		be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: 5')			er		
1				Hydrophytic Vegetation	
2	•			Present? Yes V No	
% Bare Ground in Herb Stratum 70 mud	0	= Total Cov	rer		
Remarks:					

Profile Desc	ription: (Describe t	the dep	th needed to docur	nent the i	ndicator	or confirr	n the absence	of indicators.)	
Depth	Matrix		Redo	x Feature					
<u>(inches)</u>	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-2	10YR 3/2	95	7.5Y 4/4	5	С	Μ	silty clay loam		
2-20	Gley1 4/10Y	95	10YR 4/6	5	С	Μ	clay loam	with 5% sapric muck	
				. . <u></u>					
¹ Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, CS	S=Covere	d or Coate	ed Sand G	rains. ² Lo	cation: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applica	able to all	LRRs, unless othe	rwise not	ed.)		Indicato	ors for Problematic Hydric Soils ³ :	
_ Histosol	(A1)		Sandy Redox (S5)			2 cr	m Muck (A10)	
_ Histic Ep	pipedon (A2)		Stripped Matrix	(S6)			Rec	d Parent Material (TF2)	
Black Hi	stic (A3)		Loamy Mucky M		1) (excep t	t MLRA 1) Ver	y Shallow Dark Surface (TF12)	
_ Hydroge	en Sulfide (A4)		 Loamy Gleyed 	Matrix (F2	2)		Oth	er (Explain in Remarks)	
Depleted	d Below Dark Surface	e (A11)	Depleted Matrix	(F3)					
-	ark Surface (A12)		Redox Dark Su	rface (F6)			³ Indicate	ors of hydrophytic vegetation and	
-	lucky Mineral (S1)		Depleted Dark	. ,			wetland hydrology must be present,		
	Bleyed Matrix (S4)		Redox Depress	ions (F8)	,			ss disturbed or problematic.	
Restrictive I	Layer (if present):								
Туре:									
	ches):						Hydric Soil	Present? Yes <u>V</u> No No	
Remarks:									
HYDROLO	GY								

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Water Value (A2) MLRA 1, 2, 4A, and 4B) Salt Crust (B1) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dxidized Rhizospheres alon Presence of Reduced Iron (C	(except Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) (C4) EXAMPLE CALL Constrained Con
Surface Soil Cracks (B6) Stunted or Stressed Plants (Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Field Observations:	D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes _ No Depth (inches): 4 Saturation Present? Yes _ No Depth (inches): surface (includes capillary fringe) Image: Second Se	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous in Remarks:	ispections), il avallable:

Project/Site: Southwest Corridor Light Rail	City/County: Washir	ngton	Sampling Date: June 7, 2019
Applicant/Owner: Trimet			Sampling Point: C14
Investigator(s): Rickus, Thompson	Section, Township, I	Range: see spreadsheet	
Landform (hillslope, terrace, etc.): <u>slope</u>		e, convex, none): <u>none</u>	Slope (%): <u>100</u>
Subregion (LRR): <u>A</u> Lat:	see spreadsheet	Long: see spreadsheet	
Soil Map Unit Name: <u>see spreadsheet</u>		NWI classifica	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🗾 No	o (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significa	antly disturbed? Ar	re "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturall	y problematic? (If	needed, explain any answer	s in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No 🖌					
Hydric Soil Present?	Yes	No <u> </u>	Is the Sampled Area				
Wetland Hydrology Present?	Yes	No 🖌	within a Wetland?	Yes No			
Remarks:							
Plot lies 2 feet above a wetland.							

201	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Total Number of Dominant Species Across All Strata: ² (B)
4				
-T				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: <u>30'</u>)		= Total Co	ver	That Are OBL, FACW, or FAC: <u>50</u> (A/B
 Rubus armeniacus 	100	у	FAC	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				
	100	= Total Co	ver	FACU species x 4 =
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				UPL species x 5 =
1				Column Totals: (A) (B)
2				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7 8				4 - Morphological Adaptations ¹ (Provide supportin data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric soil and wetland hydrology must
11				
				be present, unless disturbed or problematic.
		= Total Cov	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		= Total Cov		
<u>Woody Vine Stratum</u> (Plot size:) 1. Hedera helix	10		rer FACU	Hydrophytic
Woody Vine Stratum (Plot size:)	10	= Total Cov		Hydrophytic Vegetation
<u>Woody Vine Stratum</u> (Plot size:) 1. Hedera helix	10	= Total Cov	FACU	Hydrophytic
Woody Vine Stratum (Plot size:) 1. Hedera helix 2	10	= Total Cov	FACU	Hydrophytic Vegetation

Depth	Matrix		Redo	x Feature						
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	rks	
0-10	10YR 4/3	100					silt loam			
10-20	10YR 4/2	100					silt loam			
		·		·	·					
							·			
				·	·					
		·			·		·			
				·	·					
Гуре: С=С	oncentration, D=Dep	letion, RM=	Reduced Matrix, CS	=Covere	d or Coate	d Sand G	rains. ² Location: F	L=Pore Linin	g, M=Matrix.	
ydric Soil	Indicators: (Application	able to all	LRRs, unless other	wise not	ed.)		Indicators for P	roblematic F	lydric Soils ³ :	
Histosol	(A1)		Sandy Redox (S5)			2 cm Muck (A10)		
Histic E	pipedon (A2)		Stripped Matrix	(S6)			Red Parent	Material (TF2	.)	
_ Black Hi	istic (A3)		Loamy Mucky N	/lineral (F	1) (except	MLRA 1)	Very Shallov	Very Shallow Dark Surface (TF12)		
Hydroge	en Sulfide (A4)		Loamy Gleyed	Matrix (F2	2)	,	Other (Explain in Remarks)			
Deplete	d Below Dark Surface	e (A11)	Depleted Matrix	(F3)	,		、 .		,	
•	ark Surface (A12)	()	•	dox Dark Surface (F6)			³ Indicators of hydrophytic vegetation and			
	/ucky Mineral (S1)		Depleted Dark Surface (F7)			wetland hydrology must be present,				
	Gleyed Matrix (S4)		Redox Depress	ions (F8)	,		unless disturbed or problematic.			
	Layer (if present):			. ,				•		
Type:										
Depth (in	ches):						Hydric Soil Present	? Yes	No	

Wetland Hydrology Indicat	ors:		
Primary Indicators (minimum	<u>n of one required; c</u>	Secondary Indicators (2 or more required)	
Surface Water (A1)		Water-Stained Leaves (B9) (exc	ept Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)		MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)		Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)		Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Oxidized Rhizospheres along Live	ing Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)		Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)		Recent Iron Reduction in Tilled S	oils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1)	(LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on A	erial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Cor	ncave Surface (B8)	3)	
Field Observations:			
Surface Water Present?	Yes No	o 🖌 Depth (inches):	
Water Table Present?	Yes No	o 🖌 Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes No	o _ • _ Depth (inches):	Wetland Hydrology Present? Yes No <u>*</u>
Describe Recorded Data (st	ream gauge, monit	itoring well, aerial photos, previous inspe	ctions), if available:
Remarks:			

Project/Site: Southwest Corridor Light Rail	_ City/County: Wa	ashington	Sampling Date: May 15, 2020
Applicant/Owner: TriMet			Sampling Point: W-Ca1
Investigator(s): MacLean, Taya K., MS, PWS	Section, Townsh	hip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): valley bottom		ncave, convex, none): <u>concave</u>	Slope (%): 2
Subregion (LRR): <u>A</u> Lat: <u>s</u>	ee spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: <u>see spreadsheet</u>		NWI classifica	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🔽	_ No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significan	tly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	problematic?	(If needed, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map showir	ng sampling p	oint locations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ ✔ Yes Yes _ ✔	No No No		Is the Sampled Area within a Wetland?	Yes	No	
Remarks:				-			
Soil toot nite not normionik	la Matlan	dadiaaa	nt to	railroad ditab with it	advatrial de	walanmant ta	

Soil test pits not permissible. Wetland adjacent to railroad ditch with industrial development to NE.

201	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: ² (B)
4				
		= Total Co		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: <u>30'</u>)		10tai 00	VCI	
1				Prevalence Index worksheet:
				Total % Cover of:Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
Hart Obstation (Distains 5		= Total Co	ver	UPL species x 5 =
<u>Herb Stratum</u> (Plot size: <u>5'</u>) 1. Agrostis capillaris	20	Vaa	EAC	Column Totals: (A) (B)
		Yes	FAC	
2. Juncus tenuis	20	Yes	FAC	Prevalence Index = B/A =
3. Schedonorus arundinaceus	15	No	FAC	Hydrophytic Vegetation Indicators:
4. Phalaris arundinacea	15	No	FACW	1 - Rapid Test for Hydrophytic Vegetation
5				 2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
····	00	= Total Cov		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		- TOLAI COV	/ei	
1/				Undrank tio
2				Hydrophytic Vegetation
£		= Total Cov		Present? Yes <u>V</u> No
% Bare Ground in Herb Stratum20		- 10tai C0		
Remarks:				1
Mowed/managed vegetation.				

	Redox Features	
inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
Type: C=Concentration, D=Depletion, RM=	-Reduced Matrix, CS=Covered or Coated Sand	Grains. ² Location: PL=Pore Lining, M=Matrix
udria Sail Indiantara, (Appliachie to all	I PPs unless otherwise noted)	Indicators for Problematic Hydric Soils
iyunc son mulcators: (Applicable to all a	LINNS, diffess otherwise noted.)	indicatore for replemane rigarie cone
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
		•
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10) Red Parent Material (TF2)
Histosol (A1) Histic Epipedon (A2)	Sandy Redox (S5) Stripped Matrix (S6)	2 cm Muck (A10) Red Parent Material (TF2) 1) Very Shallow Dark Surface (TF12)
Histosol (A1) Histic Epipedon (A2) Black Histic (A3)	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except MLRA	2 cm Muck (A10) Red Parent Material (TF2)
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except MLRA Loamy Gleyed Matrix (F2)	2 cm Muck (A10) Red Parent Material (TF2) 1) Very Shallow Dark Surface (TF12)
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11)	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except MLRA Loamy Gleyed Matrix (F2) Depleted Matrix (F3)	2 cm Muck (A10) Red Parent Material (TF2) 1) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except MLRA Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6)	2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except MLRA Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7)	2 cm Muck (A10) Red Parent Material (TF2) 1) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present,
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except MLRA Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7)	2 cm Muck (A10) Red Parent Material (TF2) 1) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present,

For safety concerns, not granted permission by landowner (Union Pacific Railroad) to dig soil test pits. Soil indicators were therefore not used to determine wetland status. Refer to vegetation and hydrology information.

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; ch	Secondary Indicators (2 or more required)	
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living	Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils	s (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LR	(RA) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes 🖌 No	Depth (inches): +2	
	Depth (inches): <u>surface</u>	
Saturation Present? Yes <u>✓</u> No _ (includes capillary fringe)	Depth (inches): <u>surface</u>	Netland Hydrology Present? Yes <u> No No</u>
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous inspectio	ns), if available:
Remarks:		
Groundwater and stormwater inp	outs observed.	

Project/Site: Southwest Corridor Light Rail	City/County: Wa	ashington San	npling Date: May 15, 2020
Applicant/Owner: TriMet			npling Point: <u>W-Ca2</u>
Investigator(s): MacLean, Taya K., MS, PWS	Section, Townsl	hip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): valley bottom		ncave, convex, none): <u>convex</u>	Slope (%): <u>2</u>
Subregion (LRR): <u>A</u> Lat: <u>5</u>	see spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: see spreadsheet		NWI classification	see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of	fyear? Yes 🔽	_ No (If no, explain in Rema	ˈks.)
Are Vegetation, Soil, or Hydrologysignificar	ntly disturbed?	Are "Normal Circumstances" prese	nt? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS Attach site men chowi	na complina n	aint lagationa transacto im	nortant factures ato

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No			
Hydric Soil Present?	Yes	No _ 🖌	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No 🖌	within a Wetland?	Yes	No
Remarks:			•		
Soil test pits not permissibl	e. Approx.	1.25' higher	in elevation than pa	ired wetland	d plot.

