Public Hearing:

3. Resolution No. 421. 6753 SW Montgomery Way SRIR and SROZ. The applicant is requesting approval of an Abbreviated Significant Resource Impact Report (SRIR) and Significant Resource Overlay Zone (SROZ) large lot exception for construction of a residence at 6753 SW Montgomery Way.

> Case Files: DB23-0006 6753 SW Montgomery Way -Abbreviated SRIR (SRIR23-0001) -SROZ Large Lot Exception (SROZ23-0001)

DEVELOPMENT REVIEW BOARD RESOLUTION NO. 421

A RESOLUTION ADOPTING FINDINGS AND CONDITIONS OF APPROVAL, APPROVING AN ABBREVIATED SIGNIFICANT RESOURCE IMPACT REPORT (SRIR) AND SIGNIFICANT RESOURCE OVERLAY ZONE (SROZ) LARGE LOT EXCEPTION FOR CONSTRUCTION OF A RESIDENCE AT 6753 SW MONTGOMERY WAY.

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted by property owners Natalya and Joseph Oreste in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the subject site is located at 6753 SW Montgomery Way on Tax Lot 1200, Section 24A, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon, and

WHEREAS, the Planning Staff has prepared the staff report on the above-captioned subject dated September 18, 2023, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel B at a scheduled meeting conducted on September 25, 2023, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby adopt the staff report dated September 18, 2023, attached hereto as Exhibit A1, with findings and recommendations contained therein, and authorizes the Planning Director to issue permits consistent with said recommendations for:

DB23-0006 Abbreviated SRIR and SROZ Large Lot Exception.

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 25th day of September 2023, and filed with the Planning Administrative Assistant on ______. This resolution is final on the 15th calendar day after the postmarked date of the written notice of decision per *WC Sec* 4.022(.09) unless appealed per *WC Sec* 4.022(.02) or called up for review by the council in accordance with *WC Sec* 4.022(.03).

Rachelle Barrett, Chair - Panel B Wilsonville Development Review Board

Attest:

Shelley White, Planning Administrative Assistant



Exhibit A1 Staff Report Wilsonville Planning Division 6753 SW Montgomery Way SRIR SROZ

Development Review Board Panel 'B' Quasi-Judicial Public Hearing

Hearing Date:	Septemb	er 25, 2023
Date of Report:	Septemb	er 18, 2023
Application No.:	DB23-0006 Abbi	reviated SRIR Review and SROZ Large Lot Exception
Request/Summary:	The requests Abbreviated Si Significant Res construct a resid	before the Development Review Board include an gnificant Resource Impact Report (SRIR) Review and ource Overlay Zone (SROZ) Large Lot Exception to lence on a property located entirely within the SROZ.
Location:	6753 SW Montg 1200, Section 24 City of Wilsonv	omery Way. The property is specifically known as Tax Lot A, Township 3 South, Range 1 West, Willamette Meridian, ille, Clackamas County, Oregon.
Owner/Applicant:	Natalya and Jos	eph Oreste
Comprehensive Plan	Designation:	Residential 0-1 du/ac
Zone Map Classificat	ion:	Future Development Agricultural–Holding (FDA-H)
Staff Reviewers:	Cindy Luxhoj A Amy Pepper, PI Kerry Rappold,	ICP, Associate Planner E, Development Engineering Manager Natural Resources Program Manager

Staff Recommendation: <u>Approve with conditions</u> the Abbreviated SRIR and SROZ Large Lot Exception.

Applicable Review Criteria:

Development Code:	
Section 4.008	Application Procedures-In General
Section 4.009	Who May Initiate Application
Section 4.010	How to Apply
Section 4.011	How Applications are Processed
Section 4.014	Burden of Proof
Section 4.031	Authority of the Development Review Board
Subsection 4.035 (.04)	Site Development Permit Application
Subsection 4.035 (.05)	Complete Submittal Requirement
Section 4.110	Zones
Section 4.113	Standards Applying to Residential Development in
	All Zones
Section 4.120	Residential Agricultural – Holding (RA-H) Zone
Sections 4.139.00 through 4.139.11	Significant Resource Overlay Zone (SROZ)
	Regulations
Section 4.171	Protection of Natural Features and Other Resources
Section 4.172	Flood Plain Regulations
Sections 4.600-4.640.20	Tree Preservation and Protection
Other Documents:	
Wilsonville Comprehensive Plan	

Vicinity Map:



Background:

The subject property is Lot 12 in the River Estates II subdivision, which was approved in 1971. The property is designated 0-1 dwelling unit per acre in the Comprehensive Plan and is in the Future Development Agricultural–Holding (FDA-H) zone. Although 14 of the 15 lots in River Estates II have been developed with residences, Lot 12 is undeveloped vacant land that is located completely within the Significant Resource Overlay Zone (SROZ), with roughly the southern half in the 100-year floodplain.

As shown in the generalized site plan below, the applicant proposes to build a residence roughly in the center of the subject property. Although most of the development area is within the 100year floodplain, the location for the residence was chosen by the applicant in consultation with the City to minimize impacts on the SROZ and minimize tree removal. Extension of City utilities to the site is not required and the residence will use a domestic well and septic system. Access to the residence will be provided by a driveway from SW Montgomery Way.

Generalized Site Plan



The subject property is 2.98 acres (129,808 square feet). Approximate area of disturbance within the SROZ that would be needed to build the residence and other site improvements, as shown in the table below, is 12,636 square feet (9.73% of the property).

Building or Improvement	Approximate Area/Size (square feet)
House, including Garage	4,949 sf
Driveway (pervious pavement)	7,493 sf
Alternative Septic System	194 sf
Total	12,636 sf

In general practice, construction of a residence on a residentially zoned lot in the City does not require DRB review. However, because the subject property is entirely within the SROZ, an Abbreviated Significant Resource Impact Report (SRIR) is required. The Abbreviated SRIR provides a user-friendly process for the applicant, whereby City staff assist the applicant with the required information. Further, the subject property is eligible for a Large Lot Exception to the SROZ standards, per Section 4.139.10 of the Wilsonville Code, because it is greater than one (1) acre in size and at least 85% of the lot is located within the SROZ. The Large Lot Exception requires DRB review through a quasi-judicial hearing process.

Summary:

Abbreviated SRIR and SROZ Large Lot Exception (SRIR23-0001; SROZ23-0001)

Staff notes that DRB review of the request is limited to the Abbreviated SRIR and SROZ Large Lot Exception. No other aspects of the application, such as design of the proposed residence, location on the property, well siting and septic system placement, tree removal, and other site improvements, are subject to DRB review.

The applicant requests approval of an Abbreviated SRIR and SROZ Large Lot Exception to construct a residence on a parcel located entirely within the SROZ. Impacts to the SROZ are necessary for construction of the residence. The subject property, due to its size of 2.98 acres, is eligible for a Large Lot Exception to the SROZ provisions for otherwise unbuildable parcels.

Public Comments and Responses:

The City received two (2) public comments about the proposed project.

The first comment (Exhibit D1) is from a nearby property owner who desires to make the applicant aware of the location of their well in relation to the applicant's property so it is not impacted during construction of the proposed residence. The second comment (Exhibit D2) is from another nearby property owner expressing concerns about construction activities and their potential impact on properties in the area and access to the property in the event of fire.

These public comments have been forwarded to the applicant so that they may respond to the concerns at the Development Review Board public hearing.

Discussion Points:

Residential Construction within the SROZ

Per Section 4.139.02 of the Wilsonville Code, the SROZ Ordinance regulations apply to the portion of any lot or development site located within the SROZ and its associated Impact Areas. Construction of a new single-family dwelling is exempt unless the building encroaches into the Impact Area and/or SROZ (Subsection 4.139.04 (.17)), and an Abbreviated SRIR is required if the proposed building encroaches into the SROZ. In general practice, a request to construct a new

dwelling on a lot with limited buildable land would be processed as a Class 2 Administrative Review. However, because the applicant has requested a Large Lot Exception and the subject property is eligible due to its size, DRB review through a quasi-judicial hearing process is required (Subsection 4.139.10 (.01) B.).

Utilities and Services

The subject property is over 300 feet from a public sewer and, therefore, is not required to connect to this City utility. The applicant proposes to use a private septic drain field with an alternative design to minimize impacts to the SROZ and has obtained the required County and City approvals. The septic system would be located east of the proposed residence and require 194 square feet of improvement of which the drain field would comprise roughly 110 square feet.

New wells for domestic water supply within the City are prohibited unless it is unreasonable to require connection to existing services due to a significant physical barrier. Application to place a new well must be approved by the Oregon State Water Resources Department, Tualatin Valley Fire & Rescue, and the City's Community Development Director. The subject property is over 300 feet from a public water source and the applicant applied for and obtained approval from the required authorities for a proposed new well. The well would be located northwest of the proposed residence.

Tree Removal and Preservation

Development Review Board review of tree removal is not required for the development of the proposed residence; however, the Arborist Report provided by the applicant is included as an Exhibit to this staff report because it is one component of the Abbreviated SRIR. A Type B (Class 2) Tree Removal permit is required and this permit request is being reviewed concurrently by staff. A decision on the Type B permit will not be issued until after the DRB has reviewed this request for an Abbreviated SRIR and SROZ Large Lot Exception and rendered a decision.

Conclusion and Conditions of Approval:

Staff has reviewed the applicant's analysis of compliance with the applicable criteria. The Staff Report adopts the applicant's responses as Findings of Fact except as noted in the Findings. Based on the Findings of Fact and information included in this Staff Report, and information received from a duly advertised public hearing, staff recommends that the Development Review Board approve the proposed application (DB23-0006) with the following conditions:

Planning Division Conditions:

Request: SRIR23-0001 and SROZ23-0001 Abbreviated SRIR and SROZ Large Lot Exception

There are no Planning Division Conditions of Approval for this Request. Natural Resource Conditions of Approval are listed below and in Exhibit C2 of this report.

The following Conditions of Approval are provided by the Engineering, Natural Resources, or Building Divisions of the City's Community Development Department or Tualatin Valley Fire and Rescue, all of which have authority over development approval. A number of these Conditions of Approval are not related to land use regulations under the authority of the Development Review Board or Planning Director. Only those Conditions of Approval related to criteria in Chapter 4 of Wilsonville Code and the Comprehensive Plan, including but not limited to those related to traffic level of service, site vision clearance, recording of plats, and concurrency, are subject to the Land Use review and appeal process defined in Wilsonville Code and Oregon Revised Statutes and Administrative Rules. Other Conditions of Approval are based on City Code chapters other than Chapter 4, state law, federal law, or other agency rules and regulations. Questions or requests about the applicability, appeal, exemption or non-compliance related to these other Conditions of Approval should be directed to the City Department, Division, or non-City agency with authority over the relevant portion of the development approval.

Engineering Division Conditions:

PFA 1.	Public Works Plans and Public Improvements shall conform to the "Public Works
	Plan Submittal Requirements and Other Engineering Requirements" in Exhibit C1.
PFA 2.	Prior to the Issuance of the Any Permits: Applicant shall apply for City of
	Wilsonville Erosion Control. The erosion control permit shall be issued and erosion
	control measures shall be installed, inspected and approved prior to any onsite
	work occurring.
PFA 3.	Prior to the Issuance of the Building Permit: A stormwater report shall be
	submitted for review and approval. The stormwater report shall include
	information and calculations to demonstrate how the proposed development meets
	the treatment and flow control requirements, including any pervious area reduction
	strategies. A pavement design report shall be submitted for any pervious pavement
	proposed. Prior to Final Approval of the Building Permit: The applicant shall
	record a Stormwater Access Easement for any storm facilities, including pervious
	pavement.

Natural Resources Division Conditions:

NR 1. Natural Resource Division Requirements and Advisories listed in Exhibit C2 apply to the proposed development.

Building Division Conditions:

BD 1. Prior to Submittal for Building Permit: Construction in the flood plain shall comply with the Oregon Residential Specialty Code Sections R106.1.4 and R322. Applicant must consider and address in their design several critical design elements as outlined in these sections. Applicant is advised to contact the City Building Division Plans Examiner for additional information on construction in the flood plain prior to completing the design for permit submittal.

Master Exhibit List:

The entry of the following exhibits into the public record by the Development Review Board confirms its consideration of the application as submitted. The exhibit list below includes exhibits for Planning Case File DB23-0006. The Exhibit list below reflects the electronic record posted on the City's website and retained as part of the City's permanent electronic record. Any inconsistencies between printed or other electronic versions of the same Exhibits are inadvertent and the version on the City's website and retained as part of the City's permanent electronic record. Find the version on the City's method as part of the City's permanent electronic record.

Planning Staff Materials

- A1. Staff Report and Findings (this document)
- A2. Staff's Presentation Slides for Public Hearing (to be presented at Public Hearing)

Materials from Applicant

- **B1.** Applicant's Narrative and Materials Application Applicant's Narrative and Exhibits
- **B2.** Applicant's Drawings and Plans
- **B3.** Applicant's Response to Incomplete Notice Dated July 26, 2023

Development Review Team Correspondence

- **C1.** Public Works Plan Submittal and Other Engineering Requirements
- C2. Natural Resources Findings and Requirements

Other Correspondence/Public Comments

- **D1.** Danton Mendell Comment Dated September 13, 2023
- **D2.** Molly and John Herrmann Comment Dated September 15, 2023

Procedural Statements and Background Information:

1. The statutory 120-day time limit applies to this application. The application was received on May 11, 2023. Staff conducted a completeness review within the statutorily allowed 30-day review period and found the application to be incomplete on June *9*, 2023. The applicant submitted additional material on July 20 and 25, 2023. Staff conducted a completeness review within the statutorily allowed 30-day review period and deemed the application complete on August 18, 2023. The City must render a final decision for the request, including any appeals, by December 16, 2023.

Compass Direction	Zone:	Existing Use:
North	PDR 2	Residential
East	FDA-H	Residential
South	FDA-H	Residential
West	FDA-H	Residential

2. Surrounding land uses are as follows:

- 3. Previous City Planning Approvals: None
- 4. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.

Findings:

NOTE: Pursuant to Section 4.014 the burden of proving that the necessary findings of fact can be made for approval of any land use or development application rests with the applicant in the case.

General Information

Application Procedures-In General Section 4.008

The City's processing of the application is in accordance with the applicable general procedures of this Section.

Initiating Application Section 4.009

The owners of all property included in the application initiated the application and signed the application form.

Pre-Application Conference Subsection 4.010 (.02)

The City held a pre-application conference on March 3, 2022 (PRE22-0003) in accordance with this subsection.

Lien Payment before Approval Subsection 4.011 (.02) B.

No applicable liens exist for the subject property. The application can thus move forward.

General Submission Requirements Subsection 4.035 (.04) A.

The applicant has provided all of the applicable general submission requirements contained in this subsection.

Zoning-Generally and Residential Agricultural–Holding (RA-H) Zone Sections 4.110, 4.113 and 4.120

This proposed development is in conformity with the applicable zoning district, FDA-H, and general development regulations listed in Sections 4.150 through 4.199, as appropriate, have been applied in accordance with this Section.

Protection of Natural Features and Other Resources Section 4.171

The subject property is undeveloped, heavily forested with species such as bigleaf maple, western red cedar, Douglas-fir, and grand fir, and entirely within the SROZ. The applicant's narrative

Exhibit A1

recognizes that the site contains significant natural features, trees, and other natural resources in need of protection. Their goal, as stated in the narrative, "is to protect as much of the natural beauty of this property as possible." There "is a narrow band on the property with a lower water table" and the applicant proposes to place the residence and septic system "along this narrow band of drier soil". The residence is proposed to be located above the 90 foot contour as required by the CC&Rs for the River Estates II subdivision. As described by the applicant, the proposed location for the septic system is the "only area on the entire property that meets the septic criteria set forth by Clackamas County". Proposed improvements seek to minimize tree removal and limit the disturbance of soils to the extent possible. The applicant has not indicated the presence of historic, cultural resources, or other resources on the subject property in need of protection nor has any other evidence been presented indicating their presence.

Flood Plain Regulations Section 4.172

Roughly the southern half of the subject property is located in the 100-year flood plain. Most of the proposed residence and other improvements are located within the designated 100-year flood plain area and building design and construction must comply with the Oregon Residential Specialty Code Sections R106.1.4 and R322. A condition of approval ensures compliance at the time of Building permit submittal.

Tree Removal and Preservation Sections 4.600-4.640.20

Construction of the proposed residence will require removal of trees within the SROZ. Development Review Board review of tree removal is not required for the proposed residential development; however, the Arborist Report provided by the applicant is included as an Exhibit to this staff report because it is one component of the Abbreviated SRIR. A Type B (Class 2) Tree Removal permit is required and this permit request is being reviewed concurrently by staff. A decision on the Type B permit will not be issued until after the DRB has reviewed this request for an Abbreviated SRIR and SROZ Large Lot Exception and rendered a decision.

Request: SRIR23-0001 and SROZ23-0001 Abbreviated SRIR and SROZ Large Lot Exception

As described in the Findings below, the request meets the applicable criteria or will by Conditions of Approval.

Findings of Fact:

1. Pursuant to Section 4.139.10.01(B) - Large Lot Exception, the applicant may propose to develop a lot, located primarily within the Significant Resource Overlay Zone (SROZ), through a Development Review Board (DRB) quasi-judicial process.

- 2. The property is located within a mixed coniferous-deciduous forest (Site ID Number 2.20U) comprised of Douglas fir, western red cedar, red alder, big leaf maple, and a variety of native understory and shrub species, such as Indian plum, trailing blackberry, snowberry, and fringe cup. A wetland, 0.19 acre in size and located in the southwest corner of the property, was delineated by a consultant. The wetland is comprised of Oregon ash, Pacific ninebark, red-osier dogwood, and slough sedge. The wetland was not identified in the City's Natural Resources Inventory and does not qualify as locally significant due to its size (i.e., less than 0.5 acre). However, the wetland may be considered jurisdictional and subject to regulation by the Oregon Department of State Lands.
- 3. The SROZ ordinance prescribes regulations for development within the SROZ and its associated 25-foot Impact Area. Setbacks from significant natural resources implement the requirements of Metro Title 3 Water Quality Resource Areas, Metro Title 13 Nature in Neighborhoods, and Statewide Planning Goal 5. Secondary Protected Water Features, with drainage areas between 50 and 100 acres and adjacent slopes of less than 25% are assigned a vegetated corridor width of 15 feet. All significant natural resources have a 25-foot Impact Area. Development or other alteration activities may be permitted within the SROZ and its associated 25 foot Impact Area through the review of a Significant Resource Impact Report (SRIR).
- 4. Pursuant to the City's SROZ ordinance, development is only allowed within the Area of Limited Conflicting Use (ALCU). The ALCU is located between the riparian corridor boundary, riparian impact area or the Metro Title 3 Water Quality Resource Area boundary, whichever is furthest from the wetland or stream, and the outside edge of the SROZ, or an isolated significant wildlife habitat (upland forest) resource site.

Description of Request

The applicant is requesting approval of a SROZ exception for development that is located within the SROZ and its associated 25-foot Impact Area.

Summary of Issues

The proposed development will encroach into the SROZ and its associated 25-foot Impact Area. The impacts to the SROZ are necessary for the construction of a single-family residence.

Section 4.139.10 Development Review Board (DRB) Process

The following actions require review through a Development Review Board quasi-judicial process. Nothing contained herein shall be deemed to require a hearing body to approve a request for a permit under this Section.

Large Lot Exception Criteria - Greater than One Acre in Size Subsection 4.139.10 (.01) B. 1.

A1. The subject property is 2.78 acres.

Large Lot Exception Criteria – At Least 85% of Lot in SROZ Based on Surveyed Resource and Property Line Boundaries Subsection 4.139.10 (.01) B. 2.

A2. The subject property is entirely within the SROZ.

Large Lot Exception Criteria – Maximum 10% of Area in SROZ may be Excepted and Used for Development Purposes Subsection 4.139.10 (.01) B. 3.

A3. Based on the size of the property, up to 12,980 square feet may be used for development purposes. The proposed development, including the residence, septic system and driveway, will not exceed 10 percent (10%) of the area located within the SROZ.

Large Lot Exception Criteria – Reduction of SROZ does not Reduce Values Listed on City of Wilsonville Natural Resource Function Rating Matrix for Resource Site Subsection 4.139.10 (.01) B. 4.

A4. An Abbreviated SRIR, prepared by the applicant, demonstrated a reduction of the SROZ does not reduce the values associated with the significant resource area. The SRIR included the applicant's arborist report, wetland delineation, site development application, and mitigation plan.

Large Lot Exception Criteria – Proposal Sited in Location that Avoids or Minimizes Impacts to Significant Resource to Greatest Extent Possible Subsection 4.139.10 (.01) B. 5.

A5. The applicant has selected a location with fewer trees and outside an elevated water table, which minimizes impacts to the significant resource to the greatest extent possible. To offset the impacts of the proposed developed, the applicant's mitigation plan for the property includes the removal of invasive plant species, the placement of large woody debris, and the planting of native trees and shrubs.

Large Lot Exception Criteria – "Lot" Refers to Existing Legally Created Lot of Record as of Date of Adoption of SROZ Subsection 4.139.10 (.01) B. 6.

A6. The lot was legally created, as part of the River Estates II subdivision, in April 1971 and predates the adoption of the SROZ in June 2001.

Updated 1/11/2019 all previous version of this for Updated 1/11/2019 all previous version ve	n are obsolete LSONVILLE OREGON .oop E, Wilsonville, OR 97070 260 Fax: 503.682.7025 wilsonville.or.us	Planning Division Development Permit Application Final action on development application or zone change is required within 120 days per ORS 227.175 or as otherwise required by state or federal law for specific application types. A pre application conference may be required. The City will not accept applications for wireless communication facilities or similar facilities without a completed copy of a Wireless Facility Review Worksheet. The City will not schedule incomplete applications for public hearing or send administrative public notice until all of the required materials are submitted.				
Applicant:		Authorized Representative	e:			
$_{\text{Name:}}$ Joseph and Nat	alya Oreste	Name:				
Company:		Company.				
3615 SF	Willamette Ave	Company				
Mailing Address:		Mailing Address:				
City, State, Zip: MIIWaukie	, OK 97222	City, State, Zip:				
Phone: 503-888-1538	Fax:	Phone:	Fax:			
Phone:		E-mail:				
Property Owner:		Property Owner's Signatu	re:			
Name: Joseph and Nat	alya Oreste	Docusigned by: Natalya Oveste				
Company:		14B56EA2AF4CNBatalya Org	este 5/10/2023			
Mailing Address: 3615 SE	Willamette Ave	Printed Name:	Date:Date:			
City State Zim Milwaukie	ə, OR 97222	Applicant's Signature: (if dif	fferent from Property Owner)			
City, State, Zip: <u>503-888-1529</u>	<u> </u>					
Phone: 7000-1000-1000	Fax:					
E-mail:	all.com	Printed Name:	Date:			
Site Location and Descrip Project Address if Available: 6 Project Location: Parcel #0 Tax Map #(s): 31W24A	otion: 753 SW Montgomery Wa 00821597 	y, Wilsonville, OR 97070	Suite/Unit ty: □ Washington ■ Clackamas			
Request: Development Review Be Review and Large Lot E	oard (Master Plan), Abbreitsception	eviated SROZ Map Verific	ation, Abbreviated SRIR			
Project Type: Class I	Class II Class III					
Residential		Industrial	□ Other:			
Application Type(s):	□ Appeal	🗆 Comp Plan Man Amond	🗆 Parks Plan Roview			
□ Final Plat	 Major Partition 	 Minor Partition 	□ Request to Modify			
Plan Amendment	Planned Development	Preliminary Plat	Conditions			
Request for Special Meeting	□ Request for Time Extension	□ Signs	Site Design Review			
■ SROZ/SRIR Review	Staff Interpretation	Stage I Master Plan	Stage II Final Plan			
Type C Tree Removal Plan	□ Tree Permit (B or C)	Temporary Use	□ Variance			
□ Villebois SAP	Villebois PDP	□ Villebois FDP	\Box Other (describe)			
Zone Map Amendment	□ Waiver(s) Page 1	5 of 86Conditional Use	City of Wilsonville			

Narrative

Build 3926 square foot single family residence. All new construction on previously undeveloped wooded, 2.98 acre residential lot. Utilities include a proposed water well, proposed septic system, connection to existing electric and natural gas. Minimal disturbance to the wooded areas during construction and necessary mitigation to riparian habitat will be conducted as provided in the Special Resource Impact Report.

