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DEVELOPMENT REVIEW APPLICATION

| | | For Office Use Only | | |
|---|--|--|---|--|
| STAFF CONTACT | | PROJECT NO(S). | PRE-APPLICATION NO. | |
| NON-REFUNDABLE FEE(S) | | REFUNDABLE DEPOSIT(S) | TOTAL | |
| Type of Revie | ew (Please check all that a | oply): | | |
| Code Interp Conditional Design Revi Tree Easem Expediated Extension o | Iment (CDC) Iment (CDC) Iretation (MISC) Use (CUP) ew (DR ent Vacation (MISC) Land Division (ELD) f Approval (EXT) | Final Plat (FP) Flood Management Area (FMA) Historic Review (HDR) Lot Line Adjustment (LLA) Minor Partition (MIP) Modification of Approval (MOD) Non-Conforming Lots, Uses & Structures Planned Unit Development (PUD) Street Vacation | Willamette & Tualatin River Greenway (WRG) Zone Change (ZC) | |
| ite Location/A | dross | Vest Linn, 97068 | Assessor's Map No.: Multiple, see "Site Location" | |
| | | Tax Lot(s): Multiple, see "Site Location" | | |
| 31E02AA00800, 31E02 00100, 31E02AA00200, 31E02AA00200, 31E02AA00100, 31E01BB00100 | | | Total Land Area: 34.34 acre | |
| Record a pa Applicant Name Address: City State Zip: | rtition of the Subject | · | Phone: Email: 971-732-0347 duke.pdx@gmail.com | |
| | | | | |
| Owner Name (ro Address: City State Zip: | I Olward vis | · | Phone: Email: 971-732-0347 duke.pdx@gmail.com | |

- Application fees are non-refundable (excluding deposit). Applications with deposits will be billed monthly for time and materials above the initial deposit. *The applicant is financially responsible for all permit costs.
- 2.T he owner/applicant or their representative should attend all public hearings.
- 3. A decision may be reversed on appeal. The decision will become effective once the appeal period has expired.
- 4.S ubmit this form, application narrative, and all supporting documents as a single PDF through the Submit a Land Use Application web page: https://westlinnoregon.gov/planning/submit-land-use-application

The undersigned property owner authorizes the application and grants city staff the **right of entry** onto the property to review the application. Applications with deposits will be billed monthly for time and materials incurred above the initial deposit. The applicant agrees to pay additional billable charges.

Applicant's signature

BOB SCHUCTS, UEURGE 11-20.23

Applicant's signature

Date

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GENERAL INFORMATION

Property Owner and Applicant: Forward Vision Development, LLC &

e3 Design Concepts, LLC & SDG-2, LLC

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SITE INFORMATION

Parcel Number: 31E02AA00800, 31E02AA00100, 31E02AA00200, 31E01BB00100,

31E0200100, 31E0200401, and 31E0200500

Address: 1317 7th Street

Gross Site Area: 34.34 acres (excluding to be vacated right-of-way)
Zoning Designation: Single-Family Residential (R10) & General Industrial (GI)

Existing Use: One single-family home, wetland, and former industrial site.

Surrounding Zoning: The properties to the west and north are zoned a mix of R-5, R-7

and R-10 residential. The properties to the east are zoned GI.

Street Classification: 5th Avenue, 4th Street, 7th Street, and Volpp Street are all classified

as local streets. 5th Street and 4th Avenue are unimproved right-of-

way.

INTRODUCTION

APPLICANT'S REQUEST

The Applicant is proposing a lot consolidation and seeks approval of Partition Application. This narrative describes the proposed development and demonstrates compliance with the relevant approval standards of West Linn's Community Development Code "CDC". Partition Applications are evaluated under the administrative decision process. The Planning Director will render the final decision.