VEGETATION – Use scientific names of plants.

201	Absolute	Dominant		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>) 1)		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (<i>i</i>	۹)
2 3				Total Number of Dominant Species Across All Strata: <u>1</u> (f	3)
4		= Total Cov		Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A	4/B)
				Prevalence Index worksheet:	
1				Total % Cover of: Multiply by:	
2				OBL species <u>0</u> x 1 = <u>0</u>	
3				FACW species 0 x 2 = 0	
4				FAC species 100 x 3 = 300	
5			. <u> </u>	FACU species 0 x 4 = 0	
5'		= Total Cov	/er	UPL species $\underline{0}$ x 5 = $\underline{0}$	
Herb Stratum (Plot size: 5')	100	V		4	(B)
1. Schedonorus arundinaceus	100	Y	FAC		(D)
2			. <u> </u>	Prevalence Index = $B/A = \frac{3}{2}$	
3				Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 ¹	
7				4 - Morphological Adaptations ¹ (Provide suppo	rtina
8				data in Remarks or on a separate sheet)	
9				5 - Wetland Non-Vascular Plants ¹	
10				Problematic Hydrophytic Vegetation ¹ (Explain)	
				¹ Indicators of hydric soil and wetland hydrology mu	st
11		= Total Cov		be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size:)		- Total Cov	er		
1/				Liver a shutia	
2				Hydrophytic Vegetation	
% Bare Ground in Herb Stratum0		= Total Cov		Present? Yes <u>No </u>	
Remarks:				1	

Although weedy tall fescue met dominance criteria, it did not meet the prevalence index. Thus it is assumed that the plot does not meet veg criteria.

Profile Description: (Describe to	the depth ne	eded to docun	nent the i	ndicator of	or confirm	the absence of inc	dicators.)	
Depth Matrix		Redo	x Features	;				
(inches) Color (moist)	% C	olor (moist)	%	Type ¹	Loc ²	Texture	Remarks	
	·							
			·					
			·					
			·					
			. <u> </u>					
¹ Type: C=Concentration, D=Deplet	ion, RM=Red	uced Matrix, CS	S=Covered	or Coate	d Sand Gra	ains. ² Location:	PL=Pore Lining,	M=Matrix.
Hydric Soil Indicators: (Applicab	le to all LRR	s, unless other	wise note	ed.)		Indicators for	Problematic Hyd	ric Soils ³ :
Histosol (A1)	:	Sandy Redox (S	S5)			2 cm Muc	k (A10)	
Histic Epipedon (A2)	:	Stripped Matrix	(S6)			Red Pare	nt Material (TF2)	
Black Histic (A3)		Loamy Mucky N	/lineral (F1) (except	MLRA 1)	1) Very Shallow Dark Surface (TF12)		
_ Hydrogen Sulfide (A4)		Loamy Gleyed I	Matrix (F2))		Other (Ex	plain in Remarks)	
Depleted Below Dark Surface (A11)	Depleted Matrix	: (F3)					
Thick Dark Surface (A12)		Redox Dark Su	rface (F6)			³ Indicators of I	hydrophytic vegeta	tion and
Sandy Mucky Mineral (S1)		Depleted Dark \$	Surface (F	7)		wetland hy	drology must be pr	esent,
Sandy Gleyed Matrix (S4)		Redox Depress	ions (F8)			unless dist	urbed or problemat	ic.
Restrictive Layer (if present):								
Туре:								
Depth (inches):						Hydric Soil Pres	ent? Yes	No
Remarks:						I		
For safety concerns, not g	rantad par	mission by	landow	nor (Lin	ion Doo	ific Pailroad) t	a dia soil tost i	oite Soil

indicators were therefore not used to determine wetland status. Refer to vegetation and hydrology information.

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one	required; check al <u>l that apply)</u>	Secondary Indicators (2 or more required)			
Surface Water (A1)	t Water-Stained Leaves (B9) (MLRA 1, 2,				
High Water Table (A2)	4A, and 4B)				
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)			
Water Marks (B1)					
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Oxidized Rhizospheres along Living	g Roots (C3) Geomorphic Position (D2)			
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)			
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soi	ls (C6) FAC-Neutral Test (D5)			
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (L	RR A) Raised Ant Mounds (D6) (LRR A)			
Inundation Visible on Aerial Imag	gery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)			
Sparsely Vegetated Concave Su	urface (B8)				
Field Observations:					
Surface Water Present? Yes	No Depth (inches):				
Water Table Present? Yes	No Depth (inches):				
Saturation Present? Yes (includes capillary fringe)	Wetland Hydrology Present? Yes No				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					
Soil very dry within the w	et season. No surface hydrology ol	bserved and assumed no water table or			

saturation.

Project/Site: Southwest Corridor Light Rail	_ City/County: W	ashington S	Sampling Date: <u>May</u> 15, 2020
Applicant/Owner: TriMet		State: Oregon S	Sampling Point: <u>W-Cb1</u>
Investigator(s): MacLean, Taya K., MS, PWS	_ Section, Towns	hip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): valley bottom		ncave, convex, none): <u>concave</u>	Slope (%): 2
Subregion (LRR): <u>A</u> Lat: <u>Se</u>	ee spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: see spreadsheet		NWI classificat	ion: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of y	/ear?Yes 🚩	_ No (If no, explain in Ren	narks.)
Are Vegetation, Soil, or Hydrologysignificant	ly disturbed?	Are "Normal Circumstances" pre	esent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	oroblematic?	(If needed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site man showin	a samplina n	oint locations transacts i	important features etc

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🖌 No			
Hydric Soil Present?	Yes No	Is the Sampled Area	· · ·	
Wetland Hydrology Present?	Yes _ 🖌 No	within a Wetland?	Yes	No
Remarks:				
Soil test pits not permissib	le. Adjacent to a perenn	ial tributary to Fannc	Creek.	

201	Absolute	Dominant		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species	
1				That Are OBL, FACW, or FAC: 2	(A)
2				Tatal Number of Deminent	
3				Total Number of Dominant Species Across All Strata: ²	(B)
					(2)
4				Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: <u>30'</u>)		= Total Co	over	That Are OBL, FACW, or FAC: 100	(A/B)
1 Salix lasiandra	40	Yes	FACW	Prevalence Index worksheet:	
				Total % Cover of:Multiply by:	
2				OBL species x 1 =	
3				FACW species x 2 =	
4					
5				FAC species x 3 =	
	40	= Total Co	ver	FACU species x 4 =	
Herb Stratum (Plot size: 5')		10tal 00		UPL species x 5 =	_
1 Phalaris arundinacea	60	Yes	FACW	Column Totals: (A)	(B)
2				Prevalence Index = B/A =	_
3				Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				✓ 2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 ¹	
7				4 - Morphological Adaptations ¹ (Provide sup	porting
8				data in Remarks or on a separate sheet)	
9				5 - Wetland Non-Vascular Plants ¹	
10				Problematic Hydrophytic Vegetation ¹ (Explain	in)
11				¹ Indicators of hydric soil and wetland hydrology r	nust
	~~	= Total Co		be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size:)			ver		
1				Hydrophytic Vegetation	
2				Present? Yes <u>V</u> No	
% Bare Ground in Herb Stratum40		= Total Co	ver		
Remarks:				1	

Depth Matrix	Redox Fe	atures			
inches) Color (moist) %	Color (moist)	<u>% Type¹</u>	Loc ²	Texture	Remarks
				······································	
ype: C=Concentration, D=Depletion	RM=Reduced Matrix, CS=Co	overed or Coate	ed Sand Gra	ains. ² Location	n: PL=Pore Lining, M=Matrix.
* · · · · · · · · · · · · · · · · · · ·			ed Sand Gra		n: PL=Pore Lining, M=Matrix. or Problematic Hydric Soils ³ :
			ed Sand Gra		or Problematic Hydric Soils ³ :
ydric Soil Indicators: (Applicable t	o all LRRs, unless otherwis	e noted.)	ed Sand Gra	Indicators fo 2 cm Mu	or Problematic Hydric Soils ³ :
ydric Soil Indicators: (Applicable t Histosol (A1)	o all LRRs, unless otherwis Sandy Redox (S5)	e noted.)		Indicators fo 2 cm Mu Red Pare	or Problematic Hydric Soils ³ : ck (A10)
ydric Soil Indicators: (Applicable t Histosol (A1) Histic Epipedon (A2)	o all LRRs, unless otherwis Sandy Redox (S5) Stripped Matrix (S6	e noted.)) ral (F1) (excep t		Indicators fo 2 cm Mu Red Par Very Sha	or Problematic Hydric Soils ³ : ck (A10) ent Material (TF2)
ydric Soil Indicators: (Applicable t Histosol (A1) Histic Epipedon (A2) Black Histic (A3)	o all LRRs, unless otherwis Sandy Redox (S5) Stripped Matrix (S6 Loamy Mucky Mine Loamy Gleyed Matr	e noted.)) ral (F1) (except ix (F2)		Indicators fo 2 cm Mu Red Par Very Sha	or Problematic Hydric Soils ³ : ck (A10) ent Material (TF2) allow Dark Surface (TF12)
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	o all LRRs, unless otherwis Sandy Redox (S5) Stripped Matrix (S6 Loamy Mucky Mine Loamy Gleyed Matr	e noted.)) ral (F1) (except rix (F2) 3)		Indicators fo 2 cm Mu Red Pare Very Sha Other (E	or Problematic Hydric Soils ³ : ck (A10) ent Material (TF2) allow Dark Surface (TF12)
Histosol (A1) Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A12)	o all LRRs, unless otherwis Sandy Redox (S5) Stripped Matrix (S6 Loamy Mucky Mine Loamy Gleyed Matri Depleted Matrix (F3	e noted.)) ral (F1) (except ix (F2) 3) ∋ (F6)		Indicators fo 2 cm Mu Red Part Very Sha Other (E ³ Indicators of	or Problematic Hydric Soils ³ : ck (A10) ent Material (TF2) allow Dark Surface (TF12) xplain in Remarks)
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A12) 	o all LRRs, unless otherwis Sandy Redox (S5) Stripped Matrix (S6 Loamy Mucky Mine Loamy Gleyed Matri Depleted Matrix (F3 Redox Dark Surface	e noted.)) ral (F1) (except ix (F2) 3) ∋ (F6) ace (F7)		Indicators fo 2 cm Mu Red Pare Very Sha Other (E ³ Indicators of wetland h	or Problematic Hydric Soils ³ : ck (A10) ent Material (TF2) allow Dark Surface (TF12) xplain in Remarks) hydrophytic vegetation and
ydric Soil Indicators: (Applicable t Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A12) Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	o all LRRs, unless otherwis Sandy Redox (S5) Stripped Matrix (S6 Loamy Mucky Mine Loamy Gleyed Matri Depleted Matrix (F3 Redox Dark Surface Depleted Dark Surface	e noted.)) ral (F1) (except ix (F2) 3) ∋ (F6) ace (F7)		Indicators fo 2 cm Mu Red Pare Very Sha Other (E ³ Indicators of wetland h	or Problematic Hydric Soils ³ : ck (A10) ent Material (TF2) allow Dark Surface (TF12) xplain in Remarks) hydrophytic vegetation and ydrology must be present,
ydric Soil Indicators: (Applicable t Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A12) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	o all LRRs, unless otherwis Sandy Redox (S5) Stripped Matrix (S6 Loamy Mucky Mine Loamy Gleyed Matri Depleted Matrix (F3 Redox Dark Surface Depleted Dark Surface Redox Depressions	e noted.)) ral (F1) (except ix (F2) 3) ∋ (F6) ace (F7)		Indicators fo 2 cm Mu Red Pare Very Sha Other (E ³ Indicators of wetland h	or Problematic Hydric Soils ³ : ck (A10) ent Material (TF2) allow Dark Surface (TF12) xplain in Remarks) hydrophytic vegetation and ydrology must be present,

For safety concerns, not granted permission by landowner (Union Pacific Railroad) to dig soil test pits. Soil indicators were therefore not used to determine wetland status. Refer to vegetation and hydrology information.

