



ATTACHMENT G3-4

Wetland Data Determination Forms

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 12/3/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-10-SP06
 Investigator(s): T. Parry, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.304181 Long: -122.303611 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November and within the normal range for visits within December. The month of November was drier than normal, and December was wetter than normal.

Remarks:
 Upland SP for WFW-10, Unit B. Located upslope of wetland, west of E. Fork Hylebos Creek Trib 0016A

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
		0% = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u>Rubus armeniacus</u>		80%	Yes	FAC	
2. <u>Rubus spectabilis</u>		20%	Yes	FAC	
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
		100% = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>none</u>					
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
6. <u> </u>					
7. <u> </u>					
8. <u> </u>					
9. <u> </u>					
10. <u> </u>					
11. <u> </u>					
		0% = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				
1. <u>none</u>					
2. <u> </u>					
		0% = Total Cover			
% Bare Ground in Herb Stratum	<u>100%</u>				

Remarks:

SOIL							Sampling Point: WFW-10-SP06	
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):								
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 3/2	100					L	
5-16	10YR 3/2	98	10YR 4/6	2	C	M	GrL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):			Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: <u>none</u> Depth (inches): <u>n/a</u>	Hydric Soil Present? Yes <u> </u> No <u> X </u>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u> X </u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 12/3/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-10-SP07
 Investigator(s): T. Parry, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): flat bench Local relief (concave, convex, none): none Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.303639 Long: -122.303835 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November and within the normal range for visits within December. The month of November was drier than normal, and December was wetter than normal.

Remarks:
 PFO wetland SP in WFW-10, Unit B. Located approx. 3 m east of OHWM of E. Fork Hylebos Creek Trib 0016A

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 1 </u> (A) Total Number of Dominant Species Across All Strata: <u> 1 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
		0% = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				
1. <u>none</u>					
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
		0% = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u>Phalaris arundinacea</u>		90%	Yes	FACW	
2. <u>Ranunculus repens</u>		7%	No	FAC	
3. <u>Poa pratensis</u>		2%	No	FAC	
4. <u>Galium aparine</u>		1%	No	FACU	
5. <u> </u>					
6. <u> </u>					
7. <u> </u>					
8. <u> </u>					
9. <u> </u>					
10. <u> </u>					
11. <u> </u>					
		100% = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>none</u>					
2. <u> </u>					
		0% = Total Cover			
% Bare Ground in Herb Stratum		0%			

Remarks:

SOIL							Sampling Point: WFW-10-SP07	
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):								
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 3/2	100					GrL	
5-16	10YR 2/2	95	10YR 4/6	5	C	M	GrL	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ³ Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)								
Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):				Indicators for Problematic Hydric Soils³:				
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)					
<input type="checkbox"/> Thick Dark Surface (A12)			<input checked="" type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.								
Restrictive Layer (if present):				Hydric Soil Present?				
Type: none				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
Depth (inches): n/a								
Remarks:								
HYDROLOGY								
Wetland Hydrology Indicators:								
Primary Indicators (minimum of one required; check all that apply)				Secondary Indicators (2 or more required)				
<input type="checkbox"/> Surface Water (A1)			<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)			<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)		
<input checked="" type="checkbox"/> High Water Table (A2)			<input type="checkbox"/> Salt Crust (B11)			<input type="checkbox"/> Drainage Patterns (B10)		
<input checked="" type="checkbox"/> Saturation (A3)			<input type="checkbox"/> Aquatic Invertebrates (B13)			<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Water Marks (B1)			<input type="checkbox"/> Hydrogen Sulfide Odor (C1)			<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Sediment Deposits (B2)			<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)			<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Drift Deposits (B3)			<input type="checkbox"/> Presence of Reduced Iron (C4)			<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Algal Mat or Crust (B4)			<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)			<input checked="" type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Iron Deposits (B5)			<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)			<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Surface Soil Cracks (B6)			<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)								
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)								
Field Observations:				Wetland Hydrology Present?				
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	11				
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches):	9				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Remarks:								

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 12/3/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-10-SP08
 Investigator(s): T. Parry, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): flat stream bench Local relief (concave, convex, none): none Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.303661 Long: -122.303870 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: R4SBC
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November and within the normal range for visits within December. The month of November was drier than normal, and December was wetter than normal.

Remarks:
 upland SP of WFW10, Unit B. Located approx. 6m east of E. Fork Hylebos Creek (and 3m east of wetland SP WFW10-SP5).

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 3 </u> (A) Total Number of Dominant Species Across All Strata: <u> 3 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
		<u>0%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus armeniacus</u>		<u>5%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
		<u>5%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Poa pratensis</u>		<u>45%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Phalaris arundinacea</u>		<u>35%</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Ranunculus repens</u>		<u>18%</u>	<u>No</u>	<u>FAC</u>	
4. <u>Galium aparine</u>		<u>2%</u>	<u>No</u>	<u>FACU</u>	
5. <u> </u>					
6. <u> </u>					
7. <u> </u>					
8. <u> </u>					
9. <u> </u>					
10. <u> </u>					
11. <u> </u>					
		<u>100%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				
1. <u>none</u>					
2. <u> </u>					
		<u>0%</u> = Total Cover			
% Bare Ground in Herb Stratum		<u>0%</u>			

Remarks:

SOIL							Sampling Point: WFW-10-SP08
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):							
Depth	Matrix		Redox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture
0-4	10YR 2/2	100					GrL
4-10	10YR 2/2	70					GrL
	10YR 3/6	30					GrL
10-16	10YR 3/6	100					GrL
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ³ Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)							
Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):				Indicators for Problematic Hydric Soils³:			
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)				
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.							
Restrictive Layer (if present):				Hydric Soil Present?			
Type: <u>none</u>				Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Depth (inches): <u>n/a</u>							
Remarks: appears to be fill material							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indicators (2 or more required)			
<u>Primary Indicators (minimum of one required; check all that apply)</u>							
<input type="checkbox"/> Surface Water (A1)			<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)			<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)			<input type="checkbox"/> Salt Crust (B11)			<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)			<input type="checkbox"/> Aquatic Invertebrates (B13)			<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)			<input type="checkbox"/> Hydrogen Sulfide Odor (C1)			<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)			<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)			<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)			<input type="checkbox"/> Presence of Reduced Iron (C4)			<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)			<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)			<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)			<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)			<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)			<input type="checkbox"/> Other (Explain in Remarks)			<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)							
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)							
Field Observations:				Wetland Hydrology Present?			
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>				
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:							

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 12/5/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-10-SP09
 Investigator(s): T. Parry, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.304739 Long: -122.303713 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November and within the normal range for visits within December. The month of November was drier than normal, and December was wetter than normal.

Remarks:
 PFO wetland SP in WFW10, Unit C. SP positioned on a terrace to the east of E. Fork Hylebos Creek Trib 0016A

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 3 </u> (A) Total Number of Dominant Species Across All Strata: <u> 5 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
1.	<u>Alnus rubra</u>	<u>90%</u>	<u>Yes</u>	<u>FAC</u>	
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>90%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1.	<u>Rubus spectabilis</u>	<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
2.	<u>Rubus armeniacus</u>	<u>15%</u>	<u>Yes</u>	<u>FAC</u>	
3.	<u>Rubus ursinus</u>	<u>15%</u>	<u>Yes</u>	<u>FACU</u>	
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>70%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1.	<u>none</u>	<u> </u>	<u> </u>	<u> </u>	
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
6.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
7.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
8.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
9.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
10.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
11.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>0%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1.	<u>Hedera helix</u>	<u>100%</u>	<u>Yes</u>	<u>FACU</u>	
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>100%</u> = Total Cover			
% Bare Ground in Herb Stratum <u> 0%</u>					

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10YR 2/2	100					GrCL	
11-17	5Y 5/2	70	10YR 5/6	25	C	M	C	
			7.5YR 5/8	5	C	M	C	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histic Sol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
	<input type="checkbox"/> 2 cm Muck (A10)
	<input type="checkbox"/> Red Parent Material (TF2)
	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: <u>none</u> Depth (inches): <u>n/a</u>	Hydric Soil Present? Yes <u>X</u> No <u> </u>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
<u>Primary Indicators (minimum of one required; check all that apply)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Saturation Present? Yes <u> x </u> No <u> </u> Depth (inches): <u> 11 </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 12/5/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-10-SP10
 Investigator(s): T. Parry, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.304735 Long: -122.303799 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: R4SBC
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally 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 <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			

Precipitation:

According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November and within the normal range for visits within December. The month of November was drier than normal, and December was wetter than normal.