SITE DESCRIPTION/SURROUNDING LAND USE

The subject site is approximately 36 acres in size and is roughly bounded by 4th Street to 7th Street and from 5th Avenue to Volpp Street. The southern boundary of the property has approximately 300 feet of lineal frontage on the Willamette River. The site is divided by the unimproved right-of-way of 5th Street and 4th Avenue, which are both proposed to be vacated under a separate application. A 40-footwide transmission line right-of-way bounds the property to the northwest. The site is identified as tax lots 31E02AA00800, 31E02AA00100, 31E02AA00200, 31E01BB00100, 31E0200100, 31E0200401, and 31E0200500. The property is located within the City of West Linn's Waterfront Urban Renewal District.

PROPOSAL

The Applicant is requesting a three-lot partition to consolidate 22 parcels located across 34.34 acres. The proposed consolidation has been preliminarily approved by the State of Oregon Department of Environmental Quality (DEQ). The site includes a contaminated 15-acre sludge pond, commonly referred to as the 'Publisher's Pond'. As a contaminated site, under the control of DEQ, DEQ will determine what will be allowed on the site. The proposed partition will consolidate the site into three manageable parcels, identified as Outlot A, B, and C (Parcels 1, 2, and 3, respectively – of the proposed Partition) to allow for testing of the site and redevelopment. The partition will initiate the testing phase for the contaminated 15-acre sludge pond and subsequent DEQ Final Clean-up Plan approvals, preservation of sensitive wetland areas and habitat areas, development of the upland areas as approved by DEQ consistent with all governmental standards. There are no proposed changes to the site, existing structures, uses, zoning, existing roadways, or access roads. The site has unimproved right-of-way at the extension of 5th Street from the north and 4th Avenue from the east and the west. These rights-of-way will be vacated under a separate process. The table below provides the proposed lot areas through the consolidation and vacation process.

| | Parcel 1 | Parcel 2 | Parcel 3 |
|--------------------------|------------------|------------------|---------------|
| Lot Area | 486,002.5 sq.ft. | 957,851.6 sq.ft. | 51,953 sq.ft. |
| | 11.16 acres | 21.99 acres | 1.19 acres |
| To be Vacated ROW | | | |
| - 4 th Avenue | 15,093.7 sq.ft. | 19,478.2 sq.ft. | 0 sq.ft. |
| - 5 th Street | 16,197.8 sq.ft. | 0 sq.ft. | 0 sq.ft. |
| Total Lot Area | 517,294 sq.ft. | 977,329.8 sq.ft. | 51,953 sq.ft. |
| | 11.88 acres | 22.44 acres | 1.19 acres |

Outlot A (Parcel 1) will consolidate the area zoned for residential R-10 development into a single 11.88acre parcel to allow for future residential development. Parcel 1 will be developed consistent with DEQ approvals and current zoning regulations under a future land use application. As envisioned, the wetland and associated vegetative corridor will be preserved and homes will be developed north of the wetland in the developable area of the site. The existing unimproved public rights-of-way located in wetland areas would be removed. Outlot B (Parcel 2), as approved by DEQ, will isolate the contaminated 15-acre former Blue Heron Mill pulp mill sludge pond to a 22.44-acre parcel. The approval of this partition will allow the landowner and developer to commence testing on the 15-acre sludge pond and move forward with a final clean-up plan in accordance with DEQ requirements. Outlot C (Parcel 3), as approved by DEQ, will isolate the industrial zoned area along the river south of the Blue Heron Mill pond onto a single lot.

APPLICABLE CRITERIA

The following sections of West Linn's Community Development Code have been extracted as they have been deemed to be applicable to the proposal. Following each **bold** applicable criteria or design standard, the Applicant has provided a series of draft findings. The intent of providing code and detailed responses and findings is to document, with absolute certainty, that the proposed development has satisfied the approval criteria for a Partition application.

DIVISION 2. ZONING PROVISIONS

Chapter 11 RESIDENTIAL, R-10

11.030 PERMITTED USES

The following are uses permitted outright in this zoning district:

- 1. Single-family attached or detached residential unit.
 - a. Duplex residential units.
 - b. Triplex residential units.
 - c. Quadplex residential units.

Finding: The proposed partition will consolidate 22 existing lots into 3 lots for the purpose of conservation and future development. The subject site has both Residential R-10 and GI-General Industrial zoning. Parcel 1 will consolidate the area zoned Residential R-10 into a single 11.88-acre lot for the purpose of future development. Homes are not proposed at this time.