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)				
Surface Water (A1) Water-Stained Leaves (B9) (exception	t Water-Stained Leaves (B9) (MLRA 1, 2,				
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)				
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)				
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)				
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3) Oxidized Rhizospheres along Livin	g Roots (C3) Geomorphic Position (D2)				
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)				
Iron Deposits (B5) Recent Iron Reduction in Tilled Sol	ls (C6) FAC-Neutral Test (D5)				
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (L	RR A) Raised Ant Mounds (D6) (LRR A)				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)				
Sparsely Vegetated Concave Surface (B8)					
Field Observations:					
Surface Water Present? Yes <u><</u> No <u>Depth (inches)</u> : <u>+3</u>					
Water Table Present? Yes <u><</u> No Depth (inches): <u>surface</u>					
Saturation Present? Yes <u>✓</u> No Depth (inches): <u>surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> V</u> No				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

Project/Site: Southwest Corridor Light Rail	_ City/County: Wa	ashington	Sampling Date: May 15, 2020
Applicant/Owner: TriMet			Sampling Point: W-Cb2
Investigator(s): MacLean, Taya K., MS, PWS	Section, Townsh	hip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): valley bottom		ncave, convex, none): <u>convex</u>	Slope (%): <u>5</u>
Subregion (LRR): <u>A</u> Lat: <u>S</u>	ee spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: <u>see spreadsheet</u>		NWI classifica	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🔽	_ No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrologysignificant	ly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	problematic?	(If needed, explain any answer	s in Remarks.)
			in a stant facture a sta

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	No No No 🖌	Is the Sampled Area within a Wetland?	Yes	No
Remarks:			I		

Soil test pits not permissible. Approx. 2' higher in elevation than paired wetland plot on fill-slope for adjacent lot. Upland conditions determined based on dry soil conditions, landscape position, and a predominance of facultative vegetation.

201	Absolute	Dominant		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species	
1				That Are OBL, FACW, or FAC: 1 (A	()
2				Total Number of Dominant	
3				Total Number of Dominant Species Across All Strata: 1 (B)	3)
4					,
				Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: ^{30'})		= Total Co	/er	That Are OBL, FACW, or FAC: 100 (A	/B)
A Rubus armeniacus	85	Yes	FAC	Prevalence Index worksheet:	
				Total % Cover of: Multiply by:	
2				OBL species x 1 =	
3			<u> </u>	FACW species x 2 =	
4				FAC species x 3 =	
5					
	85	= Total Co	/er	FACU species x 4 =	
<u>Herb Stratum</u> (Plot size: <u>5</u> ')		-		UPL species x 5 =	
1				Column Totals: (A) (B)
2				Prevalence Index = B/A =	
3				Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				2 - Dominance Test is >50%	
6				3 - Prevalence Index is $\leq 3.0^{1}$	
7				4 - Morphological Adaptations ¹ (Provide support	tina
8				data in Remarks or on a separate sheet)	ung
9				5 - Wetland Non-Vascular Plants ¹	
10				Problematic Hydrophytic Vegetation ¹ (Explain)	
11					st
11				¹ Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.	st
				¹ Indicators of hydric soil and wetland hydrology mus	st
Woody Vine Stratum (Plot size:)		= Total Cov	er	¹ Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.	st
<u>Woody Vine Stratum</u> (Plot size:) 1		= Total Cov	er	¹ Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic. Hydrophytic	st
Woody Vine Stratum (Plot size:)	 	= Total Cov	er	¹ Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.	st
<u>Woody Vine Stratum</u> (Plot size:) 1	 	= Total Cov	er	¹ Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic. Hydrophytic Vegetation	st
Woody Vine Stratum (Plot size:) 1	 	= Total Cov	er	¹ Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic. Hydrophytic Vegetation	st

Profile Description: (Describe to the dep	th needed to document the indicator or confirm	the absence of indicators.)	
Depth <u>Matrix</u>	Redox Features		
(inches) Color (moist) %	<u>Color (moist)</u> <u>%</u> <u>Type¹</u> Loc ²	Texture Remarks	
		21 a stiller DL David Lining M. Matrice	
	=Reduced Matrix, CS=Covered or Coated Sand Gr	ains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :	
Hydric Soil Indicators: (Applicable to all		-	
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)	
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)	
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	-	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)	
_ Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	3	
Thick Dark Surface (A12)	Redox Dark Surface (F6) Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and	
Sandy Mucky Mineral (S1)	wetland hydrology must be present,		
_ Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.	
Restrictive Layer (if present):			
Туре:			
Depth (inches):		Hydric Soil Present? Yes No	
Remarks:			
For safety concerns, not granted	permission by landowner (Union Pac	cific Railroad) to dig soil test pits. Soil	
		to vegetation and hydrology information.	

Wetland Hydrology Indicat	ors:					
Primary Indicators (minimum	of one req	uired; ch	<u>e</u> ck :	al <u>l that apply)</u>		Secondary Indicators (2 or more required)
Surface Water (A1)				Water-Stained Leaves (B9) (exce	pt	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)				MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)				Salt Crust (B11)		Drainage Patterns (B10)
Water Marks (B1)				Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (B2)			•	Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)				Oxidized Rhizospheres along Livi	ng Roots (C3)	Geomorphic Position (D2)
Algal Mat or Crust (B4)			•	Presence of Reduced Iron (C4)		Shallow Aquitard (D3)
Iron Deposits (B5)			•	Recent Iron Reduction in Tilled So	oils (C6)	FAC-Neutral Test (D5)
Surface Soil Cracks (B6)			Stunted or Stressed Plants (D1) (I	LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Ae	rial Imager	y (B7)		Other (Explain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated Cor	icave Surfa	ce (B8)				
Field Observations:						
Surface Water Present?	Yes	No	~	Depth (inches):		
Water Table Present?	Yes	No		_ Depth (inches):		
Saturation Present?	Yes	No	~	_ Depth (inches):	Wetland Hyd	drology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						ble:
			-		,.	
Remarks:						
	rfaco					
Soils very dry at su	nace.					

Project/Site: Southwest Corridor Light Rail	City/County: Wa	ashington	Sampling Date: May 15, 2020
Applicant/Owner: TriMet			Sampling Point: <u>W-Cc1</u>
Investigator(s): MacLean, Taya K., MS, PWS	Section, Towns	hip, Range: see spreadsheet	
Landform (hillslope, terrace, etc.): valley bottom	Local relief (co	ncave, convex, none): <u>concave</u>	Slope (%): <u>1</u>
Subregion (LRR): <u>A</u> Lat: <u>set</u>	e spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: see spreadsheet		NWI classifica	tion: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of ye	ear?Yes 🔽	_ No (If no, explain in Re	marks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed?	Are "Normal Circumstances" pre	esent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	(If needed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site man showing	n samnling n	oint locations transacts	important features etc

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🖌 No		
Hydric Soil Present?	Yes No	Is the Sampled Area	··· / ···
Wetland Hydrology Present?	Yes _ 🖌 No	within a Wetland?	Yes No
Remarks:			

Soil test pits not permissible. Representative wetland plot for 3 linear wetland segments along roadside ditch (collectively, Wetland W-Cc) that all had same indicators of hydrology and hydrophytic vegetation. Wetland is confined to depressions between railroad fill and steep hillside.

201	Absolute	Dominant I		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	<u>Status</u>	Number of Dominant Species	
1				That Are OBL, FACW, or FAC: 1 (A))
2				Total Number of Dominant	
3				Species Across All Strata: <u>1</u> (B))
4					
		= Total Cove		Percent of Dominant Species	(ח)
Sapling/Shrub Stratum (Plot size: <u>30'</u>)		- 10121 0070			в)
1				Prevalence Index worksheet:	
				Total % Cover of:Multiply by:	
2				OBL species x 1 =	
3				FACW species x 2 =	
4				FAC species x 3 =	
5				FACU species x 4 =	
		= Total Cove	er	UPL species x 5 =	
<u>Herb Stratum</u> (Plot size: <u>5'</u>) 1 Juncus tenuis	5	Yes F	-AC	Column Totals: (A) (E)	3)
)
2				Prevalence Index = B/A =	
3				Hydrophytic Vegetation Indicators:	
4				1 - Rapid Test for Hydrophytic Vegetation	
5				✓ 2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 ¹	
					ina
7				 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 	ing
78				4 - Morphological Adaptations ¹ (Provide supporti	ing
7 8 9				 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ 	ing
7 8 9 10				 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 	
7 8 9	 			 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ 	
7. 8. 9. 10. 11.	 			 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must 	
7.				 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 	
7.			r	 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 	
7.	5		r	 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 	
7.	5		r	 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 	
7.	5		r	 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 	

Type:	Depth	Matrix		Redo	x Features						
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic.	inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	S	
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic.											
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic.			·								
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic.											
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic.			·		·						
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic.			·								
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Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic.							d Sand Gra				
Histic Epipedon (A2)	•		ble to all I			ed.)			,	dric Soils":	
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) unless disturbed or problematic. Restrictive Layer (if present): Type:	Histosol	(A1)		Sandy Redox (S5)			2 cm Muc	k (A10)		
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F3) 3Indicators of hydrophytic vegetation and Thick Dark Surface (A12) Redox Dark Surface (F6) 3Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type:	Histic E	pipedon (A2)	-	Stripped Matrix	(S6)						
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) estrictive Layer (if present): Type:	Black H	istic (A3)		Loamy Mucky N	lineral (F1	I) (except	MLRA 1)	Very Shal	llow Dark Surface	(TF12)	
Thick Dark Surface (A12) Redox Dark Surface (F6) ³ Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. testrictive Layer (if present): Type:	Hydroge	en Sulfide (A4)		Loamy Gleyed	Matrix (F2)		Other (Ex	plain in Remarks))	
	Deplete	d Below Dark Surface	(A11)	Depleted Matrix	(F3)						
Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type:	Thick Da	ark Surface (A12)		Redox Dark Su	face (F6)			³ Indicators of	hydrophytic veget	ation and	
Restrictive Layer (if present): Type:	Sandy M	/lucky Mineral (S1)		Depleted Dark	Surface (F	7)		wetland hy	drology must be p	present,	
Туре:	Sandy C	Gleyed Matrix (S4)	-	Redox Depress	ions (F8)			unless dist	urbed or problema	atic.	
	Restrictive	Layer (if present):									
Depth (inches): No	Туре:										
	Depth (in	ches):						Hydric Soil Pres	ent? Yes	No	

For safety concerns, not granted permission by landowner (Union Pacific Railroad) to dig soil test pits. Soil indicators were therefore not used to determine wetland status. Refer to vegetation and hydrology information.

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required, che	Secondary Indicators (2 or more required)	
Surface Water (A1)	Water-Stained Leaves (B9) (exce	ot Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Livit	ng Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled So	ils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (I	.RR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes 🖌 No	Depth (inches): <a><1	
Water Table Present? Yes No	Depth (inches):	
Saturation Present? Yes <u>*</u> No _ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous inspec	tions), if available:
Remarks:		
Water likely ponds in these wet de	epressions between the rai	road fill and hillside. Some groundwater

seeps observed from adjacent hillside. Juncus tenuis is generally sparse to unvegetated with patches having 5% cover scattered across the wetland complex. No indicators of flow were observed.

