WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

A complete report and signed report cover form, along with applicable review fee, are required before a report review timeline can be initiated by the Department of State Lands. All applicants will receive an emailed confirmation that includes the report's unique file number and other information.

Ways to submit report:

Ways to pay review fee:

- Under 50MB A single unlocked PDF can be emailed to: wetland.delineation@dsl.oregon.gov.
- 50MB or larger A single unlocked PDF can be uploaded to DSL's Box.com website. After upload notify DSL by email at: wetland.delineation@dsl.oregon.gov.
- <u>OR</u> a hard copy of the unbound report and signed cover form can be mailed to: Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.
- By credit card on DSL's epayment portal after receiving the unique file number from DSL's emailed confirmation.
- By check payable to the Oregon Department of State Lands attached to the unbound mailed hardcopy <u>OR</u> attached to the complete signed cover form if report submitted electronically.

Contact and Authorization Information	
	Business phone # (503) 391-9999
Jeremy Schoenfelder, Mosaic Development Services	Mobile phone # (optional)
1900 Hines Street, Suite 150	E-mail: jeremys@mosaicdevelopmentservices.com
Salem, Oregon 97302	
Authorized Legal Agent, Name and Address (if different): Business phone #
Additionized Legal Agent, Name and Address (if different	Mobile phone # (optional)
	E-mail:
	y to allow access to the property. I authorize the Department to access the
property for the purpose of confirming the information in the repo	rt, after prior notification to the primary contact.
Typed/Printed Name: Jeremy Schoenfelder	Signature: () ()
Date: 10/04/2022 Special instructions regarding s	site access:
Project and Site Information	
Project Name: Hwy 20	Latitude: 44.405672° Longitude: -122.673526°
455	decimal degree - centroid of site or start & end points of linear project
Proposed Use:	Tax Map # 13S01E27C
Residential Development	Tax Lot(s) 2500
	Tax Map #
Project Street Address (or other descriptive location):	Tax Lot(s)
4901 Hwy 20	Township 13S Range 1E Section 27C QQ SW/SW
	Use separate sheet for additional tax and location information
City: Sweet Home County: Linn	Use separate sheet for additional tax and location information Waterway: Wiley Creek River Mile: 0.5
City: Sweet Home County: Linn Wetland Delineation Information	
Wetland Delineation Information	Waterway: Wiley Creek River Mile: 0.5
Wetland Delineation Information Wetland Consultant Name, Firm and Address: Schott & Associates, Inc. Kim Cartwright	Waterway: Wiley Creek River Mile: 0.5 Phone # (503) 678-6028
Wetland Delineation Information Wetland Consultant Name, Firm and Address: Schott & Associates, Inc. Kim Cartwright PO Box 589	Waterway: Wiley Creek River Mile: 0.5 Phone # (503) 678-6028 Mobile phone # (if applicable)
Wetland Delineation Information Wetland Consultant Name, Firm and Address: Schott & Associates, Inc. Kim Cartwright PO Box 589 Aurora, Oregon	Waterway: Wiley Creek River Mile: 0.5 Phone # (503) 678-6028 Mobile phone # (if applicable) E-mail: kim@schottandassociates.com
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SCHOTT & ASSOCIATES



Ecologists & Wetlands Specialists

21018 NE Hwy 99E • P.O. Box 589 • Aurora, OR 97002 • (503) 678-6007 • FAX: (503) 678-6011

JURISDICTIONAL WETLAND DELINEATION REPORT FOR

Highway 20

T13S, R1E, Section 27C, tax lot 2500 (Portion of) Sweet Home, Linn County, Oregon

Prepared for

Mosaic Development Services 1900 Hines Street, Suite 150 Salem, Oregon 97302

Prepared by

Kim Cartwright of Schott & Associates, Inc.

Date:

September 2022

Project #: 2999

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(A) Landscape Setting and Land Use

Schott & Associates (S&A) was contracted to conduct wetland delineation on a 22.95-acre study site located at 4901 Hwy 20, Sweet Home, Oregon (portion of T13S, R1E, Section 27C, tax lot 2500; Figures 1 and 2). The purpose of this study was to document the presence and extent of existing onsite wetlands and other waters that may be regulated under the Clean Water Act (CWA) by the U.S. Army Corps of Engineers (Corps) and under the Removal-Fill Law by the Oregon Department of State Lands (DSL). This report complies with all standards and requirements set forth in Oregon Administrative Rules (OAR) 141-090-0035 (1-17) for wetland delineation reports and jurisdictional determinations for the purpose of regulating fill and removal within waters of the state. This report will be used to fulfill federal and state regulatory requirements for project permitting.

The study site encompassed all but the eastern margin of tax lot 2500 and was defined as all areas of the parcel outside of the Federal Emergency Management Agency (FEMA) 100-year floodplain (FEMA; https://www.fema.gov/flood-maps/national-flood-hazard-layer) for Wiley Creek. The subject parcel was located south of Highway 20 along the western bank of Wily Creek. Site topography consisted of the east-sloping terrace above the Wiley Creek ravine bound by steep hillslope to the south and northwest. The site was undeveloped and vegetated by Douglas-fir (*Pseudotsuga menziesii*)/bigleaf maple (*Acer macrophyllum*)/red alder (*Alnus rubra*) forest with a dense, brushy understory of Himalayan blackberry (*Rubus armeniacus*), hazelnut (*Corylus cornuta*), snowberry (*Symphoricarpos albus*), western swordfern (*Polystichum munitum*), and false brome (*Brachypodium sylvaticum*). A narrow forest clearing through the center of the site featured impenetrable blackberry thicket with a foot path cut through. This path was the primary access point to the site.

The site was surrounded by moderate density residential and commercial development to the north, east, and west, and agriculture/rural residential development to the south. At the time of delineation, the site was zoned for high-density residential (Sweet Home zoning designation R2).

(B) Site Alterations

Aerial photographs for the time period between 1994 and 2021, available from Google Earth, were reviewed to assess site history. In the earliest available aerial photograph (Figure 5b), there appears to be much less undergrowth through the site and a larger clearing through the center but is otherwise much in the same conditions as it was during fieldwork (Figure 5a).

(C) Precipitation Data and Analysis

Precipitation data for the date of fieldwork and the time period preceding it were reviewed to evaluate observed wetland hydrology conditions relative to actual and statistically normal precipitation. Precipitation that deviates from normal ranges can affect site conditions and impact observed wetland hydrology indicators. Precipitation data were acquired from the Natural Resources Conservation Service (NRCS)

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Agricultural Applied Climate Information System (AgACIS) for the Foster Dam station to provide context for observed hydrological conditions of the study area at the time of the site visit (AgACIS 2021-2022). Tables 1 and 2 provide the precipitation data, comparison to the normal water year average, as well as normal monthly ranges of precipitation representing 70% probability as reported for the Foster Dam NRCS WETS station (NRCS 1991-2021).

Table 1. Precipitation Summary for the Date of Fieldwork and Preceding Water Year (October 1, 2021 – Date of Fieldwork)

		Ol	served Precipit	ation*	
Date of Field Visit	Date of Visit (in.)	2 weeks to- Date (in.)	Water Year to-Date (in.)	Normal Water Year to-Date (in.)	% of Normal Water Year-to Date
August 4, 2022	0.0	0.0	54.76	51.86	106%

^{*}Data provided by NRCS AgACIS data from the Foster Dam Station, OR, 2021-2022

Table 2. Precipitation Assessment for The Three Months Preceding Fieldwork

Month	Total Precipitation (inches) ¹	WETS Normal Range (inches) ²	Condition (Value)	Month Weight	Weighted Condition (value*weight) ³
July	0.15	0.16-0.53	Dry (1)	3	3
June	6.3	1.58-2.89	Wet (3)	2	6
May	8.53	2.27-4.52	Wet (3)	1	3
	***			Sum	12 (Normal)

Data provided by NRCS AgACIS data from the Foster Dam, OR, 2021-2022

Fieldwork took place on August 4, 2022, when no precipitation was observed. In the two weeks preceding fieldwork, no precipitation was observed. Precipitation observed in the month of July was slightly below the WETS normal range and precipitation in June and May were above the normal range. Precipitation for the water year (October 1, 2021-August 4, 2022) was observed at 106% of normal (54.76 inches).

Based on a weighted summary of weather conditions in the three months preceding fieldwork, hydrological conditions were estimated to be normal during the time of fieldwork.

(D) Site Specific Methods

Prior to visiting the site, the following existing data and information was reviewed:

- Linn County tax map (Figure 2)
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), Sweet Home Local Wetland Inventory (LWI), and Oregon Department of Forestry (ODF) stream mapping (Figure 3)

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²Data provided by NRCS WETS station for the Foster Dam, OR, 1991-2021

³Sum = 6-9: Dry conditions, Sum = 10-14: normal conditions, Sum = 15-18: wet conditions

- U.S. Department of Agriculture (USDA) NRCS gridded Soil Survey Geographic (gSSURGO) database for Linn County (Figure 4)
- Recent and historical aerial photographs provided by Google Earth (Figures 5a-5b)
- Department of Oregon Geology and Mineral Industries (DOGAMI) 2009 LiDAR data (Figures 6a-d)

Six soil series were mapped within the study site boundary according to the USDA NRCS soil survey for Linn County. Fluvents-fluvaquents (87% hydric inclusions) was mapped in the eastern portion along Wiley Creek. Nekia silty clay loam (nonhydric) at slopes of 12-20% and 20-30% were mapped over the steep hillslopes to the south. Jory silty clay loam (nonhydric) was mapped in the west-central portion of the site. Salkum silty clay loam (nonhydric) was mapped over the steep hillslope along the northwestern boundary. Sifton variant gravelly loam (nonhydric) was mapped over a small area along the northern site boundary.

Schott & Associates visited the site on August 4, 2022. Data were collected according to methods described in the *Corps Wetland Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Delineation Manual: Western Mountains, Valleys, and Coast (Version 2)* (Environmental Laboratory 2010). Thirteen sample plots were established throughout the site to locate the boundaries of wetlands. For each sample plot, data on vegetation, hydrology, and soils were collected, recorded in the field, and later transferred to data forms (Appendix B). Plant indicator status was determined using the 2020 National Wetland Plant List (Corps 2020). Onsite streams were delineated via the ordinary high-water mark (OHWM) as indicated by top of bank, wrack or scour lines, or change in vegetation communities.

Due to dense undergrowth and few access points, not all areas of the site could be physically accessed, but the areas estimated most likely to feature wetlands or watercourses were visited, including toes of slopes, convergent slopes, flat areas, and the lowest-lying portions of the site. The wetland boundary and transition to stream channel between Photo Points 5 and 3 was inaccessible and was estimated using aerial imagery and topographic maps.

All identified wetlands and waters were classified according to the USFWS Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979) and the Guidebook for Hydrogeomorphic (HGM)-based Assessment of Oregon Wetland and Riparian Sites (DSL 2001).

Representative ground level photographs were recorded to document site conditions (Appendix C; Figures 6a-d).

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(E) Description of All Wetlands and Other Non-Wetland Waters

Three wetlands, two streams, one ephemeral drainage, and one upland ditch were identified within the site. Wetland area totaled 0.27 acre. Wetland, stream, sample plot, and photo point locations are shown on Figures 6a-d.

Wetland 1: Wetland 1 was located in the southeastern portion of the site, covering 0.11 acre. It occupied a narrow, shallow swale at the toe of a steep slope. The wetland drained both southeast and northeast toward Wiley Creek located offsite. In the southeast, the wetland drained into a small stream (Stream 1). In the northeast, the wetland drained into a culvert placed under a footpath. The culvert discharged into a faintly defined, steep-gradient, partially vegetated drainageway assumed to be ephemeral (Ephemeral Drainage described below). Wetland hydrology appeared sustained primarily by groundwater discharge. The wetland was assessed as a slope HGM class with a Cowardin class of seasonally flooded, palustrine emergent (PEMC). It was vegetated predominantly by skunk cabbage (Lysichiton americanus; OBL), lady fern (Athyrium cyclosorum; FAC), water parsley (Oenanthe sarmentosa; OBL), creeping buttercup (Ranunculus repens; FAC), stinging nettle (Urtica dioica; FAC), and bittersweet nightshade (Solanum dulcamara; FAC). Red alder trees provided canopy but were not rooted within the wetland.

Soil samples met the Corps hydric soil indicator for depleted below dark surface (A11). Dark soil layers were very dark grayish brown (10 YR 3/2) in matrix color and depleted layers were dark grayish brown (10 YR 4/2) with many yellow-red redoximorphic concentrations occurring as soft masses. Soil texture was clay loam. Corps wetland hydrology indicators observed within the wetland included high-water table (A2) and soil saturation (A3).

Wetland 2: Wetland 2 was located at the lower reach of a manmade ditch that ran along the southwestern boundary of the site at the toe of a slope and drained southwest, offsite; 0.04 acre of wetland occurred onsite. Wetland hydrology appeared sustained by groundwater discharge along with stormwater runoff from areas upslope. The wetland was assessed as a slope HGM class with a Cowardin class of excavated, seasonally flooded, palustrine emergent (PEMCx). It was only sparsely vegetated with English ivy (Hedera helix; FACU) and trailing blackberry (Rubus ursinus; FACU) that was trailing over the wetland from the ditch banks. English ivy is recognized by DSL as a problematic vegetation species in wetlands due to its invasive and vining nature.

Soil samples met the Corps hydric soil indicator for depleted below dark surface (A11). Dark soil layers were very dark gray (2.5Y 3/1) in matrix color and depleted layers were dark gray (5Y 4/1) with many yellow-red redoximorphic concentrations occurring as soft masses. Soil texture was clay loam. Corps wetland hydrology indicators observed within the wetland included high-water table and soil saturation.

Wetland 3: Wetland 3 occurred in the northern portion of the site, covering 0.12 acre. It occupied a pair of vegetated swales which drained north and converged into a single swale just before exiting the study site to the northeast. It likely drained into Wiley Creek

offsite. A small stream (Stream 2) connected the two vegetated swales at their southern extent. Wetland hydrology appeared sustained primarily by groundwater discharge. The wetland was assessed as a slope HGM class with a Cowardin class of seasonally flooded, palustrine emergent (PEMC). It was vegetated predominantly by skunk cabbage, lady fern, water parsley, creeping buttercup, and coastal hedgenettle (*Stachys chamissonis*; FACW). Red alder trees provided canopy but were not rooted within the wetland.

Soil samples met the Corps hydric soil indicator for depleted below dark surface. Dark soil layers were very dark grayish brown in matrix color and depleted layers were dark grayish brown with common yellow-red redoximorphic concentrations occurring as soft masses. Soil texture was clay loam. Corps wetland hydrology indicators observed within the wetland included high-water table and soil saturation.

Stream 1: Stream 1 emerged from the south end of Wetland 1 and drained east into Wiley Creek. It was approximately two feet wide by one foot deep with a gravelly substrate and featured a few inches of flowing water at the time of fieldwork. It was assessed as a riverine flow-through HGM class with an upper perennial, permanently flooded, riverine unconsolidated bottom (R3UBH) Cowardin class.

Stream 2: Stream 2 was a short segment of stream channel (approximately 70 feet) that connected the eastern and western vegetated swales of Wetland 3 at the southern end. It was approximately two feet wide by one foot deep with a gravelly substrate and featured a few inches of flowing water at the time of fieldwork. It was assessed as a riverine flow-through HGM class with a R3UBH Cowardin class.

Ephemeral Drainage: A small drainageway emerged from the culvert outlet that drained Wetland 1. The drainage was approximately 1-2 feet wide and a few inches deep. It did not have a defined bed or bank or any other indicator of OHWM. It was partially vegetated by western swordfern (FACU), Himalayan blackberry (FAC), trailing blackberry, and false brome (NOL). The sample plot established in the drainage bottom (Sample Plot 4) did not yield hydric soil indicators; soils were brown (7.5 YR 3/3) gravelly loam. No wetland hydrological indicators were observed within the feature.

Upland ditch: The upper portion of the manmade ditch containing Wetland 2 did not meet wetland criteria nor were any indicators of OHWM observed. It was approximately 4 feet wide and 4 feet deep and sparsely vegetated by trailing blackberry, English ivy, false brome, and western swordfern. Soils were very dark grayish brown to brown (10 YR 3/3) silt loam with no redoximorphic features.

(F) Deviation from LWI or NWI

No NWI or LWI features were mapped within the study site. Both sources show Wiley Creek offsite to the east. This study identified three slope PEMC wetlands, two R3UBH drainages, one ephemeral drainage, and one upland ditch as shown in Figures 6a-d.

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(G) Mapping Method

Wetland, OHWM, photo point, and sample plot locations were recorded with a handheld Trimble GPS unit capable of sub-meter accuracy following differential correction with Pathfinder Office desktop software. These data were converted to ESRI shapefile and mapped using ArcMap 10.6 desktop software.

The southern extent of Wetland 1 and the area where it transitioned into Stream 1 could not be physically accessed due to dense growth of Himalayan blackberry. This area was estimated from vantage points and with use of aerial and topographical maps.

(H) Additional Information

None.

(I) Summary and Conclusions

Based on vegetation, soils, hydrology, and OHWM data, three wetlands, two perennial streams, one ephemeral drainage, and one upland ditch were identified within the site. Wetland area totaled 0.27 acre. Wetland 1 (0.11 acre) was assessed as a slope PEMC wetland. Wetland 2 (0.04 acre) was assessed as a slope PEMCx wetland. Wetland 3 (0.12 acre) was assessed as a slope PEMC wetland. Streams 1 and 2 were assessed as riverine flow-through R3UBH features.

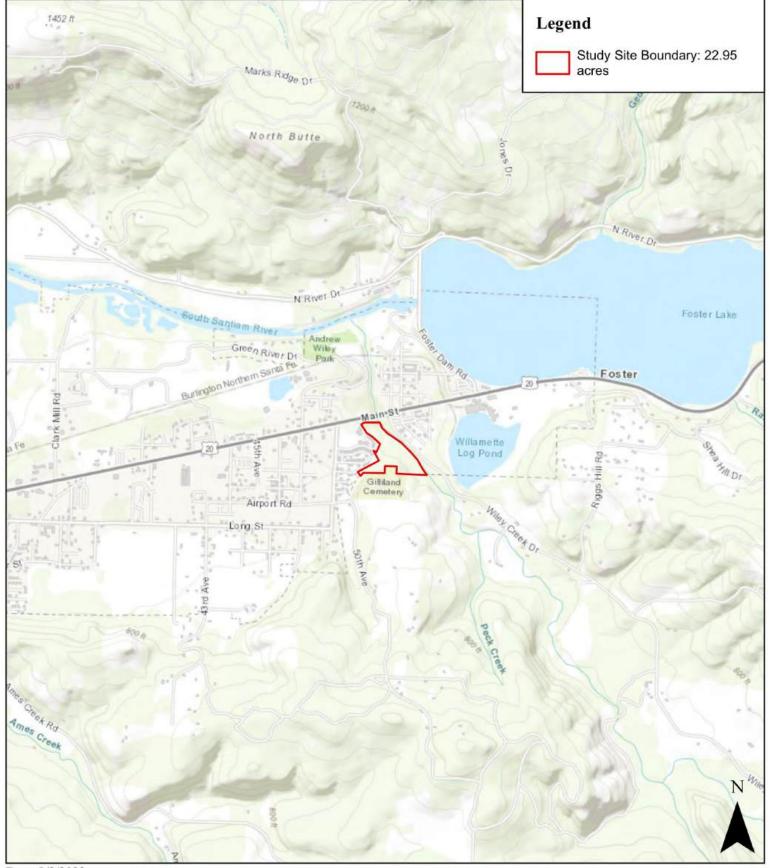
(J) Disclaimer

This report documents the investigation, best professional judgment, and conclusions of the investigators. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State lands in accordance with OAR 141-090-0005 through 141-090-0055.