Narrative

6753 SW Montgomery Way is a 2.98 acre lot in the existing River Estates II subdivision of Wilsonville. The lot is zoned as RA-H and is in the Significant Resource Overlay Zone (SROZ). We are proposing to build a single-family home with an attached in-law suite. The residence, which includes the residence, garage, deck, total to an estimated 4949 square feet of impervious improvement. A driveway of 7493 square feet will be constructed of pervious asphalt to employ habitat-friendly development practices. A wetland was identified across the frontage of the property and delineated by Pacific Habitat Services, Inc. (See attached wetland delineation report). The wetland is also shown on the site plan and shows where the driveway will cross the wetland. The 100 year and 500 year floodplain is also shown on the site plan as well as the 90 foot contour.

In preparation of the Decision Review Board Process Section 4.139.00 through 4.139.10 as applicable were considered. Specifically, 4.139.10(.01)(B) Large Lot Exception: The lot is greater than 1 acre, at least 85 percent of the lot is located within the SROZ based on surveyed resource and property line boundaries, no more than ten percent of the area located within the SROZ on the property may be excepted and used for development purposes. Through the review of an SRIR, it is determined that a reduction of the SROZ does not reduce the values listed on the City of Wilsonville Natural Resource Function Rating Matrix for the resource site. The proposal is sited in a location that avoids or minimizes impacts to the significant resource to the greatest extent possible.

DEVELOPED AREA: 12,636 SQFT (4949+7493+194)

Developed area includes the residence, driveway and trenching for the septic system tank and drain lines:

residence (impervious improvement):**4949 sqft** driveway (pervious improvement):**7493 sqft** septic system (pervious improvement) total square feet: **194 sqft** one foot wide trenching from house to tank: 21sqft tank 8ft x 5ft= 40 sqft one foot wide trenching from tank to drain field: 23 sqft drain Field: two 50 foot long by 1ft wide trenches = 110 sqft

Lot size: 2.98 acres or **129,808** sqft 10% of 129,808 = **12,980** sqft

A licensed soils professional was retained to determine suitable locations for a septic system and residence. Requirements set forth by Covenants Conditions and Restrictions (CCR's), Special Resource Overlay ZONE (SROZ), existing wetland, septic, and well were considered to determine a suitable site plan for the residence, driveway, septic and well. The soils were studied at multiple locations on the property. The proposed location for the septic system is the only area that meets the criteria set forth by Clackamas County (See attached septic approval report provided by Clackamas County). The location of the residence was determined to be soil with the best drainage and lowest water table. Other contributing factors for the siting of the residence include CCR's for the site which require the living spaces to be located above the 90 foot contour (See Site Plan for the location of the 90 foot contour).

Tualatin Valley FIre and Rescue provided documentation describing New Construction Fire Code Applications Guide for One- and Two-Family Dwellings and Townhouses. The section for driveways longer than 150 feet was reviewed as well as all of the provided solutions. The 60 ft. Y was chosen and accepted by Tualatin Valley Fire and Rescue (See attached approval from Tualatin Valley Fire & Rescue). This meets the ingress and egress standards for emergency vehicles as well as commercial deliveries and our own RV and trailer use requirements.

OAR 690-210-0030 Placement of Water Supply Wells was reviewed for well placement and maintenance requirements and aligns with current well placements of adjacent properties as well as ingress and egress for future maintenance.

A licensed arborist was retained to determine a tree mitigation and replanting plan that both preserves existing vegetation and provides replantings of primary, midstory and understory for future restoration (See Tree Mitigation Plan).

Wetland Delineation 6753 SW Montgomery Way Wilsonville, Oregon

Township	Range	Section	Tax Lot		
3 South	1 West	24A	1200 & portion of the SW Montgomery Way right-of-way		

Prepared for

Joseph and Natalya Oreste <u>nyoreste@gmail.com</u> 3615 SE Willamette Avenue Milwaukie OR 97222

Prepared by

Shawn Eisner; Amy Hawkins, PWS; Craig Tumer, PWS, John van Staveren, SPWS **Pacific Habitat Services, Inc.** Wilsonville, Oregon 97070 (503) 570-0800

PHS Project Number: 7496

June 27, 2023



TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	RESULTS AND DISCUSSION	1
	A. Landscape Setting and Land Use	1
	B. Site Alterations.	1
	C. Precipitation Data and Analysis	2
	D. Methods	2
	E. Description of All Wetlands and Other Non-Wetland Waters	3
	F. Deviation from Local Wetland or National Wetland Inventories	3
	G. Mapping Method	4
	H. Additional Information	4
	I. Results and Conclusions	4
	J. Disclaimer	4
III.	REFERENCES	5
APP	PENDIX A: Figures	
F	Figure 1: Vicinity Map (USGS)	
F	Figure 2: Tax Lot Map	
F	Figure 3: Wetland Inventory Map (Local)	
ł	Figure 4: Soil Survey Map	
l T	Figure 5: Aerial Photo	
1	rigure o. Fotentiany jurisdictional wettand (wettand Defineation Map)	
APP	PENDIX B: Wetland Delineation Data Sheets	
APP	PENDIX C: Site photos (ground level)	

I. INTRODUCTION

Pacific Habitat Services, Inc. (PHS) conducted a wetland delineation for the property located at 6753 SW Montgomery Way in Wilsonville, Oregon (Township 3 South, Range 1 West, Section 24A, Tax lot 1200 & a portion of the SW Montgomery Way right-of-way). This report presents the results of PHS's wetland delineation within the study area. Figures, including a map depicting the location of wetlands within the study area, are in Appendix A. Data sheets documenting on-site conditions are in Appendix B. Ground-level photos of the site are in Appendix C.

II. RESULTS AND DISCUSSION

A. Landscape Setting and Land Use

The study area is located north of SW Montgomery Way. Montgomery Way parallels the Willamette River, with the south end of the study area located about 425 feet from the river. Bounded by SW Montgomery Way to the south, the site is bordered to the east and west by single-family home sites. Additional residential development is located to the north, though those homes are separated from the site by an undeveloped, forested parcel. Land use in the vicinity is characterized by low density residential; generally large homes on small acreages (1 to 5 acres). Most parcels include home sites, with the balance of each property remaining forested; or on the largest parcels, often including grazing land.

The study area is forested and consists of gently sloping topography, with the highest elevations located in the northern portion of the site. The lowest elevations are in the southern portion of the study area; right along Montgomery Way.

As stated above, most of the site is forested, and dominant vegetation includes Douglas fir (*Pseudotsuga menziesii*, FACU), big leaf maple (*Acer macrophyllum*, FACU), Indian plum (*Oemleria cerasiformis*, FACU), beaked hazelnut (*Corylus cornuta*, FACU), English holly (*Ilex aquifolium*, FACU), snowberry (*Symphoricarpos albus*, FACU), trailing blackberry (*Rubus ursinus*, FACU), sedge (*Carex* sp.), sticky willy (*Galium aparine*, FACU) and fringe cup (*Tellima grandiflora*, FACU).

The study area is within the Coffee Lake Creek-Willamette River (170900070402) hydrologic unit. A wetland (described below in Section E) is in the southern portion of the study area.

B. Site Alterations

The Google Earth historical photos of the study area from 1994 (the earliest available) through 2023 area show very little change within the study area. The density of single family homes in the surrounding area has increased over the decades, starting in the early 2000s.

No recent fill material or deposits were observed within the study area.

C. Precipitation Data and Analysis

PHS performed the wetland delineation and data collection on July 29, 2022.

For climate analysis, PHS used the Direct Antecedent Rainfall Analysis Method (DAREM) for all field dates. DAREM categorizes rainfall of prior periods as, 1) drier than normal (sum is 6-9); 2) normal (sum is 10-14) and; 3) wetter than normal (sum is 15-18). The weighted average, as shown in Table 1, is then applied for the wetland hydrology assessment. The Oregon City, OR Station and WETS table was used for the analysis. Recorded precipitation for the water year, beginning on October 1, 2021, and through June 30, 2022, was 40.53 inches, which is 96 percent of normal (42.11 inches).

The weighted average precipitation for the three months preceding the July fieldwork was wetter than normal. No precipitation was recorded in the two weeks preceding the day of the July 29 fieldwork and no precipitation was recorded on that day.

Table 1:	Comparison of recorded monthly precipitation at the Oregon City, OR Weather Station
	to the WETS Tables, prior to July 2022 wetland delineation field work.

Drive Month	WETS ¹ Rainfall Percentile (inches)		Measured Condition*:		Condition Value	Month	Multiply	
Name			Rainfall ² (inches)	Dry, Wet, Normal	(1=dry, 2=normal, or	weight	Previous two columns	
	30th	70th		110111141	3=wet)			
April	2.7	4.52	4.73	Wet	3	1	3	
May	1.2	2.8	2.00	Normal	2	2	4	
June	0.94	1.82	3.64	Wet	3	3	9	
						Sum	16	

¹ WETS Table for the Oregon City OR Weather Station; Source: (http://agacis.rcc-acis.org/?fips=41005)

² Observed precipitation is the precipitation recorded at the Oregon City OR Weather Station. Source: (https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/fotg/)

*1) drier than normal (sum is 6-9), 2) normal (sum is 10-14), 3) wetter than normal (sum is 15-18)

D. Methods

Wetland Methodology

PHS delineated the limits of the wetland within the study area on July 29, 2022, based on the presence of wetland hydrology, hydric soils, and hydrophytic vegetation, in accordance with the Routine On-site Determination, as described in the *Corps of Engineers Wetland Delineation Manual, Wetlands Research Program Technical Report Y-87-1* ("The 1987 Manual") and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region.*

The entire study area was investigated for the presence of wetlands or other waters. One wetland was delineated within the study area. Wetland A was delineated based on topographic changes as well as changes from FAC and drier vegetation to FAC and wetter vegetation. As Oregon ash (*Fraxinus latifolia*, FACW) was common across the south end of the site, the transition from a

hydrophytic community was represented more typically by the shrub and ground cover species; such as Pacific ninebark (*Physocarpus capitatus*, FACW), red-osier dogwood (*Cornus albus*, FACW), and slough sedge (*Carex obnupta*, OBL) to beaked hazelnut, trailing blackberry, Indian plum, and western fringe cup. Though snowberry was present even in the wetland, its percent cover was generally much higher in upland areas.

A reconnaissance was conducted on March 22, 2022. During this site visit, a shallow water table (within the upper 12 inches of the soil profile) throughout the wetland was observed. This information was used during the delineation to assist in the delineation of the boundaries of Wetland A. As the water table typically recedes below 24 inches in seasonal wetlands within the Willamette Valley during mid-summer, wetland hydrology indicators did not include observations of a water table or saturation in soils pits. Hydrology indicators that were used in making wetland hydrology determinations included surface soil cracks, geomorphic position, and the FAC-neutral test.

The vegetation throughout the study area generally consists of mature trees and shrubs. PHS did not take additional data in areas that are topographically higher than the wetlands (other than data needed to verify the wetland/upland boundary). The upland areas across the remainder of the site do not exhibit surface indicators of wetlands (i.e., ponded surface water, geomorphic position, or stunted/stressed vegetation, FACW or wetter vegetation, etc.).

E. Description of all Wetlands and Other Non-Wetland Waters

PHS identified and delineated one wetland within the study area. A description of the delineated resource is provided below.

Wetland A

Wetland A (8,327 square feet/ 0.19 acre) was identified within the southern portion of the study area, and has Cowardin classification of palustrine, forested, broad-leaved deciduous, seasonally saturated (PFO1Y), and an Hydrogeomorphic (HGM) classification of Slope. Hydrologic inputs include groundwater, as well as precipitation and runoff from the adjacent landscape.

The soils within Wetland A met the criteria for redox dark surface (F6). As stated above, a shallow water table was observed within the wetland on the March 2022 site reconnaissance, therefore, soils were presumed to be saturated for at least two weeks during the early growing season, and as such, meet hydric soil criteria.

Wetland A is dominated by Oregon ash, Pacific ninebark, red-osier dogwood, and slough sedge. Sample Points 1 and 3 characterize Wetland A and Sample Points 2 and 4 characterize the adjacent upland areas. Wetland A continues off site to the southwest.

F. Deviation from Local Wetland or National Wetland Inventories

The Local Wetland Inventory (LWI) maps a large wetland and intermittent stream on tax lots to the west of the study area. The wetland areas continue south of Montgomery Way just west of the site and there are no wetlands or waterways mapped on this parcel. The onsite wetland delineated by PHS appears to be part of the offsite wetland shown on the LWI.

The small size of the wetland, in concert with dense understory vegetation, would make the delineated wetland difficult to identify solely from offsite means, as was the case for the LWI.

G. Mapping Method

PHS flagged the limits of the wetland within the study area with blue pin flags; lime green tape was used for sample point locations. Weddle Surveying then performed a professional land survey of the delineated boundaries. The accuracy of the survey and sample points 1-4 is subcentimeter.

H. Additional Information

The offsite wetlands and the tributary are not mapped as locally significant by the City of Wilsonville (City); however, this area is within the City's Significant Resource Overlay Zone (SROZ).

The Willamette River is approximately 425 feet south of the study area and is mapped Essential Salmonid Habitat (ESH).

I. Results and Conclusions

PHS delineated one wetland totaling 8,327 square feet /0.19 acres within the study area. The Cowardin and HGM classification for Wetland A is stated Section E.

J. Required 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.

III. REFERENCES

- Adamus, P.R. and D. Field. 2001 Guidebook for Hydrogeomorphic (HGM)-based Assessment of Oregon Wetland and Riparian Sites. Willamette Valley Ecoregion, Riverine Impounding and Slopes/Flats Subclasses. Oregon Division of State Lands, Salem, OR.
- Fishman Environmental Services, 1999. City of Wilsonville Local Wetlands Inventory and Riparian Corridor Inventory Southeast

Google Earth Map. aerial photograph (May 2023).

- Munsell Color, 2009. Munsell Soil Color Charts. Gretag-Macbeth, New Windsor, New York.
- Natural Resources Conservation Services (NRCS) monthly rainfall data for Oregon City, OR. <u>https://efotg.sc.egov.usda.gov/</u>
- Natural Resources Conservation Services (NRCS) WETS table for Oregon City, OR. <u>http://agacis.rcc-acis.org/?fips=41005</u>
- Oregon Department of State Lands, 2009. Oregon Revised Statutes (ORS), *Chapter 196 Columbia River Gorge; Ocean Resource Planning; Wetlands; Removal and Fill*. Section 196.800 Definitions for ORS 196.600 196.905
- ORMAP tax maps, 2023. <u>http://www.ormap.org/</u>
- US Army Corps of Engineers. 2020. Corps Antecedent Precipitation Tool, Version 1.0. (<u>https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-</u> Permits/techbio/
- US Army Corps of Engineers, Environmental Laboratory, 1987. Corps of Engineers Wetland Delineation Manual. Technical Report Y-87-1.
- US Army Corps of Engineers, Environmental Laboratory, 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0).*
- U.S. Army Corps of Engineers 2020. *National Wetland Plant List, version 3.5*. <u>https://wetland-plants.sec.usace.army.mil/nwpl static/v34/home/home.html</u>
- US Department of Agriculture, NRCS Web Soil Mapper, 2023. Soil Survey of Clackamas County, Oregon. <u>http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx</u>
- US Geologic Survey, 2023. 7.5-minute topographic map, Wilsonville, Oregon quadrangle. https://viewer.nationalmap.gov/basic/?basemap=b1&category=ustopo&title=US%20Topo%2 0Download