Remarks:

Upland SP in WFW-10, Unit C. SP positioned above stream terrace to the east of E. Fork Hylebos Creek Trib 0016A

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
1. <u><i>Alnus rubra</i></u>		<u>100%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>100%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u><i>Rubus spectabilis</i></u>		<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u><i>Sambucus racemosa</i></u>		<u>30%</u>	<u>Yes</u>	<u>FACU</u>	
3. <u><i>Rubus ursinus</i></u>		<u>25%</u>	<u>Yes</u>	<u>FACU</u>	
4. <u><i>Rubus ameniacus</i></u>		<u>5%</u>	<u>No</u>	<u>FAC</u>	
5. <u><i>Ilex aquifolium</i></u>		<u>5%</u>	<u>No</u>	<u>FACU</u>	
		<u>105%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u><i>Polystichum munitum</i></u>		<u>15%</u>	<u>Yes</u>	<u>FACU</u>	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>15%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u><i>Hedera helix</i></u>		<u>50%</u>	<u>Yes</u>	<u>FACU</u>	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>50%</u> = Total Cover			
% Bare Ground in Herb Stratum		<u>35%</u>			

Remarks:

ground covered by leaf litter



ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

Project No.: 554-1800-019 and -030

US Army Corps of Engineers
Western Mountains, Valleys, and Coast Region (Version 2.0)

SOIL							Sampling Point: WFW-10-SP10
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):							
Depth	Matrix		Redox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture
0-13	10YR 2/2	100					L
13-17	10YR 3/3	95	7.5YR 4/6	5	C	M	CL

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):			Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: <u>none</u> Depth (inches): <u>n/a</u>	Hydric Soil Present? Yes <u> </u> No <u> X </u>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u> X </u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 1/21/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-10-SP11
 Investigator(s): A. Hoenig, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): >10%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.303131 Long: -122.303800 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally 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 <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was normal for the three months prior to the site visits in January. The month of Decement was wet, November was dry and October was normal.

Remarks:
 Upland SP to WFW-10 Unit C, SP located between driveway and stream bank east of East Hylebos Creek Trib 0016A

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 1 </u> (A) Total Number of Dominant Species Across All Strata: <u> 2 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 50% </u> (A/B)	
1.	<u>Pseudotsuga menziesii</u>	<u>70%</u>	<u>Yes</u>	<u>FACU</u>		
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
		<u>70%</u> = Total Cover				
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				Prevalence Index worksheet: <u> </u> Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>	
1.	<u>none</u>	<u> </u>	<u> </u>	<u> </u>		
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
		<u>0%</u> = Total Cover				
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.	
1.	<u>Phalaris arundinacea</u>	<u>80%</u>	<u>Yes</u>	<u>FACW</u>		
2.	<u>Agrostis sp.</u>	<u>15%</u>	<u>No</u>	<u>FAC*</u>		
3.	<u>Hypochaeris radicata</u>	<u>3%</u>	<u>No</u>	<u>FACU</u>		
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
5.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
6.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
7.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
8.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
9.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
10.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
11.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
		<u>98%</u> = Total Cover				
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	
1.	<u>none</u>	<u> </u>	<u> </u>	<u> </u>		
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
		<u>0%</u> = Total Cover				
% Bare Ground in Herb Stratum		<u>2%</u>				

Remarks:
 *presumed FAC

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-15	10YR 2/2	100					GrSaL	cobbles
15-16	10YR 3/3	90	10YR 4/6	10	C	M	GrSaL	cobbles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p>Restrictive Layer (if present):</p> <p style="margin-left: 20px;">Type: <u>none</u></p> <p style="margin-left: 20px;">Depth (inches): <u>n/a</u></p>	<p>Hydric Soil Present? Yes <u> </u> No <u> X </u></p>
--	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<u> </u> High Water Table (A2)	<u> </u> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<u> </u> Saturation (A3)	<u> </u> Drainage Patterns (B10)
<u> </u> Water Marks (B1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Drift Deposits (B3)	<u> </u> Geomorphic Position (D2)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Shallow Aquitard (D3)
<u> </u> Iron Deposits (B5)	<u> </u> FAC-Neutral Test (D5)
<u> </u> Surface Soil Cracks (B6)	<u> </u> Raised Ant Mounds (D6) (LRR A)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Frost-Heave Hummocks (D7)
<u> </u> Sparsely Vegetated Concave Surface (B8)	

<p>Field Observations:</p> <p>Surface Water Present? Yes <u> </u> No <u> X </u> Depth (inches): <u> </u></p> <p>Water Table Present? Yes <u> </u> No <u> X </u> Depth (inches): <u> </u></p> <p>Saturation Present? Yes <u> </u> No <u> X </u> Depth (inches): <u> </u></p> <p>(includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <u> </u> No <u> X </u></p>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 1/21/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-10-SP12
 Investigator(s): A. Hoenig, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): convex Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.303121 Long: -122.303895 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: R4SBC
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil X, or Hydrology naturally 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was normal for the three months prior to the site visits in January. The month of Decement was wet, November was dry and October was normal.

Remarks:
 WFW10-Unit C. Emergent sample point within PFO wetland vegetation unit. Located on right bank within floodplain near E. Hylebos RB401 OHWM flag, 3m north of double culvert within OHWLs.
 Problematic Soil: lack of indicators but appears to be a fluvial entisol with aquic moisture regime. Geomorphic position, strong hydrophytic vegetation and wetland hydrology support determination of wetland area.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 2 </u> (A) Total Number of Dominant Species Across All Strata: <u> 2 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
		<u>0%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				
1. <u>Rubus armeniacus</u>		<u>20%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
		<u>20%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				
1. <u>Phalaris arundinacea</u>		<u>99%</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Ranunculus repens</u>		<u>1%</u>	<u>No</u>	<u>FAC</u>	
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
6. <u> </u>					
7. <u> </u>					
8. <u> </u>					
9. <u> </u>					
10. <u> </u>					
11. <u> </u>					
		<u>100%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				
1. <u>none</u>					
2. <u> </u>					
		<u>0%</u> = Total Cover			
% Bare Ground in Herb Stratum		<u>0%</u>			

Remarks:

SOIL **Sampling Point: WFW-10-SP12**

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 2/2	100					GrL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Sol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):	Hydric Soil Present?
Type: none	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Depth (inches): n/a	

Remarks:
 No hydric soil indicator met, SP located within the floodplain of a stream. Fluvial entisol with aquatic moisture regime. Soil is hydric based on strong vegetation and hydrology indicators.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
<u>Primary Indicators (minimum of one required: check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:	Wetland Hydrology Present?
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 2"	
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): surface	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 1/21/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-10-SP13
 Investigator(s): A. Hoenig, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 3-5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.303221 Long: -122.303937 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: R4SBC
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil X, or Hydrology naturally 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was normal for the three months prior to the site visits in January. The month of Decement was wet, November was dry and October was normal.

Remarks:
 PFO wetland SP on right bank of East Hylebos Creek Trib 0016A, above OHWL.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 3 </u> (A) Total Number of Dominant Species Across All Strata: <u> 3 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1.	<u>Alnus rubra</u>	<u>70%</u>	<u>Yes</u>	<u>FAC</u>	
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>70%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				
1.	<u>Rubus spectabilis</u>	<u>25%</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
2.	<u>Rubus armeniacus</u>	<u>20%</u>	<u>Yes</u>	<u>FAC</u>	
3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>45%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				
1.	<u>none</u>	<u> </u>	<u> </u>	<u> </u>	
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
6.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
7.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
8.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
9.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
10.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
11.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>0%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				
1.	<u>none</u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>0%</u> = Total Cover			
% Bare Ground in Herb Stratum		<u>100%</u>			

Remarks:

SOIL							Sampling Point:	WFW-10-SP13
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):								
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 3/1	100					L	slightly greasy
8-16	10YR 3/1	95	7.5YR 3/4	5	C	M	GrL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):			Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):	Hydric Soil Present?
Type: <u>none</u>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Depth (inches): <u>n/a</u>	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:				Wetland Hydrology Present?
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<u> </u>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>8</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>7</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 11/1/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-11-SP1
 Investigator(s): A. Hoenig, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): None
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.303850 Long: -122.302638 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No x (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 PFO wetland SP, located east of 24th Ave. S