Project/Site: Southwest Corridor Light Rail	City/County: Wa	ashington San	npling Date: <u>May 15, 2020</u>
Applicant/Owner: TriMet			npling Point: <u>W-Cc2</u>
Investigator(s): MacLean, Taya K., MS, PWS	Section, Towns	hip, Range: see spreadsheet	
Landform (hillslope, terrace, etc.): valley bottom		ncave, convex, none): <u>convex</u>	Slope (%): <u>8</u>
Subregion (LRR): <u>A</u> Lat: _	see spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: see spreadsheet		NWI classification	: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time o	f year? Yes 🦯	_ No (If no, explain in Remar	ˈks.)
Are Vegetation, Soil, or Hydrologysignificat	ntly disturbed?	Are "Normal Circumstances" prese	nt? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain any answers in	Remarks.)
		cint locations transate in	wantent factures at

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No 🖌				
Hydric Soil Present?	Yes	No	Is the Sampled Area			
Wetland Hydrology Present?	Yes	No _ 🖌 _	within a Wetland?	Yes	No	
Remarks:						
Soil test pits not permissible. Plot taken on hillside upslope of paired wetland plot.						

001	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Tatal New Area of Damin and
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 30')		= Total Co	ver	That Are OBL, FACW, or FAC: <u>50</u> (A/B)
Acer circinatum	20	Yes	FAC	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
2. Corylus cornuta	20	Yes	FACU	OBL species 0 $x 1 = 0$
3				FACW species $0 x^2 = 0$
4				
5				FAC species $\frac{2}{x 3} = \frac{6}{x 3}$
···	40	= Total Co		FACU species <u>1</u> x 4 = <u>4</u>
Herb Stratum (Plot size: 5')			ver	UPL species 1 x 5 = 5
1 Holcus lanatus	10	Yes	FAC	Column Totals: <u>4</u> (A) <u>15</u> (B)
2. Bromus carinatus	5	Yes	NOL	Prevalence Index = $B/A = \frac{3.75}{1000000000000000000000000000000000000$
3.				
				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is $\leq 3.0^1$
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
		= Total Co	/er	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		- 10101 00		
1				Undrandatio
				Hydrophytic Vegetation
2	05			Present? Yes No
% Bare Ground in Herb Stratum	85	= Total Co	/er	
Remarks:				

Depth Matrix			
inches) Color (moist) %	$\qquad Color (moist) \qquad \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Texture	Remarks
		· ·	
		· ·	
		· ·	
		· ·	
		· ·	
ype: C=Concentration, D=Depletion,	RM=Reduced Matrix, CS=Covered or Coated Sand G	Grains. ² Location	n: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applicable to	all LRRs, unless otherwise noted.)	Indicators for	r Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)	2 cm Mu	ck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Par	ent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1) Very Sha	allow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (E	xplain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)		. ,
Thick Dark Surface (A12)	Redox Dark Surface (F6)	³ Indicators of	hydrophytic vegetation and
_ Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)		ydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)		turbed or problematic.
estrictive Layer (if present):			
Туре:			
Depth (inches):		Hydric Soil Pres	sent? Yes <u>No</u>
emarks:			
or safety concerns, not grant	ted permission by landowner (Union Pa	cific Railroad)	o dia soil test pits. Soil
,	used to determine wetland status. Refe	· · · · · · · · · · · · · · · · · · ·	U

HYDROLOGY

Wetland Hydrology Indicate	ors:							
Primary Indicators (minimum	of one requi	red; che	<u>e</u> ck a	al <u>l that apply)</u>		Secondary Indicators (2 or more required)		
Surface Water (A1)				Water-Stained Leaves (B9) (excep	ot	Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)				MLRA 1, 2, 4A, and 4B)		4A, and 4B)		
Saturation (A3)				Salt Crust (B11)		Drainage Patterns (B10)		
Water Marks (B1)				Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)		
Sediment Deposits (B2)				Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)				Oxidized Rhizospheres along Living	g Roots (C3)	Geomorphic Position (D2)		
Algal Mat or Crust (B4)				Presence of Reduced Iron (C4)		Shallow Aquitard (D3)		
Iron Deposits (B5)				Recent Iron Reduction in Tilled Soi	ils (C6)	FAC-Neutral Test (D5)		
Surface Soil Cracks (B6))			Stunted or Stressed Plants (D1) (L	.RR A)	Raised Ant Mounds (D6) (LRR A)		
Inundation Visible on Ae	rial Imagery	(B7)		Other (Explain in Remarks)		Frost-Heave Hummocks (D7)		
Sparsely Vegetated Con	cave Surface	ə (B8)						
Field Observations:								
Surface Water Present?	Yes	_ No _	~	Depth (inches):				
Water Table Present?	Yes	_ No	~	Depth (inches):				
Saturation Present? (includes capillary fringe)	Yes	_ No _	~	_ Depth (inches):	Wetland Hyd	drology Present? Yes No		
Describe Recorded Data (str	eam gauge, i	nonitor	ing \	well, aerial photos, previous inspecti	ions), if availa	ble:		
Remarks:								
Very dry at surface.								

Project/Site: Southwest Corridor Light Rail	City/County: Wa	ashington	Sampling Date: May 15, 2020
Applicant/Owner: TriMet			Sampling Point: W-Cd1
Investigator(s): MacLean, Taya K., MS, PWS	Section, Townsl	hip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): valley bottom	Local relief (cor	ncave, convex, none): <u>concave</u>	Slope (%): <u>3</u>
Subregion (LRR): <u>A</u> Lat: <u>s</u>	see spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: <u>see spreadsheet</u>		NWI classific	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🖌	_ No (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significan	ntly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	na samplina p	oint locations. transects	. important features. etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ ✔ Yes Yes _ ✔ _	No No No	Is the Sampled Area within a Wetland?	Yes 🗹	No
Remarks:					

Soil test pits not permissible. Wetland between railroad fill and fill pad for adjacent building.

Absolute			Dominance Test workshe	eet:
			Number of Dominant Spec	ies
20	Yes	FACW	That Are OBL, FACW, or F	AC: <u>3</u> (A)
				3 (B)
			Species Across Air Strata.	<u> </u>
			Percent of Dominant Speci	
	= Total Co	over	That Are OBL, FACW, or F	AC: <u>100</u> (A/B)
20	Voc		Prevalence Index worksh	eet:
			Total % Cover of:	Multiply by:
		·	-	
			FAC species	x 3 =
			FACU species	x 4 =
		over	UPL species	x 5 =
70	Yes	FACW	Column Totals:	(A) (B)
			Prevalence Index = I	B/A =
		·	Hydrophytic Vegetation I	ndicators:
		·	1 - Rapid Test for Hyd	rophytic Vegetation
			✓ 2 - Dominance Test is	>50%
			4 - Morphological Ada	otations ¹ (Provide supporting
				on a separate sheet)
			5 - Wetland Non-Vasc	ular Plants ¹
	= Total Co	ver		
			Hydrophytic	
			Vegetation	Y No
				۲ No
			Vegetation	۲ No
			Vegetation	ビ No
	<u>% Cover</u> 20 20 20 20 20 70 70 70	% Cover Species? 20 Yes 20 Yes =	% Cover Species? Status 20 Yes FACW 20 Yes FACW	% Cover Species? Status Number of Dominant Spec 20 Yes FACW Total Number of Dominant Species Across All Strata:

Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
	Reduced Matrix, CS=Covered or Coated Sand	· · · · · · · · · · · · · · · · · · ·
lydric Soil Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA	1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No

For safety concerns, not granted permission by landowner (Union Pacific Railroad) to dig soil test pits. Soil indicators were therefore not used to determine wetland status. Refer to vegetation and hydrology information.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (excep	t Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Living	g Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled Soi	ls (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (L	RR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes <u><</u> No <u>Depth</u> (inches): <u>+6</u>	
Water Table Present? Yes <u><</u> No <u>Depth</u> (inches): <u>surface</u>	
Saturation Present? Yes <u>✓</u> No Depth (inches): <u>surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspecti	ons), if available:
Remarks:	

Project/Site: Southwest Corridor Light Rail	_ City/County: Washi	ngton	Sampling Date: May 15, 2020
Applicant/Owner: TriMet		State: Oregon	Sampling Point: <u>W-Cd2</u>
Investigator(s): MacLean, Taya K., MS, PWS	_ Section, Township,	Range: see spreadsheet	
Landform (hillslope, terrace, etc.): valley bottom		/e, convex, none): <u>convex</u>	Slope (%): 2
Subregion (LRR): <u>A</u> Lat: <u>Se</u>	ee spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: see spreadsheet		NWI classific	cation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes 🔽 N	o (If no, explain in R	Remarks.)
Are Vegetation, Soil, or Hydrologysignificantl	ly disturbed? A	re "Normal Circumstances"	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	oroblematic? (I	f needed, explain any answe	rs in Remarks.)
			······································

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🖌	No			
Hydric Soil Present?	Yes	No	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No 🖌	within a Wetland?	Yes	No
Remarks:					

Soil test pits not permissible. Plot 1.25' higher in elevation than paired wetland plot. Site was determined to be upland based on very dry soil conditions and a predominance of facultative nonnative vegetation (lacking FACW or wetter species).

201	Absolute	Dominant		Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species	
1				That Are OBL, FACW, or FAC: <u>3</u> (A)	
2				Total Number of Densinent	
3				Total Number of Dominant Species Across All Strata: ³ (B)	
4				Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: <u>30'</u>)		= Total Co	ver	That Are OBL, FACW, or FAC: 100 (A/B	5)
1 Crataegus monogyna	40	Yes	FAC	Prevalence Index worksheet:	
2 Rubus armeniacus	40	Yes	FAC	Total % Cover of: Multiply by:	
				OBL species x 1 =	
3				FACW species x 2 =	
4					
5				FAC species x 3 =	
	80	= Total Co	ver	FACU species x 4 =	
<u>Herb Stratum</u> (Plot size: <u>5'</u>)		-		UPL species x 5 =	
1. Agrostis capillaris	10	Yes	FAC	Column Totals: (A) (B))
2				Prevalence Index = B/A =	
3				Hydrophytic Vegetation Indicators:	
4					
				1 - Rapid Test for Hydrophytic Vegetation	
5				∠ 2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 ¹	
7				4 - Morphological Adaptations ¹ (Provide supportin data in Remarks or on a separate sheet)	g
8				5 - Wetland Non-Vascular Plants ¹	
9				Problematic Hydrophytic Vegetation ¹ (Explain)	
10				¹ Indicators of hydric soil and wetland hydrology must	
11				be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size:)	10	= Total Cov	/er		
1				Hydrophytic Vegetation	
2				Present? Yes No	
		= Total Cov	/er		
% Bare Ground in Herb Stratum90					
% Bare Ground in Herb Stratum90 Remarks:					

epth I	Matrix	Redox	K Features	i					
nches) Color (m	noist) %	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
ype: C=Concentration, ydric Soil Indicators:					d Sand Gra	ains. ² Location Indicators for		ore Lining, ematic Hyd	
Histosol (A1)	(Applicable to a	Sandy Redox (S				2 cm Mu		•	
Histic Epipedon (A2)		Stripped Matrix					```	erial (TF2)	
Black Histic (A3)		Loamy Mucky M	. ,) (except	MLRA 1)			rk Surface (TF12)
Hydrogen Sulfide (A	4)	Loamy Gleyed N	Aatrix (F2)		,	Other (E	xplain in	Remarks)	
Depleted Below Darl	Surface (A11)	Depleted Matrix	(F3)					,	
Thick Dark Surface (A12)	Redox Dark Sur	face (F6)			³ Indicators of	f hydropł	nytic vegeta	tion and
_ Sandy Mucky Minera	ıl (S1)	Depleted Dark S	Surface (F	7)		wetland h	ydrology	must be pr	esent,
Sandy Gleyed Matrix	(S4)	Redox Depress	ons (F8)			unless dis	sturbed c	or problemat	tic.
estrictive Layer (if pre	sent):								
Туре:									
Depth (inches):						Hydric Soil Pres	sent?	Yes	No
emarks:									