Appendix A

Figures



















Page 31 of 86



Appendix B

Wetland Determination Data Sheets



N	/ETLAND	DETER	RMINATIO	N DATA FO	RM - Weste	ern Mountains, Va	leys, and	I Coast R	egion	
Project/Site: Montgomery Way		City/County: Wilsonv		nville/Clackamas	ville/Clackamas Sampling D		7/29	/2022		
olicant/Owner:	Owner: Joseph and Natalya Oreste				State:	State: OR			1	
estigator(s):	gator(s): SE/CT		Section, To	wnship, Range:	Sectio	on 24, Towr	iship 3S, Ra	nge 1W		
dform (hillslope, te	errace, etc.:)		Slope		Local relief (co	ncave, convex, none):	Cond	ave	Slope (%):	1
region (LRR):		LRR A	4	Lat:	45.30	21 Long:	-122.	7463	Datum:	WGS84
Map Unit Name:			Wapato S	Silty Clay Loam		NWI Cla	assification:		PFO1C	
climatic/hydrologi	c conditions o	n the site t	typical for this ti	me of year?	Yes	No	X (i	f no, explain in	Remarks)	
vegetation	Soil	or Hy	/drology	significantly dist	urbed?	Are "Normal Circumstan	ces" present?	(Y/N)	Y	
vegetation	Soil	or Hy	/drology	naturally proble	matic? If neede	d, explain any answers in R	emarks.)			
		• • •								
MMARY OF	FINDINGS	- Attac	ch site map	snowing san	npling point	locations, transects	, importa	nt features	, etc.	
Irophytic Vegetation	on Present?	Yes -	X No)	Is Sampled A	rea within				
Iric Soil Present?		Yes _	X No		a Wetla	nd? Yes	X	No		
tland Hydrology P	resent?	Yes	X No	D						
narks:		itation f	ar tha thread	montho proced	ling the Conte		ottor those r		a the Dire	at Antono
infall Analysis	Method (D/	AREM) fo	or the three i or analysis.	montins preced	ing the Septe	ember heldwork was w	etter than r	iormai, usin	g the Dire	ct Anteced
		, tific nor	, maa of plan	*0						
SCIATION -	036 2016[]	une iidi	absolute	Dominant	Indicator	Dominance Test wo	rksheet:			
			% cover	Species?	Status					
<u>e Stratum</u> (plot	size:	30)				Number of Dominant Spe	ecies			
Fraxinus latifo	olia		50	Χ	FACW	That are OBL, FACW, or	FAC:	3		(A)
						Total Number of Dominal	nt	_		(5)
				- Tatal Oaver		Species Across All Strata	.:	5		(B)
			50	= Total Cover						
oling/Shrub Stratur	<u>n</u> (plot size	e: 15)			Percent of Dominant Spe	cies			
Corylus cornu	ıta		25	<u> </u>	FACU	That are OBL, FACW, or	FAC:	60%		(A/B)
Cornus alba			20	<u> </u>	FACW	Drevelor og hudev M				
Sympnoricarp			5			Tetel % Cover of	orksneet:			
Rubus ursinus	3				1400	OBL Species	1	x 1 =	0	
			55	= Total Cover		FACW species		x 2 =	0	
						FAC Species		x 3 =	0	
<u>b Stratum</u> (plot	size:	5)				FACU Species		x 4 =	0	
Carex obnupt	а		80	Χ	OBL	UPL Species		x 5 =	0	
Carex sp			10		(FAC)	Column Totals	0 (4	A)	0	(B)
						Prevalence Index =	B/A =	#DIV/	0!	
						Hydrophytic Vegeta	ion Indiaat	oro:		
						nyurophytic vegeta	1 Papid Tasi	UIS:	ic Voqotatio	n
						X	2- Dominance	≏ Test is >50%	ic vegetatio	
			90	= Total Cover			3-Prevalence	Index is $\leq 3.0^{\circ}$		
							4-Morphologi	cal Adaptation	s ¹ (provide s	upporting
ody Vine Stratum	(plot size:)				data in Rema	irks or on a sej	parate sheet	.)
							5- Wetland N	on-Vascular P	ants ¹	
							Problematic I	Hydrophytic Ve	getation ¹ (E	xplain)
			0	= Total Cover		¹ Indicators of hydric soil a	and wetland h	ydrology must	be present,	unless
						Hvdrophvtic				
								v	N -	
3are Ground in He	rb Stratum					Vegetation	Yes	Χ	NO	
SOIL			PHS #	7496	<u>j</u>			Sampling Point: 1		
---	--	--	--	--	--	---	--	---		
rofile Descri	ption: (Describe to f	the depth	needed to docume	ent the indica	ator or con	firm the abse	nce of indicators.)			
Depth (Inches)	Matrix	0/	Color (moint)	Redox F	eatures		Texture	Demorile		
(Inches)			Color (moist)	%	туре	LOC	l exture	Remarks		
0-8	7.5YR 3/2	100		<u> </u>			Slit Loam			
8-18	7.5YR 3/2	95	7.5YR 4/4	5	<u> </u>	M	Silty Clay Loam	Fine		
ype: C=Conc	entration, D=Depletion	on, RM=Re	educed Matrix, CS=	Covered or C	oated Sand	d Grains.		² Location: PL=Pore Lining, M=Matrix.		
ydric Soil I	ndicators: (Appli	cable to	all LRRs, unles	s otherwise	∍ noted.)		Indica	ators for Problematic Hydric Soils ³ :		
I	Histosol (A1)			Sa	andy Redox	(S5)		2 cm Muck (A10)		
H	Histic Epipedon (A2)			St	ripped Matr	rix (S6)		Red Parent Material (TF2)		
F	3lack Histic (A3)			Lo	amy Mucky	y Mineral (F1)(except MLRA 1)	Very Shallow Dark Surface (TF12)		
I	-lydrogen Sulfide (A4	·)		Lo	amy Gleye	d Matrix (F2)		Other (explain in Remarks)		
<u> </u>	Depleted Below Dark	Surface (/	A11)	De	pleted Mat	trix (F3)				
	Fhick Dark Surface (A	¥12)			edox Dark ६	Surface (F6)				
	Sandy Mucky Minera	l (S1)		De	pleted Dar	k Surface (F7)		^o Indicators of hydrophytic vegetation and wetland		
	Sandy Gleyed Matrix	(S4)		Re	edox Depre	ssions (F8)		problematic.		
estrictive I	_ayer (if present)	:	-				Τ			
vpe:										
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
) Depth (inches):						Hydric Soil Pres	ent? Yes X No		
Depth (inches Remarks:	:):						Hydric Soil Pres	sent? Yes <u>X</u> No		
Pepth (inches Remarks: <u>HYDROLO</u> Vetland Hyd	GY Jrology Indicator	 s:					Hydric Soil Pres	sent? Yes <u>X</u> No		
Depth (inches Remarks: IYDROLO Vetland Hyd	GY drology Indicator ators (minimum o	s: f one req	uired; check all th	nat apply)			Hydric Soil Pres	sent? Yes X No		
Depth (inches Remarks: HYDROLO Vetland Hyd Primary Indic	GY Jrology Indicator ators (minimum of Surface Water (A1)	s: f one req	uired; check all th	nat apply)	ater stained	d Leaves (B9) (Hydric Soil Pres	Secondary Indicators (2 or more required)Water stained Leaves (B9)		
Pepth (inches remarks: IYDROLO Vetland Hyd Primary Indic	GY Jrology Indicator ators (minimum of 3urface Water (A1) High Water Table (A2	s: f one req	uired; check all th	nat apply) Wa 1,	ater stainec 2, 4A, and	d Leaves (B9) (4B)	Hydric Soil Pres	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)		
Pepth (inches lemarks: IYDROLO Vetland Hyd Primary Indic	GY Jrology Indicator ators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3)	s: f one req !)	uired; check all th	nat apply) Wa 1, Sa	ater stained 2, 4A, and ilt Crust (B1	d Leaves (B9) (4B) 11)	Hydric Soil Pres	Secondary Indicators (2 or more required)		
Pepth (inches temarks: IYDROLO Vetland Hyd Primary Indic	GY Jrology Indicator ators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	s: <u>f one req</u>	uired; check all th	<u>nat apply)</u> Wa Sa Sa	ater stained 2, 4A, and Ilt Crust (B1 Juatic Invertion	d Leaves (B9) (4B) 11) tebrates (B13)	Hydric Soil Pres	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)		
Pepth (inches Remarks: Primary Indic Primary Indic	GY drology Indicator ators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (E	s: <u>f one req</u> ?) \$2)	uired; check all th	<u>nat apply)</u> Wa 1, Sa Aq Hy	ater stained 2, 4A, and ilt Crust (B1 juatic Invert rdrogen Sul	d Leaves (B9) (4B) 11) tebrates (B13) Ifide Odor (C1)	Hydric Soil Pres	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery		
Pepth (inches Remarks: Primary Indic	GY drology Indicator ators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	s: <u>f one req</u> !) !2)	uired; check all th	nat apply) Wa 1, Sa Aq Hy Ox	ater stained 2, 4A, and It Crust (B1 juatic Invert rdrogen Sul didized Rhiz	d Leaves (B9) (4B) 11) tebrates (B13) Ifide Odor (C1) zospheres alor	Hydric Soil Pres	Secondary Indicators (2 or more required)		
Pepth (inches Remarks: Primary Indic	GY drology Indicator ators (minimum or Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4	s: <u>f one req</u> ?) 32) 4)	uired; check all th	<u>nat apply)</u> Wa 1, Sa Aq Ox Ox	ater stained 2, 4A, and Ilt Crust (B1 Iuatic Inverti vdrogen Sul idized Rhiz esence of F	d Leaves (B9) (4B) 11) Ifide Odor (C1) zospheres alor Reduced Iron (Hydric Soil Pres Except MLRA g Living Roots (C3) C4)	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3)		
Depth (inches Depth (inches Remarks: HYDROLO Vetland Hyo Primary Indic	GY drology Indicator ators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5)	s: <u>f one req</u> ?) 32) 4)	uired; check all th	nat apply) Wa 1, Sa Aq Hy Ox Pro Re	ater stained 2, 4A, and ilt Crust (B1 juatic Invert rdrogen Sul didized Rhiz esence of F scent Iron F	d Leaves (B9) (4B) 11) Ifide Odor (C1) zospheres alor Reduced Iron (Reduction in Pli	Hydric Soil Pres Except MLRA g Living Roots (C3) C4) wed Soils (C6)	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)		
Pepth (inches Remarks: TYDROLO Vetland Hyd Primary Indic Primary Indic S S S S S S S S S S S S S	GY drology Indicator ators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (s: <u>f one req</u> ?) 32) 4) B6)	uired; check all th	nat apply) Wa 1, Sa Aq Ny Ny Re Re	ater stained 2, 4A, and It Crust (B1 juatic Invert idrogen Sul idized Rhiz esence of F scent Iron F unted or Stu	d Leaves (B9) (4B) 11) Ifide Odor (C1) zospheres alor Reduced Iron (Reduction in Pla ressed Plants	Except MLRA g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)		
Jepth (inches Depth (inches Remarks: HYDROLO Vetland Hyo Primary Indic Primary Indic S	GY drology Indicator ators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Nater Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on	s: <u>f one req</u> ?) 32) 4) B6) Aerial Ima	uired; check all th	nat apply) Wi 1, Sa Aq Hy Ox Pri Re Sti X Ot	ater stained 2, 4A, and Jut Crust (B1 Juatic Invertive rdrogen Sul vidized Rhiz esence of F scent Iron F unted or Sta her (Explain	d Leaves (B9) (4B) 11) Ifide Odor (C1) zospheres alor Reduced Iron (Reduction in Pla ressed Plants (n in Remarks)	Hydric Soil Pres	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)		
Jepth (inches Depth (inches Remarks: HYDROLO Vetland Hyo Primary Indic Primary Indic Image: State	GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated C	s: <u>f one req</u> ?) 32) 4) B6) Aerial Ima Soncave St	uired; check all th gery (B7) urface (B8)	nat apply)	ater stained 2, 4A, and ilt Crust (B1 iuatic Invert idrogen Sul idized Rhiz esence of F scent Iron F unted or Stu her (Explain	d Leaves (B9) (4B) 11) Ifide Odor (C1) zospheres alor Reduced Iron (Reduced Iron (Reduction in Pli ressed Plants n in Remarks)	Hydric Soil Pres	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)		
Jepth (inches Pepth (inches Remarks: HYDROLO Vetland Hyo Primary Indic S Image: S	GY drology Indicator ators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated C vations:	s: fone req ?) 32) 4) B6) Aerial Ima Soncave St	uired; check all th gery (B7) urface (B8)	nat apply) Wi 1, Sa Aq Hy Ox Pro Re Stu X Ot	ater stained 2, 4A, and alt Crust (B1 autic Invertion autic Invertion addized Rhiz esence of F ecent Iron F unted or Sta her (Explain	d Leaves (B9) (4B) 11) Ifide Odor (C1) zospheres alor Reduced Iron (Reduction in Plants of ressed Plants of n in Remarks)	Hydric Soil Pres	Seent? Yes X No Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)		
Image: Second State Sta	GY drology Indicator ators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated C /ations: Present? Yes	s: fone req 2) 32) 4) B6) Aerial Ima concave St	uired; check all th igery (B7) urface (B8)	nat apply) Wi 1, Sa Aq Hy Ox Pri Re Sti X Ot	ater stained 2, 4A, and ult Crust (B1 uatic Invert rdrogen Sul dized Rhiz esence of F scent Iron F unted or Stu her (Explain ches):	d Leaves (B9) (4B) 11) Ifide Odor (C1) zospheres alor Reduction in Plants ressed Plants n in Remarks)	Hydric Soil Pres	Seent? Yes X No Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Unainage Patterns (B10) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)		
Pepth (inches Pepth (inches Remarks: HYDROLO Vetland Hyo Primary Indic Primary Indic State I X State ield Observicurface Water Vater Table Primary Indic	GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated Of vations: Present? Yes resent? Yes	s: fone req 2) 32) 4) B6) Aerial Ima Soncave St	uired; check all th igery (B7) urface (B8) No X No X	nat apply)	ater stained 2, 4A, and alt Crust (B' iuatic Invertived idized Rhiz esence of F ecent Iron F unted or Stu her (Explain her (Explain ches):	d Leaves (B9) (4B) 11) tebrates (B13) Ifide Odor (C1) zospheres alor Reduced Iron (Reduced Iron (Reduction in Pli- ressed Plants i n in Remarks) >18	Hydric Soil Pres	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present?		
Image: Second	GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated Of vations: Present? Yes resent? Yes sent? Yes (fringe)	s: fone req 2) 32) 4) B6) Aerial Ima Soncave Si	uired; check all th igery (B7) urface (B8) No X No X No X	nat apply) W: 1, Sa Aq Hy Ox Pri Re Sti X Ot Depth (in Depth (in Depth (in	ater stained 2, 4A, and alt Crust (B' iuatic Invertive rdrogen Sul idized Rhiz esence of F scent Iron F unted or Stu her (Explain ches): ches):	d Leaves (B9) (4B) 11) tebrates (B13) Ifide Odor (C1) zospheres alor Reduced Iron (Reduction in Plants n in Remarks) >18 >18 >18	Hydric Soil Pres	Seent? Yes X No Secondary Indicators (2 or more required)		
Pepth (inches Depth (inches Remarks: HYDROLO Vetland Hyo Primary Indic Primary Indic Surface Water Surface Water Vater Table Present Surface Surface Reco Describe Reco	GY drology Indicator ators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated O vations: Present? Yes esent? Yes esent? Yes sent? Yes resent? Yes resent? Yes	s: f one req ?) 32) 4) B6) Aerial Ima Concave St	uired; check all th igery (B7) urface (B8) No X No X No X toring well, aerial pl	nat apply) Wi 1, Sa Aq Hy Ox Pro Re Stu X Ot Depth (in Depth (in Depth (in Depth (in	ater stained 2, 4A, and alt Crust (B' quatic Inver /drogen Sul didized Rhiz esence of F ecent Iron F unted or Str her (Explain her (Explain ches): 	d Leaves (B9) (4B) 11) tebrates (B13) Ifide Odor (C1) zospheres alor Reduced Iron (Reduction in Plu ressed Plants (n in Remarks) >18 >18 >18 >18 >18	Hydric Soil Pres	Seent? Yes X No Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)		
Primary Indices Primary Indices Primar	GY drology Indicator 2ators (minimum o 2urface Water (A1) High Water Table (A2 3aturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) 3urface Soil Cracks (nundation Visible on 3parsely Vegetated C vations: Present? Yes resent? Yes sent? Yes sent? Yes resent? Yes resent? Yes	s: fone req 2) 32) 4) B6) Aerial Ima Soncave St	uired; check all th igery (B7) urface (B8) No X No X No X toring well, aerial pl	nat apply) Wi 1, Sa Aq Hy Ox Pro Re Stu X Ot Depth (in Depth (in Depth (in Depth (in	ater stained 2, 4A, and alt Crust (B' quatic Inver /drogen Sul (idized Rhiz esence of F ecent Iron F unted or Str her (Explain her (Explain iches): 	d Leaves (B9) (4B) 11) tebrates (B13) Ifide Odor (C1) zospheres alor Reduced Iron (Reduced Iron (Reduction in Plu- ressed Plants (n in Remarks) >18 >18 >18 ons), if available	Except MLRA g Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hydr	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present? Yes X No		
Depth (inches Remarks: TYDROLO Vetland Hyu Primary Indic Primary Indic Prima	GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated Of vations: Present? Yes resent? Yes sent? Yes resent? Yes r	s: fone req 2) 32) 4) B6) Aerial Ima Soncave Sc uge, moni	uired; check all th igery (B7) urface (B8) No X No X No X toring well, aerial pl	nat apply) W: 1, Sa Aq Hy O> Pri Re Sti X Ot Depth (in Depth (in Depth (in Depth (in	ater stained 2, 4A, and alt Crust (B' quatic Inver /drogen Sul kidized Rhiz esence of F ecent Iron R unted or Stu her (Explain iches): 	d Leaves (B9) (4B) 11) tebrates (B13) Ifide Odor (C1) zospheres alor Reduced Iron (Reduction in Ple ressed Plants of n in Remarks) >18 >18 >18 >18 >18	Hydric Soil Pres	Seent? Yes X No Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)		
	GY drology Indicator ators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) on Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes re	s: fone req 2) 32) 4) B6) Aerial Ima Soncave St Soncave St uge, moni	uired; check all th igery (B7) urface (B8) No X No X No X toring well, aerial pl 12 inches of the	nat apply) Wi 1, Sa Aq Hy O> Pro Re Stu X Ot Depth (in Depth (in) Depth (in Depth (in) Depth (in Depth (in) Depth (i	ater stained 2, 4A, and alt Crust (B' quatic Inver /drogen Sul kidized Rhiz esence of F ecent Iron F unted or Str her (Explain iches): 	d Leaves (B9) (4B) 11) tebrates (B13) Ifide Odor (C1) zospheres alor Reduced Iron (Reduced Iron (Reduction in Plants) n in Remarks) >18 >18 >18 ons), if available during Marce	Hydric Soil Pres	Seent? Yes X No		

	WETLAND	DETE	RMINATION		RM - Weste	ern Mountains. Va	alleys. an	d Coast Re	PHS # gion	7496
Project/Site:	Montgo	omery Wa	ay	City/County:	Wilson	ville/Clackamas	Sampl	ing Date:	7/29/	2022
pplicant/Owner:	Joseph ar	nd Nataly	a Oreste			State	: OR	Samp	ling Point:	2
vestigator(s):		CT/SE		Section, To	wnship, Range:	Secti	on 24, Tow	nship 3S, Rar	nge 1W	
andform (hillslope,	, terrace, etc.:)		Slope	•	Local relief (cor	ncave, convex, none):	N	one	Slope (%):	<5%
Subregion (LRR):		LRR	Α	Lat:	45.302	21 Long	-122		Datum:	WGS84
Soil Map Unit Name	e:		Wapato Si	Itv Clav Loam		NWI C	lassification:		None -	
Are climatic/hvdrolo	aic conditions o	on the site	typical for this tim	e of vear?	Yes	No	• X	(if no, explain in l	Remarks)	
Are vegetation	Soil	or Hy	vdrology	significantly dist	urbed?	Are "Normal Circumsta	nces" present	(* * * * ; * * ; * * * * * * * * * * * *	Y	
Are vegetation	Soil	or Hy		naturally probler	matic? If needed	explain any answers in F	Remarks)		<u> </u>	
				- naturally problem			tomanto.)			
SUMMARY OF	FINDINGS	– Attac	ch site map s	showing sam	pling point	locations, transect	s, importa	ant features,	etc.	
lydrophytic Vegeta	ation Present?	Yes	No	Х						
lydric Soil Present	?	Yes	No	Х	a Wetlar	nd? Yes	6	No	Х	
Vetland Hydrology	Present?	Yes	No	X						
Remarks:		_								
The weighted av Rainfall Analysi	verage preci s Method (D	pitation f AREM) fo	for the three m or analysis.	onths preced	ing the Septe	mber fieldwork was v	vetter than	normal, usinç	the Dire	ct Anteced
/EGETATION	- Use scier	ntific na	mes of plant	s.						
			absolute % cover	Dominant	Indicator	Dominance Test wo	orksheet:			
ree Stratum (nlo	ot size:	30		opecies !	Jialus	Number of Dominant Sr	ecies			
1 Acer macron	ohvllum	,	, 50	х	FACU	That are OBL, FACW, o	r FAC:	2		(A)
2 Fraxinus lati	ifolia		20	X	FACW					()
3 Pseudotsuga	a menziesii		20	X	FACU	Total Number of Domina	ant			
4						Species Across All Strat	ta:	6		(B)
			90	= Total Cover			-			
apling/Shrub Strat	tum (plot size	e [.] 15)			Percent of Dominant Sp	ecies			
1 Rubus ursin	us		′ 60	х	FACU	That are OBL. FACW.	or FAC:	33%		(A/B)
2 Oemleria cer	rasiformis		25	X	FACU	- , - ,	-			
3 Corylus corr	nuta		20		FACU	Prevalence Index W	/orksheet:			
4 Ilex aquifoliu	um		15		FACU	Total % Cover of		Multiply by:		
5 Symphorical	rpos albus		5		FACU	OBL Species		x 1 =	0	
			125	= Total Cover		FACW species		x 2 =	0	
		_ 、				FAC Species		x 3 =	0	
lerb Stratum (plo	ot size:	5)	v		FACU Species		x 4 =	0	
Carex sp	nhullum		10	<u> </u>		UPL Species		x 5 =	0	
2 Geuin macro	opnynum		2			Column Totals		(A)	<u> </u>	D)
4 Hedera helix	,		2		EACU	Prevalence Index	=B/A =	#DIV/0	1	
5							-		<u> </u>	
6						Hydrophytic Vegeta	ation Indica	itors:		
7							1- Rapid Te	st for Hydrophyti	c Vegetation	ı
8				<u> </u>			2- Dominan	ce Test is >50%	-	
			16	= Total Cover			3-Prevalenc	the Index is $\leq 3.0^1$		
							4-Morpholog	gical Adaptations	¹ (provide s	upporting
Voody Vine Stratun	<u>m</u> (plot size:)				data in Rem	arks or on a sep	arate sheet)
1							5- Wetland	Non-Vascular Pla	ants'	
2						1 Indianters of the training	Problematic	Hydrophytic Veo	jetation' (Ex	(plain)
			<u> </u>	= 1 otal Cover		disturbed or problematic	anu wetland	nyarology must b	e present, i	uness
						Hydrophytic				
% Bare Ground in ⊦	Herb Stratum					Vegetation	Yes		No	Х
						10				

Page 36 of 86

SOIL			PHS #	74	96			Sampling Point: 2
Profile Descri	ption: (Describe to t	the depth	needed to docur	nent the indi	cator or cor	firm the abse	nce of indicators.)	
Depth (Inches)	Matrix	0/	Color (moist)	Redox	Features		Texture	Demorize
(inches)		100	Color (moist)	<u>%</u>	туре	LUC	Silt Loom	Remarks
0-10	7.51R 3/2	100						
10-18	/.51K 4/1	95	1.51K 4/4	5	<u> </u>	IVI	Silty Clay Loam	
Type: C=Cond	centration, D=Depletio	on, RM=Re	educed Matrix, CS	S=Covered or	Coated San	d Grains.	Indica	² Location: PL=Pore Lining, M=Matrix.
lyane co	Histosol (A1)	Capie to	an Entro, and	55 Other	Sandy Redo:	v (95)		2 cm Muck (A10)
	Listic Epipedon (A2)			`	Strinned Mat	x (00)		Pod Parent Material (TF2)
				`		Mineral (F1)(
	Black Histic (A3)	-		'		y mineral (Fi)	axcept MLRA 1)	
	Hydrogen Sulfide (A4)		L	_oamy Gleye	ed Matrix (F2)		Other (explain in Remarks)
	Depleted Below Dark	Surface (A	411)	[Depleted Ma	trix (F3)		
	Thick Dark Surface (A	\12)		F	Redox Dark	Surface (F6)		3
	Sandy Mucky Mineral	(S1)		[Depleted Dar	rk Surface (F7)		Indicators of hydrophytic vegetation and wettation hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)		F	Redox Depre	essions (F8)		problematic.
 Postrictivo '	Layer (if present):	:	_	_	_			
1.63LIICLIVE								
Туре:					-			
Type: Depth (inches Remarks:	s):				-		Hydric Soil Pres	ent? Yes <u>No X</u>
Type: Depth (inches Remarks: HYDROLO Wetland Hyd	s): GY drology Indicator	 s:			- 		Hydric Soil Pres	ent? Yes <u>No X</u>
Type: Depth (inches Remarks: HYDROLO Wetland Hy	s): IGY drology Indicator cators (minimum of	s:	uired; check all	that apply)	- 		Hydric Soil Pres	sent? Yes <u>No X</u>
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary India	s): GY drology Indicators cators (minimum of Surface Water (A1)	s: f one requ	uired; check all	that apply)	- - - Water stained	d Leaves (B9) (Hydric Soil Pres	sent? Yes <u>No X</u> Secondary Indicators (2 or more required) Water stained Leaves (B9)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary Indio	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2	s: f one requ	uired; check all	that apply)	- - Water stained I, 2, 4A, and	d Leaves (B9) (I 4B)	Hydric Soil Pres	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3)	s: f one requ	uired; check all		- Water stained I, 2, 4A, and Salt Crust (B	d Leaves (B9) (i 4B) 11)	Hydric Soil Pres	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	s: fone requ	uired; check all	that apply)	Water stained Nater stained 1, 2, 4A, and Salt Crust (B Aquatic Inver	d Leaves (B9) (I 4B) 11) rtebrates (B13)	Hydric Soil Pres	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GGY drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	s: <u>f one req</u> ') '2)	uired; check all	that apply)	Nater stained I, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su	d Leaves (B9) (I 4B) 11) rtebrates (B13) ılfide Odor (C1)	Hydric Soil Pres	Secondary Indicators (2 or more required)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	s: <u>f one req</u> !) ;2)	uired; check all	that apply)	Nater stainee Nater stainee I, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi	d Leaves (B9) (I 4B) 11) rtebrates (B13) ulfide Odor (C1) zospheres alon	Hydric Soil Pres	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4	s: <u>f one requ</u> !) i2) 1)	uired; check all	that apply)	Nater stained I, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I	d Leaves (B9) (I 4B) 11) rtebrates (B13) ilfide Odor (C1) zospheres alon Reduced Iron (i	Hydric Soil Pres	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5)	s: fone requ !) \$2) \$	uired; check all	that apply)	Nater stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F	d Leaves (B9) (I 4B) 11) Itebrates (B13) Ilfide Odor (C1) zospheres alon Reduced Iron (Reduction in Pla	Hydric Soil Pres	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I	s: <u>f one req</u> !) i2) 1) B6)	uired; check all	that apply)	Nater stained Nater stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St	d Leaves (B9) (I 4B) 11) Ifide Odor (C1) zospheres alon Reduced Iron (Reduction in Pla tressed Plants (Hydric Soil Pres	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): IGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on	s: <u>f one req</u> !) 12) 14) B6) Aerial Ima	uired; check all	that apply)	Vater stained Vater stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi. Presence of I Recent Iron F Stunted or St Dther (Explai	d Leaves (B9) (I 4B) 11) rtebrates (B13) ilfide Odor (C1) zospheres alon Reduced Iron (Reduced Iron (Reduction in Pla tressed Plants (in in Remarks)	Hydric Soil Pres Except MLRA g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary Indio	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C	s: fone requ !) 12) 4) B6) Aerial Ima ;oncave Su	uired; check all gery (B7) urface (B8)	that apply)	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explai	d Leaves (B9) (I 4B) 11) Ifide Odor (C1) zospheres alon Reduced Iron (Reduction in Pla tressed Plants (in in Remarks)	Hydric Soil Pres	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations:	s: fone requ ?) i2) i2) i2) i2) i2) i2) i2) i2) i2) i2	uired; check all gery (B7) urface (B8)	that apply)	Water stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explai	d Leaves (B9) (I 4B) 11) rtebrates (B13) ulfide Odor (C1) zospheres alon Reduced Iron (Reduction in Pla tressed Plants (in in Remarks)	Hydric Soil Pres	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B3) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated O vations: Present? Yes	s: fone requ ?) }2) 4) B6) Aerial Ima ;oncave Su	uired; check all ·gery (B7) urface (B8) No X	that apply)	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explai inches):	d Leaves (B9) (I 4B) 11) rtebrates (B13) ilfide Odor (C1) zospheres alon Reduced Iron (i Reduction in Pli tressed Plants (in in Remarks)	Hydric Soil Pres Except MLRA g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water Water Table P	s): GGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes	s: fone requ ?) i2) i2) i2) i2) i2) i2) i2) i2) i2) i2	uired; check all Igery (B7) urface (B8) No X No X	that apply)	Water stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explain inches): inches):	d Leaves (B9) (I 4B) 11) rtebrates (B13) ilfide Odor (C1) zospheres alon Reduced Iron (Reduced Iron (Reduction in Ple tressed Plants (in in Remarks)	Hydric Soil Pres Except MLRA g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A) Wetland Hydr	Secondary Indicators (2 or more required) Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present?
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water Water Table P Saturation Pre (includes capillar	s): GGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes sent? Yes y fringe)	s: fone requ ?) i2) 4) B6) Aerial Ima Soncave Su	uired; check all ugery (B7) urface (B8) No X No X No X No X	that apply)	Water stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explain inches): inches): inches):	d Leaves (B9) (1 4B) 11) rtebrates (B13) ilfide Odor (C1) zospheres alon Reduced Iron (r Reduced Iron (r Iron (r Reduced Iron (r Iron (r))) N (r Iron (r))) Iron (r Iron (r)))) Iron (r Iron (r Iron (r Iron (r)))) Iron (r Iron (r Iron (r)))) Iron (r Iron (r Iron (r Iron (r)	Hydric Soil Pres	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water Water Table P Saturation Pre (includes capillar Describe Recco	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated O vations: Present? Yes resent? Yes	s: fone requestions in the second sec	uired; check all Igery (B7) urface (B8) No X No X No X Itoring well, aerial	that apply)	Water stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explain (inches): inches): inches): Dus inspection	d Leaves (B9) (I 4B) 11) rtebrates (B13) ulfide Odor (C1) zospheres alon Reduced Iron (i Reduction in Pla tressed Plants (in in Remarks) >18 >18 >18 >18 pms), if available	Hydric Soil Pres	Seent? Yes No X Secondary Indicators (2 or more required)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water Water Table P Saturation Pre (includes capillar Describe Recco	s): GGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes sent? Yes y fringe) Irded Data (stream gates)	s: fone requ ?) 32) 4) B6) Aerial Ima >oncave Su uge, moni	uired; check all ugery (B7) urface (B8) No X No X No X ho X toring well, aerial	that apply)	Water stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explain (inches): inches): inches): ous inspection	d Leaves (B9) (I 4B) 11) rtebrates (B13) ilfide Odor (C1) zospheres alon Reduced Iron (r Reduced Iron (r Reduced Iron (r Reduced Iron (r Reduced Iron (r Reduced Iron (r Reduced Iron (r) Reduced Iron (r)	Hydric Soil Pres	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Page	37	of	86
------	----	----	----