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APPENDIX A: FIGURES

FIGURE 1: LOCATION MAP



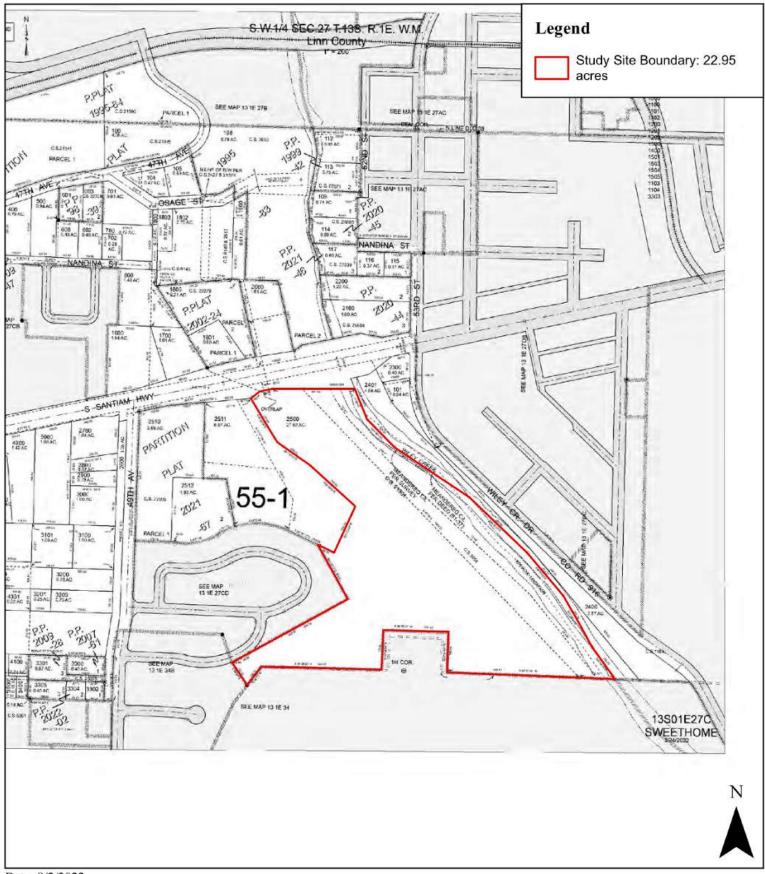
Date: 8/2/2022

Data Source: ESRI, 2022; Linn County GIS Dept, 2022

Figure 1. Location Map



FIGURE 2: TAX MAP



Date: 8/2/2022

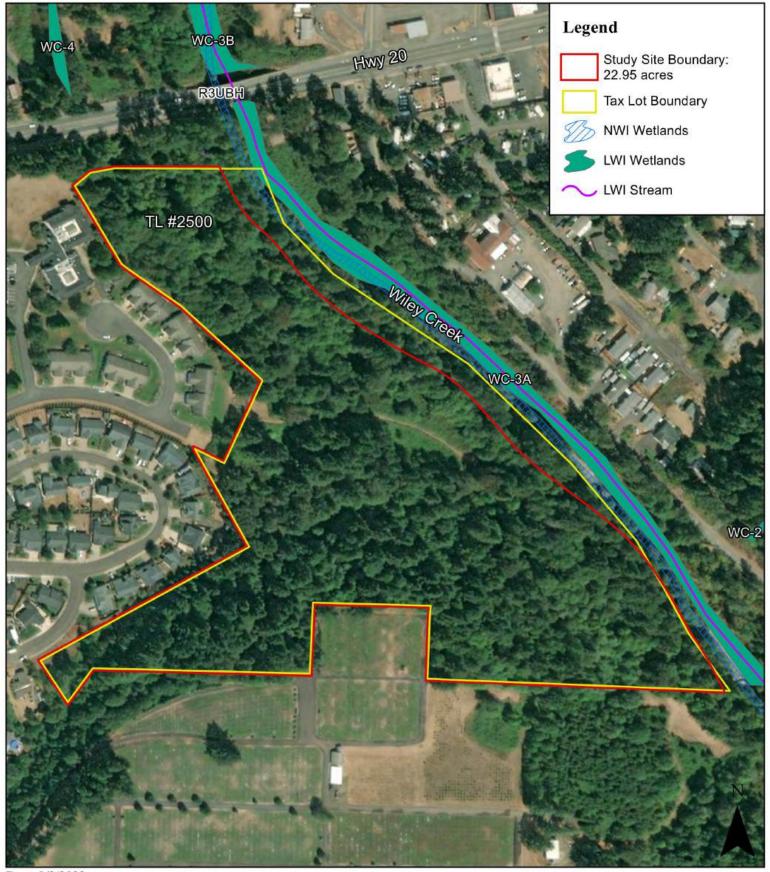
Data Source: ESRI, 2022; Linn County GIS Dept, 2022

Figure 2. Tax Map - 131E27C





FIGURE 3: WETLAND INVENTORY MAP



Date: 8/2/2022

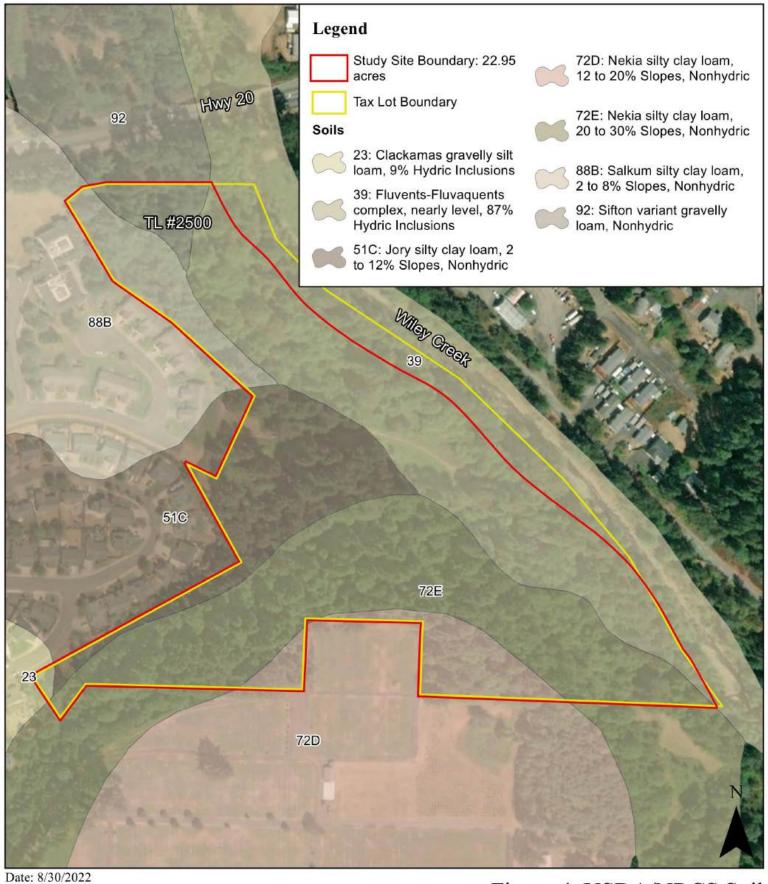
Data Source: ESRI, 2022; Linn County GIS

Dept, 2022; USFWS, NWI, 2022

Figure 3. Wetland Inventory Map



FIGURE 4: USDA/NRCS SOIL SURVEY MAP



Data Source: ESRI, 2022; Linn County GIS Dept, 2022; Soil Survey Staff, USDA, NRCS, 6/15/2022

Figure 4. USDA/NRCS Soil Survey Map



Highway 20 Project Site: S&A # 2999

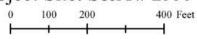


FIGURE 5A: RECENT AERIAL IMAGE



Data Source: ESRI, 2022; Linn County GIS Dept, 2022

Figure 5a. Recent Aerial Imagery-August 24, 2021



Highway 20 Project Site: S&A # 2999

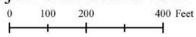
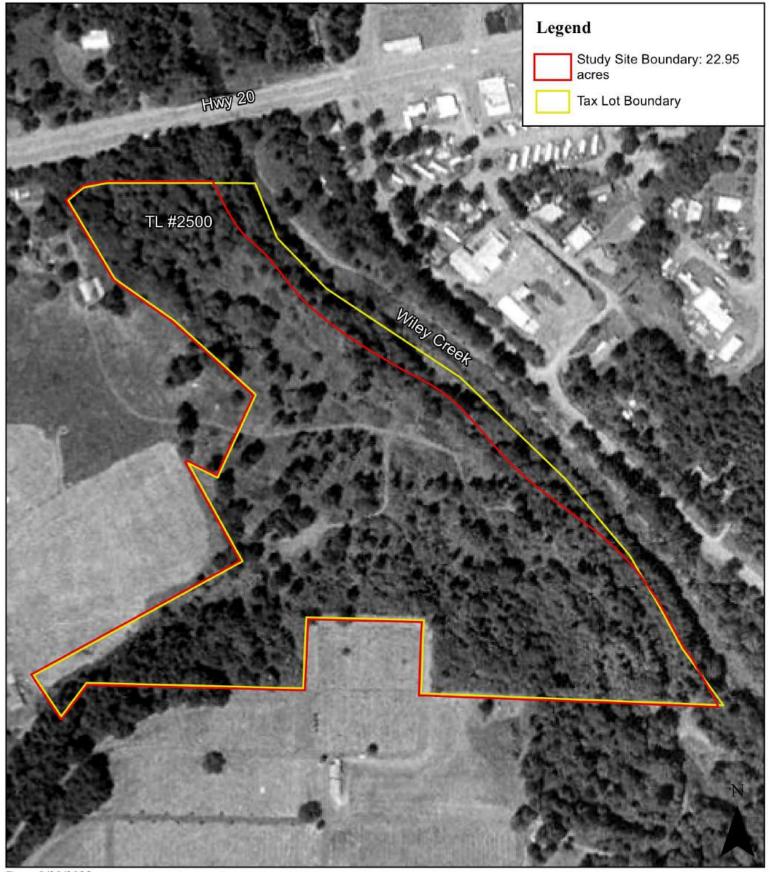


FIGURE 5B: HISTORICAL AERIAL IMAGE



Data Source: ESRI, 2022; Linn County GIS Dept, 2022

Figure 5b. Historical Aerial Imagery-July 6, 1994



Highway 20 Project Site: S&A # 2999

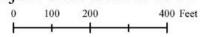
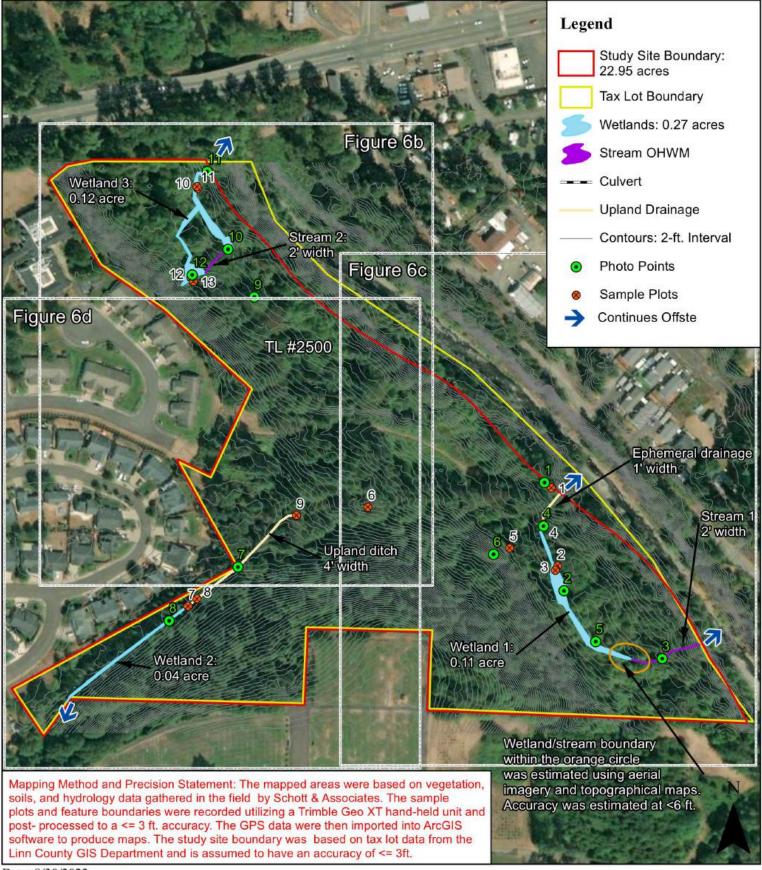


FIGURE 6A-D: WETLAND DELINEATION MAPS



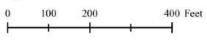
Data Source: ESRI, 2022; Linn

County GIS Dept, 2022; DOGAMI, 2009

Figure 6a. Wetland Delineation Map - Overview



Highway 20 Project Site: S&A # 2999



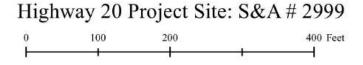


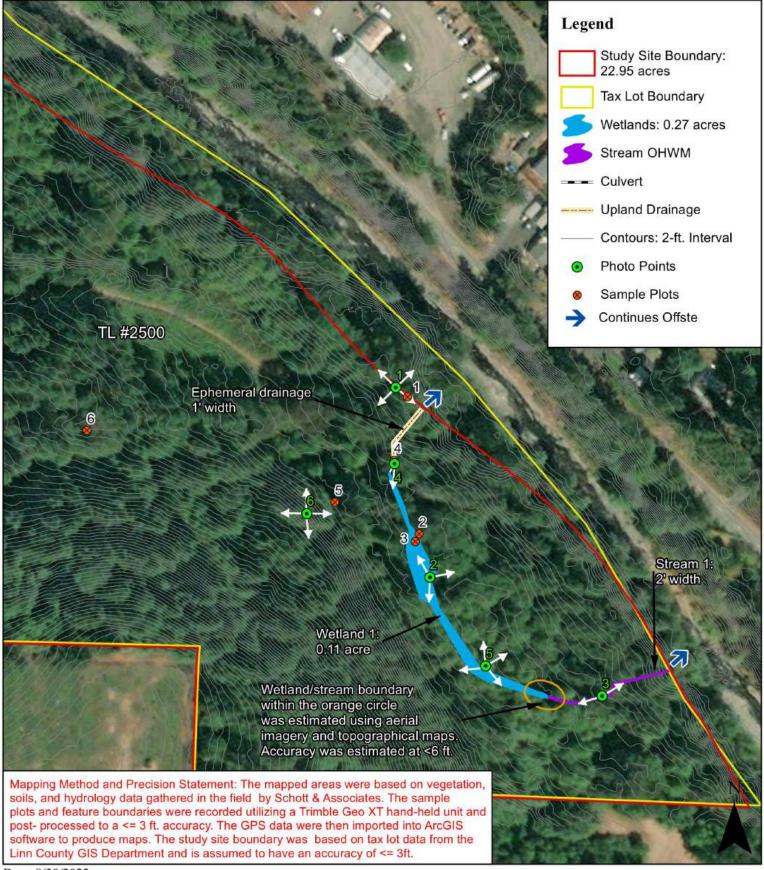
Data Source: ESRI, 2022; Linn

County GIS Dept, 2022; DOGAMI, 2009

Figure 6b. Wetland Delineation Map - North





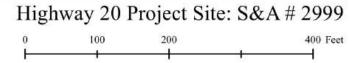


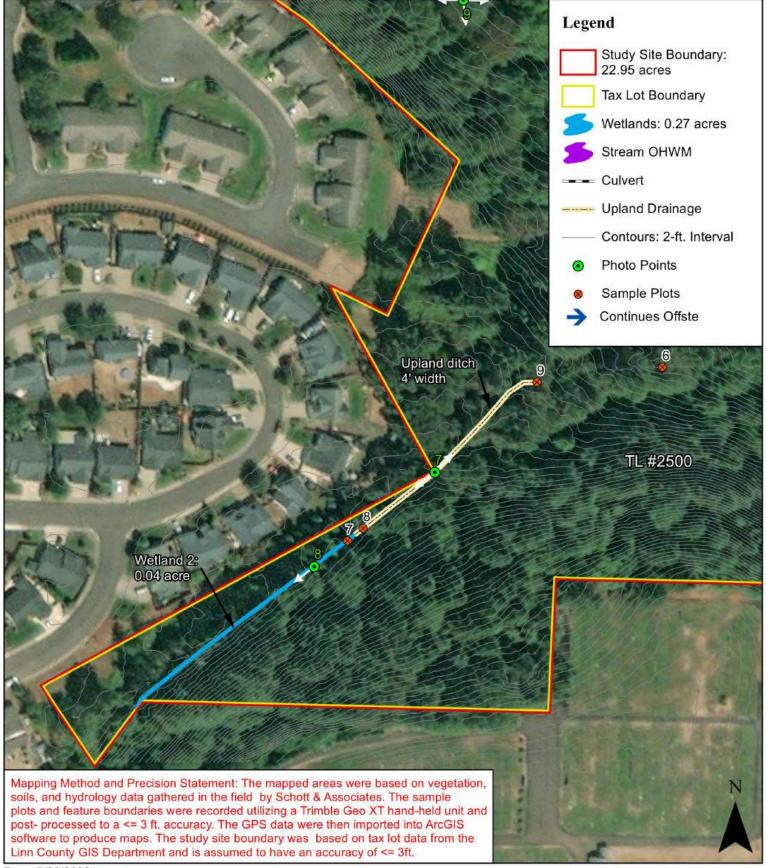
Data Source: ESRI, 2022; Linn

County GIS Dept, 2022; DOGAMI, 2009

Figure 6c. Wetland Delineation Map - East





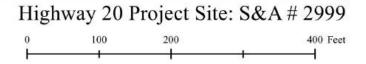


Data Source: ESRI, 2022; Linn

County GIS Dept, 2022; DOGAMI, 2009

Figure 6d. Wetland Delineation Map - West





APPENDIX B: DATA FORMS

Project/Site:	Hwy 20			City/County:	Sweet Hor	ne/Linn			Sampli	ng Date: _	8/4/2022
Applicant/Owner:	Mosaic Developmen	nt					State:	OR	Sampli	ng Point: _	1
Investigator(s):	K. Cartwright; J. For	gione		Section	n, Township	, Range:	T13S, I	R1E, Section	27C		
Landform (hillslope	, terrace, etc.):	terrace		Local re	elief (concave	e, convex	, none):	none		Slope	(%): <u>0-2</u>
Subregion (LRR):	Northwest Forests a	and Coast (LRR A)	Lat:				Long:			Da	tum:
Soil Map Unit Name		vaquents complex		CANAL TO A STATE OF THE STATE O	owe			ssification: _		ACCOUNTS ASSESS	SE VO
	logic conditions on th	7.			Yes_	950,000,000,000					
	, Soil							ircumstance			X No
Are Vegetation	, Soil	, or Hydrology		naturally pro	oblematic?	(If nee	ded, exp	olain any ans	wers in R	demarks.)	
SUMMARY OF	FINDINGS - Att	ach site map s	howing	sampling	point loca	ations, t	ransec	ts, impor	tant fea	tures, etc	n .
Hydrophytic Vegeta	tion Present?	Yes No	X								
Hydric Soil Present		Yes No		3,05,15,15,05,25	ampled Area a Wetland?	а	Yes		No	X	
Wetland Hydrology	Present?	Yes No	0 201 8	William	a Wetland:			3		<u> </u>	
	ed in lower-lying area I ravine ~20-30 feet l		r stream te	rrace closest	to offsite W	iley Cree	k to docu	ument repres	sentative (conditions.	Wily Creek is in
VEGETATION			550 550	172 W W	N2 4220 50 0	Save consum	an and an		Ac		
	<u> </u>		Absolute % Cover	Dominant Species?	Indicator Status?			t workshee nant Specie			
Tree Stratum (Us					3 TO 68 TO 10 TO 1			ACW, or FA		25	7.1
Acer macrophy	llum		100	Y	FACU				0	1	(A)
2. 3.			5 × 25	8				Dominant All Strata:		4	(B)
4						- 51					(B)
4.		Total Cover:	100	O 				nant Species ACW, or FA		25%	(A/B)
		Total Cover.	100			macAit	ODL, I	AOW, OITA	·	20/0	(\(\circ\(\beta\))
Shrub Stratum					3	Prevale	nce Inde	ex Workshe	et:		
Rubus armenia	cus		80	Y	FAC		al % Co			Multiply by:	
2. Symphoricarpo	s albus		20	Y	FACU□	OBL spe	ecies		x1 =	0	125 124
3.						FACW s	pecies		x2 =	0	
4						FAC spe			x3 =	0	
5		-							x4 =	0	
		Total Cover:	100			UPL spe			x5 =	0	
Herb Stratum						Column			(A)	0	(B)
Brachypodium	sylvaticum		50	Y	NOL	Preva	ence Inc	dex = B/A = _			
2					-						
			-	10-		Hydrop		getation Ind		- \/ t-t'-	20
_								id Test for H ninance Test			n.
•				-				valence Inde			
-			-	-				phological A			supporting
								Remarks or	10000		
Militari Militari						l . 		land Non-Va			
					-	-		natic Hydrop			(plain)
11.			3 32								
170 p. 0.1		Total Cover:	50								
Woody Vine Str	ratum) 				dric soil and ss disturbed			ust
2.						Hydrop	hytic				
		Total Cover:	0			Vegetat					
% Bar	e Ground in Herb Str	ratum <u>50</u> %	Cover of B	iotic Crust	. 0	Present			Yes	No_	X
Remarks:											