HYDROLOGY

Wetland Hydrology Indicate	ors:		
Primary Indicators (minimum	of one required; c	<u>che</u> ck al <u>l that apply)</u>	Secondary Indicators (2 or more required)
Surface Water (A1)		Water-Stained Leaves (B9) (exce	pt Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)		MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)		Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)		Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Oxidized Rhizospheres along Livi	ng Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)		Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)		Recent Iron Reduction in Tilled So	bils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6))	Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Con	cave Surface (B8)	3)	
Field Observations:			
Surface Water Present?	Yes No	o 🖌 Depth (inches):	
Water Table Present?	Yes No	o Depth (inches):	
Saturation Present?	Yes No	o _ 🖌 _ Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	···		
Describe Recorded Data (str	eam gauge, monite	itoring well, aerial photos, previous inspec	tions), if available:
Remarks:			
Soils very dry at sur	face.		
, , , , , , , , , , , , , , , , , , ,			

Project/Site: Southwest Corridor Light Rail	City/County: W	ashington		Sampling Date: N	/lay 15, 2020
Applicant/Owner: TriMet			State: Oregon	Sampling Point: <u>\</u>	N-Cf1
Investigator(s): MacLean, Taya K., MS, PWS	Section, Towns	hip, Range:	see spreadsheet		
Landform (hillslope, terrace, etc.): valley bottom			vex, none): <u>concave</u>	Slop	oe (%): <u>0</u>
Subregion (LRR): <u>A</u> Lat: <u>-</u>	see spreadsheet	Lo	ng: see spreadsheet	Datur	m: NAD 83
Soil Map Unit Name: see spreadsheet			NWI classific	ation: <u>see spreads</u>	heet
Are climatic / hydrologic conditions on the site typical for this time of	f year? Yes 🔽	No	(If no, explain in Re	emarks.)	
Are Vegetation, Soil, or Hydrologysignificar	ntly disturbed?	Are "Nori	mal Circumstances" p	resent?Yes 🖌	, No
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If neede	d, explain any answer	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showi	ing sampling p	oint loca	tions, transects,	, important fea	atures, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ ✔ Yes Yes _ ✔	No No No	 Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

Soil test pits not permissible. Depression between railroad fill and fill of adjacent lot.

201	Absolute		Indicator	Dominance Test workshee	et:	
<u>Tree Stratum</u> (Plot size: <u>30'</u>)		Species?		Number of Dominant Specie	S	
1. Fraxinus latifolia	55	Yes	FACW	That Are OBL, FACW, or FA		(A)
2				Tatal New Law (Daminant		
3				Total Number of Dominant Species Across All Strata:	3	(B)
						(8)
4		Tatal O		Percent of Dominant Specie		
Sapling/Shrub Stratum (Plot size: <u>30'</u>)		= Total Co	over	That Are OBL, FACW, or FA	C: 100	(A/B)
				Prevalence Index workshe	et:	
1				Total % Cover of:	Multiply by:	
2				OBL species	x 1 =	
3				FACW species		
4						
5	<u> </u>			FAC species		
		= Total Co		FACU species		
<u>Herb Stratum</u> (Plot size: <u>5'</u>)		_		UPL species	_ x 5 =	_
1. Phalaris arundinacea	45	Yes	FACW	Column Totals:	_ (A)	(B)
2. Juncus tenuis	45	Yes	FAC	Prevalence Index = B/	/A =	
3				Hydrophytic Vegetation In		
4				1 - Rapid Test for Hydro		
5						
				✓ 2 - Dominance Test is >		
6				3 - Prevalence Index is		
78				4 - Morphological Adapt data in Remarks or c		porting
9				5 - Wetland Non-Vascul	ar Plants ¹	
10				Problematic Hydrophytic		in)
				¹ Indicators of hydric soil and		-
11	00			be present, unless disturbed		naor
Woody Vine Stratum (Plot size:)		= Total Co	ver			
1				Hydrophytic		
2				Vegetation Present? Yes	No	
% Bare Ground in Herb Stratum10		= Total Co	ver			
Remarks:						

Depth	Matrix		Redo	x Feature	S					
inches) C	olor (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
						·				
·					· <u> </u>					
			Reduced Matrix, CS			d Sand Gra		n: PL=Pore Lining, M=Matrix.		
ydric Soil Indica	tors: (Applica	ble to all L	RRs, unless othe	rwise not	ed.)		Indicators fo	or Problematic Hydric Soils ³ :		
Histosol (A1)			Sandy Redox (,			2 cm Mu	()		
Histic Epipedo	n (A2)	-	Stripped Matrix	. ,				ent Material (TF2)		
Black Histic (A	.3)		Loamy Mucky N	Mineral (F	1) (except	MLRA 1)	Very Sha	allow Dark Surface (TF12)		
Hydrogen Sulf	ide (A4)		Loamy Gleyed	Matrix (F2	2)		Other (Ex	xplain in Remarks)		
Depleted Belo	w Dark Surface	(A11)	Depleted Matrix	k (F3)						
Thick Dark Su	rface (A12)		Redox Dark Su	rface (F6)			³ Indicators of	hydrophytic vegetation and		
Sandy Mucky	Mineral (S1)		Depleted Dark	Surface (F	7)		wetland hy	ydrology must be present,		
Sandy Gleyed	Matrix (S4)	-	Redox Depress	sions (F8)			unless dis	turbed or problematic.		
	(if present):									
estrictive Layer										
estrictive Layer Type:										

For safety concerns, not granted permission by landowner (Union Pacific Railroad) to dig soil test pits. Soil indicators were therefore not used to determine wetland status. Refer to vegetation and hydrology information.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (exception	t Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Livin	g Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled Sol	ls (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (L	RR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes <u><</u> No <u>Depth (inches)</u> : <u>+3</u>	
Water Table Present? Yes <u><</u> No Depth (inches): <u>surface</u>	
Saturation Present? Yes <u>✓</u> No Depth (inches): <u>surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions), if available:
Remarks:	

Project/Site: Southwest Corridor Light Rail	City/County: Washington Sampling Date: May 15, 2020
Applicant/Owner: TriMet	State: Oregon Sampling Point: W-Cf2
Investigator(s): MacLean, Taya K., MS, PWS	Section, Township, Range: see spreadsheet
Landform (hillslope, terrace, etc.): valley bottom	_ Local relief (concave, convex, none): <u>none</u> Slope (%): <u>0</u>
	ee spreadsheet Long: see spreadsheet Datum: NAD 83
Soil Map Unit Name: <u>see spreadsheet</u>	NWI classification: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of y	/ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificant	
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🖌	No			
Hydric Soil Present?	Yes	No _ 🖌	Is the Sampled Area		
Wetland Hydrology Present?	Yes	_ No _ 🖌 _	within a Wetland?	Yes	No
Remarks:					

Soil test pits not permissible. Upland determination made based on landscape position, dry soils, and a predominance of facultative and upland vegetation. Wetland located between railroad berm and fill of adjacent lot.

201	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: ^{30'})		= Total Co	over	That Are OBL, FACW, or FAC: 50 (A/B)
1 Crataegus monogyna	30	Yes	FAC	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
2. Rubus armeniacus	30	Yes	FAC	$\begin{array}{c c} \hline \\ \hline $
3. Cytisus scoparius	15	Yes	NOL	
4				FACW species $\frac{0}{2}$ x 2 = $\frac{9}{2}$
5				FAC species 3 x 3 = 9
	75	= Total Co		FACU species <u>1</u> x 4 = <u>4</u>
<u>Herb Stratum</u> (Plot size: <u>5'</u>)			over	UPL species $\frac{1}{x 5} = \frac{5}{2}$
1. Anthoxanthum odoratum	30	Yes	FACU	Column Totals: <u>4</u> (A) <u>18</u> (B)
2. Vicia americana	5	No	FAC	Prevalence Index = $B/A = 4.5$
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
···	0.5	= Total Co		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			vei	
1				Hydrophytic Vegetation
2				Present? Yes No
% Bare Ground in Herb Stratum65		= Total Co	ver	
Remarks:				
Tomano.				

Depth	Matrix			x Features						
inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	_Loc ²	Texture		Remarks	
						,				
		·		·						
				·						
			Deduced Matrix C				2L agotion		colining N	A-Matrix
	ncentration, D=Deploindicators: (Applica					a Sana Gra	ains. ² Location: Indicators for I		-	-
Histosol			Sandy Redox (,		2 cm Muck			
	pipedon (A2)		Stripped Matrix	,			Red Parent	· /	al (TF2)	
Black Hi	,	-	Loamy Mucky N	. ,) (except	MLRA 1)	Very Shallo		. ,	F12)
	n Sulfide (A4)		Loamy Gleyed			,	Other (Expl		•	,
	Below Dark Surface	(A11)	Depleted Matrix	• •	,				,	
•	ark Surface (A12)	、 ,	Redox Dark Su	()			³ Indicators of hy	drophy	tic vegetati	on and
	lucky Mineral (S1)		Depleted Dark	. ,	7)		wetland hydr		-	
Sandy G	leyed Matrix (S4)	-	Redox Depress	ions (F8)			unless distur	bed or	problemati	C.
estrictive L	_ayer (if present):								-	
Type:										
Depth (ind	ches):						Hydric Soil Preser	nt? Y	'es	No
Remarks:										

HYDROLOGY

Wetland Hydrology Indicat	ors:							
Primary Indicators (minimum	ı of one req		Secondary Indicators (2 or more required)					
Surface Water (A1)				Water-Stained Leaves (B9) (exce	pt	Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)				MLRA 1, 2, 4A, and 4B)		4A, and 4B)		
Saturation (A3)				Salt Crust (B11)		Drainage Patterns (B10)		
Water Marks (B1)				Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)		
Sediment Deposits (B2)				Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)				Oxidized Rhizospheres along Livir	ng Roots (C3)	Geomorphic Position (D2)		
Algal Mat or Crust (B4)				Presence of Reduced Iron (C4)		Shallow Aquitard (D3)		
Iron Deposits (B5)				Recent Iron Reduction in Tilled Sc	oils (C6)	FAC-Neutral Test (D5)		
Surface Soil Cracks (B6)			Stunted or Stressed Plants (D1) (I	LRR A)	Raised Ant Mounds (D6) (LRR A)		
Inundation Visible on Ae	rial Imager	y (B7)		Other (Explain in Remarks)		Frost-Heave Hummocks (D7)		
Sparsely Vegetated Cor	icave Surfa	ce (B8)						
Field Observations:								
Surface Water Present?	Yes	No	~	Depth (inches):				
Water Table Present?	Yes	No _		_ Depth (inches):				
Saturation Present? (includes capillary fringe)	Yes	No _	~	_ Depth (inches):	Wetland Hyd	drology Present? Yes No 🗡		
	eam gauge	, monito	ring	well, aerial photos, previous inspec	tions), if availa	ble:		
Remarks:				-				
Soils very dry at su	rface							
	1400.							

Project/Site: Southwest Corridor Light Rail	_ City/County: Wa	ashington	Sampling Date: May 15, 2020
Applicant/Owner: TrimeM			Sampling Point: W-Cg1
Investigator(s): MacLean, Taya K., MS, PWS	Section, Townsh	hip, Range: <u>see spreadsheet</u>	
Landform (hillslope, terrace, etc.): valley bottom		ncave, convex, none): <u>concave</u>	Slope (%): <u>1</u>
Subregion (LRR): <u>A</u> Lat: <u>s</u>	ee spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: <u>see spreadsheet</u>		NWI classifica	ation: see spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🔽	_ No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significan	tly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map showir	ng sampling p	oint locations, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ ✔ Yes Yes _ ✔	No No No		Is the Sampled Area within a Wetland?	Yes 🔽	No
Remarks:						
Soil test pits not permissibl	e. Wetland	d locate	d in lo	w depression betwe	en two railr	road track berms.