oject/Site:	Montac	omery Wav	/	City/County:	Wilson	ville/Clackamas	Sampling Date	. 7/29	9/2022
oplicant/Owner	Joseph ar	nd Natalva	Oreste			State:	OR	Sampling Point:	3
/estigator(s):	<u></u>	SE/CT		Section. To	wnship, Range;	Section	n 24. Township	3S. Range 1W	
ndform (hillslope.	terrace. etc.:)		Depressio	n	Local relief (cor	ncave, convex, none):	Concave	Slope (%):	1
bregion (LRR)				Lat [.]	45 302	20 Long:	-122 7467	Datum:	WGS84
il Man I Init Name			Wanato Sil	tv Clav I oam		NWI Cla	sification:	PEO1C	
e climatic/hydrolog	nic conditions o	on the site tv	nical for this tim	e of year?	Ves	No	X (if no ex	nlain in Remarks)	
	Soil	or Hyd	Irology	significantly dist	urbed?	Are "Normal Circumstanc	es" present? (V/N)	v	
		or Hyd			matic? If pooded		marke)	·	-
							indiks.)		
JMMARY OF	FINDINGS	– Attacl	n site map s	showing san	npling point	locations, transects	, important fea	tures, etc.	
drophytic Vegetat	ion Present?	Yes	X No						
dric Soil Present?)	Yes	X No		a Wetlan	ea within Id? ^{Yes} _	x	No	_
etland Hydrology F	Present?	Yes	X No						-
marks:									
ne weighted av	erage preci	pitation fo	r the three m	onths preced	ling the Septer	mber fieldwork was we	etter than norma	I, using the Dire	ect Antece
ainfall Analysis	s Method (D	AREM) for	analysis.						
EGETATION	- Use scier	ntific nam	es of plants	s.		T			
			absolute % cover	Dominant	Indicator Status	Dominance Test wor	ksheet:		
ee Stratum (plo	ot size:	30)	70 00001	Opecies:	Otatus	Number of Dominant Spec	cies		
Fraxinus latif	folia		90	х	FACW	That are OBL, FACW, or F	FAC:	3	(A)
									_ ()
						Total Number of Dominan	t		
						Species Across All Strata:		3	(B)
			90	= Total Cover					
pling/Shrub Stratu	<u>um</u> (plot size	e: 15)			Percent of Dominant Spec	cies		
Physocarpus	capitatus		80	х	FACW	That are OBL, FACW, or	FAC:	100%	(A/B)
Symphoricar	pos albus		15		FACU				
Rubus ursinu	us		10		FACU	Prevalence Index Wo	rksheet:		
						Total % Cover of	Multiply	by:	
						OBL Species	x 1 :	= 0	-
			105	= Total Cover		FACW species	x 2 :	= 0	-
rh Stratum (nlo	it size.	5)					x 3 :	=	-
Carex obnun	ta)	25	x	OBI	LIPL Species	X 4 ·	= 0	-
Geranium sp	<i>ι</i> α		3	<u> </u>	(FAC)	Column Totals	0 (A)		- (B)
<u></u>					(1710)	-	(()		(=)
						Prevalence Index =	3/A =	#DIV/0!	
									-
						Hydrophytic Vegetati	on Indicators:		
							1- Rapid Test for Hy	drophytic Vegetatio	on
						<u> </u>	2- Dominance Test i	s >50%	
			28	= Total Cover			3-Prevalence Index	is ≤ 3.0 ¹	
	(plot oizo:	5	`			2	I-Morphological Ada	aptations' (provide	supporting
ody Vine Stratum	n (plot size:)				ata in Remarks or o	on a separate shee	t)
						· · · · · · · · · · · · · · · · · · ·	Problematic Hydrox	ouiai Fiants hytic Vegetation ¹ /E	volain)
			0	= Total Covor		¹ Indicators of hydric soil as	nd wetland bydrolog	iv must he present	unless
						disturbed or problematic.		nuor de present,	0111000
						Hydrophytic			
Dava Cround in LL	erb Stratum	2	0			Vegetation	Yes X	No	
bare Ground in H						Dree ent?			

Profile Descriptor. Back Procession (Bacche to the depth needed to document the inflatter or confirm the absence of indicators.) Dest Matrix Redox Features 0-00 107 R.21 100 Sitty Clay Loam 0-10 107 R.21 100 Sitty Clay Loam 10-16 2.5Y 2.5/1 100 Sitty Clay Loam	SOIL			PHS #	7496	-		S	ampling Point:	3
Oppin Matrix Redox Features Texture Texture Remarks 0-10 10YR 2/1 100 Color (most) % Type Loc ⁴ Texture Remarks 10-16 2.5Y 2.5/1 100 Sitty Clay Learn Sitty Clay Learn Sitty Clay Learn Sitty Clay Learn 10-16 2.5Y 2.5/1 100 Sitty Clay Learn Sitty Clay Learn Sitty Clay Learn 10-16 2.5Y 2.5/1 100 Sitty Clay Learn Sitty Clay Learn Sitty Clay Learn Sitty Clay Learn 10-16 2.5Y 2.5/1 100 Sitty Clay Learn Sitty Clay Lea	Profile Descri	iption: (Describe to	the depth	needed to docume	ent the indicator or c	onfirm the abse	ence of indicators.)			
(Indition) Cost (minist) % <	Depth	Matrix			Redox Features	L - 2	·			
0-10 19/17, 2/1 100 Sitty Clay Learn 10-16 2.5Y 2.5/1 100 Sitty Clay Learn ''Type: C-Curventrution, Di-Depletion, RM-Reduced Matrix, CS-Covered or Coxiled Sand Grains. ''Location: PL-Pare Lining, M-Matrix ''Type: C-Curventrution, Di-Depletion, RM-Reduced Matrix, CS-Covered or Coxiled Sand Grains. ''Location: PL-Pare Lining, M-Matrix ''Type: C-Curventrution, Di-Depletion, RM-Reduced Matrix, CS-Covered or Coxiled Sand Grains. ''Location: PL-Pare Lining, M-Matrix ''Type: C-Curventrution, Di-Depletion Sand Cave, CS: 2 cm Mark (A10) Histocal (A1) Sandy Redox (S5) Red Parent Matrix (C) Histocal (A1) Loany Volkey Mintrai (F) X Disploted Matrix (S4) Redox Dark Surface (F7) ''Indicators of hythophylic vegetidants (F3) Sandy Mucky Mintrai (S1) Depletion Dark Surface (F7) 'Indicators of hythophylic vegetidants (F3) Sandy Mucky Mintrai (S1) Depletion Dark Surface (F7) 'Indicators of hythophylic vegetidants (F4) Present: 'Yper No No Startict Ve Layer (If present): 'Yper No Type:	(Inches)	Color (moist)		Color (moist)	% Туре	Loc ⁻	Texture		Remarks	
10-16 2.5Y 2.5/1 100 Sitty Clay Leam "Type: C-Concentration, D-Dapletion, RM-Reduced Matrix, CS=Covered of Coaled Sand Grains. "Locaton; PL=Pare Lining, M=Matrix "Type: C-Concentration, D-Dapletion, RM-Reduced Matrix, CS=Covered of Coaled Sand Grains. "Locaton; PL=Pare Lining, M=Matrix Histosci (A) Sandy Redux (S5) 2 cm Mack (A0) Histosci (A) Sandy Redux (S5) 2 cm Mack (A1) Dependent (A2) Striped Matrix (S1) Dependent Matrix (R1) Very Shallow Dark Surface (A1) Dependent (A4) Loarny Glayed Matrix (S1) Dependent Matrix (R1) Dependent Matrix (R1) Dependent Matrix (R1) Dependent Matrix (S4) Dependent Matrix (S4) Redox Dark Surface (F7) "Indicators of hydrophyle: vependent" Type: Depletion Matrix (S4) Dependent Matrix (R1) Dependent Matrix (R1) No Restrictive Layer (If present): Type: Public Soil Present? Yes	0-10	10YR 2/1	100				Silty Clay Loam			
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coalied Savid Grains. *Location PL=Pare Lining, M=Mediative, CS=Covered or Coalied Savid Grains. "Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coalied Savid Grains. *Location PL=Pare Lining, M=Mediative, Mediative, Med	10-16	2.5Y 2.5/1	100	,			Silty Clay Loam			
Type: C=Concentration. D=Depletion. RM=Reduced Matrix. CS=Coveed or Coated Sand Grains. ************************************										
Type: C-Concentration, D-Depletion, RM=Reduced Matrix, CS-Covered or Coated Sand Grains. *Location, PL-Pare Lining, M-Matrix Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soil Histopi (A1) Sandy Redox (S5) Red Farant Materia (I) Bisck Histo (A2) Simped Matrix (S2) X Bisck Histo (A3) Loamy Mudy Mineril (F1)(except MLRA 1) Very Shallow Dark Su Depleted Delow Dark Surface (A11) Depleted Matrix (F2) X Other (explain in Rem: Sandy Rody Clayed Matrix (S4) Red area Persent, Linkag, Surface (F7) */indicators of hydrophytic vegetation Thick Dark Surface (A12) Redox Dark Surface (F7) */indicators of hydrophytic vegetation hydrology must be present, Linkag, proceent, Linkag, Surface (F7) */indicators of hydrophytic vegetation Startict Laws (If present):										
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pare Lining, M=Matri Pdfr CS 011 Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric S Histor (A1) Bink Hata (A3) Lamy Mack (A10) Bink Hata (A3) Lamy Mack (M10) Red Parant Matrix (S6) Red Parant Matrix (M10) Begieted Below Dark Surface (A11) Depleted Dark Surface (A12) Redox Dark Surface (A11) Depleted Dark Surface (A11) Depleted Dark Surface (A11) Depleted Dark Surface (F6) Thick Case Surface (A11) Depleted Dark Surface (F7) Thidicators of hydrophylic vegalation Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Thydrophylic vegalation Sandy Clayee Matrix (34) Redox Depression (F8) Surface Vegalation and wetland hydrology prosent. Prior reconnalissance of this site in March 2022 revealed presence of shallow water table Surface Value (A11) Car mack Surface Value (A14) Dark Parant Mat										
Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Coveed or Coated Sand Grains. ^a Location: PL-Pore Lining, M-Matri Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric S Hateon (A1) Surdy Radox (S5) 2 on Muck (A10) Hateon (A2) Stripped Matrix (S8) Red Parent Material (1 Back Histic (A3) Learny Mucky Minetal (F1) (except MLRA 1) Very Shalow Dark Surface (A11) Depleted Blew Dark Surface (A12) Redox Dark Surface (F6) ³ Indicators of hydrolytic veryptation hydrology must be present, unless Sandy Gleyed Matrix (K3) Redox Dark Surface (F7) ³ Indicators of hydrology present. Proof resents: Type: Spepth (inches):										
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matri Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Indicators for Problematic Hydric So Histica Epipedon (A2) Sintped Matrix (S6) Red Parent Material (1 Black Histic (A3) Loarny Mucky Mineral (F1)(seccept MLRA 1) Very Shallow Dark Su Depleted Bew Dark Surface (A11) Depleted Matrix (73) Thick Dark Surface (A12) Redox Dark Surface (FP) Sandy Mucky Mineral (S1) Depleted Matrix (73) *Indicators of hydrophytic veptation hydrology must be present; unless problematic. Ype:										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric S Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histosol (A2) Stinged Matrix (S8) Red Parent Material (11) Depleted Matrix (S8) Red Parent Material (11) Very Shalow Dark Su Depleted Boliw Dark Surface (A11) Depleted Matrix (F2) X Other (explain in Rem Back Hasic (A3) Learny Gleged Matrix (F2) X Other (explain in Rem Back Hasic (A3) Learny Gleged Matrix (F2) X Other (explain in Rem Depleted Boliw Dark Surface (A12) Redox Dark Surface (F6) ** ** Sandy Muxdy Mineral (S1) Depleted Dark Surface (F6) ** problematic. SartirCitve Layer (If present): Fyre: Y No Fyre: Hydric Soil Present? Yes X No Papth (inches): Hydric Soil Present? Yes X No Surface Water (A1) Water stained Leaves (B9) (Except MLRA) Water stained Leaves (B1) <td>Type: C=Con</td> <td>centration, D=Deple</td> <td>tion, RM=Re</td> <td>educed Matrix, CS=</td> <td>Covered or Coated Sa</td> <td>and Grains.</td> <td></td> <td>²Location: F</td> <td>²L=Pore Lining, M=</td> <td>-Matrix.</td>	Type: C=Con	centration, D=Deple	tion, RM=Re	educed Matrix, CS=	Covered or Coated Sa	and Grains.		² Location: F	² L=Pore Lining, M=	-Matrix.
Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histic Explandin (A2) Stipped Matrix (S6) Red Parent Material (1 Biack Histic (A3) Loamy Mucky Minetal (F1) (except MLRA 1) Very Shallow Dark Surface (A11) Depleted Bolow Dark Surface (A11) Depleted Matrix (F3) Coher (explain in Rem Sandy Mucky Minetal (S1) Depleted Dark Surface (A12) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) hydrology must be present, unless problematic: Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) hydrology must be present, unless problematic: Present? Yes No Matrix IPPCODOGY Hydric Soil Present? Yes No Yestication for at least 2 weeks during the growing season is present. Hydric soil criteria met. Yestimetameta avec HyDROLOGY Secondary Indicators: Yestimetameta avec Secondary Indicators (2 or mo Sufface Water (A1) Audior stained Leaves (B9) (Except MLRA Water stained Leaves Worterstained Leaves Seturation (A3) Satt Crust (B11) Drainage Paterns (B1 Outprice Naturel Leaves (B3) Dry-Season Water Table (A2) Seturation (A3) Satt Crust (B1) Drainage Pat	lydric Soil	Indicators: (App	licable to	all LRRs, unless	s otherwise noted	.)	Indica	ators for P	roblematic Hyd	ric Soils ³ :
Histic Explosition (A2) Stripped Matrix (S6) Red Parent Material (1 Black Histic (A3) Loamy Winkey Mineral (F1) (except MLRA 1) Very Shallow Dark Surface Depleted Below Dark Surface (A11) Depleted Matrix (F2) X Other (explain in Rem. Depleted Below Dark Surface (A12) Redox Dark Surface (F6) ************************************		Histosol (A1)			Sandy Red	ox (S5)			2 cm Muck (A10)	1
Binkk Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Sur Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) X Other (explain in Rem Depleted Below Dark Surface (A12) Redox Dark Surface (F5) ************************************		Histic Epipedon (A2)	.)		Stripped M	atrix (S6)			Red Parent Mate	rial (TF2)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) X Other (explain in Rem. Depleted Below Dark Surface (A12) Redox Dark Surface (F7) Indicators of hydrophytic vegatation Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Indicators of hydrophytic vegatation Sandy Gleyed Matrix (F3) Redox Depressions (F8) Indicators of hydrophytic vegatation Pepth (inches): Hydric Soil Present? Yes X No Think Dark Surface (A12) Redox Depressions (F8) Problematic. No Pepth (inches): Hydric Soil Present? Yes X No Termarks: Yee Yee X No Yee Journal (A11) Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (Except MLRA Water stained Leaves (B1) Drainage Patterns (B1 Surface Water (A11) Water stained Leaves (B3) Drainage Patterns (B1 Drainag		Black Histic (A3)			Loamy Muc	cky Mineral (F1)	(except MLRA 1)		Very Shallow Da	rk Surface (TF12)
Depleted Below Dark Surface (A12) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) ** ** ** Problemetic ** ** <t< td=""><td></td><td>Hydrogen Sulfide (A</td><td>14)</td><td></td><td>Loamy Gle</td><td>yed Matrix (F2)</td><td></td><td>X</td><td>Other (explain in</td><td>Remarks)</td></t<>		Hydrogen Sulfide (A	1 4)		Loamy Gle	yed Matrix (F2)		X	Other (explain in	Remarks)
Thick Dark Surface (A12) Redox Dark Surface (F6) ³ Indicators of hydrophytic vegatation hydrology must be present, unless sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Problematic. Startictive Layer (If present): Hydric Soil Present? Yes X No No Septied functions): Hydric Soil Present? Yes X No No Startictive Layer (If present): Hydric Soil Present? Yes X No No Startist: Vegetation and wetland hydrology present. Prior reconnalissance of this site in March 2022 revealed presence of shallow water table he early spring. Saturation for at least 2 weeks during the growing season is present. Hydric soil criteria met. HYDROLOGY Secondary Indicators: Primary Indicators (Minimum of one required; check all that apply) Secondary Indicators (2 or mo Sufface Water (A1) Water stained Leaves (B9) (Except MLRA Water stained Leaves (B13) Sturface Water (A1) Aquatic Invertebrates (B13) Drinage Patterns (B1 Water Marks (B1) Aquatic Invertebrates (B13) Drinage Patterns (B1 Sediment Deposits (B2) Hydrogen Suffade Odor (C1) Saturation Visible on A Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitar (D3) Surface Soil Cracks (B6) Sturted or Stresed Plants (D1) (LRRA)		Depleted Below Dar	rk Surface (/	A11)	Depleted N	/latrix (F3)		-	_	
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) "Indicators of hydrolophytic regeletator hydrology must be present, unless, problematic. Restrictive Layer (If present): Hydric Soil Present? Yes X No Popth (inches): Hydric Soil Present? Yes X No Imaraks: Hydric Soil Present? Yes X No Vegetation and wetland hydrology present. Prior reconnaissance of this site in March 2022 revealed presence of shallow water table he early spring. Saturation for at least 2 weeks during the growing season is present. Hydric soil criteria met. HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or mo Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (C1) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Tai Saturation Visite on A crust (B4) Presence of Reductor Ion Ployed Solido Cdr (C1) Saturation Visite on A crust (B4) Saturation Visite on A crust (B4) Presence of Reductor Ion Ployed Solido (C3) X Geomorphic Position (Xi (C1) Saturation Visite on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummood		Thick Dark Surface	(A12)		Redox Dar	k Surface (F6)				
Sandy Gleyed Matrix (S4)		Sandy Mucky Miner	al (S1)		Depleted D	Jark Surface (F7))	³ Indicators of hvdrology	of hydrophytic vege	tation and wetland
Restrictive Layer (if present): Hydric Soil Present? Yes No Septh (inches):		Sandy Gleyed Matri	x (S4)		Redox Dep	ressions (F8)			problematic.	11600 diota, 20
Type: Hydric Soil Present? Yes X No Perparks: Pregetation and wetland hydrology present. Prior reconnaissance of this site in March 2022 revealed presence of shallow water table he early spring. Saturation for at least 2 weeks during the growing season is present. Hydric soil criteria met. HYDROLOGY Primary Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or mo Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A4) Mare Marks (B1) Aquatic Invertebrates (B13) Water Marks (B1) Onlidea Unified Odor (C1) Saturation (A3) Saturation (A4) Sectiment Deposits (B2) Hydroges Unified Odor (C1) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fao-Netral Test (D5) Surface Soil Cracks (B6) X Depth (inches): >16 Yes No Saturation Present? Yes <t< td=""><td>Restrictive</td><td>Layer (if present</td><td>t):</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Restrictive	Layer (if present	t):							
Depth (inches): Hydric Soil Present? Yes X No Remarks:	Гуре:									
Aremarks: Vegetation and wetland hydrology present. Prior reconnaissance of this site in March 2022 revealed presence of shallow water table he early spring. Saturation for at least 2 weeks during the growing season is present. Hydric soil criteria met. HYDROLOGY Secondary Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or mo Surface Water (A1) Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (Except MLRA High Water Table (A2) 1, 2, 4A, and 4B) (MLRA1, 2, 4A, and 4B) Saturation (A3) Saturation (IA3) Drujage Patterns (B1) Sediment Deposits (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (A2) Image Patterns (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (A2) Image Patterns (B1) Aquatic Invertebrates (B13) Dry-Season Water Table Orkes (B3) Image Patterns (B1) Aquatic Invertebrates (B13) Dry-Season Water Table Orkes (B3) Image Patterns (B1) Aquatic Invertebrates (B13) Dry-Season Water Table Orkes (B3) Image Patterns (B1) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Image Patterns (B1) Season Patterns (B1) Shallow Aquitar (D4) Image Patterns (B1) Presence of Reduced Iron (C4) Shallow Aquitar	Depth (inches	s):					Hydric Soil Pres	sent? Yes	x	No
Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or mo Surface Water (A1) Water stained Leaves (B9) (Except MLRA High Water Table (A2) Water stained Leaves (B9) (Except MLRA (MLRA1, 2, 4A, and 4B) Saturation (A3) Salt Crust (B11) Drainage Patterns (B1 Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Tat Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizosphere along Living Roots (C3) X Geomorphic Position (Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D Resent Iron Remarks) Frost-Heave Hummoch Yes Field Observations: No X Depth (inches): >16 Yes No Vater Table Present? Yes No X Depth (inches): >16 Yes No Vater Table Present? Yes No X Depth (inches): >16 Yes No Vater Table Present? Yes No X Depth (inches): >16 Yes	HYDROLO Wetland Hy)GY drology Indicate	ors:							
Surface Water (A1) Water stained Leaves (B9) (Except MLRA Water stained Leaves High Water Table (A2) 1, 2, 4A, and 4B) (MLRA1, 2, 4A, and 4 Saturation (A3) Salt Crust (B11) Drainage Patterns (B1 Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Tat Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on A Orift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) X Geomorphic Position (Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummocl Surface Water Present? Yes No X Depth (inches): >16 Yes No Vater Table Present? Yes No X Depth (inches): >16 Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous Inspections), if available: Yes No No	Primary Indi [,]	cators (minimum	of one req	uired; check all th	nat apply)			Seconda	rv Indicators (2 c	or more required)
High Water Table (A2) 1, 2, 4A, and 4B) (MLRA1, 2, 4A, and 4 Saturation (A3) Salt Crust (B11) Drainage Patterns (B1 Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Tail Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on A Orift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) X Geomorphic Position (Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummocl Saturation Present? Yes No X Depth (inches): >16 Yes X No Vater Table Present? Yes No X Depth (inches): >16 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Yes X No Yrior visit to the site in March 22, 2022 revealed a shallow water table in this wetland. Hi		Surface Water (A1)	<u>··</u> .	,	Water stair	ned Leaves (B9)	(Except MLRA		Water stained Le	aves (B9)
Saturation (A3) Salt Crust (B11) Drainage Patterns (B1 Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Tail Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on A Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) X Geomorphic Position (Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummool Sparsely Vegetated Concave Surface (B8) Depth (inches): No X Depth (inches): Surface Water Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Jaturation Present? Yes No X Depth (inches): >16 Yes X No Jescribe Recorded Data		High Water Table (A	42)		1, 2, 4A, ar	nd 4B)			(MLRA1, 2, 4A,	and 4B)
Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Tail Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on A Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) X Geomorphic Position (Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummocl Sparsely Vegetated Concave Surface (B8) Depth (inches): >16 Yes X No Vater Table Present? Yes No X Depth (inches): >16 Yes X No Jaturation Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Jaturation Present? Yes No X Depth (inches): >16 <t< td=""><td></td><td>Saturation (A3)</td><td></td><td></td><td>Salt Crust (</td><td>(B11)</td><td></td><td></td><td>Drainage Patterr</td><td>ıs (B10)</td></t<>		Saturation (A3)			Salt Crust ((B11)			Drainage Patterr	ıs (B10)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on A Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) X Geomorphic Position (Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummood Sparsely Vegetated Concave Surface (B8) No X Depth (inches): >16 Vater Table Present? Yes No X Depth (inches): >16 Saturation Present? Yes No X Depth (inches): >16 Vater Table Present? Yes No X Depth (inches): >16 Saturation Present? Yes No X Depth (inches): >16 Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: yrarks: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.		Water Marks (B1)			Aquatic Inv	vertebrates (B13))		Dry-Season Wat	er Table (C2)
Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) X Geomorphic Position (Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummood Sparsely Vegetated Concave Surface (B8) No X Depth (inches): >16 Vater Table Present? Yes No X Depth (inches): >16 Saturation Present? Yes No X Depth (inches): >16 Vater Table Present? Yes No X Depth (inches): >16 Saturation Present? Yes No X Depth (inches): >16 Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: ymarks: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.		Sediment Deposits ((B2)		Hydrogen \$	Sulfide Odor (C1)		Saturation Visible	∍ on Aerial Imagery (
Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummool Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (c4) Raised Ant Mounds (D Raised Ant Mounds (D Field Observations: No X Depth (inches): Presence of Reduced Iron (c4) Raised Ant Mounds (D Surface Water Present? Yes No X Depth (inches): Present? Nater Table Present? Yes No X Depth (inches): >16 Saturation Present? Yes No X Depth (inches): >16 Secorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Preservious inspections), if available: emarks: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland. Preservious Inspections).		Drift Deposits (B3)			Oxidized R	hizospheres alor	ng Living Roots (C3)	<u> </u>	Geomorphic Pos	ition (D2)
Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummood Sparsely Vegetated Concave Surface (B8) No X Depth (inches): Prost-Heave Hummood Surface Water Present? Yes No X Depth (inches): >16 Wetland Hydrology Present? Yes No X Depth (inches): >16 Yes No Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Present stream gauge, monitoring well, aerial photos, previous inspections), if available:		Algal Mat or Crust (F	B4)		Presence c	of Reduced Iron ((C4)		Shallow Aquitard	(D3)
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (E Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummod Sparsely Vegetated Concave Surface (B8) Sparsely Vegetated Concave Surface (B8) Frost-Heave Hummod Field Observations: No X Depth (inches): No Surface Water Present? Yes No X Depth (inches): >16 Water Table Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland. Frost-Heave Hummod		Iron Deposits (B5)			Recent Iror	ו Reduction in Pl	lowed Soils (C6)	X	Fac-Neutral Test	(D5)
Inundation Visible on Aerial Imagery (B7) X Other (Explain in Remarks) Frost-Heave Hummocl Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): >16 Wetland Hydrology Present? Mater Table Present? Yes No X Depth (inches): >16 Yes X Saturation Present? Yes No X Depth (inches): >16 Yes X No X Depth (inches): >16 Saturation Present? Yes No X Depth (inches): >16 Yes X No X Depth (inches): >16 Seconded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: amarks: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.		Surface Soil Cracks	(B6)		Stunted or	Stressed Plants	(D1) (LRR A)		Raised Ant Mour	ıds (D6) (LRR A)
Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): >16 Wetland Hydrology Present? Water Table Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Operch (includes capillary fringe) No X Depth (inches): >16 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Inundation Visible or	n Aerial Ima	igery (B7)	X Other (Exp	lain in Remarks)	l.		Frost-Heave Hur	nmocks (D7)
Field Observations: Surface Water Present? Yes No X Depth (inches): >16 Wetland Hydrology Present? Water Table Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Gincludes capillary fringe) Depth (inches): >16 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.		Sparsely Vegetated	Concave S	urface (B8)						
Surface Water Present? Yes No X Depth (inches): >16 Wetland Hydrology Present? Water Table Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Solutions capillary fringe) No X Depth (inches): >16 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Obser	vations:								
Water Table Present? Yes No X Depth (inches): >16 Wetland Hydrology Present? Saturation Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Saturation Present? Yes No X Depth (inches): >16 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Previous inspections), if available: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland. Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.	Surface Water	Present? Yes		No <u>X</u>	Depth (inches):					
Saturation Present? Yes No X Depth (inches): >16 Yes X No (includes capillary fringe) Depth (inches): >16 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.	Water Table P	resent? Yes		No X	Depth (inches):	>16	Wetland Hyd	rology Pre	sent?	-
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.	Saturation Pre (includes capillar	sent? Yes ry fringe)		No <u>X</u>	Depth (inches):	>16		Ye	s <u>X</u>	No
emarks: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.	Describe Reco	ərded Data (stream ç	jauge, moni	itoring well, aerial pł	notos, previous inspec	tions), if availabl	le:			
emarks: Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.										
Prior visit to the site in March 22, 2022 revealed a shallow water table in this wetland.	lemarks:		_			_	_	_	_	
	Prior visit to	o the site in Marc	ch 22, 202	2 revealed a sha	allow water table i	n this wetland	d.			