11.070 DIMENSIONAL REQUIREMENTS, USES PERMITTED OUTRIGHT AND USES PERMITTED **UNDER PRESCRIBED CONDITIONS**

Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:

| STANDARD | REQUIREMENT | ADDITIONAL NOTES |
|------------------------|-------------|---|
| Minimum lot size | 10,000 sf | For a single-family attached or detached unit |
| | | |
| Average minimum | 1,500 sf | |
| lot or parcel size for | | |
| a townhouse project | | |
| Minimum lot width | 35 ft | Does not apply to townhouses or cottage clusters |
| at front lot line | | |
| Average minimum | 50 ft | Does not apply to townhouses or cottage clusters |
| lot width | | |
| Minimum yard | | Except as specified in CDC 25.070(C)(1) through (4) |
| dimensions or | | for the Willamette Historic District. |
| minimum building | | Front, rear, and side yard setbacks in a cottage |
| setbacks | | cluster project are 10 ft. There are no additional |
| | | setbacks for individual structures on individual |

| Front yard | 20 ft | lots, but minimum distance between structures shall follow applicable building code requirements. Except for steeply sloped lots where the provisions |
|---|--------|---|
| Interior side yard | 7.5 ft | of CDC 41.010 shall apply Townhouse common walls that are attached may have a 0-ft side setback. |
| Street side yard | 15 ft | |
| Rear yard | 20 ft | |
| Maximum building height | 35 ft | Except for steeply sloped lots in which case the provisions of Chapter 41 CDC shall apply. |
| Maximum lot coverage | 35% | Maximum lot coverage does not apply to cottage clusters. However, the maximum building footprint for a cottage cluster is less than 900 sf per dwelling unit. • This does not include detached garages, carports, or accessory structures. • A developer may deduct up to 200 sf for an attached garage or carport. |
| Minimum accessway width to a lot which does not abut a street or a flag lot | 15 ft | |
| Maximum floor area ratio | 0.45 | Maximum FAR does not apply to cottage clusters. |
| Notes: | | |

Finding: The proposed partition will consolidate 22 existing lots into 3 lots for the purpose of conservation and development. The site has both Residential R-10 and General Industrial GI zoning. Parcel 1 will consolidate the area zoned Residential R-10 into a single 11.88-acre lot for the purpose of future residential development. The proposed lot will exceed the dimensional requirements of this section however the lot will be configured to allow for future development in conformance with the dimensional requirements of the R-10 zone. Homes are not proposed at this time. Parcel 2 will be reconfigured to a 22.44-acre parcel with industrial GI zoning. Parcel 3 will be reconfigured to a 1.19-acre parcel with industrial GI zoning.

The dimensional standards of this section can be met by a future land division.

Chapter 23 GENERAL INDUSTRIAL, GI

23.030 PERMITTED USES

The following are uses permitted outright in this zoning district:

- 1. **Agricultural sales and services**
- 2. **Animal sales and services**
 - Kennels a.
 - Veterinary, small and large animals
- 3. **Automotive and equipment**

^{1.} The sidewall provisions of Chapter 43 CDC shall apply.

- Cleaning a.
- b. Fleet storage
- C. Repairs, light and heavy equipment.
- Sales/rentals, light and heavy equipment. d.
- e. Storage, recreational vehicles and boats.
- 4. Construction sales and services.
- 5. Laundry services.
- 6. **Manufacturing of products:**
 - From raw materials.
 - b. From previously prepared materials.
- 7. Packaging and processing.
- 8. Postal service.
- 9. Public safety facilities.
- 10. **Public support facilities.**
- 11. Research services.
- 12. Scrap operations, recycling collection center.
- 13. Utilities, minor and major.
- 14. Wholesale, storage and distribution:
 - Mini warehouse a.
 - b. Light.
 - C. Heavy
- 15. Transportation facilities (Type I).

Finding: The proposed partition will consolidate the property zoned General Industrial on Parcels 2 and 3. The application is for the creation of three parcels to accommodate the existing industrial use(s). No new industrial uses are proposed at this time.