201	Absolute	Dominant		Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?		Number of Dominant Species		
1. Fraxinus latifolia	15	Yes	FACW	That Are OBL, FACW, or FAC	4	(A)
2				Total Number of Dominant		
3				Species Across All Strata:	4	(B)
						(2)
4	15	Tatal O		Percent of Dominant Species	100	
Sapling/Shrub Stratum (Plot size: ^{30'})		= Total Co	ver	That Are OBL, FACW, or FAC	100	(A/B)
1. Salix lasiandra	15	Yes	FACW	Prevalence Index worksheet	:	
2 Fraxinus latifolia	15	Yes	FACW	Total % Cover of:	Multiply by:	
				OBL species	x 1 =	
3				FACW species		
4				FAC species		
5						
	30	= Total Co	ver	FACU species		
<u>Herb Stratum</u> (Plot size: <u>5'</u>)		-		UPL species	x 5 =	_
1. Phalaris arundinacea	65	Yes	FACW	Column Totals:	(A)	_ (B)
2				Prevalence Index = B/A	_	
3				Hydrophytic Vegetation Indi		
4						
				1 - Rapid Test for Hydrop	, ,	
5				2 - Dominance Test is >50		
6				3 - Prevalence Index is ≤3	3.01	
7				4 - Morphological Adaptat data in Remarks or on		porting
8				5 - Wetland Non-Vascular	• ,	
9				Problematic Hydrophytic V		5
10						
11				¹ Indicators of hydric soil and w be present, unless disturbed o		nust
	65	= Total Cov	/er	be present, unless disturbed o		
Woody Vine Stratum (Plot size:)						
1				Hydrophytic		
2				Vegetation		
		= Total Cov		Present? Yes	No	
% Bare Ground in Herb Stratum35		-				
Remarks:						

Depth Matrix	Redox Features				
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks			
	Reduced Matrix, CS=Covered or Coated Sand	• · · · · ·			
lydric Soil Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :			
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)			
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)			
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA	1) Very Shallow Dark Surface (TF12)			
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)			
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)				
Thick Dark Surface (A12)	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and			
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,			
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.			
Restrictive Layer (if present):					
Туре:					
Depth (inches):		Hydric Soil Present? Yes No			

For safety concerns, not granted permission by landowner (Union Pacific Railroad) to dig soil test pits. Soil indicators were therefore not used to determine wetland status. Refer to vegetation and hydrology information.

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)		
Surface Water (A1) Water-Stained Leaves (B9) (exception	t Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)		
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)		
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3) Oxidized Rhizospheres along Livin	g Roots (C3) Geomorphic Position (D2)		
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)		
Iron Deposits (B5) Recent Iron Reduction in Tilled Sol	ls (C6) FAC-Neutral Test (D5)		
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (L	RR A) Raised Ant Mounds (D6) (LRR A)		
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)		
Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present? Yes <u><</u> No <u>Depth (inches)</u> : <u>+3</u>			
Water Table Present? Yes <u><</u> No Depth (inches): <u>surface</u>			
Saturation Present? Yes <u>✓</u> No Depth (inches): <u>surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> V</u> No		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions), if available:		
Remarks:			

Project/Site: Southwest Corridor Light Rail	_ City/County: Wa	ashington Samplir	ng Date: <u>May 15, 2020</u>
Applicant/Owner: TriMet			ng Point: <u>W-Cg2</u>
Investigator(s): MacLean, Taya K., MS, PWS	Section, Townsh	nip, Range: see spreadsheet	
Landform (hillslope, terrace, etc.): valley bottom		ncave, convex, none): <u>convex</u>	Slope (%): <u>4</u>
Subregion (LRR): <u>A</u> Lat: <u>s</u>	ee spreadsheet	Long: see spreadsheet	Datum: NAD 83
Soil Map Unit Name: <u>see spreadsheet</u>		NWI classification: _Se	ee spreadsheet
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🔽	_ No (If no, explain in Remarks.))
Are Vegetation, Soil, or Hydrology significan	tly disturbed?	Are "Normal Circumstances" present?	Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain any answers in Rer	narks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes 🖌	No			
Hydric Soil Present?	Yes	No	Is the Sampled Area		
Wetland Hydrology Present?	Yes	_ No 🖌	within a Wetland?	Yes	No
Remarks:					

Soil test pits not permissible. On fill-slope for railroad approx. 2.5' higher in elevation than paired wetland plot. Upland conditions determined based on dry soil conditions and a predominance of nonnative facultative plants.

201	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30'</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: _4 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: <u>30'</u>)		= Total Co	over	That Are OBL, FACW, or FAC: _100 (A/B)
1 Rubus armeniacus	60	Yes	FAC	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
2. Crataegus monogyna	30	Yes	FAC	OBL species x 1 =
3				FACW species x 2 =
4				
5				FAC species x 3 =
···	90	= Total Co	wor	FACU species x 4 =
Herb Stratum (Plot size: ^{5'})		10tai 00		UPL species x 5 =
1 Holcus lanatus	20	Yes	FAC	Column Totals: (A) (B)
2. Schedonorus arundinaceus	5	Yes	FACW	
				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				✓ 2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
· · · · ·	05	Tatal O		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	20	= Total Co	ver	
1				Hydrophytic
2				Vegetation Present? Yes <u>V</u> No No
% Dana Craying in Userb Stratium 75		= Total Co	ver	
% Bare Ground in Herb Stratum 75				
Remarks:				•

Profile Description: (Describe to	the depth neede			ator or c	onfirm	the absence of i	ndicator	s.)	
Depth <u>Matrix</u>		Redox Fe		1.	2	- <i>i</i>		- ·	
(inches) Color (moist)	% Color	(moist)	<u>% Ty</u>	pe ¹ L	oc ²	Texture		Remarks	
		·							
		· · · · ·							
		· · · · · · · · · · · · · · · · · · ·							
¹ Type: C=Concentration, D=Deple				Coated S	and Gra			ore Lining, N	
Hydric Soil Indicators: (Application)	ble to all LRRs, u	nless otherwis	se noted.)			Indicators for	or Proble	ematic Hydr	ic Soils':
<u>-</u> Histosol (A1)	San	dy Redox (S5)				2 cm Mu	ıck (A10)		
Histic Epipedon (A2)	Strip	ped Matrix (S6	5)			Red Par	ent Mate	rial (TF2)	
Black Histic (A3)	Loar	ny Mucky Mine	eral (F1) (ex	cept ML	RA 1)	Very Sh	allow Dar	k Surface (T	F12)
_ Hydrogen Sulfide (A4)	Loar	ny Gleyed Mat		Other (Explain in Remarks)					
_ Depleted Below Dark Surface	(A11) Dep	eted Matrix (F3	3)						
Thick Dark Surface (A12)	Red	ox Dark Surfac	e (F6)			³ Indicators o	f hydroph	iytic vegetati	on and
Sandy Mucky Mineral (S1)	Dep	eted Dark Surf		wetland hydrology must be present,					
Sandy Gleyed Matrix (S4)	Red	ox Depressions	s (F8)			unless dis	sturbed o	r problematio	D.
Restrictive Layer (if present):									
Туре:									
Depth (inches):						Hydric Soil Pre	sent?	Yes	No
Remarks:						I			
For safety concerns, not g	ranted permis	ssion by lar	ndowner	(Unioi	n Pac	ific Railroad)	to dig s	soil test p	its. Soil
indicators were therefore	not used to de	etermine we	etland st	atus. F	Refer	to vegetation	and hy	/drology i	nformatior

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (exc	ept Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Liv	ing Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled S	oils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1)	(LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes <u>No</u> Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes <u>No</u> Depth (inches): <u>(includes capillary fringe</u>)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	ctions), if available:
Remarks:	
Soils very dry at surface (fill material).	

APPENDIX C: Photographs

- Segment A
- Segment B
- Segment C

PHOTOGRAPHS - SEGMENT A



Photo PP-A1: Looking southwest at W-A1, seep wetland at base of steep slope. Situated over a sewer line.

PHOTOGRAPHS - SEGMENT B



Photo PP-B1: Looking southwest at D-B1.



Photo PP-B2: Looking south at S-B1. Culvert inlet at SW Barbur Boulevard.



Photo PP-B3: Looking south at W-B1.



Photo PP-B4: Looking southeast at S-B2, which lies in a city park.

PHOTOGRAPHS - SEGMENT C



Photo PP-C1: Looking east at newly impacted and restored S-C1. Recent adjacent road and sidewalk construction appears to be the cause.



Photo PP-C2: Looking northwest along the boundary of Wetland C-1 at wetland Plot C1.



Photo PP-C3: Looking south along S-C2 and Wetland C-1.



Photo PP-C4: Looking south at Knez wetlands.



Photo PP-C5: Looking north at upland Plot C11. Located in deep depression.



Photo PP-C6: Looking northwest at roadside ditch D-C1.



Photo PP-C7: Looking northeast at S-C4, which has been restored in this reach. The remainder of the stream is highly incised and 4 to 5 feet below the adjacent terraces.



Photo PP-C8: Looking southeast at start of Ditch D-Ca at partially collapsed culvert. Wetland W-Ca in background.



Photo PP-C9: Looking south along the boundary of Wetland W-Ca at Plots W-Ca1 (wetland) and W-Ca2 (upland). Ditch D-Ca in background.



Photo PP-C10: Looking northwest along Ditch D-Ca and Wetland W-Ca.



Photo PP-C11: Looking northeast from railroad berm at Wetland W-Cb (Wetland C1 beyond rail ROW) in vicinity of Plots W-Cb1 (wetland) and W-Cb2 (upland). Stream S-C1 in wetland in center of photo.



Photo PP-C12: Looking northwest from culvert at Ditch D-Cf. Looking towards S-C1. Unvegetated ditch bottom is obscured below steep upland banks dominated by reed canary grass with scattered soft rush along ditch edge.



Photo PP-13: Looking southeast at Wetland W-Cc. Algal matting and soil cracking in foreground and Plots W-Cc1 (wetland) and W-Cc2 (upland) in background.



Photo PP-C14: Looking southeast at Wetland W-Cd, which is located between railroad berm and fill-slope of adjacent lot. Plot W-Cc1 (wetland) in center of photo and Plot W-Cc2 (upland) to east.



Photo PP-C15: Looking southeast at Wetland W-Cf located between railroad berm and fillslope of adjacent lot. Plot W-Cf1 (wetland) in center of photo and Plot W-Cf2 (upland) to east.



Photo PP-C16: Looking southwest from railroad berm at Wetland W-Cf and Plots W-Cf1 (wetland) and W-Cf2 (upland).



Photo PP-C17: Looking south at Ditch D-Cb. Ditch is excavated with steep 3' tall banks. Not flowing with scattered shallow ponding present during site visit. Banks dominated by dense Himalayan blackberry.



Photo PP-C18: Looking east at Stream S-Cc. Incised channel with adjacent uplands dominated by Himalayan blackberry.



Photo PP-C19: Looking north at Stream S-Cb which is an incised narrow (1.5') channel that conveys upland runoff from railroad area to Stream S-Cc.



Photo PP-C20: Looking southeast at Railroad Ditch D-Cc from culvert. Ditch is located between railroad berm and adjacent upland slope. Some ponding present during the May 2020 site visit and recent indicators of flow including presence of litter and water staining.



Photo PP-C21: Looking southeast at Ditch D-Cd located between railroad berm and adjacent development. Photo taken from start of ditch. Unable to determine connection of ditch to a City-mapped stormwater channel (flowing south along I-5) that is mapped beyond chain link fence.



Photo PP-C22: Looking east where Railroad Ditch D-Ce extends beyond study area under I-5.