VEGETATION

<u>Tree Stratum</u>	<u>(Plot size: r=3m)</u>	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
1. <u>Populus balsamifera</u>		<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
2. _____		_____	_____	_____	
3. _____		_____	_____	_____	
4. _____		_____	_____	_____	
		<u>40%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	<u>(Plot size: r=2m)</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>Rubus laciniatus</u>		<u>25%</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Spiraea douglasii</u>		<u>15%</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Lonicera involucrata</u>		<u>10%</u>	<u>No</u>	<u>FAC</u>	
4. <u>Oemleria cerasiformis</u>		<u>5%</u>	<u>No</u>	<u>FACU</u>	
5. <u>Cornus alba</u>		<u>5%</u>	<u>No</u>	<u>FACW</u>	
		<u>70%*</u> = Total Cover			
<u>Herb Stratum</u>	<u>(Plot size: r=1m)</u>				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u>Ranunculus repens</u>		<u>15%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Phalaris arundinacea</u>		<u>5%</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Solanum dulcamara</u>		<u>1%</u>	<u>No</u>	<u>FAC</u>	
4. <u>Geum macrophyllum</u>		<u>1%</u>	<u>No</u>	<u>FAC</u>	
5. <u>Epilobium ciliatum</u>		<u>1%</u>	<u>No</u>	<u>FACW</u>	
6. _____		_____	_____	_____	
7. _____		_____	_____	_____	
8. _____		_____	_____	_____	
9. _____		_____	_____	_____	
10. _____		_____	_____	_____	
11. _____		_____	_____	_____	
		<u>23%</u> = Total Cover			
<u>Woody Vine Stratum</u>	<u>(Plot size: r=2m)</u>				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>Hedera helix</u>		<u>10%</u>	<u>Yes</u>	<u>FACU</u>	
2. _____		_____	_____	_____	
		<u>10%</u> = Total Cover			
% Bare Ground in Herb Stratum		<u>67%</u>			

Remarks:
 * Fraxinus latifolia, 5%, no, FACW
 * Rubus ursinus, 5%, no, FACU
 ground covered by leaf litter

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-5	10YR 3/2	100					L	
5-7	2.5Y 4/2	85	2.5Y 6/2	10	D	M	L	
			10YR 5/6	5	C	M	L	
7-16	10YR 6/2	65					L	
	10YR 4/2	20	10YR 4/6	15	C	M	L	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: <u>none</u> Depth (inches): <u>n/a</u>	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>4</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 11/1/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-11-SP2
 Investigator(s): A. Hoenig, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.303783 Long: -122.302703 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No x (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 upland SP of WFW11. SP located east of 24th Ave S

VEGETATION

<u>Tree Stratum</u> (Plot size: <u>r=3m</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
1. <u>Acer circinatum</u>	<u>50%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Pseudotsuga menziesii</u>	<u>40%</u>	<u>Yes</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>90%</u> = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>r=2m</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. <u>Gaultheria shallon</u>	<u>60%</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Corylus cornuta</u>	<u>15%</u>	<u>No</u>	<u>FACU</u>	
3. <u>Rubus laciniatus</u>	<u>10%</u>	<u>No</u>	<u>FACU</u>	
4. <u>Symphoricarpos albus</u>	<u>5%</u>	<u>No</u>	<u>FACU</u>	
5. <u>Mahonia nervosa</u>	<u>2%</u>	<u>No</u>	<u>FACU</u>	
<u>93%*</u> = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>r=1m</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. <u>Chamaenerion angustifolium (dead)</u>	<u>2%</u>	<u>No</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>2%</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>r=1m</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. <u>none</u>	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0%</u> = Total Cover				
% Bare Ground in Herb Stratum	<u>100%</u>			

Remarks:
 * Ilex aquifolium, 1%, No, FACU

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-2	10YR 2/2	100					L	
2-5	7.5YR 2.5/2	100					L	
5-16	7.5YR 3/4	100					L	some gravel

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted): <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
--	--

Restrictive Layer (if present): Type: <u>none</u> Depth (inches): <u>n/a</u>	<table border="0"> <tr> <td>Hydric Soil Present?</td> <td>Yes <input type="checkbox"/></td> <td>No <input checked="" type="checkbox"/></td> </tr> </table>	Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required: check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (2 or more required) <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	<table border="0"> <tr> <td>Wetland Hydrology Present?</td> <td>Yes <input type="checkbox"/></td> <td>No <input checked="" type="checkbox"/></td> </tr> </table>	Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 11/19/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: **WFW-11-SP3**
 Investigator(s): S. Krueger, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): None
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.304059 Long: -122.302397 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No x (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 PEM wetland SP, located in NW corner of WFW11

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>1m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
0% = Total Cover					
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>1m</u>)				
1. <u>Rubus armeniacus</u>		<u>5%</u>	<u>Yes</u>	<u>FAC</u>	
2. _____					
3. _____					
4. _____					
5. _____					
5% = Total Cover					
<u>Herb Stratum</u>	(Plot size: <u>1m</u>)				
1. <u>Phalaris arundinacea</u>		<u>98%</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Ranunculus repens</u>		<u>2%</u>	<u>No</u>	<u>FAC</u>	
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
100% = Total Cover					
<u>Woody Vine Stratum</u>	(Plot size: <u>1m</u>)				
1. <u>none</u>					
2. _____					
0% = Total Cover					
% Bare Ground in Herb Stratum <u>0%</u>					

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-2	10YR 2/2	100					SaL	
2-10	10YR 3/2	90	10YR 5/6	10	C	M	SaL	
10-16	10YR 3/2	95	5Y 5/1	5	D	M	SaL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: <u>none</u> Depth (inches): <u>n/a</u>	Hydric Soil Present? Yes <u>X</u> No <u> </u>
---	---

Remarks:
lots of large rock on surface

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations: Surface Water Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Water Table Present? Yes <u> x </u> No <u> </u> Depth (inches): <u> 4.5 </u> Saturation Present? Yes <u> x </u> No <u> </u> Depth (inches): <u> 0 </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> X </u> No <u> </u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 11/19/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-11-SP4
 Investigator(s): S. Krueger, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): road slope Local relief (concave, convex, none): none Slope (%): 3-5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.304125 Long: -122.302397 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 % slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No x (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Yes _____		No <u>X</u>	

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 upland SP for WFW11, located approx. 2m east of 24th Ave S.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>1m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)	
1. <u>none</u>						Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____						
3. _____						
4. _____						
		0% = Total Cover				
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>1m</u>)					
1. <u>Rubus armeniacus</u>		30%	Yes	FAC	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.	
2. <u>Rubus spectabilis</u>		5%	No	FAC		
3. _____						
4. _____						
5. _____						
		35% = Total Cover				
<u>Herb Stratum</u>	(Plot size: <u>1m</u>)					
1. <u>Schedonorus arundinaceus</u>		70%	Yes	FAC		
2. <u>Ranunculus repens</u>		10%	No	FAC		
3. <u>Galium aparine</u>		5%	Yes	FACU		
4. <u>Phalaris arundinacea</u>		5%	Yes	FACW		
5. _____						
6. _____						
7. _____						
8. _____						
9. _____						
10. _____						
11. _____						
		90% = Total Cover				
<u>Woody Vine Stratum</u>	(Plot size: <u>1m</u>)					
1. <u>none</u>					Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
2. _____						
		0% = Total Cover				
% Bare Ground in Herb Stratum		<u>10%</u>				

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-3	10YR 3/2	100					L	
3-17	10YR 3/2	98	10YR 6/6	2	C	M	L	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: none
 Depth (inches): n/a

Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
-----------------------------	------------------------------	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <input type="text"/>

Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
-----------------------------------	------------------------------	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 11/14/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: **WFW-12-SP1**
 Investigator(s): S. Krueger, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): stream bench Local relief (concave, convex, none): none Slope (%): None
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.307100 Long: -122.302974 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 percent slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No x (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No x
 Are Vegetation _____, Soil x, or Hydrology _____ naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 PEM wetland SP for WFW-12. Associated with East Fork Hylebos Creek Trib 0016A. Located at toe of slope near culvert OHWM flag EH-LB35 and 37. Problematic soils: No hydric soils indicators, but rganics may be masking redox features, as well as fluvial entisol with aquic moisture regime

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>1m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
0% = Total Cover					
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>1m</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
5. _____					
0% = Total Cover					
<u>Herb Stratum</u>	(Plot size: <u>1m</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>Phalaris arundinacea</u>		90%	Yes	FACW	
2. <u>Ranunculus repens</u>		5%	No	FAC	
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
95% = Total Cover					
<u>Woody Vine Stratum</u>	(Plot size: <u>1m</u>)				
1. _____					
2. _____					
0% = Total Cover					
% Bare Ground in Herb Stratum <u>5%</u>					

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-6	10YR 2/2	100				CL	OM - roots
7-17	5Y 4/1	100				L	roots throughout

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

<p>Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):</p> <p><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input checked="" type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
---	---

Restrictive Layer (if present):

Type: none

Depth (inches): n/a

Hydric Soil Present? Yes X No

Remarks:
 Sample point is approximately 2m from wetted stream and is within the floodplain. The stream has been highly modified. Soils have high organic content. Fluvial entisol with aquatic moisture regime. Strong hydrophytic vegetation and hydrology and geomorphic position support the determination of wetland.