23.070 DIMENSIONAL REQUIREMENTS, USES PERMITTED OUTRIGHT AND USES PERMITTED **UNDER PRESCRIBED CONDITIONS**

- Α. Except as may be otherwise provided by the provisions of this code, the following are requirements for uses within this zone:
 - 1. The minimum front lot line length or the minimum lot width at the front lot line shall be 50 feet.
 - 2. The average minimum lot width shall be 50 feet.
 - 3. Repealed by Ord. 1622.
 - 4. Where the use abuts a residential district, the setback distance of the residential zone shall apply.
 - 5. The maximum lot coverage shall be 50 percent.
 - 6. The maximum building height shall be two and one-half stories or 35 feet for any structure located within 100 feet of a residential zone and three and onehalf stories or 45 feet for any structure located 100 feet or more from a residential zone.

В. The requirements of subsections (A)(1) through (5) of this section may be modified for developments under the planned unit development provisions of Chapter 24 CDC.

Finding: Parcels 2 and 3 will consolidate the industrial zoned land onto two parcels. The parcels meet all of the minimum lot requirements of this section. Construction of new industrial uses is not proposed at this time; therefore, the lot coverage, zoning, and building height requirements of this section are not applicable to the proposed partition. This standard is met.

Chapter 48 ACCESS, EGRESS AND CIRCULATION 48.025 ACCESS CONTROL

- Purpose. The following access control standards apply to public, industrial, Α. commercial and residential developments including land divisions. Access shall be managed to maintain an adequate level of service and to maintain the functional classification of roadways as required by the West Linn Transportation System Plan.
- В. Access control standards.
 - Traffic impact analysis requirements. A traffic analysis prepared by a 1. qualified professional may be required to determine access, circulation and other transportation requirements. The purpose, applicability and standards of this analysis are found in CDC 85.170(B)(2).
 - 2. In order to comply with the access standards in this chapter, the City or other agency with access permit jurisdiction may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit. Access to and from off-street parking areas shall not permit backing onto a public street.
 - 3. Access options. When vehicle access is required for development (i.e., for offstreet parking, delivery, service, drive-through facilities, etc.), access shall be provided from a public street adjacent to the development lot or parcel. Street accesses shall comply with access spacing standards in subsection (B)(6) of this section, the West Linn Public Works Design Standards, and TSP. As an alternative, the applicant may request alternative access provisions listed below as Option 1 and Option 2, subject to approval by the City **Engineer through a discretionary process.**
 - Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted. For the purpose of this subsection, a mid-block lane is a narrow private drive providing lot frontage and access for rear lot development.
 - Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A public access easement covering the driveway

shall be recorded in this case to ensure access to the closest public street for all users of the private street/drive.

Finding:

The proposed partition will consolidate the site into three manageable parcels to allow for future development, including a residential subdivision. The proposed consolidation will result in fewer lots on the site and will not impact the transportation system or number of trips generated by the proposed lots. A traffic study has not been provided with the partition but will be provided if required by the proposed future development of the site. Vehicle access to each lot will be available through the existing street network. This standard is met.

4. Subdivisions fronting onto an arterial street. New residential land divisions fronting onto an arterial street shall be required to provide alleys or secondary (local or collector) streets for access to individual lots. When alleys or secondary streets cannot be constructed due to topographic or other physical constraints, access may be provided by consolidating driveways for clusters of two or more lots.

Finding: The subject site does not front on an arterial street. The requirements of this section are not applicable.

> 5. Double-frontage lots. When a lot or parcel has frontage onto two or more streets, access shall be provided first from the street with the lowest classification. For example, access shall be provided from a local street before a collector or arterial street.

The proposed partition will not include any double frontage lots. The requirements of this section are not applicable.