APPENDIX D: Delineation Results Tables

- Segment A
- Segment B
- Segment C

DELINEATION RESULTS TABLES - SEGMENT A

- Table 1: Wetlands
- Table 2: Waters (Streams, Ponds, and Ditches)

Table 1: Wetlands, SW Corridor, Segment A

ID ¹	Sheet #(s)	Latitude	Longitude	Size in Study Area ²	Cowardin Class ³	HGM Class⁴	Sample Plots	Photo Points	Additional Information for JD
W-A1	4	45.499662	-122.681466	0.19	PEM	Slope	A1	PP-A1	Wetland seep at base of steep slope. Lies over the top of a sewer line. Soils saturated during site visit. Wetland boundary determined by distinct break in plant community, soils, and hydrologic indicators.
Total				0.19					
1- W = \	Vetland - a	and ID#							
2- Size i	2- Size in study area is given in acres								
3- Cowa	3- Cowardin Class: PEM = palustrine emergent, PSS = palustrine scrub-shrub, PFO = palustrine forested								
4- HGM	4- HGM Class: DEP = depressional, RFT = riverine flow-through								

Table 2: Waters, SW Corridor, Segment A

Name/ ID ¹ Sheet #(s) Latitude Longitude Class ² (Yes/No) Width Foints Preliminary jurisdiction estimation/ Additional Information for JD
--

No non-wetland surface waters occur within Segment A. Several drainages are piped through the wetland study area, with approximate locations shown on the Figure 6 of Appendix A.

1- S = stream, creek, or ditched natural tributary, D = ditch, P = pond. Unnamed unless noted									
2- Cowardin Riverine Class: R3 = Upper perennial, R4 = Intermittent, R6 = Ephemeral									
Ditches that did not meet wetland criteria or did not have signs of relatively permanent flow were not assumed	I to be under Corps jurisdiction.								
All ditches in study area, except where specifically noted, met DSL exemption criteria for roadside ditches (i.e.	. <10ft wide, no fish, etc.)								
See methods section of report for additional information on assumption of Corps and DSL jurisdictional deter-	mination of ditches								

DELINEATION RESULTS TABLES - SEGMENT B

- Table 1: Wetlands
- Table 2: Waters (Streams, Ponds, and Ditches)

Table 1: Wetlands, SW Corridor, Segment B

ID ¹	Sheet #(s)	Latitude	Longitude	Size in Study Area ²	Cowardin Class ³	HGM Class⁴	Sample Plots	Photo Points	Additional Information for JD
W-B1	22	45.457414	-122.712526	0.08	PEM/ PSSC	Slope	B1	В3	Wetland swale in steep-sided depression, fed by stormwater. Drains into catch basin and thereby toward the Willamette River. Boundary from change in veg, hydrology, and swale topography.
Total									
1- W = \	Vetland - a	and ID#							
2- Size i	n study are	ea is given in a	cres						
3- Cowa	rdin Class:	: PEM = palusti	rine emergent, F	PSS = palu	strine scrub-	shrub, PF	O = palustr	ine forest	ed
4- HGM	Class: DEP	P = depressiona	al, RFT = riverine	e flow-thro	ough				

Table 2: Waters, SW Corridor, Segment B

Name/ ID ¹	Sheet #(s)	Latitude	Longitude	Cowardin Class ²	ESH (Yes/No)	OHW Width (feet)	Photo Points	Preliminary jurisdiction estimation/ Additional Information for JD
D-B1	21, 22	45.457849	-122.711495	R6	Ν	1		Non-jurisdictional roadside ditch. OHW from scour. Carries flow from road runoff into a catch basin and thereby to the storm system. OHW from scour. Not a relatively permanent water. Does not provide a hydrologic connection between two jurisdictional features. Does not provide habitat for food or game fish. Meets DSL roadside ditch exemptions.
D-B2	21	45.45835600	-122.711167	R6	Ν	1		same as D-B1
D-B3	22	45.455757	-122.715846	R6	Ν	1		same as D-B1
S-B1	20	45.461551	-122.705591	R4	Ν	1.5		Jurisdictional. Ditched natural tributary in a deeply incised channel which drains south into culvert and potentially discharged to Tryon Creek well beyond the study area. OHW from scour. Gravel and silt.
S-B2	27	45.44290882	-122.7310275	R4	No	3	B4	Jurisdictional. Remnant incised stream channel that flows through Sylvania Park. Upstream and downstream reaches are piped outside of the study area. OHW from scour, steep banks. Cobble, gravel, and silt bottom.
1-S = stream	n, creek, oı	r ditched natural t	ributary, D = dito	:h, P = pond. l	Jnnamed unl	ess noted		

2- Cowardin Riverine Class: R3 = Upper perennial, R4 = Intermittent, R6 = Ephemeral

Ditches that did not meet wetland criteria or did not have signs of relatively permanent flow were not assumed to be under Corps jurisdiction.

All ditches in study area, except where specifically noted, met DSL exemption criteria for roadside ditches (i.e. <10ft wide, no fish, etc.)

See methods section of report for additional information on assumption of Corps and DSL jurisdictional determination of ditches.

DELINEATION RESULTS TABLES - SEGMENT C

- Table 1: Wetlands
- Table 2: Waters (Streams, Ponds, and Ditches)

Table 1: Wetlands. SW Corridor. Segment C

wr-c1 37, 38 45.430864 -122.759512 1.23 PEM/ PSV PFO Siope 7 C4 "Knez Weitandis". Located in a low area that collects groundwater and surface flow the foodplain daviage and the soundary (S-C3) that frame to the weitand in place soundary (S-C3) that frame to the weitand in place soundary (S-C3) that frame to the weitand in place soundary (S-C3) that frame to the weitand in the methy to an unmame thibulary to the Tualatin R. Primarity P and PSSC, but includes some ash PFO. wr-c3 34 45.430863 -122.768522 0.60 PEM/ PSV PFO Skope 9 Weitand in weit flow flow flow flow flow flow flow flow	ID ¹	Sheet #(s)	Latitude	Longitude	Size in Study Area ²	Cowardin Class ³	HGM Class⁴	Sample Plots	Photo Points	Additional Information for JD
W-C2 34 45.430964 -122.75951 1.23 PEM/PS/ PFO Slope 7 Cf. Extende to (and abuts) an incised waterway and distinct vegetation change defines boundary (SG.3) the Tuatation R. Primarily P and TPSC, but includes some ash PFO. W-C3 34 45.431067 -122.75922 0.60 PEM/PSS/ PFO Slope 9 Wetland in wide floodplain above OHW of small incised stream (S-C3). Drains west under FS. put includes some ash PFO. W-C4 31 45.438883 -122.768292 0.60 PEM/PSS/ PFO Slope 9 Wetland in wide floodplain above OHW of small incised stream (S-C3). Drains west under FSC, but includes some ash PFO. W-C4 31 45.438883 -122.748586 0.67 PFO Slope 13 C7 Isode this welf broodplain and ripatian area. which contains wetland in places. Drains west under FSC, but includes some ash PFO. W-C4 31 45.438883 -122.748230 0.48 PEM SLOPE W-Ca1 C8.60 Off Wetland incised broodplain and ripatian area. which contains wetland in places. W-C6 37, 38 45.425001 -122.762790 0.06 PEM/PFO SLOPE W-Ca1 C11 Optin off Wetland W-C1 located in alindexid dovelaprin andi	W-C1	37, 38	45.426234	-122.761072	1.06	PSS	Slope	1, 3, 5	C2, C3	Wetland in wide swale above OHW of small incised stream (S-C2). Drains west to Fanno Cr. Primarily willow shrubs, with some young trees. Narrows to fringe wetland in places.
WC3 34 45.431067 -122.758922 0.60 PSS/PFO Slope 9 under L5. Primarity PSSC, but includes some ash PFO. W-C4 31 45.436883 -122.748586 0.67 PFO Slope 13 C7 Located in a wide floodplain and riparian area, which contains welland in places. Dr. slowly toward the west and thereby to an unnamed tributary to the Tualatin R. Prima ash PFO. W-Ca 36, 37 45.425999 -122.764230 0.48 PEM SLOPE W-Ca1 C8. C9, C1 Mowed/managed grasses. Hydrology likely from stormwater and sessonally high groundwater. Abuts D-Ca along SW boundary. Not allowed to dig for soil data on UE property. W-Cb 37, 38 45.425201 -122.762799 0.06 PEM/PFO SLOPE W-Cb1 C11 Portion of Wetland W-C1 located in railroad ROW. In mapped hydric soils. Located in zone administrate data on UE property. W-Cc 38, 39 45.421902 -122.759079 0.04 PEM DEP W-Cc1 C11 Narrow areas that pond occasionally. Not in mapped hydric soils and no surface cornerction to ther waters. SN & cover of Juncus tenus, soils saturated to the surface sour and surface flow from adjacent development and railroad. Topography and distinct vegetation change defines boundary. Extends to contend water and surface flow from adjacent development and railroad. Topography and distinct vegetation	W-C2	34	45.430964	-122.759512	1.23		Slope	7	C4	"Knez Wetlands." Located in a low area that collects groundwater and surface flow from adjacent development. Topography and distinct vegetation change defines boundary. Extends to (and abuts) an incised waterway along the property boundary (S-C3) that drains to the west and thereby to an unnamed tributary to the Tualatin R. Primarily PEM and PSSC, but includes some ash PFO.
W-C4 31 45.438883 -122.748586 0.67 PFO Slope 13 C7 slowly toward the west and thereby to an unnamed tributary to the Tualatin R. Prima sah PFO, with an understory of PSS and PEM in places. W-Ca 36, 37 45.425999 -122.764230 0.48 PEM SLOPE W-Ca1 C8, C9, C10 Moved Imanaged grasses. Hydrology likely Hyd	W-C3	34	45.431067	-122.756922	0.60		Slope	9		Wetland in wide floodplain above OHW of small incised stream (S-C3). Drains west under I-5. Primarily PSSC, but includes some ash PFO.
W-Ca 36, 37 45.425999 -122.764230 0.48 PEM SLOPE W-Ca1 C8, C3, C10 Mowed/managed grasses. Hydrology likely from stormwater and seasonally high groundwater. Abuts D-Ca along SW boundary. Not allowed to dig for soil data on UP property. W-Cb 37, 38 45.425201 -122.762799 0.06 PEM/PFO SLOPE W-Cb1 C11 Portion of Wetland W-C1 located in railroad ROW. In mapped hydric soils. Located in low are that collects groundwater and surface flow from adjacent development. Topography and distinct vegetation change defines boundary. Extends to (and abuts C2, a tributary of Fanno Creek. Not allowed to dig for soil data on UPRR property. W-Cc 38, 39 45.421902 -122.759079 0.04 PEM DEP W-Cc1 C13 Narrow areas that pond occasionally. Not allowed to dig for soil data on UPRR property. W-Cd 40 45.418701 -122.754845 0.06 PEM/PFO DEP W-Cd1 C14 Soils mapped as non-hydric. Located in a low depressional area that collects ground and surface flow from adjacent development and railroad. Topography and distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No outlet identified. W-Cd 40 45.417900 -122.753823 0.07 PFO DEP W-Cf1 C15, C16 Soil mapped as partially hydric. Located in a low depressional are	W-C4	31	45.438883	-122.748586	0.67	PFO	Slope	13	C7	Located in a wide floodplain and riparian area, which contains wetland in places. Drains slowly toward the west and thereby to an unnamed tributary to the Tualatin R. Primarily ash PFO, with an understory of PSS and PEM in places.
W-Cb 37, 38 45.425201 -122.762799 0.06 PEM/PFO SLOPE W-Cb1 C11 Iow area that collects groundwater and surface flow from adjacent development. Topography and distinct vegetation change defines boundary. Extends to (and abuts C2, a tributary of Fanno Creek. Not allowed to dig for soil data on UPRR property. W-Cc 38, 39 45.421902 -122.759079 0.04 PEM DEP W-Cc1 C13 Narrow areas that pond occasionally. Not in mapped hydric soils and no surface connection to other waters. 5% cover of Juncus tenuis, soils saturated to the surface surface soil cracks observed. Not allowed to dig for soil data on UPRR property. W-Cd 40 45.418701 -122.754845 0.06 PEM/PFO DEP W-Cd1 C14 Soils mapped as non-hydric. Located in a low depressional area that collects and surface flow from adjacent development and railroad. Topography and distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No outlet identified. W-Crf 40 45.417900 -122.753823 0.07 PFO DEP W-Cg1 C15. C16 Soil mapped as partially hydric. Located in a low depressional area that collects groundwater and surface flow from adjacent development and railroad. Topography distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No o identified. W-Cg 40 45.417599 -122.753859 0.22 PFO	W-Ca	36, 37	45.425999	-122.764230	0.48	PEM	SLOPE	W-Ca1		Mowed/managed grasses. Hydrology likely from stormwater and seasonally high groundwater. Abuts D-Ca along SW boundary. Not allowed to dig for soil data on UPRR
W-Cc 38, 39 45.421902 -122.759079 0.04 PEM DEP W-Cc1 C13 connection to other waters. 5% cover of Juncus tenuis, soils saturated to the surface surface soil cracks observed. Not allowed to dig for soil data on UPRR property. W-Cd 40 45.418701 -122.754845 0.06 PEM/PFO DEP W-Cd1 C14 Soils mapped as non-hydric. Located in a low depressional area that collects ground and surface flow from adjacent development and railroad. Topography and distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No outlet identified. W-Cf 40 45.417900 -122.753823 0.07 PFO DEP W-Cf1 C15, C16 Soil mapped as partially hydric. Located in a low depressional area that collects ground water and surface flow from adjacent development and railroad. Topography and distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No outlet identified. W-Cg 40 45.417599 -122.753859 0.22 PFO DEP W-Cg1 Soil mapped as partially hydric. Located in a low depressional area that collects groundwater and surface flow from railcoad berms along all sides of the wetland. Topography and distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No o identified. W-Cg 40 45.417599 -122.753859 0.22 PFO DEP W-Cg1	W-Cb	37, 38	45.425201	-122.762799	0.06	PEM/PFO	SLOPE	W-Cb1	C11	Topography and distinct vegetation change defines boundary. Extends to (and abuts) S-
W-Cd 40 45.418701 -122.754845 0.06 PEM/PFO DEP W-Cd1 C14 and surface flow from adjacent development and railroad. Topography and distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No outlet identified. W-Cf 40 45.417900 -122.753823 0.07 PFO DEP W-Cf1 C15, C16 Soil mapped as partially hydric. Located in a low depressional area that collects groundwater and surface flow from adjacent development and railroad. Topography distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No outlet W-Cg 40 45.417900 -122.753823 0.07 PFO DEP W-Cf1 C15, C16 Soil mapped as partially hydric. Located in a low depressional area that collects groundwater and surface flow from railroad by Oregon ash; PFO. No or identified. W-Cg 40 45.417599 -122.753859 0.22 PFO DEP W-Cg1 Soil mapped as partially hydric. Located in a low depressional area that collects groundwater and surface flow from railroad berms along all sides of the wetland. Topography and distinct vegetation change defines boundary. Dominated by Oregon PFO. No outlet identified. Total 4.49 Soil mapped as partially hydric. Located in a low depressional area that collects groundwater and surface flow from railroad berms along all sides of the wetland. Topography and distinct v	W-Cc	38, 39	45.421902	-122.759079	0.04	PEM	DEP	W-Cc1	C13	connection to other waters. 5% cover of Juncus tenuis, soils saturated to the surface, and
W-Cf 40 45.417900 -122.753823 0.07 PFO DEP W-Cf1 C15, C16 groundwater and surface flow from adjacent development and railroad. Topography distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No o identified. W-Cg 40 45.417599 -122.753859 0.22 PFO DEP W-Cg1 Soil mapped as partially hydric. Located in a low depressional area that collects groundwater and surface flow from railroad berms along all sides of the wetland. Topography and distinct vegetation change defines boundary. Dominated by Oregon PFO. No outlet identified. Total 4.49 1- W = Wetland - and ID# 2- Size in study area is given in acres	W-Cd	40	45.418701	-122.754845	0.06	PEM/PFO	DEP	W-Cd1	C14	vegetation change defines boundary. Dominated by Oregon ash; PFO. No outlet
W-Cg 40 45.417599 -122.753859 0.22 PFO DEP W-Cg1 groundwater and surface flow from railroad berms along all sides of the wetland. Topography and distinct vegetation change defines boundary. Dominated by Oregor PFO. No outlet identified. Total 4.49 1- W = Wetland - and ID# 2- Size in study area is given in acres	W-Cf	40	45.417900	-122.753823	0.07	PFO	DEP	W-Cf1		groundwater and surface flow from adjacent development and railroad. Topography and distinct vegetation change defines boundary. Dominated by Oregon ash; PFO. No outlet
1- W = Wetland - and ID# 2- Size in study area is given in acres	W-Cg	40	45.417599	-122.753859	0.22	PFO	DEP	W-Cg1		groundwater and surface flow from railroad berms along all sides of the wetland. Topography and distinct vegetation change defines boundary. Dominated by Oregon ash
2- Size in study area is given in acres	Total				4.49					
	1- W = V	/etland - a	and ID#							
3. Cowardin Class: DEM - natustring emergent DSS - natustring scrub-shrub DEC - natustring forested										
4 HGM Class: DEP = depressional, RFT = riverine flow-through							o-shrub, P	FO = palustrine	forested	