HYDROLOGY

Wetland Hydrology Indicators:	
<p><u>Primary Indicators (minimum of one required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11)</p> <p><input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (2 or more required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input checked="" type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>

Field Observations:

Surface Water Present? Yes No x Depth (inches):

Water Table Present? Yes x No Depth (inches): 7

Saturation Present? Yes x No Depth (inches): surface

(includes capillary fringe)

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 11/14/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: **WFW-12-SP2**
 Investigator(s): S. Krueger, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): >10%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.307101 Long: -122.302950 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 percent slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No x (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Yes _____		No <u>X</u>	

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 Upland SP for WFW-12. Located on fill slope near stream bench between OHWM flag LB36 and 37.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>1m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
0% = Total Cover					
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>1m</u>)				
1. <u>Rubus armeniacus</u>		1%	No	FAC	
2. _____					
3. _____					
4. _____					
5. _____					
1% = Total Cover					
<u>Herb Stratum</u>	(Plot size: <u>1m</u>)				
1. <u>Barbarea vulgaris</u>		5%	Yes	FAC	
2. <u>Festuca rubra</u>		2%	Yes	FAC	
3. <u>Ranunculus repens</u>		1%	no	FAC	
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
8% = Total Cover					
<u>Woody Vine Stratum</u>	(Plot size: <u>1m</u>)				
1. <u>none</u>					
2. _____					
0% = Total Cover					
% Bare Ground in Herb Stratum <u>92%</u>					

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-11	10YR 4/3	99	10YR 6/6	<1	C	M	GrL	
11-16	10YR 4/3	100					Sa	sm-med gravel

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

<p>Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):</p> <p><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
---	--

<p>Restrictive Layer (if present):</p> <p>Type: <u>none</u></p> <p>Depth (inches): <u>n/a</u></p>	<p>Hydric Soil Present?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
--	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
<p><u>Primary Indicators (minimum of one required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (2 or more required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>

<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p>	<p>Wetland Hydrology Present?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 11/26/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-13-SP1
 Investigator(s): A. Thom, A. Hoenig Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.302502 Long: -122.302818 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 percent slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No x (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 PSS wetland SP in middle of ditch, which runs north-south parallel to I-5. It is located southeast of S 333rd St.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>85cm²</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
		<u>0%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>85cm²</u>)				
1. <u>Rubus armeniacus</u>		<u>5%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
		<u>5%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>85cm²</u>)				
1. <u>none</u>					
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
6. <u> </u>					
7. <u> </u>					
8. <u> </u>					
9. <u> </u>					
10. <u> </u>					
11. <u> </u>					
		<u>0%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>85cm x 1m</u>)				
1. <u>none</u>					
2. <u> </u>					
		<u>0%</u> = Total Cover			
% Bare Ground in Herb Stratum	<u>100%</u>				

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-8	10YR 3/2	100					L	cobble and gravel
8-14	10YR 4/1	85	7.5YR 4/6	5	C	M	SaL	gravel
14-17	2.5Y 6/1	70	7.5YR 4/4	30	C	M	C	gravel

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: <u>clay and gravel compacted</u> Depth (inches): <u>17</u>	Hydric Soil Present? Yes <u>X</u> No <u> </u>
---	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Saturation Present? Yes <u> x </u> No <u> </u> Depth (inches): <u> 8 </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> X </u> No <u> </u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 11/26/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-13-SP2
 Investigator(s): A. Hoenig, M. Murphy Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 3-5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.302510 Long: -122.302856 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 percent slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No x (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 Upland SP for WFW-13. Located west of SP-1 and west of the wetland within the WSDOT I-5 ROW.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m²</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
		0% = Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>r=2m²</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u>Rubus armeniacus</u>		100%	Yes	FAC	
2. _____					
3. _____					
4. _____					
5. _____		100% = Total Cover			
Herb Stratum	(Plot size: <u>r=1m²</u>)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. <u>Polystichum munitum</u>		25%	Yes	FACU	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____		25% = Total Cover			
Woody Vine Stratum	(Plot size: <u>r=2m²</u>)				
1. <u>none</u>					
2. _____					
		0% = Total Cover			
% Bare Ground in Herb Stratum <u>75%</u>					

Remarks:

SOIL						Sampling Point: WFW-13-SP2		
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):								
Depth	Matrix		Redox Features			Texture	Remarks	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/1	100					SaL	
4-8	10YR 4/2	100					GSaL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
Type: gravel
Depth (inches): 8"

Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
-----------------------------	------------------------------	--

Remarks:
dense gravel starts at 4", cannot excavate below 8"

HYDROLOGY

Wetland Hydrology Indicators:

<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____

Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
-----------------------------------	------------------------------	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

Project No.: 554-1800-019 and -030

US Army Corps of Engineers
Western Mountains, Valleys, and Coast Region (Version 2.0)

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way/King Sampling Date: 12/3/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-14-SP1
 Investigator(s): _____ Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): concave Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.301029 Long: -122.304361 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 percent slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks)
 Are Vegetation x, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u> No _____	Is the Sampled Area within a Wetland?
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was within the normal range for the three months prior to the site visit in December.

Remarks:
 PEM wetland SP positioned in a swale that conveys water stormwater from the condo complex south to the East Fork Hylebos Creek Trib 0016A through a pipe. Vegetation is regularly maintained.

VEGETATION

<u>Tree Stratum</u> (Plot size: <u>r=3m</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
0% = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>r=2m</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u>none</u>	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0% = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>r=1m</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>Poa pratensis</u>	<u>55%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Ranunculus repens</u>	<u>30%</u>	<u>Yes</u>	<u>FAC</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
85% = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>r=2m</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	
1. <u>none</u>	_____	_____	_____	
2. _____	_____	_____	_____	
0% = Total Cover				
% Bare Ground in Herb Stratum	<u>15%</u>			

Remarks:

SOIL							Sampling Point:	WFW-14-SP1
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):								
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 4/2	100					L	
3-13	2.5Y 4/2	90	7.5YR 5/8	10	C	M/PL	SaL	oxidiz. Rhizo.; cobbles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input checked="" type="checkbox"/> x Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: <u>cobbles compaction</u> Depth (inches): <u>13</u>	Hydric Soil Present? Yes <u>X</u> No <u> </u>
--	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> x Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input checked="" type="checkbox"/> x Oxidized Rhizospheres along Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Surface Water Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u>	
Water Table Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u>	
Saturation Present? (includes capillary fringe) Yes <u> </u> No <u>x</u> Depth (inches): <u> </u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 SP in swale that receives stormwater input. Oxidized rhizospheres at 3"

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way/King Sampling Date: 12/3/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-14-SP2
 Investigator(s): T. Parry, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): >10%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.300974 Long: -122.304379 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 percent slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No x
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was within the normal range for the three months prior to the site visit in December.

Remarks:
 Upland SP to WFW-14. Located to the east of SP-1 and east of the wetland. It is uplope of the swale. Vegetation regularly maintained and mowed.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1.	<u>none</u>	_____	_____	_____	
2.	_____	_____	_____	_____	
3.	_____	_____	_____	_____	
4.	_____	_____	_____	_____	
		0% = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present.
1.	<u>none</u>	_____	_____	_____	
2.	_____	_____	_____	_____	
3.	_____	_____	_____	_____	
4.	_____	_____	_____	_____	
5.	_____	_____	_____	_____	
		0% = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1.	<u>Poa pratensis</u>	50%	Yes	FAC	
2.	<u>Pteridium aquilinum</u>	10%	No	FACU	
3.	_____	_____	_____	_____	
4.	_____	_____	_____	_____	
5.	_____	_____	_____	_____	
6.	_____	_____	_____	_____	
7.	_____	_____	_____	_____	
8.	_____	_____	_____	_____	
9.	_____	_____	_____	_____	
10.	_____	_____	_____	_____	
11.	_____	_____	_____	_____	
		60% = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.	<u>none</u>	_____	_____	_____	
2.	_____	_____	_____	_____	
		0% = Total Cover			
% Bare Ground in Herb Stratum		<u>40%</u>			

Remarks:
 vegetation regularly maintained and mowed.

SOIL							Sampling Point:	WFW-14-SP2
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):								
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2	10YR 3/3	100					CL	
2-4	10YR 4/6	100					CL	
4-11	2.5Y 5/3	97	2.5Y 5/4	3	C	M	GrCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Red Parent Material (TF2)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)				
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)				
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

Restrictive Layer (if present): Type: <u>compaction</u> Depth (inches): <u>11</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way/King Sampling Date: 12/3/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-14-SP3
 Investigator(s): T. Parry, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.300822 Long: -122.304254 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 percent slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was within the normal range for the three months prior to the site visit in December.