- 6. Access spacing.
 - The access spacing standards found in Tables 14 and 15 of the TSP and in CDC 48.060 shall be applicable to all newly established public street intersections, non-traversable medians, and curb cuts. Deviation from the access spacing standards may be granted by the City Engineer as part of a discretionary review if the applicant demonstrates that the deviation will not compromise the safe and efficient operation of the street and highway system.
 - b. Private drives and other accessways are subject to the requirements of CDC 48.060.
- 7. Number of access points. For single-family (detached and attached) housing types, one street access point is permitted per lot or parcel when alley access cannot otherwise be provided; except that two access points may be permitted corner lots (i.e., no more than one access per street), subject to the access spacing standards in CDC 48.060. The number of street access points for multiple family development is subject to the access spacing standards in CDC 48.060. The number of street access points for commercial,

- industrial, and public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in conformance with subsection (C)(8) of this section, in order to maintain the required access spacing, and minimize the number of access points.
- Shared driveways. For residential development, shared driveways may be 8. required in order to meet the access spacing standards in subsection (C)(6) of this section. For non-residential development, the number of driveway and private street intersections with public streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The City shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes in accordance with the following standards:
 - a. When necessary pursuant to this subsection (C)(8), shared driveways and/or frontage streets shall be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent lot or parcel develops. "Developable" means that a lot or parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).
 - b. Access easements (i.e., for the benefit of affected properties) shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.
 - c. Exception. Exceptions to the shared driveway or frontage street requirements may be granted as part of a discretionary review if the City determines that existing development patterns or physical constraints (e.g., topography, lot or parcel configuration, and similar conditions) prevent extending the street/driveway in the future.
- C. Street connectivity and formation of blocks required. In order to promote efficient vehicular and pedestrian circulation throughout the City, land divisions and site developments shall produce complete blocks bounded by a connecting network of public and/or private streets, in accordance with the following standards:
 - 1. Block length and perimeter. The maximum block length shall not exceed 800 feet along a collector, neighborhood route, or local street, or 1,800 feet along an arterial, unless a smaller block length is required pursuant to CDC 85.200(B)(2).

- 2. Street standards. Public and private streets shall also conform to Chapter 92 CDC, Required Improvements, and to any other applicable sections of the West Linn Community Development Code and approved TSP.
- 3. Exception. Exceptions to the above standards may be granted as part of a discretionary review when blocks are divided by one or more pathway(s), in conformance with the provisions of CDC 85.200(C), Pedestrian and bicycle trails, or cases where extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations preclude implementation, not just inconveniences or design challenges.

Finding: New access drives, driveways, and streets are not proposed as part of the partition. Connectivity standards will be addressed as part of the future development of the site under a separate land use application.

48.030 MINIMUM VEHICULAR REQUIREMENTS FOR RESIDENTIAL USES

- A. Direct individual access from single-family dwellings and duplex lots to an arterial street, as designated in the TSP, is prohibited for lots or parcels created after the effective date of this code where an alternate access is either available or is proposed as part of a submitted development application. Evidence of alternate or future access may include temporary cul-de-sacs, dedications or stubouts on adjacent lots or parcels, or tentative street layout plans submitted by an adjacent property owner/developer or by the owner/developer, or previous owner/developer, of the property in question
- B. In the event that alternate access is not available, the applicant may request access onto an arterial street as part of a discretionary review, and approval may be granted by the Planning Director and City Engineer after review of the following criteria:
 - a. Topography.
 - b. Traffic volume to be generated by development (i.e., trips per day).
 - c. Traffic volume presently carried by the street to be accessed.
 - d. Projected traffic volumes.
 - Safety considerations such as line of sight, number of accidents at that location, emergency vehicle access, and ability of vehicles to exit the site without backing into traffic.
 - f. The ability to consolidate access through the use of a joint driveway.
 - g. Additional review and access permits may be required by State or County agencies.

Finding: The subject site does not front on an arterial street. The requirements of this section are not applicable.