Primary Indicators (any one indicator is sufficient) Secondary Indicators (2 or more required Surface Water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (A3) Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Veter Van A and V	Redox Features	OIL							Samplin	g Point:		
(inches) Color (moist) % Color (moist) % Type! Loc ² Texture Remarks 0-4 10 YR 3/3 100 Texture Remarks OrfSit Crist OrfSit Crist Texture Remarks OrfSit Crist Indicators for Problematic Hydric Soils ³ : Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Fedox (S5) 2 cm Muck (A10) Histic Epipedon (A2) Stripped Matrix (S6) Depleted Below Dark Surface OrfSit Crist OrfSit Crist Indicators for Problematic Hydric Soils ³ : Hydric Soil Indicators (A10) Other (Explain in Remarks) Hydric Soil Fedox Mark A1 Other (Explain in Remarks) Other (Explain in Remarks) Public Depleted Dark Surface OrfSit Crist Indicators of hydrophylic vegetation and water (A11) Other (Explain in Remarks) Public Depleted Dark Surface OrfSit Crist Indicators of hydrophylic vegetation and water (A11) Other (Explain in Remarks) Public Depleted Dark Surface OrfSit Crist Indicators of hydrophylic vegetation and water (A12) Water And (A12) Other (Explain in Remarks) No Depleted Dark Surface OrfSit Crist OrfSit Crist Indicators of hydrophylic vegetation and water (A12) Water Marks (A12) Other (Explain in Remarks) OrfSit Crist Indicators of Problematic Hydric Soils OrfSit Crist OrfSit Crist Indicators of Problematic Hydric Soils OrfSit Crist OrfSit Crist Indicators of Problematic Hydric Soils OrfSit Crist OrfSit Crist OrfSit Crist Indicators of Problematic Hydric Soils Indicators of Problematic Hydric Soils Indicators of Problematic Hydric Soils Indicators of Problemat	Codor (moist)	Profile Description: (D	escribe to the de	pth needed to	document t	he indicato	r or conf	irm the abs	ence of indicate	ors.)		
(inches) Color (moist) % Color (moist) % Type! Loc ² Texture Remarks 0-4 10 YR 3/3 100 Texture Remarks CarSiL Texture Remarks CarSiL Ca	Codor (moist)	Depth N	Matrix	83	Redox Feat	ures						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains: *Location: PL=Pore Lining, M=Matrix.	man Marangan At same arangan		Color (mois	117		Loc2	Texture		Rema	rks	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histic Epipedon (A2) Sandy Radox (S5) Loamy Mucky Mineral (F1) (except MLRA 1) Differ (Explain in Remarks) Hydrogo Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Balsow Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Muck Mineral (S1) Sendy Muck Mineral (S1) Depleted Dark Surface (F6) Problematic Hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: shovel refusal-rock/gravel Depth (inches): 4 Water-Stained Leaves (B9) (except MuRA 1, 2, 4A and 4B) Saturation (A3) Saturation (A3) Water Marks (B1) Water Marks (B1) Water Marks (B1) Aquatic Invertebrates (B13) Diralinge Patterns (B10) Dir Saturation Valter (A1) Diralinge Patterns (B10) Diralinge Patter	Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoscipped Matrix (S6) Histosci (A1) Histoscipped Matrix (S6) Black Histor (A2) Stripped Matrix (S6) Black Histor (A3) Loamy Mukry Mineral (F1) (except MLRA 1) Other (Explain in Remarks) Hydrogen Stufface (A1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Trinck Dark Surface (A12) Redox Dark Surface (F6) Sandy Mukry Mineral (F1) Sendy gleyed Matrix (S4) Redox Dark Surface (F7) Wetland Hydrology must be present, unless disturbed or problematic. stertrictive Layer (fit present): ype: shovel refusal-nock/gravel epith (inches): 4 DROLOGY Water-Stained Leaves (B9) (except Matrix (B1) Water Marks (B1) Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Dry-Season Water Table (C2) Drift Deposits (B3) Oxidized Rizizopheres along Living Roots (C3) Surface Soil Cracks (B6) Surface Roots (B7) Sparsely Vegetated Concave Surface (B8) Included Open Present? Yes No X Depth (inches): Urdox Water Present? Yes No X Depth (inches): Urdox Water Pates (P4) Water Stained Leaves (B8) Wetland Hydrology Present? Yes No X Depth (inches): Water Stained Leaves (B8) Wetland Hydrology Present? Yes No X Depth (inches): Water Hydrology Present? Yes No X Depth (inches): Water Baller Present? Yes No X Depth (inches):	\		- Color (mole	- 70	Турс			<u> </u>	rtoma	ino	
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Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Histosol (A2) Stripped Matrix (S6) Black Histo (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Dark Surface (A12) Sandy Muck Mineral (F6) Sandy Muck Mineral (F6) Sandy Muck Mineral (S1) Sandy Hydrogen Sulfide (A4) Depleted Dark Surface (F6) Sandy Muck Mineral (S1) Sandy Muck Mineral (S1) Depleted Dark Surface (F7) Wetland Hydrology must be present, unless disturbed or problematic. Redox Depressions (F8) Water Stall Present? Type: Shovel refusal-rock/gravel Depth (inches): Surface Water (A11) Water Marks (B1) Water Marks (B1) Aquatic Invertebrates (B13) Water Marks (B2) Defit Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Sandy Much Mineral (S2) Algal Mat or Crust (B4) Presence of Reduced Inor (C4) Surface Salined Leaves (B9) Surface Soil Cracks (B8) Oxidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Salt Crust (B4) Presence of Reduced Inor (C4) Shallow Aquiland (O3) Hydrogen Sulface Odor (C1) Salt Crust (B4) Presence of Reduced Inor (C4) Shallow Aquiland (O3) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Firest-Heave Hummocks (D7) Frost-Heave Hummocks (D7) Saltration Present? Yes No X Depth (inches): Water table Present? Yes No X Depth (inches): Water table Present? Yes No X Depth (inches): Water table Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Depth (in	Indicators for Problematic Hydric Soils Indicators for Problematic Hydric Soils			18	-00			-				
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Sandy Muck Mineral (S1)	Sandy Muck Mineral (S1)							³ India	cators of hydroph	nytic vegetation	and	
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Restrictive Layer (if present): Type:shovel refusal-rock/gravel Depth (inches):4	Securictive Layer (if present): Speed of the present of the pr	- Same of the control					***					
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				- 14 11	-1-1-1-1			* !I - I- I - I				
emarks:	marks:	escribe Recorded Data (s	stream gauge, mo	nitoring well, a	eriai photos, p	revious ins	pections),	if available:				
		emarks:										
		DOOR TOWN TO SELECT										

Project/Site:	Hwy 20	12	City/County	Sweet Hor	me/Linn			Sampling	g Date:	8/4/2022
Applicant/Owner:	Mosaic Development					State: _			g Point:	2
Investigator(s):	K. Cartwright; J. Forgione		Section	n, Township	, Range:	T13S, F	R1E, Section	27C		
Landform (hillslope	e, terrace, etc.): terrace		Local re	lief (concav	e, convex	none): _	none		Slope (%	6): 0-2
Subregion (LRR):	Northwest Forests and Coast (I	LRR A) Lat:			- 22	Long: _			Datu	ım:
Soil Map Unit Nam	Maria de la composición del composición de la co		CONTRACTOR OF THE PARTY OF THE	0770			ssification: <u>r</u>	200 S	6001180 KNRD :	= 10
	ologic conditions on the site typic		•	Yes_					ain in Rema	
	, Soil, or Hydro								100	K_No
Are Vegetation	, Soil, or Hydro	logy	naturally pr	oblematic?	(If nee	ded, exp	lain any ans	wers in Re	marks.)	
SUMMARY OF	FINDINGS – Attach site i	map showing	sampling	point loca	ations, t	ransec	ts, import	ant feat	ures, etc.	
Hydrophytic Vegeta	ation Present? Yes X	No								
Hydric Soil Present		No X		ampled Are a Wetland?		Yes		No	X	
Wetland Hydrology			W.C.	a Wettand:					- 5	
Remarks:										
VEGETATION					c					
Tree Stratum (Us	se scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status?			t worksheet nant Species			
Acer macrophy		100	Y	FACU	That Are	OBL, FA	ACW, or FAC	C:	4	(A)
2. Alnus rubra		30	Y	FAC	Total Nu	mber of	Dominant			
3.					Species	Across A	All Strata:		5	(B)
4.					Percent	of Domin	nant Species			
8:	Total (Cover: 130	(C):		CONTRACTOR OF STATE		ACW, or FAC		80%	(A/B)
					C500 14	85 50	8000000 22 0280	250		10
Shrub Stratum		72	**	FAC			x Workshee		2012	
Rubus armenia	acus	40	Y	FAC		al % Cov			Multiply by:	53
2. 3.		_ %			OBL spe			d =	0	
4.		_	-		FAC spe			3 =	0	_
5.					0.0	-		<4 =	0	
53/4F	Total	Cover: 40			UPL spe	700		c5 =	0	_
Herb Stratum		**************************************			Column		0 ((A)	0	— (B)
1. Urtica dioica		10	Y	FAC	Preval	ence Ind	ex = B/A =			
2. Hydrophyllum	tenuipes	10	Y	FAC						
3					Hydropi	nytic Veg	getation Ind	icators:		
4							d Test for H		Vegetation	
5		_	-		X		inance Test			
-				. ——			alence Inde			
									(Provide su	pporting
					-		Remarks or			
							land Non-Va			******
10						Problem	atic Hydrop	hytic Vege	etation ¹ (Expl	lain)
11	T.4.1									
Weed. Vine C		Cover:20			1,,,_,					
Woody Vine Si 1.							ric soil and v s disturbed		drology mus	5L
2.		<u> </u>	2					- Problem		
- · · · · · · · · · · · · · · · · · · ·	Total	Cover: 0	()		Hydropi	-				
% Bai	re Ground in Herb Stratum 80		otic Crust	0	Vegetat Present		,	res X	No_	
Remarks:						(V		- A		

SOIL									Sampling Poi	nt:		2
Profile Des	scription: (Describe	to the depth	needed to do	cument th	ne indicate	or or cor	nfirm the abs	sence of	indicators.)			
Depth	Matrix			edox Feat					5			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	- Textur	· o		Remarks		
0-16	10 YR 3/3	100	Color (moist)		Турс		GrSiL		-	Kemarks		
0-10	10 11 3/3	100		7. 9.		-	GIGIL					
	3 	-					- 15		1			
				. —	——				1			
-	(· <u>- </u>			- 4 <u> </u>		/ <u>-</u>			
	· · · · · · · · · · · · · · · · · · ·						- #		02			
				<u></u>			- 170		S			
	00			117 -1			- 117					
									1			
'Type: C=0	Concentration, D=Dep	letion, RM=F	Reduced Matrix,	CS=Cove	ered or Coa	ated San	d Grains. ² L	.ocation:	PL=Pore Lini	ing, M=Matrix.		
Hydric Soi	I Indicators: (Applic	able to all L	RRs, unless ot	herwise i	noted.)		Indicator	s for Pro	oblematic Hy	dric Soils ³ :		
	sol (A1)			Redox (S					cm Muck (A1			
	Epipedon (A2)			ed Matrix (ed Parent Mat			
	Histic (A3)				ineral (F1)	(excent	MI RA 1)		ther (Explain i			
	gen Sulfide (A4)				fatrix (F2)		meros ij	— °	trici (Expidii)	ii rteiliaite)		
	ted Below Dark Surfac	~ /A44\		ed Matrix	22 43							
		e (ATT)					31		f boodes about a c			
200	Dark Surface (A12)			Dark Sur		•				egetation and		
	y Muck Mineral (S1)				Surface (F7	')		annight man sa	drology must	- 100 pp - 1		
	y gleyed Matrix (S4)		Redox	Depressi	ons (F8)			unless d	isturbed or pro	oblematic.		
Restrictive	Layer (if present):											
Type:						100						
Depth (inch	nes):		41			H	ydric Soil Pr	esent?	Y	'es	No _	X
	.,											
HYDROLOG'	Y ydrology Indicators:											
	dicators (any one indicators)	ator is suffici	ent)					Se	condary Indica	ators (2 or mor	e requir	(ha
124111 344	ce Water (A1)	ator is sumor	Amenda	Stained I	eaves (B9) (evcen	•	10000		Leaves (B9) (N	CONTRACTOR OF THE PARTY OF THE	
					A and 4B)	100 m	•	— "	4A and 4B)		ILIXA I,	۷,
The second second	Water Table (A2)							— _D				
	ation (A3)		:	ust (B11)		ix.			rainage Patter	25 25	60	
	r Marks (B1)				rates (B13					ater Table (C2)		00)
	nent Deposits (B2)				e Odor (C1			_		le on Aerial Im	agery (39)
	Deposits (B3)						Roots (C3)	_	eomorphic Po			
	Mat or Crust (B4)				duced Iron		15 OFERS		hallow Aquitar			
	eposits (B5)		1		luction in P				AC-Neutral Te			
	ce Soil Cracks (B6)			d or Stres	sed Plants	(D1) (Li	RR A)			ınds (D6) (LRF	50	
Inunda	ation Visible on Aerial	Imagery (B7) Other (Explain in	Remarks)		F	rost-Heave Hu	ımmocks (D7)		
Spars	ely Vegetated Concav	e Surface (E	88)									
Field Obse	ervations:	3250	690 598 5	3 M 5 3								
	ater Present? Yes			h (inches	· —							
Water table				h (inches		10-	Wetland H	ludrolom	ur Bracant?	Voc	No	V
Saturation I	Present? Yes apillary fringe)	N	o X Dept	h (inches)		wettand n	iyarolog	y Present?	Yes	_No _	_ ^ :
	corded Data (stream ga	auge, monito	ring well, aerial	photos, p	revious ins	spections), if available	:				
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,											
Remarks:												

Project/Site:	Hwy 20	12	City/County:	Sweet Hor	me/Linn		_ Sampling Da	ate: 8/4/2022
Applicant/Owner:	Mosaic Development					ate: OR		oint:3
Investigator(s):	K. Cartwright; J. Forgione		Section	n, Township	, Range: <u>T1</u>	3S, R1E, Sect	ion 27C	
Landform (hillslope	e, terrace, etc.): terrace		Local re	lief (concav	e, convex, no	one): none		Slope (%): 0-2
Subregion (LRR):	Northwest Forests and Coast	t (LRR A) Lat:			L	ong:	2	Datum:
Soil Map Unit Nam		10 10 10 10 10 10 10 10 10 10 10 10 10 1	CONTROL STATE	OVSe	NW	I Classification	Distriction Assessment	4048 SE 90
	ologic conditions on the site typ			Yes_			_ (If no, explain i	
Are Vegetation	, Soil, or Hyd						ces" Present? \	
Are Vegetation	, Soil, or Hyd	rology	naturally pro	oblematic?	(If needed	d, explain any a	inswers in Remar	ks.)
SUMMARY OF	FINDINGS - Attach site	map showing	sampling	point loc	ations, trar	nsects, impo	ortant feature	s, etc.
Hydrophytic Veget	ation Present? Yes	X No						
Hydric Soil Presen	t? Yes	X No	3.000 E.1200 E.20	ampled Are a Wetland?		Yes X	No	
Wetland Hydrology	Present? Yes	X No		a Wedana:		0		
remarks, Plot plac	ed in swale at toe of slope							
VEGETATION		*	D	I - 1 1 1	Dominones	Tast warksh		
<u>.</u> . 62 929	1 2 2	Absolute % Cover	Dominant Species?	Indicator Status?		Test workshop Dominant Spec		
	se scientific names.)	-				Dominant Spec BL, FACW, or F	FAC:	
12			Q 	· 				4 (A)
3						er of Dominant ross All Strata:		4 (B)
4.			W D		-			4 (B)
T. g.	Tota	al Cover: 0				Dominant Spec BL, FACW, or I		0 % (A/B)
Shrub Stratum 1.					200000000000000000000000000000000000000	Index Works		ply by:
2.			965		OBL specie	is	_x1 =	0
3					FACW spec	cies	_x2 =	0
4			·		FAC specie	s	x3 =	0
5	Bridge:				FACU speci			0
werten 1977 in weather well the con-	Tota	al Cover: 0	(UPL specie	7.00 mm	-745	0
Herb Stratum				FAC	Column Tot			0 (B)
1. Urtica dioica				OBL	Prevalenc	ce Index = B/A	=	
2. Lysichiton ame		20		FAC	Unadanan badi	a Vanatatian I		
 Athyrium cyclo Ranunculus re 		10		FAC	N 1977 (1977)	ic Vegetation I	ndicators: r Hydrophytic Veg	retation
						- Dominance Te		jetation
			·· ·		-	- Prevalence In	14440	
7			-				Adaptation1 (Pro	ovide supporting
							or on a separate	
751 Het s			·	-	D		Vascular Plants ¹	5045/50 f ()
					-		rophytic Vegetatio	on ¹ (Explain)
11.								
0.000	Tota	al Cover: 60						
Woody Vine S 1.	<u>tratum</u>	52					nd wetland hydroled or problematic	
2.					Hydrophyti	ic		
201	Tota	al Cover: 0	200		Vegetation			
% Ba	re Ground in Herb Stratum	40 % Cover of B	iotic Crust	0	Present?		Yes X	No
Remarks:								