Remarks:
 Upland SP in slight depression north of S 336th St, east of wetland WFW-14, and west of the apartment building cross road.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1.	<u>Alnus rubra</u>	<u>100%</u>	<u>Yes</u>	<u>FAC</u>	
2.	_____	_____	_____	_____	
3.	_____	_____	_____	_____	
4.	_____	_____	_____	_____	
		<u>100%</u> = Total Cover			Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.	<u>Acer circinatum</u>	<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
2.	<u>Rubus ameniacus</u>	<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
3.	_____	_____	_____	_____	
4.	_____	_____	_____	_____	
5.	_____	_____	_____	_____	
		<u>80%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present.
1.	<u>none</u>	_____	_____	_____	
2.	_____	_____	_____	_____	
3.	_____	_____	_____	_____	
4.	_____	_____	_____	_____	
5.	_____	_____	_____	_____	
6.	_____	_____	_____	_____	
7.	_____	_____	_____	_____	
8.	_____	_____	_____	_____	
9.	_____	_____	_____	_____	
10.	_____	_____	_____	_____	
11.	_____	_____	_____	_____	
		<u>0%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.	<u>none</u>	_____	_____	_____	
2.	_____	_____	_____	_____	
		<u>0%</u> = Total Cover			
% Bare Ground in Herb Stratum <u>100%</u>					

Remarks:
 leaf litter covering ground

SOIL						Sampling Point: WFW-14-SP3		
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):								
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-17	10YR 2/2	100					L	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: S = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):			Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: <u>none</u> Depth (inches): <u>n/a</u>	Hydric Soil Present? Yes <u> </u> No <u> X </u>
---	---

Remarks:
 No redoximorphic features were detected. No assumption of hydric soil because only supported by moderate hydrophytic vegetation but lacks wetland hydrology and geomorphic position.

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u> x </u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u> X </u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 12/5/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-15-SP1
 Investigator(s): T. Parry, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.301297 Long: -122.303442 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 percent slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 PFO wetland SP is positioned on a terrace to the east of East Hylebos Creek Trib 0016A

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>1=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
1. <u><i>Alnus rubra</i></u>		<u>90%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>90%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>1=2m</u>)				
1. <u><i>Rubus spectabilis</i></u>		<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u><i>Rubus armeniacus</i></u>		<u>15%</u>	<u>Yes</u>	<u>FAC</u>	
3. <u><i>Rubus ursinus</i></u>		<u>15%</u>	<u>Yes</u>	<u>FACU</u>	
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>70%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>1=1m</u>)				
1. <u><i>None</i></u>		<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>0%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>1=2m</u>)				
1. <u><i>Hedera helix</i></u>		<u>100%</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>100%</u> = Total Cover			
% Bare Ground in Herb Stratum		<u>0%</u>			

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-11	10YR 2/2	100					GrCL	
11-17	5Y 5/2	70	10YR 5/6	25	C	M	C	
			7.5YR 5/8	5	C	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

<p>Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):</p> <p><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
--	--

Restrictive Layer (if present):

Type: None

Depth (inches): N/A

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
<p><u>Primary Indicators (minimum of one required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11)</p> <p><input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (2 or more required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? Yes No Depth (inches): 11"

(includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 12/5/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-15-SP2
 Investigator(s): T. Parry, A. Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.301291 Long: -122.303605 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 0 to 8 percent slopes - AgB - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation No, Soil No, or Hydrology No naturally 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in November.

Remarks:
 SP is positioned above a stream terrace to the east.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>1=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
1. <u><i>Alnus rubra</i></u>		<u>100%</u>	<u>Yes</u>	<u>FAC</u>	
2. _____					
3. _____					
4. _____					
		<u>100%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>1=2m</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u><i>Rubus spectabilis</i></u>		<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u><i>Sambucus racemosa</i></u>		<u>30%</u>	<u>Yes</u>	<u>FACU</u>	
3. <u><i>Rubus ursinus</i></u>		<u>25%</u>	<u>Yes</u>	<u>FACU</u>	
4. <u><i>Rubus armeniacus</i></u>		<u>5%</u>	<u>No</u>	<u>FAC</u>	
5. <u><i>Ilex aquifolium</i></u>		<u>5%</u>	<u>No</u>	<u>FACU</u>	
		<u>105%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>1=1m</u>)				
1. <u><i>Polystichum munitum</i></u>		<u>15%</u>	<u>Yes</u>	<u>FACU</u>	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
		<u>15%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>1=2m</u>)				
1. <u><i>Hedera helix</i></u>		<u>50%</u>	<u>Yes</u>	<u>FACU</u>	
2. _____					
		<u>50%</u> = Total Cover			
% Bare Ground in Herb Stratum	<u>35%</u>				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-13	10YR 2/2	100					L	
13-17	10YR 3/3	95	7.5YR 4/6	5	C	M	CL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p>Restrictive Layer (if present):</p> <p>Type: <u>None</u></p> <p>Depth (inches): <u>N/A</u></p>	<p>Hydric Soil Present?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
--	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
<u>Primary Indicators (minimum of one required; check all that apply)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Wetland Hydrology Present?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 3/2/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-16-SP1
 Investigator(s): Kaylee Moser, Adam Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): _____ Slope of ditch _____ Local relief (concave, convex, none): concave Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.313703 Long: -122.299546 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Arents, Alderwood material, 6 to 15 percent slopes - AmC - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in March.

Remarks:
 Sample point is located in a vegetated roadside ditch west of on ramp to I-5 South. This sample point is a palustrine emergent sample point for WFW-16.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>3x1m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
		0% = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>2x1m</u>)				
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
5. _____					
		0% = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>1x1m</u>)				
1. <u>Festuca rubra</u>		<u>50%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Juncus effusus</u>		<u>40%</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Poa pratensis</u>		<u>30%</u>	<u>Yes</u>	<u>FAC</u>	
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
		120% = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>2x1m</u>)				
1. <u>none</u>					
2. _____					
		0% = Total Cover			
% Bare Ground in Herb Stratum		<u>0%</u>			

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-7	2.5Y 3/2	100					SIL	
7-16	2.5Y 5/1	85	10YR 4/6	15	C	M	SiCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

<p>Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):</p> <p><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
--	--

<p>Restrictive Layer (if present):</p> <p>Type: <u>gravelly silty clay loam-compacted</u></p> <p>Depth (inches): <u>7</u></p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
--	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
<p><u>Primary Indicators (minimum of one required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11)</p> <p><input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (2 or more required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input checked="" type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>

<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u></p> <p>(includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Saturation between 5-7" on top of restrictive layer. Episaturated conditions.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 3/2/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-16-SP2
 Investigator(s): Kaylee Moser, Adam Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): Midslope of ditch Local relief (concave, convex, none): concave Slope (%): 3-5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.313706 Long: -122.299526 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Arents, Alderwood material, 6 to 15 percent slopes - AmC - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation No, Soil No, or Hydrology No naturally 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 <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in March.

Remarks:
 This sample point is the upland paired SP with WFW-16-SP1. It occurs upslope and east of WFW-16-SP1.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>3x1m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
		0% = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>2x1m</u>)				
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
5. _____					
		0% = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>1x1m</u>)				
1. <u>Poa pratensis</u>		<u>50%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Dactylis glomerata</u>		<u>30%</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Holcus lanatus</u>		<u>15%</u>	<u>No</u>	<u>FAC</u>	
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
		95% = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>2x1m</u>)				
1. <u>none</u>					
2. _____					
		0% = Total Cover			
% Bare Ground in Herb Stratum <u>5%</u>					

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-10	10YR 3/2	100					GrSaL	
10-16	10YR 4/2	90	10YR 4/6	10	C	M	GrSaL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

<p>Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):</p> <p><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
--	--

<p>Restrictive Layer (if present):</p> <p>Type: <u>compacted layer - road fill - gravel</u></p> <p>Depth (inches): <u>10</u></p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
---	--

Remarks:
Soils are heavily compacted at 10 inches below the surface.

HYDROLOGY

Wetland Hydrology Indicators:	
<p><u>Primary Indicators (minimum of one required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (2 or more required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>

<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
soils dry throughout profile

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 3/2/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-16-SP3
 Investigator(s): Kaylee Moser, Adam Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): _____ Hillslope _____ Local relief (concave, convex, none): none Slope (%): 3-5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.313112 Long: -122.299995 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Arents, Alderwood material, 6 to 15 percent slopes - AmC - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation No, Soil No, or Hydrology No naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in March.