	WETLAND	DETER		N DATA FO	RM - Weste	ern Mountains. Val	leys, and Co	PHS # ast Region	7496
Project/Site:	Montgo	omery Way	1	City/County:	Wilsor	ville/Clackamas	Sampling Date	e: 7/2	29/2022
pplicant/Owner:	Joseph ar	nd Natalya	Oreste			State:	OR	Sampling Poin	: 4
nvestigator(s):		SE/CT		Section, To	wnship, Range:	Sectio	n 24, Township	3S, Range 1W	
andform (hillslope,	, terrace, etc.:)		Depressio	_ on	Local relief (co	ncave, convex, none):	Concave	Slope (%)	: 1
ubregion (LRR):		LRR A		Lat:	45.30	20 Long:	-122.7467	Datum	WGS84
oil Map Unit Name	e:		Wapato S	– ilty Clay Loam		NWI Cla	ssification:	None	
re climatic/hydrolo	gic conditions o	on the site ty	pical for this tin	ne of year?	Yes	No	X (if no, e	xplain in Remarks	
re vegetation	Soil	or Hyd	Irology	significantly dist	urbed?	Are "Normal Circumstan	ces" present? (Y/N) Y	
re vegetation	Soil	or Hyd	Irology	naturally proble	matic? If needed	d, explain any answers in R	emarks.)	·	-
		_ `					,		
SUMMARY OF	FINDINGS	- Attacl	h site map	showing san	npling point	locations, transects	, important fea	atures, etc.	
lydrophytic Vegeta	ation Present?	Yes	No	Χ	Is Sampled A	rea within			
lydric Soil Present	?	Yes	No	Χ	a Wetla	nd? Yes		No X	_
Vetland Hydrology	Present?	Yes	No	X					
temarks: The weighted av	verage preci	pitation fo	r the three n	nonths preced	ing the Septe	mber fieldwork was w	etter than norma	al, using the Di	rect Antecede
Rainfall Analysi	s Method (D	AREM) for	r analysis.						
/EGETATION	- Use scien	tific nam	es of plant	ts.					
			absolute % cover	Dominant Species?	Indicator Status	Dominance Test wo	ksheet:		
ree Stratum (plo	ot size:	30)	/0 00 001	000003:		Number of Dominant Spe	cies		
1 Fraxinus lati	ifolia		70	х	FACW	That are OBL, FACW, or	FAC:	2	(A)
2									
3						Total Number of Domina	nt		
4						Species Across All Strata	:	7	(B)
			70	= Total Cover					
apling/Shrub Strat	tum (plot size	e: 15)			Percent of Dominant Spe	cies		
1 Symphorical	rpos albus		70	X	FACU	That are OBL, FACW, or	FAC:	29%	(A/B)
2 Rubus ursin	us		50	X	FACU				
3 Acer macrop	ohyllum		10		FACU	Prevalence Index W	orksheet:		
4 Rosa sp			5		(FAC)	Total % Cover of	Multiply	by:	
5						OBL Species	x 1	= 0	_
			135	= Total Cover		FACW species	x 2	= 0	-
lerb Stratum (plo	ot size:	5)				FACU Species	x 4	= 0	-
1 Galium apari	ine		5	x	FACU	UPL Species	x 5	= 0	_
2 Veratrum cal	lifornicum		5	Х	FAC	Column Totals	0 (A)	0	(B)
3 Tellima gran	diflora		5	X	FACU				
4 Geranium sp	0		3		(FAC)	Prevalence Index =	B/A =	#DIV/0!	_
5									
6						Hydrophytic Vegeta	ion Indicators:		
/							2 Dominance Test	is >50%	ION
			18	= Total Cover			3-Prevalence Index	$is \leq 3.0^1$	
							4-Morphological Ad	aptations ¹ (provide	supporting
Voody Vine Stratur	<u>m</u> (plot size:	5)				data in Remarks or	on a separate she	et)
1							5- Wetland Non-Va	scular Plants ¹	
2							Problematic Hydrop	ohytic Vegetation ¹ (Explain)
			0	= Total Cover		¹ Indicators of hydric soil a	and wetland hydrolo	gy must be presen	t, unless
						Hvdrophvtic			
	Jorh Stratum					Vegetation	Yes	N	x
% Bare Ground in F	leib Stratum					Vegetation			

Page	40	of	86
------	----	----	----

SOIL			PHS #	/4	96			Sampling Point: 4
Profile Descri	ption: (Describe to	the depth	needed to docur	nent the indi	cator or cor	nfirm the abser	nce of indicators.)	
Depth	Matrix			Redox	Features	1 a a ²	- ·	
(Inches)		<u>%</u>	Color (moist)	%	туре	LUC		Remarks
0-10	10 fR 2/2	100						
10-16	10YR 3/1	100					Clay Loam	
								2
Type: C=Con Hvdric Soil	centration, D=Deplet	ion, RM=Re	all LRRs. unle	ss otherwi	Coated San	d Grains.	Indica	² Location: PL=Pore Lining, M=Matrix.
	Histosol (A1)		,	Ę	Sandv Redox	x (S5)		2 cm Muck (A10)
	Histic Eninedon (A2)				Stripped Mat	rix (S6)		Bed Parent Material (TE2)
	Black Histic (A3)			·`	oamy Muck	v Mineral (F1)	excent MI RA 1)	Very Shallow Dark Surface (TE12)
	Black Filstic (A3)	4)				y Mineral (F2)	except werke T	Other (explain in Remarke)
	Hydrogen Sullide (A4	+)	• • • •	L	Loamy Gleye	Matrix (F2)		Other (explain in Remarks)
	Depleted Below Dark	(Surface (A	411)		Depleted Mat	trix (F3)		
	Thick Dark Surface (A12)		F	Redox Dark S	Surface (F6)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Minera	il (S1)			Depleted Dar	rk Surface (F7)		hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	: (S4)		ŀ	Redox Depre	essions (F8)		problematic.
Restrictive	Layer (if present)	12						
-								
Гуре: Donth (include					-			anto Mar
Type: Depth (inches Remarks:	s):						Hydric Soil Pres	ent? Yes No <u>X</u>
Type: Depth (inches Remarks: HYDROLO Wetland Hy	s): DGY drology Indicator	 'S:			- 		Hydric Soil Pres	ent? Yes <u>No X</u>
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	^{s):} DGY drology Indicator cators (minimum c	r s:	uired; check all	that apply)	- 		Hydric Soil Pres	ent? Yes <u>No X</u> Secondary Indicators (2 or more required)
Fype: Depth (inches Remarks: HYDROLO Vetland Hy Primary India	B): DGY drology Indicator cators (minimum c Surface Water (A1)	r s: of one requ	uired; check all		Vater stained	d Leaves (B9) (Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1.2.4A. and 4B)
Fype: Depth (inches Remarks: HYDROLO Vetland Hy Primary Indio	s): GY drology Indicato cators (minimum c Surface Water (A1) High Water Table (A: Saturation (A3)	r s: of one requ	uired; check all	that apply)	Nater stained	d Leaves (B9) (I 4B) 11)	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Fype: Depth (inches Remarks: HYDROLO Vetland Hy Primary India	s): DGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	r s: If one requ	uired; check all		Nater stained I, 2, 4A, and Salt Crust (B Aquatic Inver	d Leaves (B9) (I 4B) 11) rtebrates (B13)	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Fype: Depth (inches Remarks: HYDROLO Netland Hy Primary India	s): GY drology Indicator cators (minimum c Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (I	r s: <u>of one requ</u> 2) 32)	uired; check all	that apply)	Nater stained I, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su	d Leaves (B9) (I 4B) 11) tebrates (B13) ılfide Odor (C1)	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (1)
Fype: Depth (inches Remarks: HYDROLO Netland Hy Primary India	s): GY drology Indicator cators (minimum c Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	r s: of one requ 2) 32)	uired; check all	that apply)	- - - I, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhiz	d Leaves (B9) (I 4B) 11) rtebrates (B13) ilfide Odor (C1) zospheres alon	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (I Drift Deposits (B3) Algal Mat or Crust (B	r s: <u>of one req</u> 2) 32) 4)	uired; check all	that apply)	Nater stained I, 2, 4A, and Salt Crust (B Aquatic Inver Iydrogen Su Dxidized Rhi: Presence of I	d Leaves (B9) (I 4B) 11) rtebrates (B13) Ilfide Odor (C1) zospheres alon Reduced Iron (0	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): DGY drology Indicator cators (minimum c Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5)	rs: of one requ 2) B2) 4)	uired; check all	that apply)	Nater stained I, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhiz Presence of I Recent Iron F	d Leaves (B9) (I 4B) 11) Itebrates (B13) Ilfide Odor (C1) zospheres alon Reduced Iron ((Reduction in Plo	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GY drology Indicator cators (minimum c Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks	rs: of one req 2) B2) 4) (B6)	uired; check all	that apply)	Nater stained I, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St	d Leaves (B9) (I 4B) 11) Ifde Odor (C1) zospheres alon Reduced Iron ((Reduction in Plo tressed Plants (Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible on	rs: of one requiration (2) B2) B2) (B6) Aerial Ima	uired; check all	that apply)	- - - Nater stained I, 2, 4A, and Salt Crust (B' Aquatic Inver -lydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explai	d Leaves (B9) (I 4B) 11) Ifide Odor (C1) zospheres alon Reduced Iron (C Reduction in Plo tressed Plants (in in Remarks)	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Orainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Fype: Depth (inches Remarks: HYDROLO Vetland Hy Primary India	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated	rs: of one required 2) B2) i4) (B6) Aerial Ima Concave Su	uired; check all gery (B7) urface (B8)	that apply)	Nater stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explai	d Leaves (B9) (I 4B) 11) Itebrates (B13) Ifide Odor (C1) zospheres alon Reduced Iron ((Reduction in Plo tressed Plants (in in Remarks)	Hydric Soil Pres	No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (1) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Netland Hy Primary India Primary India	s): DGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated of vations:	rs: of one req 2) B2) i4) (B6) Aerial Ima Concave Su	uired; check all gery (B7) urface (B8)	that apply)	Vater stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver -lydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explai	d Leaves (B9) (I 4B) 11) Itebrates (B13) Iffide Odor (C1) zospheres alon Reduced Iron (C Reduction in Plo tressed Plants (in in Remarks)	Hydric Soil Pres	No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (0 Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water	s): GGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B3) Surface Soil Cracks Inundation Visible on Sparsely Vegetated of vations: Present? Yes	rs: of one required 2) B2) i4) (B6) i Aerial Ima Concave Su	uired; check all Igery (B7) urface (B8)	that apply)	Nater stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi; Presence of I Recent Iron F Stunted or St Dther (Explai inches):	d Leaves (B9) (I 4B) 11) Itebrates (B13) Iffide Odor (C1) zospheres alon Reduced Iron ((Reduction in Plo tressed Plants (in in Remarks)	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Mater stained Leaves (B10) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water Water Table P	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated of vations: Present? Yes resent? Yes	rs: of one required 2) B2) i4) (B6) Aerial Ima Concave Su	uired; check all Igery (B7) urface (B8) No X No X	that apply)	Nater stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explain inches): inches):	d Leaves (B9) (I 4B) 11) Itebrates (B13) Iffide Odor (C1) zospheres alon Reduced Iron ((Reduction in Plo tressed Plants (in in Remarks) > 16	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water Water Table P Saturation Pre includes capillar	s): GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated of vations: Present? Yes resent? Yes sent? Yes y fringe)	rs: of one required 2) B2) i4) (B6) Aerial Ima Concave Su	uired; check all Igery (B7) urface (B8) No X No X No X	that apply)	Nater stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explain inches): inches): inches):	d Leaves (B9) (I 4B) 11) Itebrates (B13) Iffide Odor (C1) zospheres alon Reduced Iron ((Reduction in Plo tressed Plants (in in Remarks) >16 >16 >16	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Suface Water Saturation Pre includes capillar Describe Recc	s): GGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B3) Algal Mat or Crust (B) Surface Soil Cracks Inundation Visible on Sparsely Vegetated vations: Present? Yes resent? Yes sent? Yes sent? Yes y fringe) orded Data (stream g	rs: of one request 2) B2) i4) (B6) i Aerial Ima Concave Su auge, moni	uired; check all ugery (B7) urface (B8) No X No X No X toring well, aerial	that apply)	Nater stained 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explain inches): inches): Dus inspectic	d Leaves (B9) (I 4B) 11) Itebrates (B13) Ifide Odor (C1) zospheres alon Reduced Iron ((Reduction in Plo tressed Plants (in in Remarks) >16 >16 >16	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Water stained Leaves (B10) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (0 Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present? Yes No X
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water Vater Table P Saturation Pre includes capillar Describe Recc	s): GGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A1) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks of Inundation Visible on Sparsely Vegetated of vations: Present? Yes resent? Yes sent? Yes sent? Yes y fringe) orded Data (stream g	rs: of one req 2) B2) i4) (B6) I Aerial Ima Concave Si auge, moni	uired; check all ugery (B7) urface (B8) No X No X No X toring well, aerial	that apply) 1 5 4 6 7 6 7 <td< td=""><td>Water stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver -lydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explain inches): inches): inches): </td><td>d Leaves (B9) (4B) 11) 11) 11) 11) 11) 11) 11) 1</td><td>Hydric Soil Pres</td><td>ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (0 Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) roology Present? Yes No X</td></td<>	Water stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver -lydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explain inches): inches): inches): 	d Leaves (B9) (4B) 11) 11) 11) 11) 11) 11) 11) 1	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (0 Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) roology Present? Yes No X
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India Primary India Field Obser Surface Water Vater Table P Saturation Pre includes capillar Describe Recco	s): OGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated of vations: Present? Yes resent? Yes resent? Yes sent? Yes y fringe) orded Data (stream g	rs: of one required 2) B2) i4) (B6) Aerial Ima Concave Su auge, monit	uired; check all Igery (B7) urface (B8) No X No X No X toring well, aerial	that apply)	Water stainer 1, 2, 4A, and Salt Crust (B Aquatic Inver Hydrogen Su Dxidized Rhi: Presence of I Recent Iron F Stunted or St Dther (Explai inches): inches): Dus inspectic	d Leaves (B9) (I 4B) 11) tebrates (B13) ilfide Odor (C1) zospheres alon Reduced Iron ((Reduction in Plo tressed Plants (in in Remarks) >16 >16 >16	Hydric Soil Pres	ent? Yes No X Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Water stained Leaves (B10) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present? Yes No X

Appendix C

Site Photos





Photo A:

Looking west along the northern wetland boundary. The pink flag is upland sample point SP-4.

Photo B:

Looking northwest across the west end of the wetland. The driveway in the background is just beyond the study area.



Project #7496 6//6/2023



Pacific Habitat Services, Inc. 9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070 Photo documentation - Photos taken July 29, 2022 6753 SW Montgomery Way Wilsonville, Oregon

Page 43 of 86



Photo C:

Looking east near the east end of the study area. The wetland begins just north of the street surface.

Project #7496 6/6/2023



Pacific Habitat Services, Inc. 9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070 Photo documentation - Photos taken July 29, 2022

6753 SW Montgomery Way

Wilsonville, Oregon

Page 44 of 86



Lou Phemister ASCA Registered Consulting Arborist #590 (573) 999-3886 / louphemister@outlook.com

ARBORIST REPORT

Tree Inventory for Tree Removal & Protection Plan

DATE: 05-01-2023 PROPERTY ADDRESS: Tax Lot 01200, 6753 SW Montgomery Way, Wilsonville OR 97070 CLIENT REFERENCE: Natalya and Joseph Oreste PROJECT DESCRIPTION: Tree Inventory to meet the regulatory requirements of the City of Wilsonville.