Matrix				ne indicate	or or con	firm the absenc	e of indicators.)
Color (moist) 10 YR 3/2		Re				mm the absence	
10 YR 3/2	0/6		edox Featu	ures			
	70	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
S) Color (moist) % Color (mois	200	100-	100 0 100		L		
	80	10 YR 3/6	20	С	М	CL	76 16
					<u> </u>	#	
			7/4 <u>1</u>		(C)	(A <u></u>	하 : 15 <u>- 4)</u> - 1 <u>7</u>
			-012			8	0 0 40 0
						***	20 %
						19	- 2 24
entration, D=Deple	tion, RM=F	Reduced Matrix,	CS=Cove	ered or Coa	ated Sand	Grains. ² Locat	tion: PL=Pore Lining, M=Matrix.
cators: (Applicat	ble to all L	.RRs, unless ot	herwise r	noted.)		Indicators for	Problematic Hydric Soils ³ :
1)		Sandy	Redox (S	5)		07-	2 cm Muck (A10)
edon (A2)		Strippe	ed Matrix (S6)		·	Red Parent Material (TF2)
c (A3)		Loamy	Mucky Mi	ineral (F1)	(except l	MLRA 1)	Other (Explain in Remarks)
Sulfide (A4)		Loamy	Gleyed M	1atrix (F2)			
elow Dark Surface	(A11)	Deplet	ed Matrix	(F3)			
Surface (A12)		Redox	Dark Surf	face (F6)		³ Indicato	rs of hydrophytic vegetation and
k Mineral (S1)		Deplet	ed Dark S	urface (F7)	wetlan	nd hydrology must be present,
ed Matrix (S4)		Redox	Depression	ons (F8)		unle	ss disturbed or problematic.
er (if present):							
					93741		
i.		4			Hy	dric Soil Preser	nt? Yes X No
logy Indicators:	6- D1 205501						020 NO 66 NO 90 POSEN 00 I
rs (any one indicate	or is suffic	Amenda	950 PK 1100				Secondary Indicators (2 or more required
rs (any one indicate ater (A1)	or is suffic	Water-		eaves (B9			Water-Stained Leaves (B9) (MLRA 1, 2
rs (any one indicate ater (A1) r Table (A2)	or is suffic	Water-	RA 1, 2, 4	A and 4B)			Water-Stained Leaves (B9) (MLRA 1, 2 4A and 4B)
rs (any one indicate ater (A1) r Table (A2) (A3)	or is suffic	Water- MLF Salt Co	RA 1, 2, 4 / rust (B11)	A and 4B)			Water-Stained Leaves (B9) (MLRA 1, 2 4A and 4B) Drainage Patterns (B10)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1)	or is suffic	Water- MLF Salt Ci Aquati	RA 1, 2, 4 rust (B11) c Invertebr	A and 4B))		Water-Stained Leaves (B9) (MLRA 1, 2 4A and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2)	or is suffic	Water- MLF Salt Co Aquati Hydrog	RA 1, 2, 4/ rust (B11) c Invertebi gen Sulfide	A and 4B) rates (B13 e Odor (C1)	_	Water-Stained Leaves (B9) (MLRA 1, 2 4A and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)	or is suffic	Water- MLF Salt C Aquati Hydro Oxidiz	RA 1, 2, 4A rust (B11) c Invertebr gen Sulfide ed Rhizos	A and 4B) rates (B13 e Odor (C1 pheres alo) I) ing Living	Roots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	or is suffic	Water- MLF Salt Co Aquati Hydroo Oxidizo Preser	RA 1, 2, 44 rust (B11) c Invertebi gen Sulfide ed Rhizosp nce of Red	A and 4B) rates (B13 e Odor (C1 pheres alo) I) ng Living (C4)	Roots (C3)	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)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5)	ior is suffic	Water- MLF Salt Co Aquati Hydrog Oxidize Preser Recen	RA 1, 2, 44 rust (B11) c Invertebi gen Sulfide ed Rhizosj nce of Red t Iron Red	A and 4B) rates (B13 e Odor (C1 pheres alo duced Iron uction in P) I) ng Living (C4) Plowed So	Roots (C3)	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)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5)		Water- MLF Salt Co Aquati Hydrog Oxidiz Preser Recen Stunte	RA 1, 2, 44 rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Red t Iron Red d or Stress	A and 4B) rates (B13 e Odor (C1 pheres alo duced Iron uction in P sed Plants) I) ng Living (C4) Plowed So (D1) (LR	Roots (C3)	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)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) sil Cracks (B6) Visible on Aerial In	magery (B7	Water- MLF Salt C Aquati Hydro Oxidiz Preser Recen Stunte Other	RA 1, 2, 44 rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Red t Iron Red d or Stress	A and 4B) rates (B13 e Odor (C1 pheres alo duced Iron uction in P) I) ng Living (C4) Plowed So (D1) (LR	Roots (C3)	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)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) sil Cracks (B6) Visible on Aerial In	magery (B7	Water- MLF Salt C Aquati Hydro Oxidiz Preser Recen Stunte Other	RA 1, 2, 44 rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Red t Iron Red d or Stress	A and 4B) rates (B13 e Odor (C1 pheres alo duced Iron uction in P sed Plants) I) ng Living (C4) Plowed So (D1) (LR	Roots (C3)	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)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) sil Cracks (B6) Visible on Aerial In	magery (B7 Surface (B	Water- MLF Salt Ci Aquati Hydrog Oxidizi Preser Recen Stunte Other	RA 1, 2, 44 rust (B11) c Invertebr gen Sulfide ed Rhizos nce of Red t Iron Red d or Stress	A and 4B) rates (B13 e Odor (C1 pheres alo duced Iron uction in P sed Plants n Remarks) I) ng Living (C4) Plowed So (D1) (LR	Roots (C3)	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)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) oil Cracks (B6) Visible on Aerial Integetated Concave ons: Present? Yes sent? Yes	magery (B7 Surface (B	Water- MLF Salt Ci	RA 1, 2, 44 rust (B11) c Invertebringen Sulfide ed Rhizosplance of Red t Iron Red d or Stress (Explain in	A and 4B) rates (B13 e Odor (C1 pheres alo duced Iron uction in P sed Plants n Remarks):) I) ng Living (C4) Plowed So (D1) (LR	Roots (C3)	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) Frost-Heave Hummocks (D7)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) oil Cracks (B6) Visible on Aerial Integetated Concave ons: Present? Yes sent? Yes ent? Yes	magery (B7 Surface (B	Water- MLF Salt Ci	RA 1, 2, 44 rust (B11) c Invertebringen Sulfide ed Rhizosplace of Red t Iron Red d or Stress (Explain in	A and 4B) rates (B13 e Odor (C1 pheres alo duced Iron uction in P sed Plants n Remarks):) I) ng Living (C4) Plowed So (D1) (LR	Roots (C3)	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)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) sil Cracks (B6) Visible on Aerial Integetated Concave ons: Present? Yes sent? Yes ry fringe)	magery (B7 Surface (B N X N	Water- MLF Salt Ci	RA 1, 2, 44 rust (B11) c Invertebrate gen Sulfide ed Rhizosplance of Red t Iron Red d or Stress (Explain in th (inches) th (inches)	A and 4B) rates (B13 e Odor (C1 pheres alo duced Iron uction in P sed Plants n Remarks):) I) Ing Living (C4) Plowed So I (D1) (LR)	Roots (C3) ils (C6) R A) Wetland Hydro	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) Frost-Heave Hummocks (D7)
rs (any one indicate ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) oil Cracks (B6) Visible on Aerial Integetated Concave ons: Present? Yes sent? Yes ent? Yes	magery (B7 Surface (B N X N	Water- MLF Salt Ci	RA 1, 2, 44 rust (B11) c Invertebrate gen Sulfide ed Rhizosplance of Red t Iron Red d or Stress (Explain in th (inches) th (inches)	A and 4B) rates (B13 e Odor (C1 pheres alo duced Iron uction in P sed Plants n Remarks):) I) Ing Living (C4) Plowed So I (D1) (LR)	Roots (C3) ils (C6) R A) Wetland Hydro	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) Frost-Heave Hummocks (D7)
	cators: (Application) edon (A2) c (A3) Sulfide (A4) elow Dark Surface Surface (A12) k Mineral (S1) ed Matrix (S4) er (if present):	cators: (Applicable to all L 1) edon (A2) c (A3) Sulfide (A4) elow Dark Surface (A11) Surface (A12) k Mineral (S1) ed Matrix (S4) er (if present):	cators: (Applicable to all LRRs, unless of 1) Sandy edon (A2) Strippe c (A3) Loamy Sulfide (A4) Loamy elow Dark Surface (A11) Deplet Surface (A12) Redox k Mineral (S1) Deplet ed Matrix (S4) Redox er (if present):	cators: (Applicable to all LRRs, unless otherwise in 1) Sandy Redox (S Stripped Matrix (C (A3)	cators: (Applicable to all LRRs, unless otherwise noted.) 1) Sandy Redox (S5) Stripped Matrix (S6) C (A3) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) elow Dark Surface (A11) Depleted Matrix (F3) Surface (A12) Redox Dark Surface (F6) k Mineral (S1) Depleted Dark Surface (F7) Redox Depressions (F8) er (if present):	cators: (Applicable to all LRRs, unless otherwise noted.) 1) Sandy Redox (S5) edon (A2) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except leaves Dark Surface (A11) Surface (A12) Pepleted Matrix (F3) Surface (A12) Redox Dark Surface (F6) k Mineral (S1) Pepleted Dark Surface (F7) ed Matrix (S4) Redox Depressions (F8) er (if present):	Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (except MLRA 1) Sulfide (A4) Loamy Gleyed Matrix (F2) Elow Dark Surface (A11) Surface (A12) Redox Dark Surface (F6) Redox Dark Surface (F7) Wetlar Matrix (S4) Redox Depressions (F8) Unle

Project/Site:	Hwy 20		12	City/County:	Sweet Hor	me/Linn			Sampling	Date:	8/4/2022
Applicant/Owner:	Mosaic Developme	ent					State:	OR	Sampling	Point:	4
Investigator(s):	K. Cartwright; J. Fo	orgione		Section	n, Township	, Range:	T13S, F	R1E, Section	27C		
Landform (hillslope	e, terrace, etc.):	terrace		Local re	lief (concav	e, convex	, none):	none		_Slope (%):	0-2
And the second s	Northwest Forests	and Coast (LRR A)	Lat:				Long:			Datum	
Soil Map Unit Nam		uvaquents complex		CONTROL STATE	0100			ssification: r	2000 Marie - 1000 Marie 1	nte sen se	75
	ologic conditions on t	7.5			Yes_			(
Are Vegetation	, Soil							ircumstances		100	_No
Are Vegetation	, Soil	_, or Hydrology		naturally pro	oblematic?	(If nee	ded, exp	olain any ans	wers in Ren	narks.)	
SUMMARY OF	FINDINGS - At	tach site map s	howing	sampling	point loca	ations, t	ransec	ts, import	ant featu	res, etc.	
Hydrophytic Vegeta	ation Present?	YesNo	X	la tha C		_					
Hydric Soil Present	t?	Yes No		3.000 E.1200 E.20	ampled Area a Wetland?		Yes		No X		
Wetland Hydrology	Present?	YesNo	X								
Remarks: Plot plac plants)	ed at culvert outlet i	n bottom of partiall	y vegetated	d ephemeral	channel (po	orly defin	ed bed a	nd bank, ste	ep gradient,	, no FACW o	r OBL
VEGETATION				2 1 3					S.		
Tree Stratum (Us	se scientific names.)		Absolute % Cover	Dominant Species?	Indicator Status?			t worksheet nant Species			
						That Are	OBL, F	ACW, or FAG	D:	1	(A)
2.				N	8 <u></u>	Total Nu	ımber of	Dominant			-0.0
3.						Species	Across /	All Strata:		3	_(B)
4						Percent	of Domi	nant Species	í		
		Total Cover:	0			That Are	OBL, F	ACW, or FA	D:	33%	_(A/B)
Shrub Stratum						Prevale	nce Inde	ex Workshee	et:		
1. Rubus armenia	acus		50	Y	FAC	Tot	al % Co	ver of:	Mu	ıltiply by:	
2. Symphoricarpo	os albus		20	Y	FACU□	OBL spe	ecies .	>	c1 =	0	## ##
3						FACW s	pecies	>	c2 =	0	_
4						FAC spe			c3 =	0	-
5			0.20			TO DESCRIPTION OF THE PARTY OF			<4 =	0	_
		Total Cover:	70			UPL spe			¢5 =	0	- (5)
Herb Stratum	audication ma		20	V	NOL	Column			(A)	0	_(B)
 Brachypodium 2. 	sylvaucum		30	Y		Prevai	ence inc	dex = B/A = _			<u> </u>
,				(i '	-	Hydrop	hytic Ve	getation Ind	icators:		
				No. 2		,		id Test for H		egetation	
_								ninance Test			
6							3 - Prev	valence Inde	x is ≤3.0 ¹		
7.							4 - Mor	phological A	daptation1 (Provide supp	oorting
8				119 3 21 <u>-</u>			data in	Remarks or	on a separa	te sheet)	
9				VI			5 - Wet	land Non-Va	scular Plant	s¹	
10							Probler	natic Hydrop	hytic Vegeta	ation ¹ (Explai	n)
11		7227 (377) (227)									
V2200000000000000000000000000000000000	processors	Total Cover:	30			1.					
Woody Vine S								dric soil and v			
1. 2.			<u> </u>	2 <u></u>	8-	100000000000000000000000000000000000000		oo alatarbea	o. problema	and a	
**************************************		Total Cover:	0	st 		Hydrop					
% Bai	re Ground in Herb S			iotic Crust	0	Vegetat Present		•	/es	_ No	(
Remarks:							1.5		// Circle		

SOIL								1	Sampling Poil	nt:		4
Profile Des	scription: (Describe	to the depth nee	eded to doci	ument th	ne indicato	r or cor	firm the abs	ence of	indicators.)			
Depth	Matrix	\$		lox Feat								
(inches)	Color (moist)	% Cold	or (moist)	%	Type ¹	Loc ²	Texture			Remarks		
0-16	7.5 YR 3/3	100	or (moist)	- 70	Турс		GrSiL	_		Kernarks		
	7.5 TK 5/5			-		-:	GISIL					
	<u></u>						1 %	_				
-					-			_				
	Ø						- 2	_				
	×						1.55					
<u> </u>	S											
	30						- 0					
-												
'Type: C=0	Concentration, D=Dep	oletion, RM=Redu	ced Matrix, C	CS=Cove	ered or Coa	ited San	d Grains. *Lo	ocation:	PL=Pore Lini	ing, M=Matrix.		
Hydric Soil	Indicators: (Applic	able to all LRRs	, unless oth	erwise r	noted.)		Indicators	for Pro	blematic Hyd	dric Soils ³ :		
Histos	sol (A1)	_	Sandy F	Redox (S	5)				cm Muck (A10			
Histic	Epipedon (A2)	_	Stripped	Matrix (S6)			Re	ed Parent Mat	terial (TF2)		
Black	Histic (A3)	_	Loamy N	Mucky Mi	ineral (F1)	(except	MLRA 1)	0	ther (Explain i	n Remarks)		
Hydro	gen Sulfide (A4)		Loamy (Gleyed M	latrix (F2)							
Deple	ted Below Dark Surfa	ce (A11)	Deplete	d Matrix	(F3)							
Thick	Dark Surface (A12)		Redox D	ark Surf	ace (F6)		³ India	cators of	hydrophytic v	egetation and		
— Sandy	Muck Mineral (S1)	A rc	Depleted	d Dark S	urface (F7))	we	etland hy	drology must	be present,		
Sandy	gleyed Matrix (S4)			Depression			ı	unless di	sturbed or pro	oblematic.		
	Layer (if present):								300000 - 100000 - 10000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000	S ASTACA CO POSICIONALE		
Type:												
Depth (inch	es):					l H	ydric Soil Pre	esent?	Y	'es	No	X
Remarks:						25.5		R6465:=51U4			S CARLES SEE	
YDROLOGY Wetland H	Y ydrology Indicators:	0										
	icators (any one indic							Sec	condany Indics	ators (2 or mor	e require	(he
1,541.91	ce Water (A1)	ator is sumcienty	Water-S	tained L	eaves (B9)	(except		10000		Leaves (B9) (N	2007/2004/2007	
		-			and 4B)	(except		— ·	4A and 4B)		ILIX I,	۷,
The second second	Vater Table (A2)				aliu 4D)			— _D				
	ation (A3)	8 	_	st (B11)	rotos (D12)				rainage Patter		20	
	Marks (B1)	·	_		rates (B13)			_		ater Table (C2)		00)
	ent Deposits (B2)	i .			Odor (C1		Dt- (00)	_		le on Aerial Im	agery (29)
	Deposits (B3)	-					Roots (C3)	_	eomorphic Po			
	Mat or Crust (B4)				luced Iron (" (00)		nallow Aquitar			
	eposits (B5)	7			uction in Pl		111111111111111111		AC-Neutral Te			
	ce Soil Cracks (B6)	<u> </u>			sed Plants	0.00	RR A)	_		ınds (D6) (LRI	200	
-	ation Visible on Aerial		Other (E	xplain in	Remarks)			— Fr	ost-Heave Hu	ımmocks (D7)		
	ely Vegetated Conca	ve Surface (B8)										
Field Obse		No.	V Doub	(in alasa)								
Water table	ater Present? Yes Present? Yes			(inches)								
Saturation F		·		(inches)	-	10	Wetland H	vdrolog	v Present?	Yes	No	Х
	apillary fringe)			.M.	0. 11			,	8	(-	-	
Describe Rec	orded Data (stream g	auge, monitoring	well, aerial p	hotos, pi	revious ins	pections), if available:					
Remarks:												
, ornar no.												

Project/Site:	Hwy 20		32	City/County:	: Sweet Hor	me/Linn			Sampli	ing Date: _	8/4/2022
Applicant/Owner:	Mosaic Developm	ent					State:			ing Point: _	5
Investigator(s):	K. Cartwright; J. F	orgione		Section	n, Township	, Range:	T13S, I	R1E, Section	127C		
Landform (hillslope	, terrace, etc.):	terrace		Local re	elief (concav	e, convex	, none):	none		Slope	(%): 0-2
Subregion (LRR):	Northwest Forests	and Coast (LRR A)	Lat:				Long:	2		Da	itum:
Soil Map Unit Nam		luvaquents complex		CONTRACT OF THE PARTY OF THE PA	0220			ssification: _		A000001100 KN000	SE 95
	M	the site typical for t			Yes_						
		, or Hydrology						ircumstance			X_No
Are Vegetation	, Soil	, or Hydrology		naturally pr	oblematic?	(If nee	ded, exp	olain any ans	wers in F	Remarks.)	
SUMMARY OF	FINDINGS - A	ttach site map s	howing	sampling	point loca	ations, t	ransec	cts, impor	tant fea	atures, etc	3 .
Hydrophytic Vegeta	ation Present?	Yes No	×								
Hydric Soil Present	1?	Yes No		310633335553	ampled Area a Wetland?		Yes		No	X	
Wetland Hydrology	Present?	Yes No			a rrottana.						
Remarks:											
VEGETATION											
Tree Stratum (Us	se scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status?			t workshee nant Specie			
Pseudotsuga n		^	40		FACU	That Are	OBL, F	ACW, or FA	C:	1	(A)
2. Acer macrophy	AND 107		5	V.	FACU	Total Nu	ımber of	Dominant	-		
3.	Se veres.					Species	Across	All Strata:		3	(B)
4.						Percent	of Domi	nant Specie:			
89		Total Cover:	45					ACW, or FA		33%	(A/B)
						120000 120	20 20	Visit in the Control			100
Shrub Stratum								ex Workshe			
Rubus armenia	111111111111111111111111111111111111111		80	Y	FAC		al % Co		_	Multiply by:	<u> </u>
Symphoricarpo	s albus		5		FACU	OBL spe			×1 =	0	
3. 4.				·		FAC Spe			x2 = x3 =	0	
5.			-						x4 =	0	
J		Total Cover:	85		. ———	UPL spe			x5 =	0	
Herb Stratum		101411 001011		•		Column			(A) —	0	(B)
Polystichum m	unitum		5		FACU			dex = B/A =			
2. Rubus ursinus	The state of the s		40	Y	FACU□	3/10/4/2000		Control of the state of the sta			
3.						Hydrop	hytic Ve	getation Inc	licators:	ž.	
4							1 - Rap	id Test for H	lydrophyt	tic Vegetatio	n
5								ninance Tes			
6							3 - Prev	valence Inde	x is ≤3.0)1	
7							4 - Mor	phological A	daptation	n1 (Provide :	supporting
8								Remarks or)
								land Non-Va			
10							Probler	matic Hydrop	hytic Ve	getation (Ex	rplain)
11		1221111211									
V220-000-00-00-00-00-00-00-00-00-00-00-00	properties:	Total Cover:	45			4					77+8823
Woody Vine St								dric soil and ss disturbed			ust
1. 2.		a ; å		2		100000000000000000000000000000000000000		- alosarbou	p. obio		
4 10 ₂		Total Cover:	0	:(+		Hydrop					
% Bar	re Ground in Herb S	Stratum 30 %		iotic Crust	0	Vegetat Present			Yes	No	X
Remarks:Litter ~ 20				51.1101			1.5		# 0380 <u> </u>		

SOIL									Sampling Poi	nt:		5
Profile Des	scription: (Describe	to the depti	needed to do	cument th	ne indicato	or or cor	firm the abs	sence of	f indicators.)			
Depth	Matrix	3.		dox Feat								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textur	· o		Remarks		
0-16	10YR 3/3	100	Color (moist)		Турс		SiL		3	Kemarks		
	1011 3/3	100		18 1.		-	SIL	 8	100			
-	ij						10		1.0			
				-	. ——				-			
	79 <u></u>						-		4			
	×					_	- 8		9			
				-			- 10-	<u></u>	ō			
-	(i) 			00			1 (1)		R 0			
-				.					2			
Type: C=0	Concentration, D=Dep	letion, RM=F	Reduced Matrix,	CS=Cove	ered or Coa	ated San	d Grains. ~L	.ocation:	PL=Pore Lini	ing, M=Matrix.		
Hydric Soi	I Indicators: (Applic	able to all I	RRs unless of	herwise r	noted)		Indicator	s for Pro	oblematic Hy	dric Soils ³ :		
	sol (A1)	ubio to un E		Redox (S			maioator		cm Muck (A1			
	Epipedon (A2)			d Matrix (ed Parent Ma			
	Histic (A3)				ineral (F1)	/avcont	MI DA 1\	C	ther (Explain i			
					nerai (F1) 1atrix (F2)		WLKA I)	— "	triei (Expiairi	ii Keiliaiks)		
	gen Sulfide (A4)	/444\			22 43							
	ted Below Dark Surface	ce (ATT)		ed Matrix			3,		£ -			
100	Dark Surface (A12)			Dark Sur		V-				egetation and		
	/ Muck Mineral (S1)				Surface (F7)			ydrology must			
	gleyed Matrix (S4)		Redox	Depressi	ons (F8)			uniess d	listurbed or pro	obiematic.		
Restrictive	Layer (if present):											
Type:								32	323	2		227
Depth (inch	nes):					Hy	ydric Soil Pr	esent?	Y	'es	No _	_X
HYDROLOG												
	ydrology Indicators:							0-		(0		- 40
2437 34	licators (any one indic	ator is sumic	Acceptant	Otainadt	(DO)	\	·	-		ators (2 or more		
	ce Water (A1)				eaves (B9)	17 h	•	v		Leaves (B9) (N	ILKA 1,	2,
	Water Table (A2)				A and 4B)			— _	4A and 4B)			
-	ation (A3)			ust (B11)		·			rainage Patter			
	Marks (B1)				rates (B13					ater Table (C2)		001
	nent Deposits (B2)				e Odor (C1		_	_		le on Aerial Im	agery (0	C9)
	Deposits (B3)						Roots (C3)	_	eomorphic Po			
	Mat or Crust (B4)				duced Iron				hallow Aquitar			
	eposits (B5)				luction in P				AC-Neutral Te			
	ce Soil Cracks (B6)				sed Plants		RR A)			ınds (D6) (LRF	(A)	
-	ation Visible on Aerial	75 F867	R. 1 	Explain in	Remarks))		— F	rost-Heave Hu	ımmocks (D7)		
Spars	ely Vegetated Concav	e Surface (E	38)									
Field Obse			v 5									
Water table	ater Present? Yes Present? Yes			h (inches h (inches								
Saturation I				h (inches		Siz-	Wetland H	lvdrolog	y Present?	Yes	No	Х
	apillary fringe)	-	3	1.00	0=			300	,,	(-	_	
Describe Rec	orded Data (stream g	auge, monito	oring well, aerial	photos, p	revious ins	pections), if available	:				
Domarka:												
Remarks:												