Remarks:
 PSS wetland SP. SP located north of NE park and ride parking lot and ~100ft west of tower

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>3x1m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>					
2. _____					
3. _____					
4. _____					
0% = Total Cover					
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>2x1m</u>)				
1. <u>Rubus armeniacus</u>		<u>25%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Spiraea douglasii</u>		<u>40%</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Robinia pseudoacacia</u>		<u>10%</u>	<u>No</u>	<u>FACU</u>	
4. _____					
5. _____					
75% = Total Cover					
<u>Herb Stratum</u>	(Plot size: <u>1x1m</u>)				
1. <u>Ranunculus repens</u>		<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Juncus effusus</u>		<u>30%</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Poa pratensis</u>		<u>10%</u>	<u>No</u>	<u>FAC</u>	
4. <u>Typha latifolia</u>		<u>10%</u>	<u>No</u>	<u>OBL</u>	
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
90% = Total Cover					
<u>Woody Vine Stratum</u>	(Plot size: <u>2x1m</u>)				
1. <u>none</u>					
2. _____					
0% = Total Cover					
% Bare Ground in Herb Stratum <u>10%</u>					
Hydrophytic Vegetation Present? Yes <u>X</u> No _____					

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-6	2.5YR 3/2	100					SIL	
6-16	2.5YR 4/1	85	10YR 4/6	15	C	M	GrSIL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

<p>Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):</p> <p><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
---	--

Restrictive Layer (if present):

Type: None

Depth (inches): N/A

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
<p><u>Primary Indicators (minimum of one required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11)</p> <p><input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (2 or more required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>

Field Observations:

Surface Water Present? Yes No Depth (inches):

Water Table Present? Yes No Depth (inches): 9

Saturation Present? Yes No Depth (inches): surface

(includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Surface water was observed both upslope and downslope of this sample point.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: OMFS and TDLE City/County: Federal Way, King County Sampling Date: 3/2/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-16-SP4
 Investigator(s): Kaylee Moser, Adam Thom Section, Township, Range: T21N R04E S16
 Landform (hillslope, terrace, etc.): _____ Hillslope _____ Local relief (concave, convex, none): none Slope (%): 3-5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.313068 Long: -122.300005 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Arents, Alderwood material, 6 to 15 percent slopes - AmC - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation No, Soil No, or Hydrology No naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visits in March.

Remarks:
 Sample point is located 1 foot north of park and ride curb. Upland sample point to WFW-16-SP3. Remained of grass strip south of fence determined wetland area.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>3x1m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>none</u>	_____	_____	_____	_____	
2. _____	_____	_____	_____	_____	
3. _____	_____	_____	_____	_____	
4. _____	_____	_____	_____	_____	
		0% = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>2x1m</u>)				
1. <u>none</u>	_____	_____	_____	_____	
2. _____	_____	_____	_____	_____	
3. _____	_____	_____	_____	_____	
4. _____	_____	_____	_____	_____	
5. _____	_____	_____	_____	_____	
		0% = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>1x1m</u>)				
1. <u>Poa pratensis</u>	_____	<u>85%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Stellaria media</u>	_____	<u>10%</u>	<u>No</u>	<u>FACU</u>	
3. <u>Draba verna</u>	_____	<u>5%</u>	<u>No</u>	<u>NOL</u>	
4. _____	_____	_____	_____	_____	
5. _____	_____	_____	_____	_____	
6. _____	_____	_____	_____	_____	
7. _____	_____	_____	_____	_____	
8. _____	_____	_____	_____	_____	
9. _____	_____	_____	_____	_____	
10. _____	_____	_____	_____	_____	
11. _____	_____	_____	_____	_____	
		110% = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>2x1m</u>)				
1. <u>none</u>	_____	_____	_____	_____	
2. _____	_____	_____	_____	_____	
		0% = Total Cover			
% Bare Ground in Herb Stratum		<u>0%</u>			

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-7	10YR 2/1	100					L	
7-10	2.5Y 5/2	98	10YR 4/4	2	C	M	GrL	
10+								compacted

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

<p>Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):</p> <p><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
--	--

<p>Restrictive Layer (if present):</p> <p>Type: <u>highly compacted gravelly loam</u></p> <p>Depth (inches): <u>10</u></p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
---	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
<p><u>Primary Indicators (minimum of one required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (2 or more required)</u></p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>

<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
dry to 10" BGS

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Sound Transit OMFS City/County: Federal Way, King Sampling Date: 2/27/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: SP WFW 17-1
 Investigators: STORY Section, Township, Range: T21N R4E S21
 Landform (hillslope, terrace, etc.): Channel Local Relief (concave, convex, none): None Slope(%): 0
 Subregion (LRR): A - Northwestern Forest, Lat: 47.292095 Long: -122.307587 Datum: WGS84
 Soil Map Unit Name: Alderwood gravelly sandy loam NWI Classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If No, explain in Remarks)
 Are Vegetation: Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation: Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
 Sample plot meets 3 of 3 criteria, is located in wetland WFW-17.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Alnus rubra</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Populus balsamifera</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>60</u>	<u>= Total Cover</u>		
<u>Sapling/Shrub Stratum</u> (Plot size: 3m)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x1= <u> </u> FACW species <u> </u> x2= <u>0</u> FAC species <u>137</u> x3= <u>411</u> FACU species <u> </u> x4= <u>0</u> UPL species <u> </u> x5= <u>0</u> Column Totals: <u>137</u> (A) <u>411</u> (B) <i>Prevalence Index = B/A=</i> <u>3.00</u>
1. <u>Rubus spectabilis</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Rosa pisocarpa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
3. <u>Rubus armeniacus</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>70</u>	<u>= Total Cover</u>		
<u>Herb Stratum</u> (Plot size: 1m)				
1. <u>Ranunculus repens</u>	<u>7</u>	<u>Yes</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>7</u>	<u>= Total Cover</u>		
<u>Woody Vine Stratum</u> (Plot size:)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u> </u>	<u>= Total Cover</u>		
% Bare Ground in Herb Stratum <u>93</u>		% Cover of Biotic Crust <u> </u>		Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>

Remarks:
 Sample plot meets dominance test and prevalence index for hydrophytic vegetation.

SOIL

Sampling Point: SP WFW 17-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10YR 3/2	100					Silt Loam	
11-18	10YR 4/1	90	10YR 4/6	10	C	M	Silt Loam	

¹Type: C= Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRLA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		

<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____</p>
---	---

Remarks:
Sample plot meets hydric soil indicator A11, depleted below dark surface.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MRLA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MRLA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Tables (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B)		
<input type="checkbox"/> Sparsley Vegetated Concave Surface (B8)		

<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ 1.0</p> <p>Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ 0.0</p> <p>(includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____</p>
--	---

Describe Recorded Date (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Sample plot meets wetland hydrology indicators for saturation and high water table.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Sound Transit OMFS City/County: Federal Way, King Sampling Date: 12/19/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: SP WFW 17-2
 Investigators: Danielski, Story Section, Township, Range: T21N R4E S21
 Landform (hillslope, terrace, etc.): Hillslope Local Relief (concave, convex, none): None Slope(%): 2
 Subregion (LRR): A Lat: 47.292091 Long: -122.307617 Datum: WGS84
 Soil Map Unit Name: Alderwood gravelly sandy loam NWI Classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If No, explain in Remarks)
 Are Vegetation: Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation: Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
 Sample plot has 2 of 3 wetland indicators and lacks hydric soil; plot not located in a wetland. Upland sample plot for WFW-17. Site visit occurred outside of growing season.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Populus balsamifera</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Alnus rubra</u>	<u>45</u>	<u>Yes</u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>95</u>	<u>= Total Cover</u>		
<u>Sapling/Shrub Stratum</u> (Plot size: 3m)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u>195</u> Multiply by: OBL species <u> </u> x1= <u> </u> FACW species <u> </u> x2= <u>0</u> FAC species <u>195</u> x3= <u>585</u> FACU species <u> </u> x4= <u>0</u> UPL species <u> </u> x5= <u>0</u> Column Totals: <u>195</u> (A) <u>585</u> (B) <i>Prevalence Index = B/A= <u>3.00</u></i>
1. <u>Lonicera involucrata</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Rubus spectabilis</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>100</u>	<u>= Total Cover</u>		
<u>Herb Stratum</u> (Plot size: 1m)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u> </u>	<u>= Total Cover</u>		
<u>Woody Vine Stratum</u> (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u> </u>	<u>= Total Cover</u>		
% Bare Ground in Herb Stratum <u>100</u>		% Cover of Biotic Crust <u> </u>		

Remarks:
 Sample plots meets dominance test and prevalence index for hydrophytic vegetation. Hydrophytic species found in plot are primarily deep-rooted tree and shrub species that have access to a deeper water table.

SOIL

Sampling Point: SP WFW 17-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 2/2	100					Sandy Loam	
7-9	10YR 5/1	95	10YR 4/6	5	C	M	Sandy Loam	
9-15	10YR4/4	100					Sandy Loam	

¹Type: C= Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRLA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
--	--

Remarks:
Gravels throughout. Sample plot lacks hydric soil indicators. Since the layer with depleted matrix is only 2 inches thick and starts at 7 inches, soil does not meet minimum thickness or depth requirements to qualify for hydric soil indicators A11 (depleted below dark surface) or F3 (depleted matrix). Soil below the depleted matrix is also very bright (4/4).