Introduction

A portion of the above referenced lot was surveyed and inventoried for all tree species 6-inches DBH and over. The areal extent of the survey was approximately 120-ft x 120-ft. The clients had marked out the location of a proposed development footprint with yellow tape and stakes (see Figure 1). There was also an existing trail from the right-of-way to the future homesite allowing vehicle access; this may approximate to the future driveway location. All trees within and adjacent to these points of reference were inventoried and tagged.

The tree inventory was completed on March 31st and April 24th 2023. Detail of the survey is provided in Table 1 and locations are provided in Figure 1. All of the surveyed trees are tagged in the field with aluminum tree tags with identification numbers. Tree locations are not geo-located and are estimated based on the above mentioned reference points.

During the April 24th inventory the property owners asked the consultant to provide information and approximate locations of all trees not adjacent to the proposed development that were either dead, dying or dangerous and that were able to be recommended for removal. These trees were tagged in the field and are detailed in Table 2 and Figure 2 of this report.

Site Conditions

This is a semi-natural area with no invasive tree species noted and multiple large 'high value' native evergreens; Douglas fir and Western red cedar predominate. There are no visible signs of the serious diseases that can affect these two species. Dead, dying and declining trees appear mostly related to natural factors such as age and competitive stress, however the Big-leaf maple trees at the south end of the property, and adjacent to the driveway, appear to be subject to changing hydrological conditions affecting the site. These trees have significantly declining crown structure and are growing within saturated soils; these soil conditions are not suitable for this species and it is assumed that the root zone conditions are relatively recent.

Tree Removal and Tree Preservation related to Development

Because the footprints of the Residence, Well, Drain field and Driveway have not been precisely defined the following Tree Removal/ Preservation and Tree Protection information can be provided.

Tree Removal

Given the locational data provided in Figure 1 and Table1 the following 59 trees may require removal either because of their location, condition, future life expectancy or their unsuitability for preservation within proximity of a residence:

Trees: 4, 11, 12, 13, 16, 20, 22, 24, 25, 28, 30, 31, 32, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 64, 67, 69, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 88, 89, 93, 94.

Of the above trees 59 trees: 7 are Dead; 5 are Dying; and 12 are considered in 'Poor' condition.

Other trees adjacent to the footprint of the proposed development may also need to be removed due to the depth and/or proximity of excavation. When the exact location and depth of excavation are know a further assessment should be completed by a qualified arborist. Assessments should be completed when an excavation is within the following parameters for any tree: 1-foot radial distance for every 1-inch of trunk diameter (diameter measured at 4.5-ft from grade).

<u>Tree Preservation</u>:

The following 20 trees can be considered as 'High' value trees due to their size, species, condition and position within the tree canopy. Given their location, it may be possible to design the project around preserving these trees.

Trees 1, 2, 3, 6, 8, 14, 15, 17, 18, 23, 26, 27, 37, 66, 92, 101, 107, 109, 111, 115.

Tree Protection Notes:

- 1. A currently qualified ISA Certified Arborist should provide a Tree Protection Plan for any tree 12-inches DBH and over required to be preserved tree where any disturbance comes within 20-ft of that tree. Disturbance is taken to mean the following: excavation below existing grade, placement of fill, construction workspace for equipment or vehicles, staging and storage of materials.
- 2. Tree Removal should be completed under the supervision of an ISA Certified Arborist. Unmanaged tree removal can severely damage or de-stabilize trees to remain on the site. Tree Pruning by a similarly qualified arborist will ensure that the health and longevity of a preserved tree is maintained to the maximum extent possible.

Recommended Tree Removals unrelated to Development

There are 15 trees recommended for removal solely due to their condition. These trees were classified as Dead, Dying or Dangerous by the consultant. Details and explanations for these classifications are given within Table 2 below. The approximate locations of the trees within the property are shown in Figure 2. The trees have been tagged with aluminum tree tags numbered per Table 1 below.

Figure 1. Tree Locations (all trees 6-inches DBH and over – see Table 1 for location info)



Figure 2. Tree Locations (Dead Dying and Dangerous Trees - see Table 2 for location info)



Table 1. Tree Survey of March 31 & April 24, 2023, all trees 6-inches DBH and over within area shown in Fig 1.

ID	Tree Species	DBH	Condition	Tree Condition Notes	Location	Actions
1	Douglas fir Pseudotsuga menziesii	22	Good	Slender crown form. Good vigor and vitality	40-ft i/s T	
2	Douglas fir Pseudotsuga menziesii	35	Good/Fair	Fully mature tree. Codominant in canopy. Mounded basal area	10-ft i/s T	
3	Douglas fir Pseudotsuga menziesii	14	Good	Canopy codominant. Good vigor	Central	
4	Western red cedar Thuja plicata	45	Good	Large fully mature tree. Canopy dominant. No defects noted	20-ft i/s T	
5	Red alder Alnus rubra	15	Good/Fair	Canopy codominant. Crown remains in adequate condition.	16-ft i/s T	
6	Douglas fir Pseudotsuga menziesii	34	Good	Canopy dominant. Good vigor	15-ft i/s T	
7	Big leaf maple Acer macrophyllum	6	Dead	No living tissue remains	Central	
8	Douglas fir Pseudotsuga menziesii	30	Good	Canopy dominant but with reduced crown structure	Central	
9	Big leaf maple Acer macrophhlum	18	Good/Fair	Early maturity. Reduced crown size	6-ft o/s SE co	
10	Red alder Alnus rubra	18	Good/Fair	Stem lean. Crown in adequate condition. Lean is away from homesite	19-ft i/s T	
11	Red alder Alnus rubra	21	Fair	Fully mature tree. Crown decline is starting	1-ft o/s T	
12	Oregon ash Fraxinus latifolia	26	Good	Narrow crown form, space shared with T55. Tree 12-ft from T54	18-ft i/s W side T	
13	Red alder Alnus rubra	14	Poor	Heavily damaged crown. Crown heavily reduced	5-ft i/s T	
14	Douglas fir Pseudotsuga menziesii	30	Good	Fully mature tree. Crown partially asymmetric	16-ft i/s T	
15	Douglas fir Pseudotsuga menziesii	12	Good	Tree in good condition but subordinate within canopy	18-ft i/s T	
16	Western red cedar <i>Thuja plicata</i>	6	Good	Young tree with complete crown. Heavily shaded within canopy	30-ft i/s T	
17	Douglas fir Pseudotsuga menziesii	19	Good	Canopy dominant tree. No defects noted	35-ft i/s T	
18	Douglas fir Pseudotsuga menziesii	32	Good	Canopy dominant tree. No defects noted	20-ft i/s T	

ID	Tree Species	DBH	Condition	Tree Condition Notes	Location	Actions
19	Red alder	7	Fair	Tree highly suppressed within canopy	Central	
	Alnus rubra					
20	Douglas fir	22	Dying	Stem and crown decline. Heavy show	4-ft o/s NE	
	Pseudotsuga menziesii			of Phellinus pini conks. REMOVE	со	
21	Big leaf maple	20	Good	Stem leans but stem and crown	20-ft i/s T	
	Acer macrophyllum	_		structure is sound		
22	Big leaf maple	9	Good/Fair	Narrow crown with weak structure.	Central	
	Acer macrophyllum	0.6	<u> </u>	Tree partially suppressed	10.0.11.0	
23	Douglas fir	26	Good	Mature tree, no defects noted. Crown	40-ft 1/s S	
	Pseudotsuga menziesii	0	D	asymmetric and shaded to N	side T	
24	Red alder	9	Poor	Stem leans heavily to S. Heavy ivy load	18-ft 1/s T	
05	Alnus rubra Ded elder	10	Door	Weels ensure form Storm etructure has	10 ft fn S	
25	Alpus rubra	12	FUUI	defect	12-IL IL S	
26	Western red cedar	34	Good	Fully mature specimen Strong crown	10-ft o/s	
20	Thuja plicata	54	Good	development	NW co	
27	Douglas fir	28	Good	Early maturity. Canopy dominant. No	8-ft o/s T	
	Pseudotsuga menziesii			defects noted		
28	Red alder	8	Dead	No remaining crown	25-ft o/s T	
	Alnus rubra			_	-	
29	Big leaf maple	18	Good/Fair	Partially spressed within canopy. Low	8-ft i/s T	
	Acer macrophyllum			vigor		
30	Red alder	19	Dying	Minimal crown remains in declining	3-ft i/s T	
	Alnus rubra			tree. REMOVE		
31	Red alder	15	Dead	No crown remains	14-ft i/s T	
	Alnus rubra	1.4	D:/0.1		A / 77 1	
32	Red alder	14	Fair/Good	Stem leans inward to homesite, but no	At T line	
22	Alnus rubra	10	Cood/Foin	hazard	4 ft o / o NUV	
33	Thuia plicata	12	Good/Fall	density	4-11 0/S NW	
34	Big leaf manle	18	Poor	Subdominant in canopy Tree in	10-ft i/s T	
01	Acer macrophhlum	10	1 001	decline.	10 11 1/ 5 1	
35	Big leaf maple	13	Fair	Tree strongly suppressed	Central	
	Acer macrophyllum					
36	Douglas fir	31	Good	Mature canopy dominant tree. Full	At W side T	
	Pseudotsuga menziesii			crown development		
37	Douglas fir	30	Good	Mature canopy dominant tree. Full	37-ft o/s	
	Pseudotsuga menziesii			crown development	NW co	
38	Big leaf maple	6	Dead	Tree suppression complete	At W T line	
	Acer macrophyllum					

ID	Tree Species	DBH	Condition	Tree Condition Notes	Location	Actions
39	Big leaf maple	21	Good/Fair	Mature tree with branch break-outs	10-ft i/s T	
	Acer macrophyllum					
40	Big leaf maple	25	Good/Fair	Mature tree. Stable structure despite	3-ft o/s T	
41	Big leaf maple	6	Poor	Weak crown structure Dying upper	8-ft i/s W T	
••	Acer macronhullum	U	1 001	crown	line	
42	Big leaf maple	27	Good/Fair	Mature specimen on mounded base	40-ft fr W T	
	Acer macronhullum	21	Goody I all	Some branch break-outs	line	
43	Douglas fir	31	Good	Fully mature tree Canopy dominant	Central	
	Pseudotsuga menziesii	01	auuu	with full spreading crown	Central	
44	Western red cedar	6	Fair	Young tree Weak crown structure and	Central	
	Thuia nlicata	Ŭ	1 ull	suppressed	Central	
45	Western red cedar	6	Good/Fair	Young tree. Partially suppressed	Central	
	Thuja plicata	0		within canopy	00110100	
46	Douglas fir	12	Dead	Leaning away from homesite, can	1-ft o/s T	
	Pseudotsuga menziesii			reduce ht to maintain as habitat	line	
47	Western red cedar	38	Good	Mature tree. Full spreading upright	12-ft i/s T	
	Thuja plicata			crown	line	
48	Western red cedar	9	Good/Fair	Partly suppressed. Leaning stem	25-ft i/s T	
	Thuja plicata				line	
49	Douglas fir	15	Good/Fair	Reduced crown structure. High 'live	10-ft N of	
	Pseudotsuga menziesii			crown ratio'	T4	
50	Big leaf maple	6	Poor	Leaning stem. Canopy subdominant,	40-ft 1/s T	
	Acer macrophyllum			suppressed.	line	
51	Big leaf maple	7	Poor	Suppressed. Minimal crown structure	3-ft i/s T	
	Acer macrophyllum				line	
52	Big leaf maple	7	Fair/Good	Narrow partially developed crown	Adjacent to	
	Acer macrophyllum			structure	vehicle trail	
53	Douglas fir	18	Fair	Damaged surface roots. Reduced	Adjacent to	
	Pseudotsuga menziesii			crown structure. No fail hazard.	vehicle trail	
54	Douglas fir	26	Fair/Good	Small crown form. Mounded basal	15-ft fr W T	
	Pseudotsuga menziesii			area	line	
55	Big leaf maple	14	Good/Fair	Canopy codominant. Low vigor	4-ft o/s T	
	Acer macrophyllum				line	
56	Big leaf maple	19	Fair/Good	Mature tree with reduced crown	8-ft o/s T	
	Acer macrophyllum			structure	line	
57	Big leaf maple	6	Dead	Tree leaning heavily and supported	Adjacent to	
	Acer macrophyllum			within adjacent tree. No sig hazard	vehicle trail	
58	Big leaf maple	20	Fair/Good	Fully mature tree. Crown form reduced	Adjacent to	
	Acer macrophyllum			through declining vigor	vehicle trail	

ID	Tree Species	DBH	Condition	Tree Condition Notes	Location	Actions
59	Western red cedar	20	Fair/Good	Thin crown structure. Disturbed root	Adjacent to	
	Thuja plicata			zone.	vehicle trail	
60	Big leaf maple	10	Fair	Tree partially suppressed. Stem break	Adjacent to	
	Acer macrophyllum	0.4		out from base of tree	vehicle trail	
61	Big leaf maple	24	Fair	Upper crown lost, but basal area	Adjacent to	
60	Acer macrophyllum	1 -	O a a 1/E a in	appears sound.	vehicle trail	
62	Big leaf maple	15	Good/Fair	Tree in early maturity. Low vigor	0-It 0/S I	
62	Rig leaf maple	10	Good/Fair	Semi moture tree Low vigor	Adjacent to	
03	Ager magrophullum	10	Good/Fall	Semi-mature tree. Low vigor	vehicle troil	
64	Big leaf maple	10	Good/Fair	Thin branch structure, but upright	Adjacent to	
04	Acer macrophullum	10	Good/Pail	form	vehicle trail	
65	Big leaf maple	13	Good	Weak crown structure. Small crown	Adjacent to	
	Acer macrophullum	10		with upper crown damage	vehicle trail	
66	Douglas fir	30	Good	Mature, canopy dominant tree. No	Adjacent to	
	Pseudotsuga menziesii			defects noted	vehicle trail	
67	Big leaf maple	8	Fair	Leaning stem	Adjacent to	
	Acer macrophyllum				vehicle trail	
68	Douglas fir	37	Good/Fair	Fully mature. Large partially damaged	Adjacent to	
	Pseudotsuga menziesii			crown	vehicle trail	
69	Big leaf maple	9	Good	Semi-mature. Developing crown	Adjacent to	
	Acer macrophyllum			structure	vehicle trail	
70	Western red cedar	10	Good/Fair	Low foliage density, but good branch	Adjacent to	
	Thuja plicata	1.1	0 1/D ·	structure	vehicle trail	
71	Big leaf maple		Good/Fair	Leaning stem, but strong crown	Adjacent to	
70	Acer macrophyllum	0	Fair	structure	venicle trail	
72	Big leaf maple	9	Fair	Small and suppressed crown form	Adjacent to	
72	Acer macrophynum	24	Fair/Good	Codominant leaders from 40 ft Storm	Adjacent to	
13	Fravinus latifolia	27	Fail / Good	damaged upper crown	vehicle trail	
74	Big leaf maple	16	Fair	Storm damage and decline in upper	Adjacent to	
••	Acer macrophullum	10	1 ull	crown	vehicle trail	
75	Big leaf maple	17	Fair	Storm damage and decline to upper	Adjacent to	
	Acer macrophyllum			crown.	vehicle trail	
76	Big leaf maple	14	Poor	Crown weakened from multiple branch	Adjacent to	
	Acer macrophyllum			break outs	vehicle trail	
77	Big leaf maple	10	Dead	Functionally dead. No remaining	Adjacent to	
	Acer macrophyllum			crown structure	vehicle trail	
78	Big leaf maple	18	Poor	Damaged and declining crown	Adjacent to	
	Acer macrophyllum				vehicle trail	

ID	Tree Species	DBH	Condition	Tree Condition Notes	Location	Actions
79	Big leaf maple	6	Dying	Small & suppressed tree. Tree	Adjacent to	
	Acer macrophyllum			supported by adjacent tree	vehicle trail	
80	Big leaf maple	14	Poor	Narrow, declining crown	Adjacent to	
01	Acer macrophyllum	10	Dering	Orange and Minimal and a second second	vehicle trail	
81	Big leaf maple	10	Dying	Suppressed. Minimal crown remains	Adjacent to	
80	Rig loof monlo	17	Door	Norrow orown form Wools structure	Adjacent to	
04	Acer macrophullum	17	1001	Natiow crown form. Weak structure	vehicle trail	
83	Big leaf maple	18	Poor	Significant storm damage to crown	Adjacent to	
	Acer macrophyllum	10	1001	Standing water	vehicle trail	
84	Big leaf maple	18	Dead	Functionally dead, no crown.	Adjacent to	
	Acer macrophyllum			Saturated soils	vehicle trail	
85	Douglas fir	11	Good	Narrow but healthy crown	8-ft from T	
	Pseudotsuga menziesii					
86	Big leaf maple	14	Dying	Damaged base and weak structure.	10-ft from T	
~ -	Acer macrophyllum	10	0 1/D :	Likely to fail in near/medium term	1700	
87	Big leaf maple	12	Good/Fair	Strong crown development, but some	17-ft from T	
00	Western red oder	12	Good/Eair	damage due to adj failures	11 ft from T	
00	Thuia plicata	15	Good/Fall	secured No significant defetos	11-101101111	
89	Western red cedar	9	Good/Fair	Thin crown form Base sound No	8-ft from T	
	Thuia plicata		accupitan	significant defects		
90	Big leaf maple	11	Good/Fair	Small narrow crown. No significant	18-20-ft	
	Acer macrophyllum			defects	from T61	
91	Big leaf maple	7	Good	Young tree. Regrowth from crown	10-ft from T	
	Acer macrophyllum			damage		
92	Douglas fir	30	Good	Mature tree on slight mound. Thin	17-ft from T	
00	Pseudotsuga menziesu	10	0 1	crown density. No defects	10.0.0 0	
93	Douglas IIr Docudatourg mangiagii	18	Good	Canopy codominant. Narrow crown	12-it from 1	
04	Pseudolsuga menziesu Big leof monle	6	Good/Fair	Subdominant in canony No significant	10 ft from T	
74	Acer macronhullum	0	Good/Fall	defects		
95	Big leaf maple	9	Fair/Good	Thin and damaged crown. Stable	15-ft from T	
	Acer macrophyllum		,	structure		
96	Big leaf maple	7	Fair	Low vigor. Suppressed crown	15-ft from T	
	Acer macrophyllum					
97	Douglas fir	10	Good/Fair	Subdominant in canopy. Healthy but	12-ft from T	
	Pseudotsuga menziesii			thin crown		
98	Big leaf maple	8	Good/Fair	Subdominant in canopy. Crown	15-ft from T	
	Acer macrophyllum			healthy		

ID	Tree Species	DBH	Condition	Tree Condition Notes	Location	Actions
99	Big leaf maple Acer macrophyllum	12	Fair	Crown fully overtopped, but appears healthy – decline possible	10-ft from T	
100	Big leaf maple Acer macrophyllum	7	Good/Fair	Small narrow crown. No significant defects	18-20-ft from T61	
101	Douglas fir Pseudotsuga menziesii	23	Good	Narrow crown form. No defects noted	10-ft from PL	
102	Douglas fir Pseudotsuga menziesii	14	Good/Fair	Canopy codominant. Less than 1-ft from adj tree. Row of 3	18-ft from PL	
103	Red alder Alnus rubra	26	Dying	Twin stem tree. Large leaning stems failure may affect developed area		
104	Big leaf maple Acer macrophyllum	7	Fair/Good	Low spreading crown. Part suppressed. No defects	12-ft from PL	
105	Big leaf maple Acer macrophyllum	13	Good/Fair	Upright and strong crown form. Tree stable	30-ft approx from T	
106	Douglas fir Pseudotsuga menziesii	9	Good/Fair	Thin crown structure. May be influenced by well excavation	10-ft from T26	
107	Douglas fir Pseudotsuga menziesii	27	Good	Canopy dominant. High crown but complete. No defects	18-ft from PL	
108	Douglas fir Pseudotsuga menziesii	11	Dead	Complete death. Likely competitive stress	12-ft from PL	
109	Douglas fir Pseudotsuga menziesii	21	Good	Canopy codominant. No defects noted	At PL	
110	Big leaf maple Acer macrophyllum	8	Good/Fair	Partially suppressed. Good vigor. No defects noted	18-ft from PL	
111	Douglas fir Pseudotsuga menziesii	15	Good	Codominant in canopy. No sig defects. Less than 1-ft from adj tree	18-ft from PL	
113	Douglas fir Pseudotsuga menziesii	11	Fair/Good	Suppressed but healthy crown. 1-ft from adj tree. Line of 3	15-ft from PL	
115	Douglas fir Pseudotsuga menziesii	22	Good	Canopy dominant. On raised mounded area	6-ft from PL	
117	Big leaf maple Acer macrophyllum	6	Good/Fair	Spreading, part-suppressed crown. No sig defects	10-ft from PL	

Table Notes: DBH: Diameter of tree at 4.5-ft from grade

Location abbreviations: i/s – inside; o/s – outside; PL – estimated property line; T – Tape placed on-site; Trail – existing vehicle trail

Table 2. List of Dead, Dying or Dangerous Trees - April 24th, 2023.

ID	Tree Species	DBH	Condition	Tree Condition Notes	Location	Actions
200	Douglas fir Pseudotsuga menziesii	11	Dead	Crown fully dead. Competitive stress is likely cause.	Rear Yard area	REMOVE
201	Western red cedar Thuja plicata	11	Dead	Crown fully dead. Competitive stress is likely cause.	Rear Yard area	REMOVE
202	Red alder Alnus rubra	12	Dying	Crown dieback. Heavy stem lean allied to girdling roots	Rear Yard area	REMOVE
203	Big leaf maple Acer macrophyllum	27	Dangerous	Fully mature tree in gradual decline. Tree partially uprooted with stem lean	Rear Yard area	REMOVE
204	Red alder Alnus rubra	14	Dying	Severe dieback and root damage. Failure likely.	Rear Yard area	REMOVE
205	Red alder Alnus rubra	18	Dying	Crown in steep decline. Failure likely in short term	Rear Yard area	REMOVE
206	Western red cedar Thuja plicata	28	Dying	20% of expected foliage remains. Die- back spread thru crown. Cause either temperature or competitive stress	Rear Yard area	REMOVE
207	Red alder Alnus rubra	16	Dead	Stem remains, crown failed and absent	Rear Yard area	REMOVE
209	Red alder Alnus rubra	15	Dangerous	Damaged and declining crown. Heavy lean over adjacent property	Rear Yard area	REMOVE
210	Red alder Alnus rubra	26	Dangerous	Damaged and declining crown. Heavy lean over adjacent property	Rear Yard area	REMOVE
215	Red alder Alnus rubra	15	Dead	Fully dead. No living tissue	Rear Yard area	REMOVE
217	Red alder Alnus rubra	8	Dying	Suppressed tree with partially broken stems	Rear Yard area	REMOVE
218	Red alder Alnus rubra	15	Dead	Crown has failed. No living tissue	Rear Yard area	REMOVE
219	Red alder Alnus rubra	8	Dying	Stem partially broken. Decline will continue	Rear Yard area	REMOVE
220	Red alder Alnus rubra	18	Dying	Crown in steep decline and damaged by adjacent tree failures	Rear Yard area	REMOVE

Supporting Documentation: Attached Arborist Report <u>https://library.municode.com/or/wilsonville/codes/code_of_ordinances?nodeId=CH4PLLADE_TRPRPR_S</u> <u>4.610.30TYBPE</u>

Re: Tree removal mitigation plan for SROZ and Type B tree removal permit application for 6753 SW Montgomery Way, Wilsonville, OR 97070

The arborist report dated May 1, 2023 identified 59 trees for removal of which 7 are dead, 5 are dying and 12 are considered in poor condition.