Project/Site:	Hwy 20		City/County:	Sweet Hor	me/Linn			Sampling I	Date:	8/4/2022
Applicant/Owner:	Mosaic Development					State:	OR	Sampling I	Point:	6
Investigator(s):	K. Cartwright; J. Forgione		Section	n, Township	, Range:	T13S,	R1E, Section	27C		
	e, terrace, etc.): terrace						none): 2-12%
	Northwest Forests and Coast (LRR A	<u>)</u> Lat:					2		Datun	n:
Soil Map Unit Nam	THE REPORT OF THE PROPERTY OF THE PARTY OF T	2018 MI 1015	n la	8207	100000		assification: r	200 ST 200 ALCOHOL	10 000 D	.70
	ologic conditions on the site typical for			Yes_			(
	, Soil, or Hydrology						Circumstances			_No
Are Vegetation	, Soil, or Hydrology	-	naturally pr	oblematic?	(If nee	ded, ex	plain any ans	wers in Rem	arks.)	
SUMMARY OF	FINDINGS - Attach site map	showing	sampling	point loca	ations, t	ranse	cts, import	ant featur	res, etc.	
Hydrophytic Vegeta	ation Present? YesN	oX	lo the S	ampled Are	•					
Hydric Soil Present		oX		a Wetland?		Yes		No X		
Wetland Hydrology	Present? YesN	oX	-							
VEGETATION										
VEGETATION		Absolute	Dominant	Indicator	Domina	nce Tes	st worksheet	t:		
Tree Stratum (Us	se scientific names.)	% Cover	Species?	Status?	Number	of Dom	inant Species	3		
Acer macrophy	사용 원인 교육 100 H : 100 H	100	Y	FACU	That Are	OBL, F	ACW, or FA	C:	1	(A)
2.					Total Nu	ımber of	f Dominant			
3					Species	Across	All Strata:		5	(B)
4		· 	-		Percent	of Domi	inant Species	3		
	Total Cover	:100	,		That Are	OBL, F	ACW, or FA	C:	20%	(A/B)
Shrub Stratum					Prevale	nce Ind	ex Workshee	et·		
Rubus armenia	acus	20	Y	FAC		al % Co			Itiply by:	
2. Corylus cornut		25	Y	FACU□	OBL spe		,		0	
3.					FACW s		,		0	
4.					FAC spe		76	x3 =	0	_
5		-			FACU s	pecies	>	κ4 =	0	
	Total Cover	: 45			UPL spe	ecies	,	x5 =	0	_
Herb Stratum					Column			(A)	0	— ^(B)
Brachypodium	0.0000	30	Y	NOL	Preval	ence Ind	dex = B/A = _			-50
2. Osmorhiza cla		1		FACU	111					
 Polystichum m 4. 		20	. <u> </u>	EACU_	Hydrop	•	egetation Ind oid Test for H		agatation	
			-			Section 1	minance Test		egetation	
<i>-</i>			-				valence Inde			
7		1	- 14				rphological A		Provide sup	porting
							Remarks or			
_						5 - We	tland Non-Va	scular Plant	s ¹	
						Proble	matic Hydrop	hytic Vegeta	tion ¹ (Expla	ain)
		3	\$1 4							
	Total Cover	:51								
Woody Vine St	tratum						dric soil and ses disturbed			Ē.
2.					Hydrop	hytic				
	Total Cover				Vegetat					
% Bai	re Ground in Herb Stratum50 %	Cover of B	iotic Crust	0	Present	?		Yes	_ No	<u>X</u>
Remarks:										

SOIL									Sampling Poil	nt:		6
Profile Des	scription: (Describe	to the depth	needed to do	cument th	ne indicato	or or cor	nfirm the abs	sence of	indicators.)			
Depth	Matrix	3		edox Feat								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	- Textur	·o		Remarks		
0-16	10 YR 3/3	100	Color (moist)		Турс		I			Kemarks		
0-10	10 11 3/3	100		7. 9.		<u> </u>	_ <u></u>	 8 8	io .			
	\$ 					-	- 16	_				
		— –		. —	. —		- 3					
	(-			<u> </u>			
	×						-1 /5					
						_	- 12					
-	00-			100 0		-	- 17		i e			
1- 0							21		DI D. II.			
Type: C=0	Concentration, D=Dep	ietion, Kivi=K	educed Matrix,	CS=Cove	erea or Coa	ated San	id Grains. L	.ocation:	PL=Pore Lini	ng, M=Matrix.		
Hydric Soi	I Indicators: (Applic	able to all LF	RRs, unless ot	herwise ı	noted.)		Indicator	s for Pro	blematic Hyd	dric Soils ³ :		
Histos	sol (A1)		Sandy	Redox (S	5)			2	cm Muck (A10	0)		
Histic	Epipedon (A2)		Strippe	ed Matrix ((S6)			Re	ed Parent Mat	terial (TF2)		
Black	Histic (A3)		Loamy	Mucky M	ineral (F1)	(except	MLRA 1)	Ot	ther (Explain i	n Remarks)		
— Hydro	gen Sulfide (A4)		Loamy	Gleyed M	Matrix (F2)							
— Deple	ted Below Dark Surface	ce (A11)	Deplet	ed Matrix	(F3)							
	Dark Surface (A12)	8 - 5	Redox	Dark Sur	face (F6)		³ Indi	icators of	hydrophytic v	egetation and		
200	Muck Mineral (S1)				urface (F7)			drology must			
	gleyed Matrix (S4)			Depressi					sturbed or pro			
	Layer (if present):								900000 00000000000000 0 00000	242 (2011) - 2010 (2010)		
Type:												
Depth (inch	nes):					Н	ydric Soil Pr	esent?	Y	'es	No	X
HYDROLOG	Υ											
Wetland H	ydrology Indicators:											
Primary Ind	licators (any one indicators	ator is sufficie	ent)					Sec	condary Indica	ators (2 or mor	e require	ed)
Surfac	ce Water (A1)		Water-	Stained L	eaves (B9) (excep	t	W	ater-Stained I	Leaves (B9) (N	ILRA 1,	, 2,
High \	Water Table (A2)		MLF	RA 1, 2, 4	A and 4B)				4A and 4B)			
The second second	ation (A3)		Salt Cr	ust (B11)				Dr	rainage Patter	ns (B10)		
— Water	Marks (B1)		— Aquatio	Inverteb	rates (B13)		Dr	y-Season Wa	iter Table (C2)		
	nent Deposits (B2)				e Odor (C1					le on Aerial Im		C9)
	Deposits (B3)						Roots (C3)	— _G	eomorphic Po	sition (D2)		**************************************
	Mat or Crust (B4)				duced Iron			_	nallow Aquitar			
\$100 M	Deposits (B5)				luction in P		oils (C6)		AC-Neutral Te			
	ce Soil Cracks (B6)				sed Plants					ınds (D6) (LRF	RA)	
	ation Visible on Aerial	Imagery (B7)			Remarks	, en - 2000 -	88			ımmocks (D7)	,	
-	ely Vegetated Concav					Ś				3- 3		
Field Obse	<u> </u>		-,				T					
	ater Present? Yes	No	X Dept	h (inches):							
Water table	Present? Yes	No		h (inches								
Saturation I		No	X Dept	h (inches):		Wetland H	lydrolog	y Present?	Yes	_No _	Х
	apillary fringe)		danall andal	-6-4) if available	v				
Describe Rec	corded Data (stream g	auge, monitor	ring well, aerial	pnotos, p	revious ins	spections	s), if available	5				
Remarks:												

Project/Site:	Hwy 20		City/County:	Sweet Hor	me/Linn			Sampling	Date:	8/4/2022
Applicant/Owner:	Mosaic Development					State:	OR	Sampling	Point:	7
Investigator(s):	K. Cartwright; J. Forgione		Section	n, Township	, Range:	T13S, F	R1E, Sectio	n 27C		
Landform (hillslope	e, terrace, etc.): terrace		Local re	lief (concav	e, convex	, none):	none		Slope (%	%): <u>0-2</u>
Subregion (LRR):	Northwest Forests and Coast (I	LRR A) Lat:		- 55		Long:	:: D		Datu	um:
Soil Map Unit Nam	e: Jory silty clay loam, 2 to						ssification:	none		
Are climatic / hydro	ologic conditions on the site typic	al for this time of	year?	Yes	Х	No		(If no, explai	n in Rema	ırks)
Are Vegetation	, Soil, or Hydro	logy	significantly	disturbed?	Are "N	lormal C	ircumstance	es" Present?	Yes	X No
Are Vegetation	, Soil, or Hydro					ded, exp	olain any an	swers in Ren	narks.)	
SUMMARY OF	FINDINGS – Attach site i	4				ransec	ts, impo	rtant featu	res, etc.	
Lhudeonhudia Vanat	ation December Von	No. V	1							
Hydrophytic Veget Hydric Soil Presen		No X No	is the or	ampled Are		Ves	x	No		
Wetland Hydrology		No No	within a	a Wetland?				. No		
	ced in bottom of sparsely vegetat	ti-ss-tv				255				
VEGETATION										
12021111011		Absolute	D	la d'astra	Domino	nas Tas	t workshee			
L. 6 129		Absolute % Cover	Dominant Species?	Indicator Status?						
	se scientific names.)	70 00101	————	———			nant Specie ACW, or FA			
1		—	ea 	· · · · · ·					0	(A)
1.8							Dominant			
3			(i)		Species	Across	All Strata:		2	(B)
4			φ 		THE RESERVED TO SERVED IN		nant Specie			
	Total	Cover: 0			That Are	OBL, F	ACW, or FA	AC:	0%	(A/B)
Shrub Stratum 1. 2.		- 12	10 T		OBL spe	al % Co		x1 =		
3		_ : :						x2 =		
4					FAC spe				0	
5	Hp 10 = 5 = 50 a				ROBERT SERVICE CONTRACTOR			x4 =		
	Total	Cover: 0			UPL spe	ecies	C-0	x5 =		
Herb Stratum						Totals:		(A)	0	
1. Rubus ursinus	<u> </u>		Y	FACU	Preval	ence Inc	lex = B/A =			
2. Hedera helix		5	Y	FACU	house and a			Caranava-mana		
5.					Hydropi	1 - Rap 2 - Don	ninance Tes	Hydrophytic \ st is >50%	/egetation	
6. 7.							valence Ind	ex is ≤3.0° Adaptation1 (Drovido -	unnertin =
0		_ }			-			r on a separa	beer and the second of the	apporting
9.			(i)					ascular Plan	~ 198 <u>6</u> ~ 100 februari 100 februari	
		<u> </u>	9,	-				phytic Veget		vlain)
11		_ = -				Fioblei	nauc i iyulo	priyuc vegeu	adon (Exp	naiii)
>= 0.000 (0.000 d = 0.000 d = 0.000 d = 0.000 d	Total	Cover: 10								
Woody Vine S 1.	<u>tratum</u>							l wetland hyd d or problema		st
2.					Hydrop	hytic				
	Total	Cover: 0			Vegetat					
% Ba	re Ground in Herb Stratum 90	% Cover of B	iotic Crust	. 0	Present	?		Yes	_ No	X
Remarks:										

Profile Description: (Description: Depth Matr inches) Color (moist 0-1 2.5Y 3/1 1-16 5Y 4/1	ix		cument the in	dicator or	confirm the abo	ence of indicators \
0-1 Color (moist 2.5Y 3/1		Po			Committe ans	ence of marcators.)
0-1 Color (moist 2.5Y 3/1		170	dox Features			2
0-1 2.5Y 3/1		Color (moist)		pe¹ Lo	c ² Texture	e Remarks
	100	Color (molot)		<u> </u>	1	Nomano
	80	10 YR 4/4	20	C N	/ CL	
# 10 C		10 111 4/4				
			-		- d	 i i
						——————————————————————————————————————
-						
#25			** ***********************************		10	
<u> </u>			00 -1			
Type: C=Concentration, D=	Depletion, RM=	Reduced Matrix,	CS=Covered of	or Coated S	Sand Grains. ² L	ocation: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Ap	oplicable to all			l.)	Indicators	s for Problematic Hydric Soils ³ :
— Histosol (A1)			Redox (S5)			2 cm Muck (A10)
Histic Epipedon (A2)		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	d Matrix (S6)			Red Parent Material (TF2)
Black Histic (A3)		3. The state of th	Mucky Minera		ept MLRA 1)	Other (Explain in Remarks)
Hydrogen Sulfide (A4)			Gleyed Matrix	(F2)		
Depleted Below Dark S		S	ed Matrix (F3)	and the second	3	
Thick Dark Surface (A1			Dark Surface			cators of hydrophytic vegetation and
Sandy Muck Mineral (S	·公司		ed Dark Surfac			etland hydrology must be present,
Sandy gleyed Matrix (S	C-071	Redox	Depressions (-8)		unless disturbed or problematic.
Restrictive Layer (if preser	nt):					
ype:					20 10 12 12 1	
Depth (inches):		41			Hydric Soil Pro	esent? Yes X No
DROLOGY						
100 100 000 000 000 000	tors:					
Vetland Hydrology Indicat		sient)				Secondary Indicators (2 or more required
Vetland Hydrology Indicat		Acceptable of	Stained Leave	s (B9) (exc		Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1, 2
Vetland Hydrology Indicat rimary Indicators (any one i		Water-	Stained Leave		cept	
Vetland Hydrology Indicat rimary Indicators (any one Surface Water (A1)		Water-			cept	Water-Stained Leaves (B9) (MLRA 1, 2
Vetland Hydrology Indicatorimary Indicators (any one in Surface Water (A1) X High Water Table (A2)		Water- MLR Salt Cn	A 1, 2, 4A and	14B)	cept	Water-Stained Leaves (B9) (MLRA 1, 2 4A and 4B)
Vetland Hydrology Indicators (any one of the control of the contro	indicator is suffic	Water- MLR Salt Cr	A 1, 2, 4A and ust (B11)	(B13)	cept	Water-Stained Leaves (B9) (MLRA 1, 2 4A and 4B) Drainage Patterns (B10)
Vetland Hydrology Indicate Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1)	indicator is suffic	Water- MLR Salt Cr Aquatic Hydrog Oxidize	tA 1, 2, 4A and ust (B11) c Invertebrates en Sulfide Odd ed Rhizosphere	(B13) or (C1) es along Liv	cept ving Roots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Vetland Hydrology Indicate Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	indicator is suffice	Water- MLR Salt Cr Aquatic Hydrog Oxidize	A 1, 2, 4A and ust (B11) Invertebrates en Sulfide Odd	(B13) or (C1) es along Liv	3	Water-Stained Leaves (B9) (MLRA 1, 2 4A and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Vetland Hydrology Indicate Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	indicator is suffice	Water- MLR Salt Cr Aquatic Hydrog Oxidize Presen	tA 1, 2, 4A and ust (B11) c Invertebrates en Sulfide Odd ed Rhizosphere	(B13) or (C1) es along Lin I Iron (C4)	ving Roots (C3)	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)
Vetland Hydrology Indicate Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	indicator is suffice	Water- MLR Salt Cr Aquatio Hydrog Oxidize Presen Recent	tA 1, 2, 4A and ust (B11) convertebrates are Sulfide Odd Rhizosphere co of Reduced	(B13) or (C1) es along Lin I Iron (C4) n in Plowed	ving Roots (C3)	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)
Vetland Hydrology Indicate Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	indicator is suffice	Water- MLR Salt Cr Aquatic Hydrog Oxidize Presen Recent Stunted	AA 1, 2, 4A and ust (B11) c Invertebrates gen Sulfide Odd ed Rhizosphere ace of Reduced I Iron Reductio	(B13) or (C1) es along Lin I Iron (C4) in in Plower Plants (D1)	ving Roots (C3)	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)
Vetland Hydrology Indicate Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	indicator is suffice () 6) erial Imagery (B	Water- MLR Salt Cr Aquatic Hydrog Oxidize Presen Recent Stunted Other (tA 1, 2, 4A and ust (B11) c Invertebrates en Sulfide Odd ed Rhizosphere ice of Reduced Iron Reductio d or Stressed F	(B13) or (C1) es along Lin I Iron (C4) in in Plower Plants (D1)	ving Roots (C3)	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)
Vetland Hydrology Indicate Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A Sparsely Vegetated Co	indicator is suffice (e) erial Imagery (B encave Surface (Water- MLR Salt Cr Aquatic Hydrog Oxidize Presen Recent Stuntec 7) Other (A 1, 2, 4A and ust (B11) convertebrates are Sulfide Odd at Rhizosphere are of Reduced fron Reduction of or Stressed Fexplain in Ren	(B13) or (C1) es along Lin I Iron (C4) in in Plower Plants (D1)	ving Roots (C3)	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)
Vetland Hydrology Indicate Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A Sparsely Vegetated Co	indicator is suffice 6) Perial Imagery (Bencave Surface (Water	A 1, 2, 4A and ust (B11) c Invertebrates en Sulfide Odd Rhizosphere ce of Reduced Iron Reduction or Stressed Fexplain in Ren	(B13) or (C1) es along Lin I Iron (C4) n in Plowed Plants (D1) narks)	ving Roots (C3)	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)
Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present? Water table Present?	6) erial Imagery (Bencave Surface (Water	tA 1, 2, 4A and ust (B11) c Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction or Stressed Fexplain in Ren th (inches):h (inches):h	(B13) or (C1) es along Lid I Iron (C4) in in Plowed Plants (D1) marks)	ving Roots (C3) d Soils (C6) (LRR A)	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) Frost-Heave Hummocks (D7)
Vetland Hydrology Indicate Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present? Vater table Present? Saturation Present?	6) erial Imagery (Bencave Surface (Water	A 1, 2, 4A and ust (B11) c Invertebrates en Sulfide Odd Rhizosphere ce of Reduced Iron Reduction or Stressed Fexplain in Ren	(B13) or (C1) es along Lin I Iron (C4) n in Plowed Plants (D1) narks)	ving Roots (C3) d Soils (C6) (LRR A)	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)
Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present? Vater table Present? Saturation Present? includes capillary fringe)	6) erial Imagery (Boncave Surface (Yes X Yes X 1	Water- MLR Salt Cr Aquatic Hydrog Oxidize Presen Recent Stunted Other (B8) Dept Dept Dept Dept Dept Dept	tA 1, 2, 4A and ust (B11) c Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction of or Stressed Fexplain in Ren th (inches):h (inches):h (inches):h	(B13) or (C1) es along Lin l Iron (C4) n in Plower Plants (D1) narks)	ving Roots (C3) d Soils (C6) (LRR A) Wetland H	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) Frost-Heave Hummocks (D7)
Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present? Vater table Present? Saturation Present? includes capillary fringe) scribe Recorded Data (streat	6) erial Imagery (Boncave Surface (Yes X Yes X 1	Water- MLR Salt Cr Aquatic Hydrog Oxidize Presen Recent Stunted Other (B8) Dept Dept Dept Dept Dept Dept	tA 1, 2, 4A and ust (B11) c Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction of or Stressed Fexplain in Ren th (inches):h (inches):h (inches):h	(B13) or (C1) es along Lin l Iron (C4) n in Plower Plants (D1) narks)	ving Roots (C3) d Soils (C6) (LRR A) Wetland H	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) Frost-Heave Hummocks (D7)
Primary Indicators (any one in Surface Water (A1) X High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present? Vater table Present? Saturation Present? includes capillary fringe)	6) erial Imagery (Boncave Surface (Yes X Yes X 1	Water- MLR Salt Cr Aquatic Hydrog Oxidize Presen Recent Stunted Other (B8) Dept Dept Dept Dept Dept Dept	tA 1, 2, 4A and ust (B11) c Invertebrates en Sulfide Odd d Rhizosphere ce of Reduced Iron Reduction of or Stressed Fexplain in Ren th (inches):h (inches):h (inches):h	(B13) or (C1) es along Lin l Iron (C4) n in Plower Plants (D1) narks)	ving Roots (C3) d Soils (C6) (LRR A) Wetland H	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) Frost-Heave Hummocks (D7)