Table 2: Waters, SW Corridor, Segment C

Name/ ID ¹	Sheet #(s)	Latitude	Longitude	Cowardin Class ²	ESH (Yes/No)	OHW Width (feet)	Photo Points	Preliminary jurisdiction estimation/ Additional Information for JD
S-C1	38	45.423306	-122.760312	R4	No	4	C1	Jurisdictional. Within the study area, this feature contains no vegetation within an incised, likely historically excavated, flowing, open water area. Drains to catch basin and thereby likely to Fanno Creek (outside study area). OHW 4' from drift lines, steep banks. Silt bottom.
S-C2	37	45.426498	-122.760725	R3	No	9	C2, C3	Jurisdictional. Stream (Red Rock Creek) in an incised channel. Drains to culvert and thereby west to Fanno Creek (outside study area). OHW 8-10' from scour, drift lines, steep banks - lies below the top of bank. Silt bottom.
S-C3	34	45.430966	-122.758869	R3	No	10	C4	Jurisdictional. Stream (Red Rock Creek) in an incised channel that runs through Knez wetlands and drains south outside study area. Reenters study area south of SW Hunziker Road, as S-C2. OHW from scour, drift lines, steep banks- lies below the top of bank. Silt bottom.
D-C1	32	45.435955	-122.748977	R6	No	1	C6	Non-jurisdictional roadside ditch. Discontinuous signs of scour. Not a relatively permanent water. Does not provide a hydrologic connection between two jurisdictional features. Does not provide habitat for food or game fish. Meets DSL roadside ditch exemptions.
S-C4	31	45.438689	-122.731027	R3	No	5	C7	Jurisdictional. Stream (Red Rock Creek) in an incised channel that flows below a wide floodplain and riparian area, which contains wetland in places. Portions of study area contain stream mitigation areas. OHW 8-10' from scour, drift lines, steep banks - lies below the top of bank. Silt bottom.
S-Ca	41	45.413502	-122.751000	R6	No	1.5	C19	Non-jurisdictional. Ephemeral erosional channel located along between railroad berm fill and adjacent slope. Drains only uplands along railroad track during rain events directly to Ball Creek (S-Cc). Evidence of flow including wrack accumulation and incised banks. English ivy adjacent to incised channel.
S-Cb	41	45.413899	-122.751000	R3	No	24	C18	Jurisdictional to USACE and DSL. Stream (Ball Creek) in an incised channel with steep banks and no adjacent wetlands in study area. Perennial. Banks lined with thick blackberry and reed canary grass. Big leaf maple and Douglas fir on upland banks. Coastal cuthroat trout; no salmonids. OHW determined by change in distinct change in elevation, vegetation, and substrate composition.
D-Ca	36, 37	45.426498	-122.764999	R4	No	3	C8, C9	Jurisdictional railroad ditch. Receives stormwater imputs and groundwater from adjacent W-Ca. Non-hydric soils. Flows SE to stormwater system. Adjacent to entire length of and drains W-Ca.
D-Cb	41	45.414501	-122.751999	R6	No	10	C17	Non-jurisdictional . Stormwater fed only. Drains SE to Ball Creek, a tributary of Fanno Creek. Entirely in mapped non-hydric soils. Not flowing but scattered shallow ponding observed during May 15, 2020 site visit.
D-Cc	43	45.405201	-122.747002	R6	No	3	C20	Non-jurisdictional Railroad Ditch. Ephemeral drainage alongside railroad fill. Drains to culvert under SW Upper Boones Ferry Rd. In mapped non-hydric soils.
D-Cd	44	45.403400	-122.745003	R6	No	6	C21	Non-jurisdictional Railroad Ditch. Ephemeral. Dry during May 15, 2020 site visit. No surfacewater connection to City of Tigard-mapped stormwater channel beyond fence along I-5 to south. In mapped non-hydric soils.
D-Ce	44	45.403400	-122.745003	R6	No	3	C22	Non-jurisdictional Railroad Ditch. Ephemeral. Dry during May 15, 2020 site visit. In mapped non-hydric soils and no adjacent wetlands identified.
D-Cf	37, 38	45.424702	-122.762001	R4	No	12	C12	Jurisdictional. Receives hydrology from stormwater outlet and from seasonally high groundwater. Drains directly to S-Ca (DEA-mapped stream), a tributary to Fanno Creek. Steep upland banks dominated by reed canary grass with scattered soft rush along ditch edges transitioning to blackberry. Ditch bottom unvegetated. In mapped hydric and partially hydric soils.
D-Cg	42	45.410099	-122.750000	R4	No	15		Non-jurisdictional. Stormwater channel daylighted between stormwater inlet and outlet culverts. Flowing during May 15, 2020 site visit. In mapped non-hydric soil and not a realigned stream channel.
2- Cowardii	n Riverine Cl	lass: R3 = Upper	tributary, D = ditc perennial, R4 = In or did not have sig	termittent, R6	i = Ephemera	I	ot assumed	I to be under Corps jurisdiction.

Ditches that did not meet wetland criteria or did not have signs of relatively permanent flow were not assumed to be under Corps jurisdiction.

All ditches in study area, except where specifically noted, met DSL exemption criteria for roadside ditches (i.e. <10ft wide, no fish, etc.)

See methods section of report for additional information on assumption of Corps and DSL jurisdictional determination of ditches.

APPENDIX E: WETS TABLE

SW Corridor Project Wetland Delineation Report November 2020

WETS Station: PORTLAND INTL AIRPORT, OR

Requested years: 1971 - 2000

	Temp	peratur	re (°F)		Precipitation (inches)							
Month	Avg daily	Avg daily	•	Avg		chance have	Avg number of days with 0.10 inch or more	Average total				
	max	min	mean		less than	ess than more than		snowfa				
Jan	46.0	34.6	40.3	5.07	2.98	6.15	12	1.1				
Feb	50.7	36.4	43.6	4.18	2.84	4.98	10	1.3				
Mar	56.4	39.3	47.8	3.71	2.85	4.31	10	0.1				
Apr	61.4	42.6	52.0	2.64	1.93	3.10	8	0.0				
May	67.7	48.1	57.9	2.38	1.44	2.88	7	0.0				
Jun	73.6	53.2	63.4	1.59	0.94	1.93	5	0.0				
Jul	80.1	57.4	68.7	0.72	0.33	0.86	2	0.0				
Aug	80.6	57.7	69.1	0.93	0.35	1.09	2	0.0				
Sep	75.6	52.8	64.2	1.65	0.72	1.93	4	0.0				
Oct	64.3	45.4	54.8	2.88	1.57	3.52	7	0.0				
Nov	52.5	40.0	46.3	5.61	3.72	6.73	13	0.6				
Dec	46.0	35.3	40.6	5.71	3.89	6.82	12	1.2				
Annual:					32.85	40.58						
Average	62.9	45.2	54.1	-	-	-	-	-				
Total	_	-	-	37.07			92	4.3				