The arborist inventory for development removal includes 59 trees due to their location, condition, future life expectancy, or their unsuitability for preservation within proximity of the residence, driveway, septic field and well (32 big leaf maples, 9 western red cedars, 9 douglas firs, 8 red alder, 1 oregon ash). Of the 52 live trees, the conditions range from poor to good (5 dying, 7 fair, 6 fair/good, 9 good, 13 good/fair, 12 poor). The sizes of the live trees range from 6" DBH to 34" DBH (20 are 6-12" DBH, 17 are 13-18" DBH, 8 are 19-24" DBH, 4 are 25-30" DBH, 4 are 31" + DBH). 18 additional trees were identified as dead, dying or dangerous in the rear section of the property (see arborist report trees numbered 200-220). An additional 33 trees were identified for removal due to proximity of the residence, driveway, septic field and well.

In planning for mitigation, three calculation methods were reviewed and considered:

SROZ Option A - 4.139.07(.02)(E)(1)(a)

The mitigation requirement shall be calculated based on the number and size of trees that are removed from the site. Trees that are removed from the site shall be replaced as shown in Table NR - 3. Conifers shall be replaced with conifers. Bare ground shall be planted or seeded with native grasses or herbs.

Table NR – 3: Tree Replacement Requirements									
Size of Tree to be Removed (inches in diameter at breast height)	Number of live trees to be Removed	Number of Trees and Shrubs to be Planted	Number of Trees and Shrubs to be Replanted						
6 to 12	36	2 trees and 3 shrubs	72 trees and 108 shrubs						
13 to 18	28	3 trees and 6 shrubs	84 trees and 168 shrubs						
19 to 24	13	5 trees and 12 shrubs	65 trees and 156 shrubs						
25 to 30	14	7 trees and 18 shrubs	98 trees and 252 shrubs						
over 30	9	10 trees and 30 shrubs	90 trees and 270 shrubs						
	100	Total	409 trees and 954 shrubs						

Based on Mitigation Standards 4.139.07(.02)(E)(1)(a), the quantity of replacement trees and shrubs is 409 trees and 954 shrubs.

<u>SROZ Option B – 4.139.07(.02)(E)(1)(b)</u>

The mitigation requirement shall be calculated based on the size of the disturbance within the Significant Resource Overlay Zone. Native trees and shrubs shall be planted at a rate of five (5) trees and twenty-five (25) shrubs per every 500 square feet of disturbance area... Bare ground shall be planted or seeded with native grasses or herbs.

Size of Disturbance	12,933 ft ² / 500	25.87
Number of Trees per 500 ft ²	5 * 25.87	129
Number of Shrubs per 500 ft ²	25 * 25.87	647

The total area of disturbance for the home, driveway, and septic drain field on the lot is 12,933 square feet of the 2.98-acre lot. Based on this size of disturbance, SROZ Option B - 4.139.07(.02)(E)(1)(b) would require installation of 129 trees and 647 shrubs.

<u>Type B Tree Removal Permit</u> – 4.620.00 (.02)

The permit grantee shall replace removed trees on a basis of one (1) tree replanted for each tree removed.

Pricing for one-for-one replacement of like-valued trees with installation per the Type B tree removal permit process in accordance with Subsections 4.610.30 (.02) F and 4.620.00 (.02) was determined by type of tree and size of DBH at time of removal.

	Trac		Condition	Replacement	Drice of Tree*	Installation**
טו	Iree	Ори	Condition	5120	Price of Tree	Installation
2	Douglas Fir	35	Good/Fair	45 Gal	\$185	\$60
3	Douglas Fir	14	Good	5 gal	\$18	\$60
4	Western Red Cedar	45	Good	7-8' B&B	\$85	\$60
5	Red Alder	15	Good/Fair	10 gal 1-1.25"	\$65	\$60
6	Douglas Fir	34	Good	45 Gal	\$185	\$60
7	Big Leaf Maple	6	Dead			
8	Douglas Fir	30	Good	45 Gal	\$185	\$60
10	Red Alder	18	Good/Fair	10 gal 1-1.25"	\$65	\$60
11	Red Alder	21	Fair	15 gal 1.5- 1.75"	\$95	\$60
12	Oregon Ash	26	Good	B & B 1.75" cal.	\$125	\$60

13	Red Alder	14	Poor	10 gal 1-1.25"	\$65	\$60
14	Douglas Fir	30	Good	45 Gal	\$185	\$60
15	Douglas Fir	12	Good	5 gal	\$18	\$60
16	Western Red Cedar	6	Good	5 gal 4'	\$18	\$60
17	Douglas Fir	19	Good	5 gal	\$18	\$60
18	Douglas Fir	32	Good	45 Gal	\$185	\$60
19	Red Alder	7	Fair	5 gal 4'	\$18	
20	Douglas Fir	22	Dying			
21	Big Leaf Maple	20	Good	25 gal	\$125	\$60
22	Big Leaf Maple	9	Good/Fair	7 gal	\$45	\$60
24	Red Alder	9	Poor	5 gal 4'	\$18	\$60
25	Red Alder	12	Poor	10 gal 1-1.25"	\$65	\$60
26	Western Red Cedar	34	Good	7-8' B&B	\$85	\$60
27	Douglas Fir	28	Good	20 gal 6-8'	\$95	\$60
28	Red Alder	8	Dead			
29	Big Leaf Maple	18	Good/Fair	15gal	\$75	\$60
30	Red Alder	19	Dying			
31	Red Alder	15	Dead			
32	Red Alder	14	Fair/Good	10 gal 1-1.25"	\$65	\$60
33	Western Red Cedar	12	Good/Fair	5-6' B&B	\$40	\$60
34	Big Leaf Maple	18	Poor	15gal	\$75	\$60
35	Big Leaf Maple	13	Fair	15gal	\$75	\$60
36	Douglas Fir	31	Good	45 Gal	\$185	\$60
37	Douglas Fir	30	Good	45 Gal	\$185	\$60
38	Big Leaf Maple	6	Dead			

39	Big Leaf Maple	21	Good/Fair	25 gal	\$125	\$60
40	Big Leaf Maple	25	Good/Fair	25 gal	\$125	\$60
41	Big Leaf Maple	6	Poor	7 gal	\$45	\$60
42	Big Leaf Maple	27	Good/Fair	25 gal	\$125	\$60
43	Douglas Fir	31	Good	45 Gal	\$185	\$60
44	Western Red Cedar	6	Fair	5 gal 4'	\$18	\$60
45	Western Red Cedar	6	Good/Fair	5 gal 4'	\$18	\$60
46	Douglas Fir	12	Dead			
47	Western Red Cedar	38	Good	7-8' B&B	\$85	\$60
48	Western Red Cedar	9	Good/Fair	5 gal 4'	\$18	\$60
49	Douglas Fir	15	Good/Fair	5 gal	\$18	\$60
50	Big Leaf Maple	6	Poor	7 gal	\$45	\$60
51	Big Leaf Maple	7	Poor	7 gal	\$45	\$60
52	Big Leaf Maple	7	Fair/Good	7 gal	\$45	\$60
53	Douglas Fir	18	Fair	5 gal	\$18	\$60
54	Douglas Fir	26	Fair/Good	20 gal 6-8'	\$95	\$60
55	Big Leaf Maple	14	Good/Fair	15gal	\$75	\$60
56	Big Leaf Maple	19	Fair/Good	15gal	\$75	\$30
57	Big Leaf Maple	6	Dead			
58	Big Leaf Maple	20	Fair/Good	25 gal	\$125	\$60

59	Western Red Cedar	20	Fair/Good	6-7' B&B	\$65	\$60
60	Big Leaf Maple	10	Fair	7 gal	\$45	\$60
61	Big Leaf Maple	24	Fair	25 gal	\$125	\$60
62	Big Leaf Maple	15	Good/Fair	15gal	\$75	\$60
64	Big Leaf Maple	10	Good/Fair	7 gal	\$45	\$60
67	Big Leaf Maple	8	Fair	7 gal	\$45	\$60
68	Douglas Fir	37	Good/Fair	45 Gal	\$185	\$60
69	Big Leaf Maple	9	Good	7 gal	\$45	\$60
75	Big Leaf Maple	17	Fair	15gal	\$75	\$60
76	Big Leaf Maple	14	Poor	15gal	\$75	\$60
77	Big Leaf Maple	10	Dead			
78	Big Leaf Maple	18	Poor	15gal	\$75	\$60
79	Big Leaf Maple	6	Dying			
80	Big Leaf Maple	14	Poor	15gal	\$75	\$60
81	Big Leaf Maple	10	Dying			
82	Big Leaf Maple	17	Poor	15gal	\$75	\$60
83	Big Leaf Maple	18	Poor	15gal	\$75	\$60
84	Big Leaf Maple	18	Poor	15gal	\$75	\$60
85	Douglas Fir	11	Good	5 gal	\$18	\$60

86	Big Leaf Maple	14	Dying			
87	Big Leaf Maple	12	Good/Fair	15gal	\$75	\$60
88	Western Red Cedar	13	Good/Fair	5-6' B&B	\$40	\$60
89	Western Red Cedar	9	Good/Fair	5 gal 4'	\$18	\$60
91	Big Leaf Maple	7	Good	7 gal	\$45	\$60
92	Douglas Fir	30	Good	45 Gal	\$185	\$60
93	Douglas Fir	18	Good	5 gal	\$18	\$60
94	Big Leaf Maple	6	Good/Fair	7 gal	\$45	\$60
95	Big Leaf Maple	9	Fair/Good	7 gal	\$45	\$60
96	Big Leaf Maple	7	Fair	7 gal	\$45	\$60
97	Douglas Fir	10	Good/Fair	5 gal	\$18	\$60
98	Big Leaf Maple	8	Good/Fair	7 gal	\$45	\$60
99	Big Leaf Maple	12	Fair	15gal	\$75	\$60
101	Douglas Fir	23	Good	20 gal 6-8'	\$95	\$60
102	Douglas Fir	14	Good/Fair	5 gal	\$18	\$60
103	Red Alder	26	Dying			
106	Douglas Fir	9	Good/Fair	5 gal	\$18	\$60
107	Douglas Fir	27	Good	20 gal 6-8'	\$95	\$60
108	Douglas Fir	11	Dead			
111	Douglas Fir	15	Good	5 gal	\$18	\$60
113	Douglas Fir	11	Fair/Good	5 gal	\$18	\$60
200	Douglas Fir	11	Dead			
201	Western Red Cedar	11	Dead			
202	Red Alder	12	Dying			
203	Big Leaf Maple	27	Dangerous			
204	Red Alder	14	Dying			
205	Red Alder	18	Dying			
206	Western Red Cedar	28	Dying			

207	Red Alder	16	Dead			
209	Red Alder	15	Dangerous			
210	Red Alder	26	Dangerous			
215	Red Alder	15	Dead			
217	Red Alder	8	Dying			
218	Red Alder	15	Dead			
219	Red Alder	8	Dying			
220	Red Alder	18	Dying			
				Sub Total:	\$6,022	\$4,770
				Grand Total:	\$10,792	

Prices were obtained from

https://www.thenurseryoutlet.us/_files/ugd/782e45_e8f1b902b8ef4066add0b8b1b669576e.pdf

**Installation costs from Dennis' 7 Dees Landscaping & Garden Centers of \$60/person/hour for labor and based on one hour labor for trees of 5 gallons or larger.

Proposed Mitigation Plan

Due to the current density of the 2.98-acre lot, it would be harmful to the property to plant the quantity of trees and shrubs required of any of the three mitigation options detailed above. Further, too many large trees around the homesite could also negatively impact the structure of the home, be potential fall hazards during storms, and become a fire hazard.

For the sake of the existing plants and trees on the lot, in addition to the health and survival rate of replacements to be installed over the year following construction, the following mitigation plan is proposed.

Mitigation will address both the site of construction and the full lot to include:

- 1. Removal of noxious vegetation from the entire 2.98-acre lot (english holly and ivy)
- 2. Placement of downed woody debris spread throughout the 2.98-acre lot

3. Planting overstory of grand fir, western red cedar, and big leaf maple along front and back areas and spread throughout the full lot as space allows

4. Planting of appropriate trees, grasses, plants appropriate to the wetland designation

5. Planting midstory of elderberry, vine maples, and indian plum along front and side yard areas and over septic drain field

6. Planting understory of snowberry, oregon grape, and thimble berry along front and side yard areas and over septic drain field

7. Seeding of native grass on the bare ground of backyard area

Replacement trees and shrubs will all be at least one-gallon in size and at least twelve inches in height per Mitigation Standards 4.139.07(.02)(E)(2). Understory will consist of at least three different species (snowberry, oregon grape, and thimble berry); mid-story will consist of at least three different species

(elderberry, vine maples, and indian plum); and overstory will consist of three different conifers (grand fir, western red cedar, and big leaf maple). Mulching will be applied around all new plantings and browse protection will be installed and maintained for a minimum of two years.

In addition to removal of noxious species on the entire 2.98-acre lot, placement of downed woody debris throughout the lot, and seeding of native grass on bare ground, we propose planting a minimum of 10 overstory trees, 20 midstory plants, and 30 understory plants in the front, back, and side yard areas, over the septic drain field, and spread throughout the full lot as space allows. Twenty nine dead, dying, dangerous trees will be removed as part of the mitigation and cleanup plan.

Removal of dead, dying	Labor to cut and remove	TBD	TBD
Removal of noxious vegetation from the entire 2.98-acre lot and placement of downed woody debris spread throughout the 2.98-acre lot	Labor for removing identified noxious species and spreading downed woody debris	\$50/hour * 2 people * 48 hours	\$4800
Planting overstory of grand fir, western red cedar, and big leaf maple along front and side yard areas and spread throughout the full lot as space allows	Delivery and installation of 15 trees of 2" caliper size or greater (Price based on 2" Big Leaf Maple from Plant Oregon)	\$199/tree, \$60/person/hour labor for installation, \$45/truckload delivery \$199 * 15 = \$2985 trees \$60 * 15 hours = \$900 labor	\$3885
Planting midstory of elderberry, vine maples, and indian plum along front and side yard areas and over septic drain field	Delivery of 30 midstory plants to be planted by us (Price based on 3-gallon Vine Maple)	\$27/plant \$27 * 30 = \$810 midstory \$60 * 30 hours = \$1800 labor	\$2610
Planting understory of snowberry, oregon grape, and thimble berry along front and side yard areas and over septic drain field	Delivery of 45 understory plants to be planted by us (Price based on 3-gallon Snowberry)	\$21/plant \$21 * 45 = \$945 plants \$60 * 45 hours = \$2700 labor	\$3645
Seeding native grass on the bare ground of backyard area	Tall fescue grass seed, 20lb. bag	\$55/bag \$60 * 2 = \$120 labor	\$175
		IUIAL	

Costs of this mitigation plan breaks down as follows:

Conclusion

The cost of the proposed mitigation plan (\$15,115) + TBD cost for removal of dead, dying, dangerous trees is comparable to the total cost of the Type B Tree Removal Permit mitigation requirements (\$10,792). It also meets the intent of the SROZ replacement calculation options without causing additional harm to the existing property and vegetation.

As previously stated, the current density of the lot is substantial and should be protected. The quantity of new plantings should not interfere with existing vegetation or cause hazards to the home or other trees on the lot. This mitigation plan is in the best interest of the health and survival rate of both replacements and the current landscape.

DocuSign Envelope ID: 074F6615-75E8-4556-BD0D-0C72694C2D23 FIRE CODE / LAND USE / BUILDING REVIEW



North Operating Center 11945 SW 70th Avenue Tigard, OR 97223 Phone: 503-649-8577

South Operating Center 8445 SW Elligsen Rd Wilsonville, OR 97070 Phone: 503-649-8577

APPLICATION

REV 6-30-20

Project Information	Permit/Review Type (check one):			
Applicant Name: Joseph and Natalya Oreste	ILand Use / Building Review - Service Provider Permit			
Address ² 3615 SE Willamette Ave Milwaukie, OR 97222	Emergency Radio Responder Coverage Install/Test			
Phone: 503-888-1538	□LPG Tank (Greater than 2,000 gallons)			
Email:nyoreste@gmail.com	□Flammable or Combustible Liquid Tank Installation (Greater than 1,000 gallons)			
Site Address: 6753 SW Montgomery Way City: Wilsonville, OR 97070	 Exception: Underground Storage Tanks (UST) are deferred to DEQ for regulation. 			
Map & Tax Lot #: 3S-1w-24-NE & 00821597	□Explosives Blasting (Blasting plan is required)			
Business Name:	Exterior Toxic, Pyrophoric or Corrosive Gas Installation (in excess of 810 cu.ft.)			
Land Use/Building Permit #	Tents or Temporary Membrane Structures (in excess of 10,000 square feet)			
Choose from: Beaverton, Tigard, Newberg, Tualatin, North	□Temporary Haunted House or similar			
Plains, West Linn, Wilsonville, Sherwood, Rivergrove, Durham, King City, Washington County, Clackamas County,	DOLCC Cannabis Extraction License Review			
Multnomah County, Yamhill County	Ceremonial Fire or Bonfire (For gathering, ceremony or other assembly)			
Project Description	For Fire Marshal's Office Use Only			
Build 3926 square foot single family residence.	TVFR Permit # 2022 - 0040			
wooded, 2.98 acre lot. Utilities include proposed	Permit Type: SPP - COW			
gas.	Submittal Date: 4/4/2022			
	Assigned To: OFM Am			
	Due Date:			
DocuSigned by:	Fees Due:			
Natalya Oriste	Fees Paid:			

Approval/Inspection Conditions

(For Fire Marshal's Office Use Only)

This section is for application approval only	This section used when site inspection is required	
Fire Marshal or Designee Date	Inspection Comments:	
Conditions: see approved site plan.		
an approved turnaround is		
required.		
See Attached Conditions: Yes No		
Site Inspection Required: XYes D No		
	Final TVFR Approval Signature & Emp ID Date	
Pag	e 66 01 86	



ADDRESS: 6753 SW MONTGOMERY WAY SUBDIVISION: RIVER ESTATES II LEGAL: PARCEL# 00821597 - MAP:31W24A - TAXLOT:01200 OWN#ABE 6706186H & NATALYA ORESTE - PHONE: (503) 888-1538



DAN JOHNSON DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING 150 BEAVERCREEK ROAD OREGON CITY, OR 97045

April 10, 2023

Tyler Fuhriman tyler@fuhrimanconsulting.com

IMPORTANT DOCUMENT – PLEASE READ CAREFULLY This is not a septic construction permit.

Site: Township 3S Range 1W Section 24A Tax Lot 1200 6753 SW Montgomery Way

Application Number: SE050722

Results: Approved

To whom it may concern:

Onsite Wastewater Systems program staff have completed an evaluation at the property referenced above. The site that was prepared for this evaluation was found suitable for an Onsite Wastewater treatment system. A detailed report of this investigation is enclosed. Current minimum design standards for a FOUR bedroom single family residence are also included. This office can provide updated standards (fees may apply) for alternative developments or updated minimum standards as required by rule.

If you have any questions, feel free to contact me at 503-793-5011.

Sincerely,

Aaron Dennis, WWS Soil Scientist, Senior

Enclosures: General Site Evaluation Information Field Sheet Construction Detail Sheet Minimum Setback Requirements

CC:

phone: 503-742-4740

fax: 503-742-4550

www.clackamas.us\septic

General Site Evaluation Information

Please note that this approval is site specific to the area tested and does not address the feasibility of locating the system elsewhere on the property. The enclosed diagram indicates the limited area that appears suitable for this type of system. Please refer to the enclosed diagram for specifics concerning the dimensions and/or special conditions of the approved site.

Site evaluation report review. An applicant may request the Oregon Department of Environmental Quality to review a site evaluation report issued by an agent. The application for review must be submitted to the department in writing within 60 days after the site evaluation report issue date and must include the site evaluation review fee in OAR 340-071-0140(2). The department will review and approve or disapprove the site evaluation report.

This approval will remain valid until the system is installed and approved. Technical rule changes which take place after the date of this letter will not invalidate this approval, except that construction standards may be changed to meet codes applicable at the time of permit issuance. However, if conditions on this or adjacent properties are changed in any manner which would prohibit issuance of a permit because of a conflict with the applicable State rules, this approval will then be considered null and void. **Modifications to the approval area including logging, filling, cutting, or grading may render this approval invalid.** Check with this Department before conducting any of this work in the approval area.

The approval of this property and the conditions set forth in this letter in no way waives requirements as may be set by the zoning of the area. A permit to construct a system on this property will be subject to the review and approval of the County Planning Department. This Approval in no way waives any requirements set forth by other government agencies.

Minimum design requirements for an onsite wastewater treatment system

Work in the vicinity of the absorption area shall begin when unsaturated soils conditions are found to a depth of at least six inches below the bottom of the absorption facility

Tank:

- The multi-compartment dosing tank will have a minimum liquid capacity of 1,500 gallons, and shall be equipped with TWO watertight riser(s) to the surface. (SEE NOTE 2)
 - a. You may use a 1,000 gallon septic tank with a 500 gallon dosing tank, both equipped with watertight riser(s) to the surface.
 - b. An effluent lift pump may be required as part of this system.