- C. Driveway standards. When any portion of any house is less than 150 feet from the adjacent right-of-way, driveway access to the home shall meet the following standards:
 - a. One single-family residence, including residences with an accessory dwelling unit as defined in CDC 02.030, shall provide a driveway with 10 feet of unobstructed horizontal clearance. Dual-track or other driveway designs that

- minimize the total area of impervious driveway surface are encouraged but not required.
- b. Two to four single-family residential homes shall provide a driveway with 14- to 20-foot-wide paved or all-weather surface.
- c. Maximum driveway grade shall be 15 percent. The 15 percent shall be measured along the centerline of the driveway only. Variations require approval of a Class II variance by the Planning Commission pursuant to Chapter 75 CDC. However, in no case shall the last 18 feet in front of the garage exceed 12 percent grade as measured along the centerline of the driveway only. Grades elsewhere along the driveway shall not apply.
- d. The driveway shall include a minimum of 20 feet in length between the garage door and the back of sidewalk, or, if no sidewalk is proposed, to the paved portion of the right-of-way.
- D. When any portion of one or more homes is more than 150 feet from the adjacent rightof-way, the provisions of subsection B of this section shall apply in addition to the following provisions.
 - a. A turnaround shall be provided if required by Tualatin Valley Fire and Rescue (TVF&R) in order to receive a service provider permit.
 - b. Minimum vertical clearance for the driveway shall be 13 feet, six inches.
 - c. A minimum centerline turning radius of 45 feet is required unless waived by TVF&R.
 - d. There shall be sufficient horizontal clearance on either side of the driveway so that the total horizontal clearance is 20 feet.
- E. Access to five or more single-family homes shall be by a street built to City of West Linn standards, consistent with the TSP (Tables 26 through 30 and Exhibits 6 through 9) and the Public Works Design Standards. All streets shall be public. This full street provision may only be waived by variance.
- F. Access and/or service drives for multifamily dwellings shall be fully improved with hard surface pavement:
 - a. With a minimum of 24-foot width when accommodating two-way traffic; or
 - b. With a minimum of 15-foot width when accommodating one-way traffic. Horizontal clearance shall be two and one-half feet wide on either side of the driveway.
 - c. Minimum vertical clearance of 13 feet, six inches.
 - d. Turnaround facilities as required by TVF&R standards for emergency vehicles when the drive is over 150 feet long. Fire Department turnaround areas shall not exceed seven percent grade unless waived by TVF&R.
 - e. The grade shall not exceed 10 percent on average, with a maximum of 15 percent.
 - f. A minimum centerline turning radius of 45 feet for the curve.

Finding: New houses are not proposed as part of the proposed partition. The requirements of this section are not applicable.

- G. Where on-site maneuvering and/or access drives are necessary to accommodate required parking, in no case shall said maneuvering and/or access drives be less than that required in Chapters 46 and 48 CDC.
- H. In order to facilitate through traffic and improve neighborhood connections, the developer shall make all local street connections identified in the Transportation System Plan, Table 17 and Figure 12, that are within the boundaries of the project, which may necessitate construction of a public street through a multifamily site.
- Gated accessways to residential development other than a single-family home are prohibited.

Finding: New access drives are not proposed with the new partition. The requirements of this section are not applicable.

48.040 MINIMUM VEHICLE REQUIREMENTS FOR NON-RESIDENTIAL USES

Access, egress, and circulation system for all non-residential uses shall not be less than the following:

- A. Service drives for non-residential uses shall be fully improved with hard surface pavement:
 - 1. With a minimum of 24-foot width when accommodating two-way traffic; or
 - 2. With a minimum of 15-foot width when accommodating one-way traffic. Horizontal clearance shall be two and one-half feet wide on either side of the driveway.
 - 3. Meet the requirements of CDC 48.030(E)(3) through (6).
 - 4. Pickup window driveways may be 12 feet wide unless the Fire Chief determines additional width is required.
- B. All non-residential uses shall be served by one or more service drives as determined necessary to provide convenient and safe access to the property and designed according to CDC 48.030(A). In no case shall the design of the service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street, other than an alley.
- C. All on-site maneuvering and/or access drives shall be maintained pursuant to CDC
- D. Gated accessways to non-residential uses are prohibited unless required for public safety or security.

Finding: New access drives are not proposed with the new partition. The requirements of this section are not applicable.