Project/Site:	Hwy 20			City/County	: Sweet Hor	me/Linn			Samp	oling Da	ate:	8/4/2022
Applicant/Owner:	Mosaic Developme			•				OR		oling Po	oint:	8
Investigator(s):	K. Cartwright; J. Fo	rgione		Section	n, Township	, Range:	T13S, R	1E, Section	on 27C			
Landform (hillslope	e, terrace, etc.):	terrace		Local re	elief (concav	e, convex	, none): <u>r</u>	none		5	Slope (%):	0-2
Subregion (LRR):	Northwest Forests	and Coast (LRR A)	Lat:				Long: _			24	Datum:	
Soil Map Unit Nam	e: Jory silty cla	y loam, 2 to 12 pe	rcent slope	s			NWI Clas	sification:	none			
Are climatic / hydro	ologic conditions on t	he site typical for t	his time of	year?	Yes	X	No_		(If no, e	xplain ir	n Remarks	5)
Are Vegetation	, Soil	, or Hydrology		significantly	disturbed?	Are "N	lormal Cir	cumstanc	es" Pres	ent? Y	Yes X	No
Are Vegetation	, Soil	_, or Hydrology		naturally pr	oblematic?	(If nee	ded, expl	ain any ar	nswers in	Remar	ks.)	
SUMMARY OF	FINDINGS - Att	ach site map s	showing	sampling	point loca	ations, t	transect	ts, impo	rtant fe	ature	s, etc.	
Hydrophytic Veget	ation Present?	Yes No	×	2 20 0								
Hydric Soil Presen	t?	YesNo	×	3,05,15,15,05,15	ampled Area a Wetland?		Yes		No	X		
Wetland Hydrology	Present?	Yes No		within	a wettand?		-				Ş	
Remarks:		731500-0000		•								
VEGETATION												
TEGETATION			Absolute	Dominant	Indicator	Domina	nce Test	workshe	et.			
			% Cover	Species?	Status?			ant Speci				
THE PROPERTY OF THE PARTY OF TH	se scientific names.)			· —	FACU			CW, or F		1		(4)
1. Pseudotsuga r			65	Y	FACU				-		0	- ^(A)
2. Acer macrophy	yllum		5		FACU		Across A	Dominant				(D)
3.			2						===		4	-(B)
4		Tetal Carren	70					ant Speci		•	0.4	/A /D)
		Total Cover:				I nat Are	OBL, FA	ACW, or F	AC:	0	%	- (A/B)
Shrub Stratum 1.					8		nce Inde	x Worksh er of:	eet:	Multig	oly by:	
_									x1 =		0	5 0
2		_				Prince of start fair	-				0	-
4						FAC spe					0	-
5.						FACU s				-	0	5 Et
		Total Cover:	0			UPL spe			x5 =		0	
Herb Stratum						Column	Totals:	0	(A)	(0	(B)
1. Brachypodium	sylvaticum		20	Y	NOL							
2. Rubus ursinus	9		10	Υ	FACU□							
3. Polystichum m	unitum		15	Υ	FACU_	Hydrop	hytic Veg	etation Ir	ndicators	s:		
4						<u> </u>	1 - Rapid	d Test for	Hydroph	ytic Veg	etation	
-							2 - Domi	inance Te	st is >50°	%		
6.							3 - Preva	alence Inc	dexis ≤3	.0 ¹		
7							4 - Morp	hological	Adaptatio	on1 (Pro	ovide supp	orting
0					1.60		data in F	Remarks o	or on a se	parate	sheet)	
0							5 - Wetla	and Non-\	/ascular	Plants ¹		
							Problem	atic Hydro	ophytic V	egetatio	on¹ (Explai	n)
11												
		Total Cover:	45									
Woody Vine S 1.	<u>tratum</u>							ric soil and s disturbe				
2						Hydrop	hytic					
A.F		Total Cover:				Vegetat	70.00					
% Ba	re Ground in Herb St	ratum <u>55</u> %	Cover of B	iotic Crust	0	Present			Yes		NoX	
Remarks:												

Profile Des	cription: (Describe t	to the dep	th needed to	o document	t the indicat	or or con	firm the abse	nce of indica	tors.)			
Depth	Matrix			Redox Fe	atures				82			
(inches)	Color (moist)	%	Color (moi	SCOT MANY	Type ¹	Loc ²	Texture		F	Remarks		
0-2	10YR 3/2	100					L					
2-16	10YR 3/2	60		7.5	70.8		SiL	Mixed				
	10YR 3/3	40		88.2	11.5	-		_				
-							-	_				
						_	-	_				
-												
							. Po					
	30				-100-1		ilk.					
Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Ma	atrix, CS=Co	overed or Co	ated Sand	Grains. ² Loc	ation: PL=Po	re Lining, I	M=Matrix.		
Hydric Soil	Indicators: (Applica	able to all	LRRs, unles	s otherwis	e noted.)		Indicators f	or Problema	tic Hydric	Soils ³ :		
Histos	ol (A1)		Sa	andy Redox	(S5)		0:	2 cm Mud	ck (A10)			
Histic	Epipedon (A2)		Si	ripped Matri	x (S6)		(r_	Red Pare	nt Material	(TF2)		
Black	Histic (A3)		Lo	amy Mucky	Mineral (F1)	(except l	MLRA 1)	Other (Ex	plain in Re	emarks)		
Hydrog	gen Sulfide (A4)		Lo	amy Gleyed	Matrix (F2))						
Deplet	ed Below Dark Surfac	e (A11)	D	epleted Matr	ix (F3)							
Thick	Dark Surface (A12)		R	edox Dark S	urface (F6)		³ Indica	itors of hydrop	hytic vege	tation and		
	Muck Mineral (S1)		D	epleted Dark	Surface (F	7)	wetl	and hydrology	must be p	resent,		
Sandy	gleyed Matrix (S4)		_ R	edox Depres	ssions (F8)		un	less disturbed	or probler	natic.		
Restrictive	Layer (if present):											
						- 1						
Type:	VIII.		-			883						
Type: Depth (inch emarks:	es):					Ну	dric Soil Pres	ent?	Yes_		No_	X
Depth (inchemarks:	(<u></u>			Ну	dric Soil Pres	ent?	Yes_		No _	X
Depth (inchemarks: 'DROLOG' Wetland Hy	vdrology Indicators:					Ну	dric Soil Pres	000 0	50000 3	(2.2.	00	100
Depth (inchemarks: ODROLOGY Wetland Hy Primary Indi	vdrology Indicators: cators (any one indica	ator is suffi	AL YOU	lator Stoings	AL cover (PC		dric Soil Pres	Secondary	· Indicators	THE STREET STREET	e requir	red)
Depth (inchemarks: ODROLOG) Wetland Hy Primary Indi	rdrology Indicators: cators (any one indica e Water (A1)	ator is suffi	AL YOU		Leaves (B9) (except	dric Soil Pres	Secondary Water-St	Indicators	THE STREET STREET	e requir	red)
Primary Indi Surface High V	rdrology Indicators: cators (any one indica e Water (A1) Vater Table (A2)	ator is suffi	w	MLRA 1, 2,	4A and 4B)) (except	dric Soil Pres	Secondary Water-St	Indicators ained Leav d 4B)	es (B9) (M	e requir	red)
Primary Indi Surface High V Satura	vdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3)	ator is suffi	W	MLRA 1, 2, alt Crust (B1	4A and 4B)	(except	dric Soil Pres	Secondary Water-St 4A an Drainage	Indicators ained Leav d 4B) Patterns (I	res (B9) (M	e requir	red)
Primary Indi Surface High V Satura Water	rdrology Indicators: cators (any one indicate e Water (A1) Vater Table (A2) tion (A3) Marks (B1)	ator is suffi	W	MLRA 1, 2, alt Crust (B1 quatic Invert	4A and 4B) 1) ebrates (B13	e) (except	dric Soil Pres	Secondary Water-St 4A an Drainage Dry-Seas	Indicators ained Leav d 4B) Patterns (I on Water I	es (B9) (M B10) Γable (C2)	e requir	red), 2 ,
Primary Indi Surface High V Satura Water Sedim	rdrology Indicators: cators (any one indicate e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	ator is suffi	W Sa Ad Hy	MLRA 1, 2, alt Crust (B1 quatic Invert ydrogen Sulf	4A and 4B) 1) ebrates (B13 fide Odor (C	9) (except 3)		Secondary Water-St 4A an Drainage Dry-Seas Saturatio	r Indicators ained Leav d 4B) Patterns (I on Water I	es (B9) (M B10) Fable (C2) n Aerial Im	e requir	red) , 2,
Primary Indi Surface High V Satura Water Sedim Drift D	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	ator is suffi	W Sa Aa Hi	MLRA 1, 2, alt Crust (B1 quatic Inverto ydrogen Sulf xidized Rhizo	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres alc	(except 3) 1) ong Living		Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp	Indicators ained Leav d 4B) Patterns (I on Water I n Visible or	es (B9) (M B10) Γable (C2) n Aerial Im n (D2)	e requir	red), 2 ,
Primary Indi Surface High V Satura Water Sedim Drift D Algal N	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	ator is suffi	W	MLRA 1, 2, alt Crust (B1 quatic Inverteydrogen Sulf xidized Rhize resence of R	4A and 4B) 1) ebrates (B13 fide Odor (C	(C4)	- - - - Roots (C3)	Secondary Water-St: 4A an Drainage Dry-Seas Saturatio Geomorp Shallow A	r Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position	B10) Fable (C2) A Aerial Im n (D2)	e requir	red), 2 ,
Primary Indi Surface High V Satura Water Sedim Drift D Algal N	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	ator is suffi	W Sa Aa H: O: Pi Ra	MLRA 1, 2, alt Crust (B1 quatic Inverti ydrogen Sulf xidized Rhiz resence of R ecent Iron R	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald deduced Iron	3) (except 3) 1) ong Living (C4)	Roots (C3)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu	Indicators ained Leav d 4B) Patterns (I on Water I n Visible or	B10) Fable (C2) A Aerial Im (D2) 3)	e requir ILRA 1,	red), 2 ,
Primary Indi Surface Water Sedim Drift D Algal M Surface	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)		W Si Ai H: O Pi Ri Si	MLRA 1, 2, alt Crust (B1 quatic Inverte ydrogen Sulf xidized Rhiz- resence of Recent Iron R unted or Str	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald Reduced Iron eduction in F	(C4) Plowed So is (D1) (LR	Roots (C3)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	r Indicators ained Leav d 4B) Patterns (I on Water 1 n Visible or hic Position Aquitard (D	es (B9) (M B10) Fable (C2) In Aerial Im In (D2) 3) D5) (D6) (LRF	e requir ILRA 1,	red) , 2,
Primary Indi Surface Water Sedim Drift D Algal M Iron De Surface Inunda	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6)	lmagery (E	— W — Si — Ai — H: — O — Pi — Ri — Si — Si — O	MLRA 1, 2, alt Crust (B1 quatic Inverte ydrogen Sulf xidized Rhiz- resence of Recent Iron R unted or Str	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald deduced Iron eduction in F essed Plants	(C4) Plowed So is (D1) (LR	Roots (C3)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	r Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position Aquitard (D tral Test (E	es (B9) (M B10) Fable (C2) In Aerial Im In (D2) 3) D5) (D6) (LRF	e requir ILRA 1,	red) , 2,
Primary Indi Surface Water Sedim Drift D Algal M Iron De Surface Inunda	rdrology Indicators: cators (any one indicate e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aerial ely Vegetated Concave	lmagery (E	— W — Si — Ai — H: — O — Pi — Ri — Si — Si — O	MLRA 1, 2, alt Crust (B1 quatic Inverte ydrogen Sulf xidized Rhiz- resence of Recent Iron R unted or Str	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald deduced Iron eduction in F essed Plants	(C4) Plowed So is (D1) (LR	Roots (C3)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	r Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position Aquitard (D tral Test (E	es (B9) (M B10) Fable (C2) In Aerial Im In (D2) 3) D5) (D6) (LRF	e requir ILRA 1,	red), 2 ,
Primary Indi Surface Water Sedim Drift D Algal M Iron De Surface Inunda Sparse Surface Wa	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aerial ely Vegetated Concavervations: ter Present? Yes	lmagery (E e Surface	W Si O Pi Ri Si Si O' (B8)	MLRA 1, 2, alt Crust (B1 quatic Invertey drogen Sulf xidized Rhize resence of Recent Iron Runted or Struther (Explain	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald Reduced Iron eduction in F essed Plants in Remarks	(C4) Plowed So is (D1) (LR	Roots (C3)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	r Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position Aquitard (D tral Test (E	es (B9) (M B10) Fable (C2) In Aerial Im In (D2) 3) D5) (D6) (LRF	e requir ILRA 1,	red) , 2,
Primary Indi Surface Water Sedim Drift D Algal N Iron De Surface Inunda Sparse Surface Water table	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aerial (B4) ely Vegetated Concavirvations: ter Present? Yes Present? Yes	Imagery (E e Surface	W Si O Pi Ri Si Si O (B8)	MLRA 1, 2, alt Crust (B1 quatic Invertey drogen Sulf xidized Rhize resence of Recent Iron R unted or Strather (Explain Depth (inched	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald Reduced Iron eduction in F essed Plants in Remarks es): es):	(C4) Plowed So is (D1) (LR	Roots (C3)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position Aquitard (D tral Test (E nt Mounds	es (B9) (M B10) Fable (C2) A Aerial Im In (D2) 3) D5) (D6) (LRF ocks (D7)	e requir ILRA 1, agery (red) , 2,
Primary Indi Surface High V Satura Water Sedim Drift D Algal N Iron De Surface Inunda Sparse Field Obse Surface Water table Saturation F	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aerial (B4) ely Vegetated Concavirvations: ter Present? Yes Present? Yes	Imagery (E e Surface	W Si O Pi Ri Si Si O (B8)	MLRA 1, 2, alt Crust (B1 quatic Invertey drogen Sulf xidized Rhize resence of Recent Iron Runted or Struther (Explain	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald Reduced Iron eduction in F essed Plants in Remarks es): es):	(C4) Plowed So is (D1) (LR	Roots (C3)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position Aquitard (D tral Test (E nt Mounds	es (B9) (M B10) Fable (C2) In Aerial Im In (D2) 3) D5) (D6) (LRF	e requir ILRA 1,	red) , 2,
Primary Indi Surface High V Satura Water Sedim Drift D Algal N Iron De Surface Inunda Sparse Field Obse Surface Water table Saturation F (includes ca	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aerial (B4) ely Vegetated Concavervations: ter Present? Present? Yes Present? Yes	Imagery (E e Surface		MLRA 1, 2, alt Crust (B1 quatic Inverti- ydrogen Sulf- xidized Rhize resence of Recent Iron Runted or Stru- ther (Explain Depth (inched Depth (inched	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald Reduced Iron eduction in F essed Plants in Remarks es): es):	(C4) Plowed So is (D1) (LR	Roots (C3) ils (C6) R A)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position Aquitard (D tral Test (E nt Mounds	es (B9) (M B10) Fable (C2) A Aerial Im In (D2) 3) D5) (D6) (LRF ocks (D7)	e requir ILRA 1, agery (red) , 2,
Primary Indi Surface High V Satura Water Sedim Drift D Algal N Iron De Surface Inunda Sparse Surface Water table Saturation F (includes calescribe Reco	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aerial (B4) ely Vegetated Concavervations: ter Present? Present? Yes	Imagery (E e Surface		MLRA 1, 2, alt Crust (B1 quatic Inverti- ydrogen Sulf- xidized Rhize resence of Recent Iron Runted or Stru- ther (Explain Depth (inched Depth (inched	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald Reduced Iron eduction in F essed Plants in Remarks es): es):	(C4) Plowed So is (D1) (LR	Roots (C3) ils (C6) R A)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position Aquitard (D tral Test (E nt Mounds	es (B9) (M B10) Fable (C2) A Aerial Im In (D2) 3) D5) (D6) (LRF ocks (D7)	e requir ILRA 1, agery (red) , 2,
Primary Indi Surface High V Satura Water Sedim Drift D Algal N Iron De Surface Inunda Sparse Field Obse Surface Water table Saturation F (includes ca	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aerial (B4) ely Vegetated Concavervations: ter Present? Present? Yes	Imagery (E e Surface		MLRA 1, 2, alt Crust (B1 quatic Inverti- ydrogen Sulf- xidized Rhize resence of Recent Iron Runted or Stru- ther (Explain Depth (inched Depth (inched	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald Reduced Iron eduction in F essed Plants in Remarks es): es):	(C4) Plowed So is (D1) (LR	Roots (C3) ils (C6) R A)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position Aquitard (D tral Test (E nt Mounds	es (B9) (M B10) Fable (C2) A Aerial Im In (D2) 3) D5) (D6) (LRF ocks (D7)	e requir ILRA 1, agery (red) , 2,
Primary Indi Surface High V Satura Water Sedim Drift D Algal N Iron De Surface Inunda Sparse Surface Water table Saturation F (includes calescribe Reco	rdrology Indicators: cators (any one indicate Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) ation Visible on Aerial (B4) ely Vegetated Concavervations: ter Present? Present? Yes	Imagery (E e Surface		MLRA 1, 2, alt Crust (B1 quatic Inverti- ydrogen Sulf- xidized Rhize resence of Recent Iron Runted or Stru- ther (Explain Depth (inched Depth (inched	4A and 4B) 1) ebrates (B13 fide Odor (C ospheres ald Reduced Iron eduction in F essed Plants in Remarks es): es):	(C4) Plowed So is (D1) (LR	Roots (C3) ils (C6) R A)	Secondary Water-St: 4A an Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	Indicators ained Leav d 4B) Patterns (I on Water I n Visible or hic Position Aquitard (D tral Test (E nt Mounds	es (B9) (M B10) Fable (C2) A Aerial Im In (D2) 3) D5) (D6) (LRF ocks (D7)	e requir ILRA 1, agery (red) , 2,