Pretreatment:

- Your site requires installation of a pretreatment unit. Construction details must be included in the system design plans, along with any applicable standards found in this letter and OAR 340-071-290; 340-071-295; 340-071-0302 &/or 340-071-0345, Complete design plans must be submitted for review and approved before permit issuance.
 - a. Plans must include an operation and maintenance agreement in accordance with OAR 340-071-0130 (23)
 - b. Gravelless absorption method. A minimum of 150 lineal feet of gravelless half pipe absorption trench is required with a maximum trench depth of 17 inches and a minimum trench depth of 12 inches. Trenches shall be constructed 1-2 foot wide on 10 foot minimum centers. Please reference OAR 340-071-0290(6) for comprehensive construction details

Drainfield:

A capping fill absorption trench following Pretreatment is one option for this site. Please reference enclosed site map and OAR 340-071-0265 for comprehensive construction details. (<u>SEE NOTE 1</u>)

Conditions:

- Keep traffic, such as vehicles, heavy equipment, or livestock off the drainfield and replacement area.
- No part of the system can be installed within any utilities, right of way, or access easement.
- Maximum number of bedrooms shall be FOUR.
- A replacement system layout meeting the minimum standards contained herein is required See attached field site map for approval area locations
- Minimum lot size is as platted

<u>NOTE 1</u>: SOME ALTERNATIVE DRAIN MEDIA PRODUCTS ALLOW FOR DIFFERENT CONSTRUCTION STANDARDS. CONSULT INSTALLERS GUIDE OR THIS OFFICE WITH QUESTIONS <u>NOTE 2</u>: SOME SYSTEMS MAY REQUIRE A DIFFERENT TANK SIZE THAN INDICATED CONSULT INSTALLERS GUIDE OR THIS OFFICE WITH QUESTIONS
TABLE 1 OAR 340-071-0220 MINIMUM SEPARATION DISTANCES

Items Requiring Setback	From Subsurface Absorption Area Including Replacement Area	From Septic Tank and Other Treatment Units, Effluent Sewer and Distribution Units		
 Groundwater Supplies and Wells. 	*100'	50'		
Springs: Upgradient. Downgradient.	50' 100'	50' 50'		
 **3. Surface Public Waters: Year round. Seasonal. 	100' 50'	50' 50'		
 Intermittent Streams: Piped (watertight not less than 20' from any part of the onsite system). Unpiped. 	20' 50'	20' 50'		
 5. Groundwater Interceptors: On a slope of 3% or less. On a slope greater than 3%: 	20'	10'		
Upgradient. Downgradient.	10' 50'	5' 10'		
 6. Irrigation Canals: Lined (watertight canal). Unlined: 	25'	25'		
Upgradient. Downgradient.	25' 50'	25' 50'		
 7. Manmade Cuts Down Gradient in Excess of 30 Inches (top of downslope cut): Which Intersect Layers that Limit Effective Soil Depth Within 48 Inches of 	50'	25'		
 Surface. Which Do Not Intersect Layers that Limit Effective Soil Depth. 	25'	10'		
 8.Downgradient Escarpments: Which Intersect Layers that Limit Effective Soil Depth. Which Do Not Intersect Layers that Limit 	50'	10'		
Effective Soil Depth.	25'	10'		
9.Property Lines.	10'	5'		
10. Water Lines.	10'	10'		
11. Foundation Lines of any Building, Including	10'	5'		
12. Underground Utilities.	10'	-		
* 50-foot setback for wells constructed with special standards granted by WRD. **This does not prevent stream crossings of pressure effluent sewers.				



*Pressure Distribution via Gravelless Absorption Method per OAR 340-071-0290 (6)

Depth	Texture	Color	Redox/Conc	Consistency (Moist)	Structure	Roots	H2O, ESD, Conditions associated with saturation, etc.
Test Pi	t 2 S	lope:		N:			W :
Te of Di		•		NI-			
lest Pr		юре:		Ni			W:
Test Pit	t4 S	lope:		N:			W:
Test Pit	t 5 S	lope:		N:			W :
Test Pit	t 6 S	lope:		N:			W:
	1				ĺ.	1	

Test Pit 1

Slope:

N:

W:

5 RESIDENCE RVI ARKI 622.71 563 Ą Æ 215.29 WETLAND A (0.19 ACRE) MONTGOMERY WAY SCALE: |": 75' ADDRESS: 6753 SW MONTGOMERY WAY

STEEP SLOPE BEGINS NORTH OF LOT LINE - S=50%

229'

TOTAL DISTURBED AREA: 12,636 SQFT

IMPERVIOUS AREA: 4,949 SQFT

PERVIOUS AREA: 7,493 SQFT

SEPTIC TRENCHING: 194 SQFT

SUBDIVISION: RIVER ESTATES II

LEGAL: PARCEL# 00821597 - MAP:31W24A - TAXLOT:01200

OWNER: JOSEPH & NATALYA ORESTE - PHONE: (503) 888-1538

Page 74 of 86



City of Wilsonville Exhibit B2 DB23-0006 Response to the incomplete submitted application number: DB23-0006 6753 SW Montgomery Way SRIR SROZ based on the applicable provisions of ORS 227.178(2) and Subsection 4.035(.05) Wilsonville Code ("WC"), due to the following missing items:

1. Wetland delineation and local significance determination to ensure no proposed development is within the wetland(s). Show wetland(s), floodplain (100-year and 500- year), and other natural features such as streams or drainages, if applicable, on site plan to understand their relationship to proposed development.

A wetland was identified across the frontage of the property and delineated by Pacific Habitat Services, Inc. (See attached wetland delineation report). The classification of wetland allows a driveway to cross through it. The wetland is also shown on the newly submitted site plan and shows where the driveway will cross the wetland. The 100 year and 500 year floodplain is also shown on the site plan as well as the 90 foot contour.

PHS identified and delineated one wetland within the study area:

Wetland A (8,327 square feet/ 0.19 acre) was identified within the southern portion of the study area, and has Cowardin classification of palustrine, forested, broad-leaved deciduous, seasonally saturated (PFO1Y), and an Hydrogeomorphic (HGM) classification of Slope. Hydrologic inputs include groundwater, as well as precipitation and runoff from the adjacent landscape.

2. Abbreviated SRIR and findings addressing the SROZ ordinance (Section 4.139.00 through 4.139.10, as applicable) and large lot exception criteria, and calculations demonstrating that no more than 10% of the area located within the SROZ on the property is proposed to be used for development purposes.

Large Lot Exception

Section 4.139.10(.01)(B) Large Lot Exception states that an exception to the standards of this Section may be authorized where the following conditions apply:

-The lot is greater than one acre in size.

The lot at 6753 SW Montgomery Way is 2.98 acres.

-At least 85 percent of the lot is located within the SROZ based on surveyed resource and property line.

The lot at 6753 SW Montgomery Way is entirely in the SROZ.

-No more than 10 percent of the area located within the SROZ on the property may be excepted and used for development purposes.

The lot size is 2.98 acres or 129,808 square feet

10% of 129,808 = 12,980 square feet

PROPOSED DEVELOPED AREA: 12,636 square feet (4949+7493+194)

Developed area includes the residence, driveway and trenching for the septic system tank and drain lines:

• residence (impervious improvement):4949 square feet



- driveway (pervious improvement):7493 square feet
- septic system (pervious improvement) total square feet: **194** square feet
 - \circ $\,$ one foot wide trenching from house to tank: 21 square feet
 - tank 8ft x 5ft= 40 square feet
 - o one foot wide trenching from tank to drain field: 23 square feet
 - drain field: two 50 foot long by 1ft wide trenches = 110 square feet

-The proposed development is sited in a location that avoids or minimizes impacts to the significant resource to the greatest extent possible.

The proposed site location minimizes impacts to the significant resource to the greatest extent possible. Our goal is to protect as much of the natural beauty of this property as possible. The soils were studied at multiple locations on the property by licensed professionals. There is a narrow band on the property with a lower water table. The residence and septic were sited along this narrow band of dryer soil. The proposed location for the septic system is the only area on the entire property that meets the septic criteria set forth by Clackamas County (See attached septic approval report). Other contributing factors for the siting of the residence include CC&R's for the site that require living spaces to be located above the 90 foot contour (See Site Plan for the location of the 90 foot contour). OAR 690-210-0030 Placement of Water Supply Wells was reviewed for well placement, which aligns with current well placements of adjacent properties. Ingress and egress requirements for future well maintenance were also considered.

3. Identification of trees proposed for preservation, as listed in Arborist Report, on Figure 1, Tree Locations. Provide findings demonstrating how removal of native vegetation within City of Wilsonville Page 2 the SROZ is minimized and design alternatives were considered to prioritize and preserve significant large mature trees, such as Tree #4 (45-inch Western red cedar) and Tree #47 (38-inch Western Red Cedar).

The soils were studied at multiple locations on the property by licensed professionals. The proposed location for the septic system is the only area that meets the criteria set forth by Clackamas County (See attached septic approval report provided by Clackamas County). The location of the residence was determined to be soil with the best drainage and lowest water table. Other contributing factors for the siting of the residence include CC&R's for the site that require living spaces to be located above the 90 foot contour (See Site Plan for the location of the 90 foot contour). OAR 690-210-0030 Placement of Water Supply Wells was reviewed for well placement, which aligns with current well placements of adjacent properties. Ingress and egress maintenance requirements for future maintenance were also considered. A licensed arborist was retained to determine a tree mitigation and replanting plan that both preserves existing trees to the greatest extent possible and provides a plan for replanting of primary, midstory and understory for future restoration (See Tree Mitigation Plan). Tree #4 is located in the middle of the proposed driveway and too close to the garage to preserve. Tree #47 is located at the northeast corner of the proposed residence and is too close to the residence to preserve. The two trees in question were marked for removal as shown on the arborist's report.

4. Sufficient information to determine if the proposed residence is greater than 5,000 square feet of impervious area and whether the driveway and parking area are proposed to be pervious or impervious (staff notes that gravel is considered an impervious surface). A Stormwater Report showing how the project meets the City's stormwater management requirements must be included in the submitted materials if the proposed amount of impervious area triggers the City's stormwater management requirements.

The proposed residence will be less than 5,000 square feet of impervious improvement. The total impervious improvement is 4949 sqft. The driveway will be constructed of pervious asphalt or approved alternative.

5. Sufficient information to determine whether a residential fire sprinkler system was considered as a feasible alternative in lieu of a turnaround, as shown on the submitted site plan, in order to minimize area impacted pursuant to Subsection 4.139.10 (.01) B. 5. Staff notes that the City Building Official contacted TVF&R regarding whether they would accept a sprinkler system in lieu of the proposed turnaround and the fire district responded that this would be an acceptable alternative. Universal Alternate Construction Standards (UACS) review would be required if a sprinkler system is proposed.

Tualatin Valley Fire and Rescue provided documentation "New Construction Fire Code Applications Guide for One- and Two-Family Dwellings and Townhouses". The section for driveways longer than 150 feet was reviewed as well as all of the provided solutions, including residential fire sprinkler systems. We chose the 60 ft. Y turnaround, which was approved by Tualatin Valley Fire and Rescue (See attached approval from Tualatin Valley Fire & Rescue). This meets the ingress and egress standards for emergency vehicles as well as commercial deliveries and our own RV and trailer use requirements.

Exhibit C1 Public Works Plan Submittal Requirements and Other Engineering Requirements

- 1. All construction or improvements to public works facilities shall be in conformance to the City of Wilsonville Public Works Standards 2017.
- 2. Applicant shall submit insurance requirements to the City of Wilsonville in the following amounts:

Coverage (<i>Aggregate, accept where noted</i>)	Limit
Commercial General Liability:	
 General Aggregate (per project) 	\$3,000,000
 General Aggregate (per occurrence) 	\$2,000,000
 Fire Damage (any one fire) 	\$50,000
 Medical Expense (any one person) 	\$10,000
Business Automobile Liability Insurance:	
 Each Occurrence 	\$1,000,000
 Aggregate 	\$2,000,000
Workers Compensation Insurance	\$500,000

- 3. No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved by Staff, all fees have been paid, all necessary permits, right-of-way and easements have been obtained and Staff is notified a minimum of 24 hours in advance.
- 4. All public utility/improvement plans submitted for review shall be based upon a 22"x 34" format and shall be prepared in accordance with the City of Wilsonville Public Work's Standards.
- 5. Plans submitted for review shall meet the following general criteria:
 - a. Utility improvements that shall be maintained by the public and are not contained within a public right-of-way shall be provided a maintenance access acceptable to the City. The public utility improvements shall be centered in a minimum 15-ft. wide public easement for single utilities and a minimum 20-ft wide public easement for two parallel utilities and shall be conveyed to the City on its dedication forms.
 - b. Design of any public utility improvements shall be approved at the time of the issuance of a Public Works Permit. Private utility improvements are subject to review and approval by the City Building Department.
 - c. In the plan set for the PW Permit, existing utilities and features, and proposed new private utilities shall be shown in a lighter, grey print. Proposed public improvements shall be shown in bolder, black print.



-

- d. All elevations on design plans and record drawings shall be based on NAVD 88 Datum.
- e. All proposed on and off-site public/private utility improvements shall comply with the State of Oregon and the City of Wilsonville requirements and any other applicable codes.
- f. Design plans shall identify locations for street lighting, gas service, power lines, telephone poles, cable television, mailboxes and any other public or private utility within the general construction area.
- g. As per City of Wilsonville Ordinance No. 615, all new gas, telephone, cable, fiber-optic and electric improvements etc. shall be installed underground. Existing overhead utilities shall be undergrounded wherever reasonably possible.
- h. Any final site landscaping and signing shall not impede any proposed or existing driveway or interior maneuvering sight distance.
- i. Erosion Control Plan that conforms to City of Wilsonville City Code Section 8.317.
- j. Existing/proposed right-of-way, easements and adjacent driveways shall be identified.
- k. All engineering plans shall be printed to PDF, combined to a single file, stamped and digitally signed by a Professional Engineer registered in the State of Oregon.
- 1. All plans submitted for review shall be in sets of a digitally signed PDF and three printed sets.
- 6. Submit plans in the following general format and order for all public works construction to be maintained by the City:
 - a. Cover sheet
 - b. City of Wilsonville construction note sheet
 - c. Land Use Conditions of Approval sheet
 - d. General construction note sheet
 - e. Existing conditions plan.
 - f. Erosion control and tree protection plan.
 - g. Site plan. Include property line boundaries, water quality pond boundaries, sidewalk improvements, right-of-way (existing/proposed), easements (existing/proposed), and sidewalk and road connections to adjoining properties.
 - h. Grading plan, with 1-foot contours.
 - i. Composite utility plan; identify storm, sanitary, and water lines; identify storm and sanitary manholes.
 - j. Detailed plans; show plan view and either profile view or provide i.e.'s at all utility crossings; include laterals in profile view or provide table with i.e.'s at crossings; vertical scale 1''=5', horizontal scale 1''=20' or 1''=30'.
 - k. Street plans.
 - 1. Storm sewer/drainage plans; number all lines, manholes, catch basins, and cleanouts for easier reference.
 - m. Stormwater LID facilities (Low Impact Development): provide plan and profile views of all LID facilities.
 - n. Water and sanitary sewer plans; plan; number all lines, manholes, and cleanouts for easier reference.

- o. Where depth of water mains are designed deeper than the 3-foot minimum (to clear other pipe lines or obstructions), the design engineer shall add the required depth information to the plan sheets.
- p. Detailed plan for water quality facility (both plan and profile views), including water quality orifice diameter and manhole rim elevations. Provide detail of inlet structure and energy dissipation device. Provide details of drain inlets, structures, and piping for outfall structure. Note that although storm water facilities are typically privately maintained they will be inspected by engineering, and the plans must be part of the Public Works Permit set.
- q. Composite franchise utility plan.
- r. City of Wilsonville detail drawings.
- s. Illumination plan.
- t. Striping and signage plan.
- u. Landscape plan.
- 7. Design engineer shall coordinate with the City in numbering the sanitary and stormwater sewer systems to reflect the City's numbering system. Video testing and sanitary manhole testing will refer to City's numbering system.
- 8. The applicant shall install, operate and maintain adequate erosion control measures in conformance with City Code Section 8.317 during the construction of any public/private utility and building improvements until such time as approved permanent vegetative materials have been installed.
- 9. Applicant shall work with City Engineering before disturbing any soil on the respective site. If 5 or more acres of the site will be disturbed applicant shall obtain a 1200-C permit from the Oregon Department of Environmental Quality. If 1 to less than 5 acres of the site will be disturbed a 1200-CN permit from the City of Wilsonville is required.
- 10. The applicant shall be in conformance with all stormwater and flow control requirements for the proposed development per the Public Works Standards.
- 11. A storm water analysis prepared by a Professional Engineer registered in the State of Oregon shall be submitted for review and approval by the City.
- 12. The applicant shall be in conformance with all water quality requirements for the proposed development per the Public Works Standards. If a mechanical water quality system is used, prior to City acceptance of the project the applicant shall provide a letter from the system manufacturer stating that the system was installed per specifications and is functioning as designed.
- 13. Storm water quality facilities shall have approved landscape planted and approved by the City of Wilsonville prior to paving.

- 14. The applicant shall contact the Oregon Water Resources Department and inform them of any existing wells located on the subject site. Any existing well shall be limited to irrigation purposes only. Proper separation, in conformance with applicable State standards, shall be maintained between irrigation systems, public water systems, and public sanitary systems. Should the project abandon any existing wells, they shall be properly abandoned in conformance with State standards.
- 15. All survey monuments on the subject site, or that may be subject to disturbance within the construction area, or the construction of any off-site improvements shall be adequately referenced and protected prior to commencement of any construction activity. If the survey monuments are disturbed, moved, relocated or destroyed as a result of any construction, the project shall, at its cost, retain the services of a registered professional land surveyor in the State of Oregon to restore the monument to its original condition and file the necessary surveys as required by Oregon State law. A copy of any recorded survey shall be submitted to Staff.
- 16. Streetlights shall be in compliance with City dark sky, LED, and PGE Option C requirements.
- 17. Sidewalks, crosswalks and pedestrian linkages in the public right-of-way shall be in compliance with the requirements of the U.S. Access Board.
- 18. No surcharging of sanitary or storm water manholes is allowed.
- 19. The project shall connect to an existing manhole or install a manhole at each connection point to the public storm system and sanitary sewer system.
- 20. A City approved energy dissipation device shall be installed at all proposed storm system outfalls. Storm outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
- 21. The applicant shall provide a 'stamped' engineering plan and supporting information that shows the proposed street light locations meet the appropriate AASHTO lighting standards for all proposed streets and pedestrian alleyways.
- 22. All required pavement markings, in conformance with the Transportation Systems Plan and the Bike and Pedestrian Master Plan, shall be completed in conjunction with any conditioned street improvements.
- 23. Street and traffic signs shall have a hi-intensity prismatic finish meeting ASTM 4956 Spec Type 4 standards.
- 24. The applicant shall provide adequate sight distance at all project driveways by driveway placement or vegetation control. Specific designs to be submitted and approved by the City Engineer. Coordinate and align proposed driveways with driveways on the opposite side of the proposed project site.

- 25. The applicant shall provide adequate sight distance at all project street intersections, alley intersections and commercial driveways by properly designing intersection alignments, establishing set-backs, driveway placement and/or vegetation control. Coordinate and align proposed streets, alleys and commercial driveways with existing streets, alleys and commercial driveways with existing streets, alleys and commercial driveways. Specific designs shall be approved by a Professional Engineer registered in the State of Oregon. As part of project acceptance by the City the Applicant shall have the sight distance at all project intersections, alley intersections and commercial driveways verified and approved by a Professional Engineer registered in the State of Oregon, with the approval(s) submitted to the City (on City approved forms).
- 26. Access requirements, including sight distance, shall conform to the City's Transportation Systems Plan (TSP) or as approved by the City Engineer. Landscaping plantings shall be low enough to provide adequate sight distance at all street intersections and alley/street intersections.
- 27. Applicant shall design interior streets and alleys to meet specifications of Tualatin Valley Fire & Rescue and Allied Waste Management (United Disposal) for access and use of their vehicles.
- 28. The applicant shall provide the City with a Stormwater Maintenance and Access Easement Agreement (on City approved forms) for City inspection of those portions of the storm system to be privately maintained. Applicant shall provide City with a map exhibit showing the location of all stormwater facilities which will be maintained by the Applicant or designee. Stormwater LID facilities may be located within the public right-of-way upon approval of the City Engineer. Applicant shall maintain all LID storm water components and private conventional storm water facilities; maintenance shall transfer to the respective homeowners association when it is formed.
- 29. The applicant shall "loop" proposed waterlines by connecting to the existing City waterlines where applicable.
- 30. Applicant shall provide a minimum 6-foot Public Utility Easement on lot frontages to all public right-of-ways. An 8-foot PUE shall be provided along Collectors. A 10-ft PUE shall be provided along Minor and Major Arterials.
- 31. For any new public easements created with the project the Applicant shall be required to produce the specific survey exhibits establishing the easement and shall provide the City with the appropriate Easement document (on City approved forms).
- 32. Mylar Record Drawings:

At the completion of the installation of any required public improvements, and before a 'punch list' inspection is scheduled, the Engineer shall perform a record survey. Said survey shall be the basis for the preparation of 'record drawings' which will serve as the physical

record of those changes made to the plans and/or specifications, originally approved by Staff, that occurred during construction. Using the record survey as a guide, the appropriate changes will be made to the construction plans and/or specifications and a complete revised 'set' shall be submitted. The 'set' shall consist of drawings on 3 mil. Mylar and an electronic copy in AutoCAD, current version, and a digitally signed PDF.

Findings for SRIR23-0001

(if SRIR include related findings here)

Significant Resource Overlay Zone

- 1. All landscaping, including herbicides used to eradicate invasive plant species and existing vegetation, in the SROZ shall be reviewed and approved by the Natural Resources Manager. Native plants are required for landscaping in the SROZ.
- 2. Mitigation actions shall be implemented prior to or at the same time as the impact activity is conducted.



[This email originated outside of the City of Wilsonville]

Re: 6753 SW Montgomery Way SRIR and SROZ // DB23-0006

Hello Cindy,

We live across the street (6710 SW Montgomery Way) from the above mentioned Proposed Development. I want to make you are aware of where our water well is, in respect to the proposed residential structure.

The well was permitted and drilled around 1986. My goal is to make sure there are no incorrect or lost records in respect to the placement of the well for our home.

Our Water Well resides within the east side "brick driveway pillar" which is directly across the street from the proposed development and our septic system is up by our house.

I hope this information will be useful to the owner's plan so they don't get too close to the well.

Unrelated, I was wondering why after all these years and the many potential buyers for this property, what has changed to allow it to finally perk. I always assumed it would require something new and fancy to comply. Climate change? Water diversions? Rules change?

Thanks

Danton Mendell dan@alpinepockets.com 503-682-7176 US home & transfer to BZ 503-307-1438 US cell



From:	Molly Herrmann
То:	Luxhoj, Cindy
Cc:	JOHN HERRMANN
Subject:	For Board Review members re: 6753 Montgomery Way
Date:	Friday, September 15, 2023 11:45:03 AM

[This email originated outside of the City of Wilsonville]

I write not to oppose the variance but to add in concerns from those of us that share this street.

We have 2 asks:

1) if you approve this variance that it come with a 'condition' or direction or option for neighbors who suffer due to construction activity and vehicles on this very narrow street, which the city does not take care of.

As some of you may know the street has been subject to unprecedented construction activity in the last couple of years. Due to the narrowness of the street, limited right of ways due to canals and streams, overhang of trees, the construction vehicles tend to park where it suits them regardless of the risks and damage to others. And because the owners are not always present there is no one to 'police' appropriate behavior. We have had our garbage and waste pick up services disrupted, mailbox blocked, driveway blocked (we could not get in or out), trees damaged, right of way and property damaged (all also environmental issues just as concerning as the overlay zone). And there is no one to take our concerns to. We don't begrudge a property owner from improving their property, but we would ask that you inform/direct these owners to police their vendors. And I have no idea where they are going to park because the front of this property is at probably the narrowest point of the street due to a slight curve; there is nowhere to park.

2)This has been raised before: as the properties are filled in at the east end of the street, there is less vegetation which could be a hedge against fire (like the wildfires); the east end of the street is very far from any public water (we have no city water); and firetruck will not come down the end of the street or driveways because of the tree overhang (they told us that some years back - I don't know if that's still true). But you might think about asking the Fire Marshall for a position on this.

Thank you for your time and attention.

Molly & John Herrmann 6850 SW Montgomery Way Wilsonville, OR 97070 5034907694