48.050 ONE-WAY VEHICULAR ACCESS POINTS

Where a proposed parking facility plan indicates only one-way traffic flow on the site, it shall be accommodated by a specific driveway serving the facility, and the entrance drive shall be situated closest to oncoming traffic, and the exit drive shall be situated farthest from oncoming traffic.

Finding: The proposed partition does not include a parking facility plan. The requirements of this section are not applicable.

48.060 WIDTH AND LOCATION OF CURB CUTS AND ACCESS SEPARATION REQUIREMENTS

- A. Minimum curb cut width shall be 16 feet.
- B. Maximum curb cut width shall be 36 feet, except along Highway 43 in which case the maximum curb cut shall be 40 feet. For emergency service providers, including fire stations, the maximum shall be 50 feet.
- C. No curb cuts shall be allowed any closer to an intersecting street right-of-way line than the following:
 - 1. On an arterial when intersected by another arterial, 150 feet.
 - 2. On an arterial when intersected by a collector, 100 feet.
 - 3. On an arterial when intersected by a local street, 100 feet.
 - 4. On a collector when intersecting an arterial street, 100 feet.
 - 5. On a collector when intersected by another collector or local street, 35 feet.
 - 6. On a local street when intersecting any other street, 35 feet.
- D. There shall be a minimum distance between any two adjacent curb cuts on the same side of a public street, except for one-way entrances and exits, as follows:
 - 1. On an arterial street, 150 feet.
 - 2. On a collector street, 75 feet.
 - 3. Between any two curb cuts on the same lot or parcel on a local street, 30 feet.
- E. A rolled curb may be installed in lieu of curb cuts and access separation requirements.
- F. For non-residential development, curb cuts shall be kept to the minimum, particularly on Highway 43. Consolidation of driveways is preferred. The standard on Highway 43 is one curb cut per business if consolidation of driveways is not possible.
- G. Clear vision areas shall be maintained, pursuant to Chapter 42 CDC, and required line of sight shall be provided at each driveway or accessway, pursuant to the West Linn Public Works Design Standards.

Finding: No new accesses are proposed with this partition. The requirements of this section are not applicable.

48.070 PLANNING DIRECTOR'S AUTHORITY TO RESTRICT ACCESS APPEAL PROVISIONS

- A. For non-residential applications, or residential applications subject to discretionary review, in order to provide for increased traffic movement on congested streets and eliminate turning movement problems, the Planning Director and the City Engineer, or their designee, may restrict the location of driveways on said street and require the location of driveways on adjacent streets upon the finding that the proposed access would:
 - 1. Provide inadequate access for emergency vehicles; or
 - 2. Cause or increase hazardous conditions to exist which would constitute a clear and present danger to the public health safety and general welfare.
- B. A decision by the Planning Director may be appealed to the Planning Commission as provided by CDC.

Finding: The proposed lot consolidation partition will be accessible from existing streets. The consolidation will not increase traffic movements on congested streets, as no uses are proposed at this time. The requirements of this section are not applicable.

48.080 BICYCLE AND PEDESTRIAN CIRCULATION

- A. Within all multifamily developments, each residential dwelling shall be connected to vehicular parking stalls, common open space, and recreation facilities by a pedestrian pathway system having a minimum width of six feet and constructed of concrete, asphalt, brick or masonry pavers, or other hard surface. The pathway material shall be of a different color or composition from the driveway. (Bicycle routes adjacent to the travel lanes do not have to be of different color or composition.)
- B. Bicycle and pedestrian ways within a subdivision shall be constructed according to the provisions in CDC 85.200(C).
- C. Bicycle and pedestrian ways at commercial or industrial sites shall be provided according to the provisions of Chapter 55 CDC, Design Review.

Finding: Multi-family development is not proposed. The proposed partition will not create new streets. The requirements of this section are not applicable.