Project/Site: Hwy 20	<u> </u>	City/County:	Sweet Hor	ne/Linn		300	Sampling [Date:	8/4/2022
Applicant/Owner: Mosaic Development					State: C	DR	Sampling F	Point:	9
Investigator(s): K. Cartwright; J. Forgione		Section	n, Township	, Range:	T13S, R	1E, Section	27C		
Landform (hillslope, terrace, etc.): terrace		Local re	elief (concav	e, convex,	none): <u>r</u>	one		Slope (%)	: 0-2
Subregion (LRR): Northwest Forests and Coast ((LRR A) Lat:				Long: _	50		Datum	1:
Soil Map Unit Name: Jory silty clay loam, 2 to		14.	OWNE	N		sification: r	2000 Model 1	NO 60600 DE	95
Are climatic / hydrologic conditions on the site typic			Yes_	to the second second second			If no, explain		
Are Vegetation, Soil, or Hydro							s" Present?		_No
Are Vegetation, Soil, or Hydro	ology	naturally pr	oblematic?	(If need	led, expl	ain any ans	wers in Rem	arks.)	
SUMMARY OF FINDINGS – Attach site	map showing	sampling	point loca	ations, tr	ansect	ts, import	ant featur	es, etc.	
Hydrophytic Vegetation Present? Yes	No X								
Hydric Soil Present? Yes		310633335553	ampled Area a Wetland?		Yes		No X		
Wetland Hydrology Present? Yes			a Wettaliu:		-			98	
Remarks:									
VEGETATION	Absolute % Cover	Dominant Species?	Indicator Status?			worksheet			
Tree Stratum (Use scientific names.)						ant Species CW, or FAC		2	
Pseudotsuga menziesii		- Y	FACU				-	0	_ ^(A)
Acer macrophyllum	10	<u> </u>		Total Nun Species A				5	(D)
3. 4.				71				5	_(B)
<u> </u>	Cover: 40	011				ant Species CW, or FA		0%	(A/B)
<u>Shrub Stratum</u> 1. 2. 3. 4. 5.				OBL spec	ecies _	×	(1 =	tiply by: 0 0 0	
Total	Cover: 0			UPL spec	cies _	x	c5 =	0	
Herb Stratum			2020	Column T	_		A)	0	_(B)
Polystichum munitum	30	Y	FACU	Prevale	nce Inde	ex = B/A = _			-50
2. Bromus arvensis		Y	UPL						
3. Rubus ursinus		Y	FACU			etation Ind			
4. Asarum caudatum	10		FACU			Market Market State of State	ydrophytic Ve	egetation	
5. 6.	_	(i 				inance Test alence Inde	NT CONTINU		
							daptation1 (F	rovido eun	norting
	- 3						on a separat		porting
9				L-			scular Plants		
10.				-			hytic Vegetal	3.0	in)
11	_						,		
Total	Cover: 80								
Woody Vine Stratum 1.	92		uru s				wetland hydro or problemat		
2		0.0		Hydrophy	vtic				
	Cover: 0			Vegetation					
% Bare Ground in Herb Stratum 2	0 % Cover of B	iotic Crust	0	Present?		Y	'es	No	<u> </u>
Remarks:									

SOIL								Samp	ling Point:	·		9
Profile Des	cription: (Describe	to the dep	oth needed to doc	ument the	indicato	or or cor	nfirm the abs	ence of indic	ators.)			
Depth	Matrix		Re	dox Featur	es							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	е		Remarks		
0-2	10YR 3/2	100					L					
2-6	10YR 3/2	95	10YR 3/3			8:	SiL	======================================				
							- M - 19					
	77 <u></u>		5:	<u> </u>								
	· · · · · · · · · · · · · · · · · · ·		2									
			-				- 112	<u> </u>				
			-				- 0					
¹ Type: C=C	Concentration, D=Dep	letion, RM	=Reduced Matrix.	CS=Cover	ed or Coa	ted San	d Grains. ² L	ocation: PL=P	ore Lining	a, M=Matrix.		
	Indicators: (Applic	able to all		Redox (S5)			indicators	for Problema				
	ol (A1) Epipedon (A2)			d Matrix (S	N				uck (A10) ent Mater			
	Histic (A3)			Mucky Min		(except	MI RA 1)			Remarks)		
	gen Sulfide (A4)		N	Gleyed Ma		(except	MILICA I)		Apiairi III	(Ciriaina)		
	ted Below Dark Surface	ce (A11)	A	d Matrix (F								
	Dark Surface (A12)	20 (1111)		Dark Surfa			³ Indi	cators of hydro	ohvtic ve	getation and		
	Muck Mineral (S1)			d Dark Su)		etland hydrolog		-		
	gleyed Matrix (S4)		-	Depression		,		unless disturbe	-			
	Layer (if present):								Section and the section and			
THE PROPERTY OF THE PARTY OF TH	Shovel Refusal/Rock/l	Packed Sc	ile									
Depth (inch		_				H	ydric Soil Pr	esent?	Yes	s	No	X
Remarks:												
Wetland H	Y ydrology Indicators:											
	icators (any one indic		icient)					Secondar	v Indicato	ors (2 or mor	e requi	red)
	ce Water (A1)	ator 10 curi	Ampath c	Stained Lea	aves (B9)	(except	t		T C	aves (B9) (N	THE PARTY NAMED IN	
	Vater Table (A2)			A 1, 2, 4A		(ā i		nd 4B)	() (
Annual An	ation (A3)			ust (B11)	85				e Patterns	s (B10)		
	Marks (B1)			Invertebra	ates (B13))				er Table (C2)		
Sedim	ent Deposits (B2)		Hydrog	en Sulfide	Odor (C1)		Saturation	on Visible	on Aerial Im	agery ((C9)
Drift D	eposits (B3)		Oxidize	d Rhizospl	heres alor	ng Living	Roots (C3)	Geomor	phic Posi	tion (D2)		
Algal N	Mat or Crust (B4)		Presen	ce of Redu	iced Iron	(C4)		Shallow	Aquitard	(D3)		
Iron D	eposits (B5)		Recent	Iron Redu	ction in Pl	lowed So	oils (C6)	FAC-Ne	utral Test	(D5)		
Surfac	ce Soil Cracks (B6)		Stunted	or Stresse	ed Plants	(D1) (LF	RR A)	Raised	Ant Moun	ds (D6) (LRF	RA)	
Inunda	ation Visible on Aerial	lmagery (l	B7) Other (Explain in f	Remarks)			Frost-He	ave Hum	mocks (D7)		
Sparse	ely Vegetated Concav	e Surface	(B8)									
Field Obse			20 (20 12) 13			21						
Surface Wa Water table	ter Present? Yes Present? Yes			n (inches): n (inches):								
Saturation F				(inches):		ele.	Wetland H	ydrology Pres	sent?	Yes	No	X
(includes ca	apillary fringe)	-		1.30	1		3			(e		
Describe Rec	orded Data (stream g	auge, mon	itoring well, aerial _l	ohotos, pre	evious ins	pections	s), if available:					
Remarks:												

Project/Site:	Hwy 20		13	City/County:	Sweet Hor	ne/Linn			Sampling	Date:	8/4/2022
Applicant/Owner:	Mosaic Developmen	nt					State: C	R	Sampling	Point:	10
Investigator(s):	K. Cartwright; J. For	gione		Section	n, Township	, Range:	T13S, R	1E, Section	on 27C		
Landform (hillslope	e, terrace, etc.):	terrace		Local re	elief (concav	e, convex	, none): n	one		Slope (%):	0-2
Subregion (LRR):	Northwest Forests a	and Coast (LRR A)	Lat:		76		Long: _			Datum	:
Soil Map Unit Nam	ne: Fluvents-Flu	vaquents complex	, nearly lev	/el			NWI Clas	sification:	none		
Are climatic / hydro	ologic conditions on the	ne site typical for the	nis time of	year?	Yes	X	No_		(If no, explain	n in Remarks	s)
Are Vegetation	, Soil	, or Hydrology		significantly	disturbed?	Are "N	lormal Cir	cumstanc	es" Present?	Yes X	No
Are Vegetation	, Soil	, or Hydrology		naturally pro	oblematic?	(If nee	ded, expla	ain any ar	nswers in Rem	narks.)	
SUMMARY OF	FINDINGS - Att	ach site map s	howing	sampling	point loca	ations, t	transect	s, impo	rtant featu	res, etc.	
Hydrophytic Veget	ation Present?	Yes X No									
Hydric Soil Presen		Yes X No			ampled Are		Yes	X	No		
	y Present?	Yes X No		within a	a Wetland?		1 Marketon (2)	33050			
	ced in vegetated swal	е		-							
VEGETATION											
			Absolute	Dominant	Indicator	Domina	nce Test	workshe	et:		
Tree Stratum (Us	se scientific names.)		% Cover	Species?	Status?	Number	of Domin	ant Speci	es		
· · · · · · · · · · · · · · · · · · ·						That Are	OBL, FA	CW, or F	AC:	3	(A)
0				28-	· 	Total Nu	ımber of D	Dominant			#05070
2				0		Species	Across A	II Strata:		3	(B)
4.						Percent	of Domina	ant Speci		-7	- 4-3
1 8 -		Total Cover:	0							100%	(A/B)
Shrub Stratum 1.				A.		Tot	nce Index tal % Cove	er of:	Mu	Itiply by:	
2									_x1 =	- 10	<u>=</u>
3.						ALCOHOLD TO THE PARTY OF THE PA			_x2 =		-
4						FAC spe	_		_x3 =		
5						NO DESCRIPTION OF THE PARTY OF			_x4 =		_
		Total Cover:	0			UPL spe			_x5 =	0	
Herb Stratum					EAC				_(A)		_(B)
1. Urtica dioica	32		10	70 1001	FAC	Preval	lence Inde	ex = B/A =			<u> </u>
2. Lysichiton ame			20	Y	OBL						-
3. Athyrium cyclo			40	Y	FAC	Hydrop			ndicators:		
4. Stachys cham	issonis		20	Y	FACW		The state of the state of		Hydrophytic V	egetation	
5						_x_			st is >50%		
6.									dexis ≤3.0 ¹		
7.									Adaptation1 (I		orting
8.		T1 8		·					or on a separa		
									/ascular Plant		
							Problem	atic Hydro	ophytic Vegeta	ition (Explai	n)
11		2234000000000000									
Woody Vine S	tratum	Total Cover:	90						d wetland hydi d or problema		
2.						Lington	hudia				
- A		Total Cover:	0	e. 		Hydrop Vegetat					
% Ba	re Ground in Herb Str			iotic Crust	0	Present			Yes X	No	
Remarks:							227		W030: 200	51 THE ST	

SOIL								Sampling Po		1
	scription: (Describe	to the de	CONTRACTOR			r or co	nfirm the abse	nce of indicators.)		
Depth	Matrix	20 mm		lox Fea						
(inches)	Color (moist)	%_	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-9	10 YR 3/2	100	40 VP 0/0	-			_ <u>L</u>			
9-16	10 YR 4/2	95	10 YR 3/6	5	_ <u>C</u>	M	CL			
			-					_		
	74							_		
							_ 3			
	·						_			
1	16							_		
'Type: C=	Concentration, D=Dep	oletion, RM	I=Reduced Matrix, 0	CS=Cov	ered or Coa	ited Sar	nd Grains. *Loc	cation: PL=Pore Lin	ning, M=Matrix.	
Hydric Soi	il Indicators: (Applie	cable to al	l LRRs, unless oth	erwise	noted.)		Indicators f	or Problematic Hy	dric Soils³:	
•	sol (A1)		Sandy F				0-	2 cm Muck (A1		
	Epipedon (A2)		Stripped				0 -	Red Parent Ma		
	Histic (A3)		S		/lineral (F1)	(except	t MLRA 1)	Other (Explain	in Remarks)	
	ogen Sulfide (A4)	The course of the course		- 20	Matrix (F2)					
	eted Below Dark Surfa	ace (A11)	Deplete				3			
-	Dark Surface (A12)				rface (F6)			tors of hydrophytic		
	y Muck Mineral (S1)				Surface (F7) ions (F8))		and hydrology must		
	y gleyed Matrix (S4) Layer (if present):		Redox L	epress	ions (F8)		un	lless disturbed or pr	obiematic.	
	e Layer (II present):									
Type: Depth (inch	nec).						lydric Soil Pres	ent?	Yes X	No
Remarks:			i				,			
YDROLOG	10.00									
	ydrology Indicators		Gainet)					Casandaniladia	ataus (2 as man	
5/23/2019	dicators (any one indicators (A1)	cator is sur	LONG LUIS CO.	tained I	Leaves (B9)	lovoon		Secondary Indic	Leaves (B9) (M	
V 18-61	ce Water (A1) Water Table (A2)				Leaves (B9) IA and 4B)	(excep		4A and 4B)		ILKA 1, 2,
	ation (A3)		Salt Cru				-	Drainage Patte		
	r Marks (B1)		_	- 2	, brates (B13)				ater Table (C2)	
	nent Deposits (B2)				de Odor (C1)		3. 		ble on Aerial Im	
	Deposits (B3)						g Roots (C3)	Geomorphic Po		5-7(7
	Mat or Crust (B4)				duced Iron (Shallow Aquita		
Iron D	Deposits (B5)		Recent	Iron Re	duction in Pl	owed S	oils (C6)	FAC-Neutral To		
Surfa	ce Soil Cracks (B6)		Stunted	or Stres	ssed Plants	(D1) (L	RR A)	Raised Ant Mo	unds (D6) (LRR	(A S
Inund	ation Visible on Aeria	I Imagery (B7) Other (E	xplain i	in Remarks)		· · · · · · · · · · · · · · · · · · ·	Frost-Heave H	ummocks (D7)	
Spars	sely Vegetated Conca	ve Surface	(B8)							
Field Obse				, ,			20			
Water table	ater Present? Ye Present? Ye			(inches		100				
Saturation		-	[11] [12] [12] [13] [13] [13] [13] [13] [13] [13] [13	(inches		- 10	Wetland Hyd	drology Present?	Yes X	No
THE RESERVE AND ADDRESS OF THE PARTY OF THE	apillary fringe)			-70	1877 11		300	17.03 	100	
escribe Red	corded Data (stream of	gauge, mor	nitoring well, aerial p	hotos, p	previous insp	pections	s), if available:			
Remarks:										

Project/Site: Hwy 20		City/County:	Sweet Hor	me/Linn			Sampl	8/4/2022	
Applicant/Owner: Mosaic Development				State: OR				11	
Investigator(s): K. Cartwright; J. Forgione		Section	n, Township	, Range:	T13S, F	R1E, Section	1 27C		
Landform (hillslope, terrace, etc.): terrace		Local re	elief (concav	e, convex,	none):	none		Slope (%): <u>0-2</u>
Subregion (LRR): Northwest Forests and Coast (LRR A	<u>)</u> Lat:				Long:			Dat	tum:
Soil Map Unit Name: Fluvents-Fluvaquents comple.		CONTRACT OF THE PARTY OF THE PA	OWNE	N		ssification: .	1000	76.098 11330 - KSHID	
Are climatic / hydrologic conditions on the site typical for			Yes_	An annual control of		A reserved		olain in Rem	
Are Vegetation, Soil, or Hydrology								-	X_No
Are Vegetation, Soil, or Hydrology		naturally pr	oblematic?	(If need	led, exp	olain any ans	swers in F	Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing	sampling	point loca	ations, tr	ansec	ts, impor	tant fea	tures, etc	
Hydrophytic Vegetation Present? YesNo	o X								
Hydric Soil Present? YesNo		310633335553	ampled Area a Wetland?		Yes		No	X	
Wetland Hydrology Present? YesNo			a Wettaliu:			9		95	
Remarks: Plot placed upslope of swale									
VEGETATION		22 1/2 1/2	70 5020 50	I			4.		
Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status?	Number	of Domi	t workshee nant Specie	s		
1. Alnus rubra	80	Y	FAC:	That Are	OBL, F	ACW, or FA	·C:	2	(A)
2. Acer macrophyllum	50	Y	FACU			Dominant			
3				Species /	Across /	All Strata:		4	(B)
4	-	Q 				nant Specie			
Total Cover	:130	,		That Are	OBL, F	ACW, or FA	.C:	50%	(A/B)
Shrub Stratum			5	Dravalan	aa lada	ex Workshe	ot:		
1. Rubus armeniacus	30	Y	FAC		al % Cov			Multiply by:	
2.				OBL spec			x1 =	0	35 A
3.	×				control -		700	0	
4.				FAC spec		-	x3 =	0	
5.				FACU sp	ecies		x4 =	0	
Total Cover	:30			UPL spec	cies .		x5 =	0	
Herb Stratum			DEATH-SAC	Column 1			(A)	0	(B)
Polystichum munitum	50	Y	FACU	Prevale	ence Inc	lex = B/A =			170
2. Equisetum arvense	10	·	FAC						
3	. .	0.				getation Inc			
4	-	-				id Test for F ninance Tes		ic Vegetatior	1
5 6.		(i 				alence Inde			
								1 (Provide s	upporting
n	 							arate sheet)	
9.						land Non-Va			
10.				l-				getation ¹ (Ex	plain)
11		00 0		Ø					entransport &
Total Cover	60								
Woody Vine Stratum 1.	68 K	24				dric soil and ss disturbed		nydrology mi matic.	ust
2.				Hydroph	vtic				<u> </u>
Total Cover				Vegetatio	-				
% Bare Ground in Herb Stratum 40 %	Cover of B	iotic Crust	0	Present?	•		Yes	No	X
Remarks:									

SOIL							Sampling Poi	nt:		1
Profile Des	scription: (Describe	to the dep	oth needed to doo	ument the indic	ator or c	onfirm the abse	ence of indicators.)			
Depth	Matrix		Re	dox Features						
(inches)	Color (moist)	%	Color (moist)	% Type	Loc	² Texture	<u> </u>	Remarks		
0-10	7.5 YR 3/3	100	2			GrSiL	- 1 No.			
	8D			10			2 3			
-										
<u> </u>	74				_	_	4) /4			
							- 18 9f			
-			<u> </u>	0 2	_	- 17	- €2 %			
-	99			(Œ				
¹ Type: C=0	Concentration, D=Dep	oletion RM:	=Reduced Matrix	CS=Covered or C	Coated S	and Grains 21 o	cation: PL=Pore Lini	ing M=Matrix		
1,700. 0	concontration, D Do	oronori, i iii	Troductur mains,	00 0010104 01 0	routed of	una Gramo.	odion: 1 E 1 oro Em	ing, in main.		
- Contract State of State	il Indicators: (Applie	cable to all				Indicators	for Problematic Hye			
	sol (A1)			Redox (S5)		93	2 cm Muck (A1			
	Histic Epipedon (A2)			d Matrix (S6)		(0-	Red Parent Ma			
	Histic (A3)			Mucky Mineral (F		pt MLRA 1)	Other (Explain i	n Remarks)		
	ogen Sulfide (A4)	17007 Na W 240444		Gleyed Matrix (F	2)					
	eted Below Dark Surfa	ice (A11)		ed Matrix (F3)		3,				
-	Dark Surface (A12)			Dark Surface (F6			ators of hydrophytic v	_		
	y Muck Mineral (S1)			ed Dark Surface (l Depressions (F8)			tland hydrology must			
· Sections	y gleyed Matrix (S4)		Redox	Depressions (F8)		u	nless disturbed or pro	obiematic.		
	Layer (if present):	NOCESSES								
Type: Depth (inch	shovel refusal	-roots 0				Hydric Soil Pre	cont? V	'es	No	Х
Remarks:	103).					riyane con rie				
									—	—
HYDROLOG										
	ydrology Indicators		:-!4\				Casandaniladia	.t (2		
55137 350	dicators (any one indicators (A1)	cator is sum	J. Verballing	Stained Leaves (E	20) (ovo		Secondary Indica Water-Stained		THE PARTY STORY	-
	ce Water (A1) Water Table (A2)			A 1, 2, 4A and 4	100 March 1995	sbr .	4A and 4B)	Leaves (Da) (N	ILKA I	, 2,
	ation (A3)			ust (B11)	۵)	· · ·	Drainage Patter	ms (B10)		
-	r Marks (B1)		3.—— S	Invertebrates (B	13)	0.5	Dry-Season Wa			
	nent Deposits (B2)			en Sulfide Odor (85	Saturation Visib			(C9)
	Deposits (B3)			d Rhizospheres a		ing Roots (C3)	Geomorphic Po		-5-7	
	Mat or Crust (B4)			ce of Reduced Iro			Shallow Aquitar			
	Deposits (B5)			Iron Reduction in		Soils (C6)	FAC-Neutral Te			
1000000	ce Soil Cracks (B6)		Stunted	d or Stressed Plan	nts (D1) (LRR A)	Raised Ant Mou		RA)	
Inund	ation Visible on Aeria	I Imagery (E	37) Other (Explain in Remarl	ks)		Frost-Heave Hu	ımmocks (D7)		
Spars	sely Vegetated Conca	ve Surface	(B8)							
Field Obse		- 3	20 00 20 0	2 M ta ta						
Surface Wa Water table	ater Present? Ye Present? Ye			h (inches): h (inches):						
Saturation				h (inches):	- 88	Wetland Hy	drology Present?	Yes	No	X
(includes ca	apillary fringe)		N 	. 20			0 555	(C		
Describe Rec	corded Data (stream of	gauge, mon	itoring well, aerial	photos, previous i	inspectio	ns), if available:				
Remarks:										