HYDROLOGY

Wetland Hydrology Indicators:		<i>Secondary Indicators (2 or more required)</i>
Primary Indicators (minimum of one required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MRLA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MRLA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Tables (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B)		
<input type="checkbox"/> Sparsley Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ <input checked="" type="checkbox"/> No _____ Depth (inches): <u>6.0</u> Saturation Present? Yes _____ <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2.0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
---	--

Describe Recorded Date (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Saturated at 2, water table present at 6. Sample plot meets primary hydrology indicators for high water table and saturation.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Sound Transit OMFS City/County: Federal Way, King Sampling Date: 2/27/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: SP WFW 18-1
 Investigators: STORY Section, Township, Range: T21N R4E S21
 Landform (hillslope, terrace, etc.): Channel Local Relief (concave, convex, none): None Slope(%): 0
 Subregion (LRR): A - Northwestern Forest, Lat: 47.292809 Long: -122.306519 Datum: WGS84
 Soil Map Unit Name: Alderwood gravelly sandy loam NWI Classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If No, explain in Remarks)
 Are Vegetation: Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation: Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
 Sample plot meets 3 of 3 criteria, is located in wetland WFW-18.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Alnus rubra</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>15</u>	<u>= Total Cover</u>		
<u>Sapling/Shrub Stratum</u> (Plot size: 3m)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x1= <u> </u> FACW species <u>40</u> x2= <u>80</u> FAC species <u>35</u> x3= <u>105</u> FACU species <u> </u> x4= <u>0</u> UPL species <u> </u> x5= <u>0</u> Column Totals: <u>75</u> (A) <u>185</u> (B) <i>Prevalence Index = B/A= <u>2.47</u></i>
1. <u>Rubus spectabilis</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Rubus armeniacus</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>20</u>	<u>= Total Cover</u>		
<u>Herb Stratum</u> (Plot size: 1m)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Phalaris arundinacea</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>40</u>	<u>= Total Cover</u>		
<u>Woody Vine Stratum</u> (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u> </u>	<u>= Total Cover</u>		
% Bare Ground in Herb Stratum <u>60</u>		% Cover of Biotic Crust <u> </u>		

Remarks:
 Sample plot meets dominance test and prevalence index for hydrophytic vegetation.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/2	100					Silt Loam	
5-18	10YR 4/2	95	10YR 4/6	5	C	M	Silty Clay Loam	

¹Type: C= Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRLA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No _____

Remarks:

Sample plot meets hydric soil indicator F3, depleted matrix.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MRLA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water Stained Leaves (B9) (MRLA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Tables (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes No _____ Depth (inches): _____ 1.00
 Water Table Present? Yes No _____ Depth (inches): _____ 3.0
 Saturation Present? Yes No _____ Depth (inches): _____ 0.0
 (includes capillary fringe)

Wetland Hydrology Present? Yes No _____

Describe Recorded Date (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sample plot meets wetland hydrology indicators for surface water, saturation and high water table.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Sound Transit OMFS City/County: Federal Way, King Sampling Date: 12/19/2019
 Applicant/Owner: Sound Transit State: WA Sampling Point: SP WFW 18-2
 Investigators: Danielski Section, Township, Range: T21N R4E S21
 Landform (hillslope, terrace, etc.): Hillslope Local Relief (concave, convex, none): None Slope(%): 2
 Subregion (LRR): A Lat: 47.292816 Long: -122.306473 Datum: WGS84
 Soil Map Unit Name: Alderwood gravelly sandy loam NWI Classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If No, explain in Remarks)
 Are Vegetation: Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation: Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:
 Sample plot meets 2 of 3 wetland criteria and lacks hydric soils, is not located in a wetland. Upland plot for WFW 18. Site visit occurred outside of growing season.

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: 3m)				
1. <u>Rubus armeniacus</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Salix scouleriana</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Rubus ursinus</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
= Total Cover				
<u>Herb Stratum</u> (Plot size: 1m)				
1. <u>Phalaris arundinacea</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Epilobium anagallidifolium</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Polystichum munitum</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover				
<u>Woody Vine Stratum</u> (Plot size:)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover				
% Bare Ground in Herb Stratum <u>68</u>	% Cover of Biotic Crust _____			Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>

Remarks:
 Sample plot meets dominance test but not prevalence index for hydrophytic vegetation. Hydrophytic species found in plot are primarily deep-rooted tree and shrub species that have access to a deeper water table.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 2/2	100					Sandy Loam	
10-16	10YR 3/3	100					Sandy Loam	

¹Type: C= Concentration, D= Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRLA 1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No _____ X
--	---

Remarks:
Sample plot lacks hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Stained Leaves (B9) (except MRLA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Tables (A2)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B)	
<input type="checkbox"/> Sparsley Vegetated Concave Surface (B8)	
	<input type="checkbox"/> Water Stained Leaves (B9) (MRLA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes _____ No X Depth (inches): _____ Water Table Present? Yes _____ X No _____ Depth (inches): _____ 12.0 Saturation Present? Yes _____ X No _____ Depth (inches): _____ 4.0 (includes capillary fringe)	Wetland Hydrology Present? Yes _____ X No _____
--	---

Describe Recorded Date (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Sample plot meets primary hydrology indicators for high water table and saturation.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TDLE City/County: Federal Way, King County Sampling Date: 2/21/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-21-SP1
 Investigator(s): J. Wozniak, M. Murphy Section, Township, Range: T21N R04E S21
 Landform (hillslope, terrace, etc.): floodplain Local relief (concave, convex, none): none Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.288658 Long: -122.308085 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 8 to 15 percent slopes - AgC: - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally 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 <u> X </u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> X </u>	No <u> </u>
Hydric Soil Present?	Yes <u> X </u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u> X </u>	No <u> </u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visit in February.

Remarks:
 WFW-21-SP1 is identified as PSS (paulstrine scrub-shrub) under Cowardin classification. Sample point is located below ordinary high on West Hylebos Creek about 20 feet upstream of culvert outlet within an I-5 cloverleaf.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 5 </u> (A) Total Number of Dominant Species Across All Strata: <u> 5 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 100% </u> (A/B)
1.	<u>none</u>				
2.					
3.					
4.					
		0% = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1.	<u>Rubus armeniacus</u>	20%	Yes	FAC	
2.	<u>Salix scouleriana</u>	10%	Yes	FAC	
3.					
4.					
5.					
		30% = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u> X </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1.	<u>Solanum dulcamara</u>	40%	Yes	FAC	
2.	<u>Veronica americana</u>	30%	Yes	OBL	
3.	<u>Poa pratensis</u>	20%	Yes	FAC	
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
		90% = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u>
1.	<u>none</u>				
2.					
		0% = Total Cover			
% Bare Ground in Herb Stratum		<u> 10% </u>			

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 3/2	80	7.5YR 4/6	20	C	M	GrL	
10-16	10YR 4/2	95	10YR 4/6	5	C	M	GrL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: none _____ Depth (inches): n/a _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
---	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
<u>Primary Indicators (minimum of one required; check all that apply)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): 1 _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): surface _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TDLE City/County: Federal Way, King County Sampling Date: 2/21/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-21-SP2
 Investigator(s): J. Wozniak, M. Murphy Section, Township, Range: T21N R04E S21
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 3-5%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.288638 Long: -122.308054 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 8 to 15 percent slopes - AgC - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally 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 <u> </u> No <u> X </u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u> X </u>
Hydric Soil Present?	Yes <u> X </u> No <u> </u>		
Wetland Hydrology Present?	Yes <u> </u> No <u> X </u>		

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visit in February.