Project/Site:	Hwy 20			City/County:	Sweet Hor	me/Linn			Samplin	ng Date:	8/4/2022
Applicant/Owner:	Mosaic Development						State:			ng Point:	12
Investigator(s):	K. Cartwright; J. Forgione	6		Section	n, Township	, Range:	T13S, F	R1E, Section	on 27C		
Landform (hillslope	e, terrace, etc.): terra	ce		Local re	lief (concav	e, convex	, none):	none		Slope (%	6): <u>0-2</u>
Subregion (LRR):	Northwest Forests and Co	ast (LRR A)	Lat:				Long:			Datu	ım:
Soil Map Unit Nam		2777 82 1814 1775			0770			ssification:	-	stasiina seen	28 70
	ologic conditions on the site	77.5			Yes_					lain in Rema	
Are Vegetation	, Soil, or I										X_No
Are Vegetation	, Soil, or I	Hydrology .		naturally pro	oblematic?	(If nee	ded, exp	olain any ar	nswers in R	emarks.)	
SUMMARY OF	FINDINGS - Attach	site map s	howing	sampling	point loca	ations, t	ransec	ts, impo	rtant fea	tures, etc.	
Hydrophytic Vegeta	ation Present? Yes	X No									
Hydric Soil Present		X No		HOSPERSON	ampled Area a Wetland?		Yes	x	No		
Wetland Hydrology	Present? Yes	X No		Within	a wettand:			9			
Remarks: Plot plac	ed in vegetated swale										
VEGETATION											
			Absolute	Dominant	Indicator	Domina	nce Tes	t workshe	et:		
Tree Stratum (Us	se scientific names.)	4	% Cover	Species?	Status?	Control of the Contro		nant Speci			
1						I nat Are	OBL, F	ACW, or F	AC:	3	(A)
1.5			75					Dominant			
5 A						Species	ACTOSS /	All Strata:		3	(B)
4	()	Fotal Cover:	0					nant Speci ACW, or F		100%	(A/B)
Shrub Stratum					8	Prevale	nce Inde	ex Worksh	eet:		
1						Tot	al % Co	ver of:		Multiply by:	
2.						OBL spe		i.	_x1 =	0	
3						and the second second second			_x2 =	0	
4						FAC spe		-	_x3 =	0	
5						FACU s	and the second second		_×4 =	0	
Horb Stratum		Fotal Cover:	0			UPL spe		0	_x5 =	0	— (B)
Herb Stratum 1. Ranunculus re	nene		50	Y	FAC				· (A)	0	(B)
Oenanthe same			25		OBL	1 TOVA	erice inc	10X - D/A -	1		
3. Athyrium cyclo			20		FAC	Hydropi	nvtic Ve	getation Ir	ndicators:		
4.						,		7.0		c Vegetation	
						x			st is >50%		
e							3 - Prev	alence Inc	lex is ≤3.0 ¹		
7							4 - Mor	phological	Adaptation ²	1 (Provide su	pporting
8						-	data in	Remarks o	or on a sepa	arate sheet)	
									/ascular Pla		
10							Probler	natic Hydro	phytic Veg	etation ¹ (Exp	lain)
11	12										
V200-000-000-000-00-00-00-00-00-00-00-00-		Total Cover:	95						200000000000000000000000000000000000000		ACC)
Woody Vine S									d wetland h d or probler	ydrology mu	st
1 2.				· <u> </u>		100000000000000000000000000000000000000		o diotal be	- or problet		
* * * * * * * * * * * * * * * * * * *		Γotal Cover:	n	· ·		Hydropi					
% Bai	re Ground in Herb Stratum			otic Crust	0	Vegetat Present			Yes_X	No	
Remarks:							7.5				
westerministativity											

SOIL								Sampling P	oint:	12
Profile De	scription: (Describe	to the dep	th needed to docu	ıment tl	he indicato	or or cor	nfirm the abs	ence of indicators	.)	
Depth	Matrix		Red	ox Feat	ures		_			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	<u> </u>	Remarks	
0-2	10 YR 3/2	95	10 YR 3/4	5	c_	M	<u>L</u>			
2-16	2.5 Y 3/1	95	2.5 YR 3/3	5		M	<u>L</u>			
7						_	-	-		
	17.					_	- 1			
			·				-	0 9 <u></u>		
-	***		209				- 10			
*	***************************************						- 10			
¹ Type: C=	Concentration, D=Dep	etion, RM	=Reduced Matrix, C	S=Cove	ered or Coa	ted San	d Grains. ² Lo	ocation: PL=Pore L	ining, M=Matrix.	
Hydric So	il Indicators: (Application	able to all	LRRs, unless other	erwise i	noted.)		Indicators	for Problematic F	lydric Soils ³ :	
	sol (A1)		Sandy R					2 cm Muck (A		
	Epipedon (A2)		Stripped					Red Parent M		
	(Histic (A3)		3. The second se		lineral (F1)	(except	MLRA 1)	Other (Explai	n in Remarks)	
	ogen Sulfide (A4)		A	(2)	Matrix (F2)					
	eted Below Dark Surface	æ (A11)	Depleted				3 _{localia}	cators of hydrophytic	a varatation and	
	Dark Surface (A12) ly Muck Mineral (S1)				face (F6) Surface (F7	١.		etland hydrology mu		
	ly gleyed Matrix (S4)				ons (F8)	,		unless disturbed or		
	e Layer (if present):			Срісооі	0113 (1 0)		్	arriess distarbed or p	problemate.	
Type:	e zayo. (p. oco).									
Depth (incl	hes):					H,	ydric Soil Pre	esent?	Yes X N	No
Remarks:										
HYDROLOG	SY.									
	lydrology Indicators:									
1550	dicators (any one indica	ator is suffi	Amend con	N 188 - N 81	7 9000000	F00 3			licators (2 or more re	\$100 \$100 PM (\$100)
	ice Water (A1)				eaves (B9)	(except	t		d Leaves (B9) (MLF	RA 1, 2,
	Water Table (A2)				A and 4B)			4A and 4E	- 22	
	ration (A3) er Marks (B1)		Salt Crus	25				Drainage Pat		
-	ment Deposits (B2)		-		e Odor (C1				Water Table (C2) sible on Aerial Imag	ery (C9)
	Deposits (B3)						Roots (C3)	Geomorphic I		ery (OS)
	Mat or Crust (B4)				duced Iron		g 1100to (00)	Shallow Aquit		
	Deposits (B5)		X		duction in P	enteres en la constant	oils (C6)	FAC-Neutral		
	ace Soil Cracks (B6)		Stunted	or Stres	sed Plants	(D1) (LF	RR A)	Raised Ant M	lounds (D6) (LRR A	ι)
Inund	dation Visible on Aerial	lmagery (E	37) Other (E	xplain ir	n Remarks)			Frost-Heave	Hummocks (D7)	
Spars	sely Vegetated Concav	e Surface	(B8)							
Field Obs			20 00 20 0	M % %						
	ater Present? Yes e Present? Yes			(inches (inches	· -					
Saturation			경영(C) ((inches			Wetland Hy	ydrology Present?	Yes X N	lo
THE RESIDENCE OF THE PARTY OF T	capillary fringe)			.00	1004TI			50 1205		~
Describe Re	corded Data (stream ga	auge, mon	itoring well, aerial p	hotos, p	revious ins	pections	s), if available:			
Remarks:										
and the second considerable an										

Project/Site: Hwy 20	te: Hwy 20					me/Linn			Sampling Date:		
Applicant/Owner: Mosaic Development				State: OR			Samplin	13			
Investigator(s): K. Cartwright; J. Forgion	е		Section	n, Township	, Range:	T13S, F	R1E, Section	27C			
Landform (hillslope, terrace, etc.): terr	ace		Local re	elief (concav	e, convex	, none):	none		Slope (%)	: 0-2	
Subregion (LRR): Northwest Forests and (Coast (LRR A)	Lat:				Long:			Datun	n:	
Soil Map Unit Name: Fluvents-Fluvaqu			District Control of the Control of t	owe			ssification: _	310 S	recitio kinin se	20	
Are climatic / hydrologic conditions on the si	7.5		•	Yes_	X		ili sanakan mananan ili		ain in Remark		
Are Vegetation, Soil, or									? Yes X	_No	
Are Vegetation, Soil, or	Hydrology		naturally pr	oblematic?	(If nee	ded, exp	olain any ans	swers in Re	emarks.)		
SUMMARY OF FINDINGS – Attach	site map s	howing	sampling	point loca	ations, t	ransec	ts, impor	tant feat	ures, etc.		
Hydrophytic Vegetation Present? Yes	sNo	X	1-4-0								
	s No			ampled Area a Wetland?	a	Yes		No	x		
	sNo			a rrottana.							
Remarks: Plot placed upslope of swale											
VEGETATION											
Tree Stratum (Use scientific names.)		Absolute % Cover	Dominant Species?	Indicator Status?			t workshee nant Specie				
Alnus rubra		100		FAC			ACW, or FA		2	(A)	
2.			0.		Total Nu	ımber of	Dominant	9			
3.	- 2				Species	Across	All Strata:		4	(B)	
4.					Percent	of Domi	nant Specie:				
	Total Cover:	100					ACW, or FA		50%	_ (A/B)	
Shrub Stratum				9	Prevale	nce Inde	ex Workshe	et:			
Rubus armeniacus		30	Y	FAC		al % Co			Multiply by:		
2. Corylus cornuta		50	Y	FACU	OBL spe			x1 =	0	=55 =50	
3. Ilex aquifolium		10		FACU	FACW s	pecies		x2 =	0		
4.					FAC spe			x3 =	0		
5					FACU s	pecies .		x4 =	0		
	Total Cover:	90			UPL spe	ecies		x5 =	0	_	
Herb Stratum		114161			Column			(A)	0	(B)	
1. Polystichum munitum		60	Y	FACU NOL	Preval	ence Inc	dex = B/A = _			-70	
2. Brachypodium sylvaticum		10		NOL							
3. 4.				9 	нуагор	3.5	getation Inc id Test for H		Vegetation		
4 5.						Section of the section	ninance Tes		vegetation		
6.							valence Inde				
7.					-				(Provide sup	porting	
8.			-		-		Remarks or				
9.					-		land Non-Va				
10.									etation ¹ (Expla	ain)	
11.											
	Total Cover:	70									
Woody Vine Stratum 1.			25				dric soil and ss disturbed		drology must natic.		
2		, ,	0.0		Hydrop	nytic					
	Total Cover:				Vegetat						
% Bare Ground in Herb Stratur	n <u>30</u> %	Cover of B	iotic Crust	0	Present	?	(I	Yes	No	<u>X</u>	
Remarks:											

SOIL							Samp	oling Point:	13
Profile Des	scription: (Descr	ibe to the dep	oth needed to doc	ument the indica	tor or co	nfirm the abs	ence of indic	cators.)	
Depth	Matri	x	Re	dox Features					
(inches)	Color (moist)) %	Color (moist)	%Type ¹	Loc ²	Texture	е	Remark	S
0-16	10 YR 3/3	100				GrSiL			
. 				1: 0.2					
	75. 75.				10	- W - G			
100	% <u></u>			· · · · · · · · · · · · · · · · · · ·		- 0			
	·								
	23		-		- 1-	_ %			
	937			099		-107			
1- 0						21			1700
Type: C=0	Concentration, D=	Depletion, RIM	=Reduced Matrix, (US=Covered or Co	oated San	id Grains. "L	ocation: PL=	Pore Lining, M=Matr	IX.
Hydric Soi	I Indicators: (Ap	plicable to all	LRRs, unless oth	erwise noted.)		Indicators	for Problem	natic Hydric Soils ³ :	
Histos	sol (A1)		Sandy F	Redox (S5)			2 cm M	luck (A10)	
Histic	Epipedon (A2)		Stripped	d Matrix (S6)			Red Pa	rent Material (TF2)	
Black	Histic (A3)		Loamy	Mucky Mineral (F1) (except	MLRA 1)	Other (Explain in Remarks)	18
Hydro	gen Sulfide (A4)		Loamy	Gleyed Matrix (F2	2)				
Deple	ted Below Dark S	urface (A11)	Deplete	d Matrix (F3)					
Thick	Dark Surface (A1	2)	Redox I	Dark Surface (F6)		³ Indi	cators of hydr	ophytic vegetation a	nd
	y Muck Mineral (S			d Dark Surface (F	7)			gy must be present,	
Sandy	y gleyed Matrix (S4	4)	Redox I	Depressions (F8)		J.	unless disturb	ed or problematic.	
Restrictive	Layer (if presen	t):							
Type:	- 129				- 1		172	322	
Depth (inch	nes):				H	ydric Soil Pr	esent?	Yes	_ No X
Remarks:									
HYDROLOG	Υ								
Wetland H	ydrology Indicate	ors:							
Primary Ind	licators (any one in	ndicator is suff	ficient)	are the warra			100000000000000000000000000000000000000	ary Indicators (2 or n	
	ce Water (A1)			Stained Leaves (B		t		Stained Leaves (B9)	(MLRA 1, 2,
	Water Table (A2)			A 1, 2, 4A and 4B)			and 4B)	
-	ation (A3)		3	ıst (B11)				ge Patterns (B10)	
-	r Marks (B1)			Invertebrates (B1				ason Water Table (0	
	nent Deposits (B2))	1	en Sulfide Odor (C				ion Visible on Aerial	Imagery (C9)
기대기학교	Deposits (B3)			d Rhizospheres al		g Roots (C3)		orphic Position (D2)	
	Mat or Crust (B4)		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	ce of Reduced Iron		-11- (00)	·	v Aquitard (D3)	
	eposits (B5)			Iron Reduction in				eutral Test (D5)	DD A)
	ce Soil Cracks (B6			or Stressed Plant		RR A)		Ant Mounds (D6) (L	
	ation Visible on A			Explain in Remark	s)		Frost-F	leave Hummocks (D	17)
	ely Vegetated Cor	icave Suriace	(60)			1			
Field Obse Surface Wa	ervations: ater Present?	Yes	No X Depth	n (inches):					
Water table		Yes —		(inches):					
Saturation I		Yes	No X Depth	n (inches):		Wetland H	ydrology Pre	sent? Yes	NoX_
THE RESIDENCE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN	apillary fringe)		itorias unal acrial :	shetee previous in	onostions) if available	ρ		
Describe Rec	corded Data (strea	m gauge, mon	nitoring well, aerial p	onotos, previous ir	spections	s), if available:			
Remarks:									

APPENDIX C: GROUND LEVEL PHOTOGRAPHS



Photo Point 1. From the eastern study site boundary facing northwest.



Photo Point 1. From the eastern study site boundary facing northeast.



Photo Point 1. From the eastern study site boundary facing southeast



Photo Point 1. From the eastern study site boundary facing southwest.



Photo Point 2. From Wetland 1 facing northwest toward wetland area.



Photo Point 2. From Wetland 1 facing south toward wetland area.



Photo Point 2. From Wetland 1 facing northeast toward adjacent upland.



Photo Point 3. From Stream 1 facing northeast, downstream.



Photo Point 3. From Stream 1 facing west, upstream, at small footbridge.



Photo Point 4. From the culverted outlet of Wetland 1 facing south toward wetland.



Photo Point 4. From the culverted outlet of Wetland 1 facing north toward ephemeral stream.



Photo Point 5. Facing northeast.



Photo Point 5. Facing southeast.



Photo Point 5. Facing west, downslope, toward Wetland 1.



Photo Point 5. Facing north.



Photo Point 6. From the center of the site facing east.



Photo Point 6. From the center of the site facing north.



Photo Point 6. From the center of the site facing south.



Photo Point 6. From the center of the site facing west.



Photo Point 7. At the upper end of the ditch along the southwestern boundary facing northeast.



Photo Point 7. At the upper end of the ditch along the southwestern boundary facing southwest.



Photo Point 8. From the lower end of the ditch (Wetland 2) facing southwest toward wetland portion of ditch.



Photo Point 9. From the northern portion of the site facing north.



Photo Point 9. From the northern portion of the site facing east.



Photo Point 9. From the northern portion of the site facing south.



Photo Point 9. From the northern portion of the site facing west.



Photo Point 10. From the convergence of Stream 2 and Wetland 3 facing southwest toward stream.



Photo Point 10. From the convergence of Stream 2 and Wetland 3 facing north toward wetland.



Photo Point 11. From Wetland 3 at the northern boundary facing northeast. Wetland continues offsite.



Photo Point 11. From Wetland 3 at the northern boundary facing northwest. Wetland continues offsite.



Photo Point 11. From Wetland 3 at the northern boundary facing southwest toward wetland area.



Photo Point 12. From Wetland 3 facing northwest toward wetland area.



Photo Point 12. From Wetland 3 facing northeast toward wetland area.



Photo Point 12. From Wetland 3 facing southeast toward adjacent upland.

APPENDIX D: LITERATURE CITATIONS

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WD2022-0548, additional information submitted per DSL review

Project/Site:	Hwy 20	City/County:	Sweet Hon	ne/Linn		Sampling Date:			8/4/202			
Applicant/Owner:	Mosaic Developmer	nt		por vici • vici vici vici i i • vi			State:	OR		Sampling Point:		
Investigator(s):	K. Cartwright; J. For		Section	n, Township,	Range:	T13S,	R1E, Sec	tion 27C				
Landform (hillslope	e, terrace, etc.):	terrace		Local re	elief (concave	e, convex	, none):	none		Slope (%): 0-2	
Subregion (LRR):	Northwest Forests a	and Coast (LRR A	Lat:	77	50		Long:	2		Datu	m:	
Soil Map Unit Nam	e: Jory silty clay	y loam, 2 to 12 pe	rcent slope	S			NWI Cla	assification	n: none			
Are climatic / hydro	ologic conditions on th	ne site typical for t	his time of	year?	Yes_	X	No		(If no, ex	olain in Remar	ks)	
Are Vegetation	, Soil	, or Hydrology		significantly	disturbed?	Are "N	ormal C	ircumstar	ces" Preser	nt? Yes X	No	
Are Vegetation	, Soil	, or Hydrology		naturally pr	oblematic?	(If nee	ded, ex	plain any	answers in F	Remarks.)		
SUMMARY OF	FINDINGS - Att	ach site map s	showing	sampling	point loca	ations, t	ranse	cts, imp	ortant fea	itures, etc.		
Hydrophytic Vegeta	ation Present?	Yes X No	ě									
Hydric Soil Present		Yes X No		3106333330033	ampled Area a Wetland?	а	Yes	X	No			
Wetland Hydrology	Present?	Yes X No		Within	a wettand?							
	ed in bottom of spars vas composed primar						Cormer	ous carro	y and neav	y lear litter cov	ы.	
VEGETATION												
			Absolute	Dominant	Indicator	Domina	nce Tes	st worksh	eet:			
Tree Stratum (Us	se scientific names.)		% Cover		Status?	Number	of Dom	inant Spe	cies			
1						That Are	OBL, F	ACW, or	FAC:	0	(A)	
2				-		Total Nu	mber of	f Dominan	ıt			
3.						Species	Across	All Strata:		2	(B)	
4.				· · · · · · · · · · · · · · · · · · ·		Percent	of Dom	inant Spe	cies			
		Total Cover:	0					ACW, or		0%	(A/B)	
Shrub Stratum 1.			<i>a</i>	21 5		Tot	al % Co			Multiply by:		
2						OBL spe		-	—~~~	0		
3.									Washing Co.	0	_	
4.				-		FACU s	TO 000 A TO 000	-	x3 = x4 =	0		
5.		Total Cover:	0			UPL spe		-	x4 x5 =	0		
Herb Stratum		Total Cover.				Column			_(A)		(B)	
Rubus ursinus			5	Y	FACU							
Hedera helix	2:		5	Y	FACU	1,113,131			2012			
3.					-	Hydrop	nytic Ve	getation	Indicators:			
4.							1 - Rap	oid Test fo	r Hydrophyt	ic Vegetation		
5.							2 - Dor	minance T	est is >50%			
6.							3 - Pre	valence Ir	ndex is ≤3.0	1		
7							4 - Moi	rphologica	I Adaptation	1 (Provide su	porting	
8							data in	Remarks	or on a sep	arate sheet)		
9				×			5 - We	tland Non	-Vascular Pi	ants ¹		
10						<u>x</u>	Proble	matic Hyd	rophytic Ve	getation ¹ (Expl	ain)	
11												
Woody Vine St		Total Cover:							nd wetland l	nydrology mus	t	
2.				25	-		narrana	2.0.010	p. 0010			
		Total Cover:	0	O.		Hydrop Vegetat						
% Rai	re Ground in Herb Str			otic Crust	0				Yes)	(No		
	on species meet prot		- Andreas and the second	enertie ook ale energia is			277	es of the F	774004	- Distributes		
	, p. 101				33.3001							

US Army Corps of Engineers