Remarks:
 Sample point is located upslope and east of WFW-21-SP1 within an I-5 cloverleaf. Associated with E Fork Hylebos Creek Tributary 0016A. Paired upland SP to WFW-21-SP1.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>r=3m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 0 </u> (A) Total Number of Dominant Species Across All Strata: <u> 6 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 0% </u> (A/B)
1.	<u>Populus tremuloides</u>	<u>40%</u>	<u>Yes</u>	<u>FACU</u>	
2.	<u>Pseudotsuga menziesii</u>	<u>20%</u>	<u>Yes</u>	<u>FACU</u>	
3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>60%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>r=2m</u>)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1.	<u>Gaultheria shallon</u>	<u>40%</u>	<u>Yes</u>	<u>FACU</u>	
2.	<u>Rubus ursinus</u>	<u>20%</u>	<u>Yes</u>	<u>FACU</u>	
3.	<u>Rubus spectabilis</u>	<u>5%</u>	<u>No</u>	<u>FAC</u>	
4.	<u>Rubus ameniacus</u>	<u>5%</u>	<u>No</u>	<u>FAC</u>	
5.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>70%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>r=1m</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1.	<u>Geranium robertianum</u>	<u>40%</u>	<u>Yes</u>	<u>FACU</u>	
2.	<u>Polystichum munitum</u>	<u>20%</u>	<u>Yes</u>	<u>FACU</u>	
3.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
4.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
5.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
6.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
7.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
8.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
9.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
10.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
11.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>60%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>r=2m</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>
1.	<u>none</u>	<u> </u>	<u> </u>	<u> </u>	
2.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		<u>0%</u> = Total Cover			
% Bare Ground in Herb Stratum <u>20%</u>					

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1	10YR 2/1	100	none				L	
1-9	10YR 3/2	100	none				GrL	
9-15	10YR 4/2	95	10YR 4/6	5	C	M	Very GrL	
15-18	7.5YR 3/4	100					GrL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.
³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

2 cm Muck (A10)
 Red Parent Material (TF2)
 Very Shallow Dark Surface (TF12)
 Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: none _____
 Depth (inches): n/a _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TDLE City/County: Federal Way, King County Sampling Date: 2/25/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-22-SP1
 Investigator(s): M. Murphy, A. Thom Section, Township, Range: T21N R04E S21
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): <3%
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.290108 Long: -122.308639 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): Alderwood gravelly sandy loam, 8 to 15 percent slopes - AgC - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No X (If no, explain in Remarks)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation No, Soil No, or Hydrology No naturally 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 <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visit in February.

Remarks:
 PSS wetland SP. SP located in a roadside depression near off-ramp of I-5 south. Headed south on I-5 exit 142 B on east side of off ramp in a roadside "clover leaf".

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>1=3m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>Populus balsamifera</u>		<u>10%</u>	<u>Yes</u>	<u>FAC</u>	
2. _____		_____	_____	_____	
3. _____		_____	_____	_____	
4. _____		_____	_____	_____	
		<u>10%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>1=2m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u>Cornus alba</u>		<u>15%</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Rubus armeniacus</u>		<u>5%</u>	<u>Yes</u>	<u>FAC</u>	
3. _____		_____	_____	_____	
4. _____		_____	_____	_____	
5. _____		_____	_____	_____	
		<u>20%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>1=1m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>Poa pratensis</u>		<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
2. _____		_____	_____	_____	
3. _____		_____	_____	_____	
4. _____		_____	_____	_____	
5. _____		_____	_____	_____	
6. _____		_____	_____	_____	
7. _____		_____	_____	_____	
8. _____		_____	_____	_____	
9. _____		_____	_____	_____	
10. _____		_____	_____	_____	
11. _____		_____	_____	_____	
		<u>40%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>1=2m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>		_____	_____	_____	
2. _____		_____	_____	_____	
		<u>0%</u> = Total Cover			
% Bare Ground in Herb Stratum		<u>60%</u>			

Remarks:
 Spirea located on north and south end of the wetland but not located in plot. 60% of plot is in standing water/ditches.

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-5	10YR 2/1	100					L	
5-11	2.5Y 4/2	98	10YR 4/6	2	C	M	SaGrL	
11-15	2.5Y 5/2	80	10YR 5/8	20	C	M	VGrSaL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):

Histosol (A1) Sandy Redox (S5)
 Histic Epipedon (A2) Stripped Matrix (S6)
 Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1)
 Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)
 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)

Indicators for Problematic Hydric Soils³:

2 cm Muck (A10)
 Red Parent Material (TF2)
 Very Shallow Dark Surface (TF12)
 Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): N/A

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Surface Water (A1) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
 High Water Table (A2) Salt Crust (B11)
 Saturation (A3) Aquatic Invertebrates (B13)
 Water Marks (B1) Hydrogen Sulfide Odor (C1)
 Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3)
 Drift Deposits (B3) Presence of Reduced Iron (C4)
 Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)
 Iron Deposits (B5) Stunted or Stressed Plants (D1) (LRR A)
 Surface Soil Cracks (B6) Other (Explain in Remarks)
 Inundation Visible on Aerial Imagery (B7) Frost-Heave Hummocks (D7)
 Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
 Drainage Patterns (B10)
 Dry-Season Water Table (C2)
 Saturation Visible on Aerial Imagery (C9)
 Geomorphic Position (D2)
 Shallow Aquitard (D3)
 FAC-Neutral Test (D5)
 Raised Ant Mounds (D6) (LRR A)

Field Observations:

Surface Water Present? Yes No Depth (inches):

Water Table Present? Yes No Depth (inches): 6

Saturation Present? Yes No Depth (inches): 5

(includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TDLE City/County: Federal Way, King County Sampling Date: 2/25/2020
 Applicant/Owner: Sound Transit State: WA Sampling Point: WFW-22-SP2
 Investigator(s): M. Murphy, A. Thom Section, Township, Range: T21N R04E S21
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): None
 Subregion (LRR): Northwest Forests and Coast (LRR A) Lat: 47.290117 Long: -122.308600 Datum: NAD 1983
 Soil Unit (Name-ID-Hydric Rating): lerwood gravelly sandy loam, 8 to 15 percent slop - AgC - Not Hydric NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			

Precipitation:
 According to the Seattle Tacoma International NOAA weather station, precipitation was above the normal range for the three months prior to the site visit in February.

Remarks:
 SP-2 is located approximately 10 feet upslope of SP-1. SP is located on the side of a fill prism/WSDOT service road and serves as the upland paired SP to WFW-22-SP1.

VEGETATION

<u>Tree Stratum</u>	(Plot size: <u>1=3m</u>)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71%</u> (A/B)
1. <u><i>Pseudotsuga menziesii</i></u>		<u>10%</u>	<u>Yes</u>	<u>FACU</u>	
2. <u><i>Populus balsamifera</i></u>		<u>5%</u>	<u>Yes</u>	<u>FAC</u>	
3. <u><i>Thuja plicata</i></u>		<u>2%</u>	<u>No</u>	<u>FAC</u>	
4. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>17%</u> = Total Cover			
<u>Sapling/Shrub Stratum</u>	(Plot size: <u>1=2m</u>)				
1. <u><i>Cytisus scoparius</i></u>		<u>5%</u>	<u>Yes</u>	<u>NOL</u>	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation (Explain) ¹ ¹ Indicators of hydric soil and wetland hydrology must be present.
2. <u><i>Cornus alba</i></u>		<u>5%</u>	<u>Yes</u>	<u>FACW</u>	
3. <u><i>Pseudotsuga menziesii</i></u>		<u>2%</u>	<u>No</u>	<u>FACU</u>	
4. <u><i>Thuja plicata</i></u>		<u>2%</u>	<u>No</u>	<u>FAC</u>	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>14%</u> = Total Cover			
<u>Herb Stratum</u>	(Plot size: <u>1=1m</u>)				
1. <u><i>Lupinus polyphyllus</i></u>		<u>40%</u>	<u>Yes</u>	<u>FAC</u>	
2. <u><i>Holcus lanatus</i></u>		<u>30%</u>	<u>Yes</u>	<u>FAC</u>	
3. <u><i>Schedonorus arundinaceus</i></u>		<u>20%</u>	<u>Yes</u>	<u>FAC</u>	
4. <u><i>Festuca rubra</i></u>		<u>10%</u>	<u>No</u>	<u>FAC</u>	
5. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>100%</u> = Total Cover			
<u>Woody Vine Stratum</u>	(Plot size: <u>1=2m</u>)				
1. <u><i>None</i></u>		<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>		<u> </u>	<u> </u>	<u> </u>	
		<u>0%</u> = Total Cover			
% Bare Ground in Herb Stratum <u>0%</u>					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>

Remarks:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators):

Depth (inches)	Matrix		Redox Features			Loc ²	Texture ³	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-2	10YR 4/2	100					SaL	
3-16	2.5Y 5/2	95	10YR 5/8	5	C	M	SaL	Cobbles
16-19	2.5Y 4/3	100					GrSa	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

³Texture: Sa = sand; Si = silt; C = clay; L = loam or loamy. Texture Modifier: co = coarse; f = fine; vf = very fine; + = heavy (more clay); - = light (less clay)

<p>Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted):</p> <p><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (TF12)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
--	--

<p>Restrictive Layer (if present):</p> <p>Type: <u>None</u></p> <p>Depth (inches): <u>N/A</u></p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
--	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
<p>Primary Indicators (minimum of one required: check all that apply)</p> <p><input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p>Secondary Indicators (2 or more required)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Geomorphic Position (D2)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p> <p><input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)</p> <p><input type="checkbox"/> Frost-Heave Hummocks (D7)</p>

<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
soils moist but not saturated.