DIVISION 8. LAND DIVISION

Chapter 85 LAND DIVISIONS - GENERAL PROVISIONS

- A. The purpose of the land division provisions of this code is to implement the Comprehensive Plan; to provide rules and standards governing the approval of plats of subdivisions (four lots or more) and partitions (three lots or fewer); to help direct the development pattern; to lessen congestion in the streets; to increase street safety; to efficiently provide water, sewage, and storm drainage service; and to conserve energy resources.
- B. The purpose is further defined as follows:
 - 1. To improve our sense of neighborhood and community and increase opportunities for socialization.
 - 2. To comply with the State's Transportation Planning Rule (TPR), which seeks to encourage alternate forms of transportation and reduce reliance upon the private automobile and vehicle miles traveled by increasing accessibility within and between subdivisions and neighborhoods. This may be accomplished by designing an easily understood, interconnected pattern of streets, bicycle and foot paths, and accommodation of transit facilities. Cul-de-sacs are to be discouraged unless site conditions dictate otherwise.
 - 3. To reduce pedestrian/vehicle conflicts and create a safe and attractive environment for pedestrians and bicyclists.
 - 4. To protect natural resource areas such as drainageways, Willamette and Tualatin River greenways, creeks, habitat areas, and wooded areas as required

- by other provisions of this code or by the layout of streets and graded areas so as to minimize their disturbance.
- 5. To protect the natural features and topography by minimizing grading and site disturbance and by requiring proper erosion control techniques.
- 6. To arrange the lots and streets so as to minimize nuisance conditions such as glare, noise, and vibration.
- 7. To maximize passive solar heating benefits by orienting the streets on an eastto-west axis which increases exposure to the sun.
- 8. To arrange for the efficient layout of utilities and infrastructure as well as their extension to adjacent properties in a manner consistent with either adopted utility plans or sound engineering practices.
- 9. To arrange lots and roads to create reasonably buildable lots and acceptable driveway grades.
- 10. To encourage the arrangement of increased densities and smaller lots in proximity to needed services and schools as well as transportation corridors so as to reduce vehicle miles traveled and to encourage alternate modes of travel.
- 11. To encourage design experimentation and creativity.
- 12. To arrange for the mitigation of impacts generated by new development. These impacts include increased automobile, foot, and bicycle traffic. These impacts are to be mitigated at the developer's cost, by the provision of streets, sidewalks, bicycle and foot paths, and traffic control devices within, contiguous to, and nearby the development site. Similarly, increased demand on local infrastructure such as water lines, sanitary sewer lines, and storm drainage and detention facilities, should be offset by improving existing facilities or providing new ones.

The proposed partition will consolidate the site into three manageable parcels to allow Finding: for redevelopment. Future development will meet the purpose of this section.

85.050 APPROVAL REQUIRED BEFORE CREATING STREET OR ROAD TO PARTITION LAND

- A. No person shall create a street or road for the purpose of partitioning an area or tract of land without approval by the approval authority under the provisions of CDC 99.060(A) and (B).
- B. No instrument dedicating land to public use shall be accepted for recording unless such instrument bears the approval of the Planning Director or City Engineer, as applicable, under the provisions of CDC 99.060(A) and (B), procedures for decision-making.

Finding: The proposed partition will not create a street or road. The requirements of this section are not applicable.

85.070 ADMINISTRATION AND APPROVAL PROCESS

The application shall be filed by the record owner(s) of the property or by an authorized agent who has a letter of authorization from the property owners of record. The burden of proof will be upon the applicant to demonstrate the validity of the ownership, if challenged.

- B. Action on the application for a tentative plan shall be as provided by Chapter 99 CDC.
 - 1. The Planning Director shall approve, deny, or approve with conditions an application for a partition subject to the provisions of CDC 85.200, 99.060(A), and 99.110. The Director's decision may be appealed to the City Council as provided by CDC 99.240(A).
 - 2. The Planning Commission shall approve, deny, or approve with conditions an application for a tentative plan for a subdivision subject to the provisions of CDC 85.200, 99.060(B), and 99.110. A petition for review of the Planning Commission's decision may be filed as provided by CDC 99.240.
 - 3. Action on the final plat shall be ministerial and taken by the Planning Director and City Engineer, and the Planning Director and City Engineer shall approve a final subdivision or partition plat upon the finding that the approval criteria set forth in CDC 89.050 have been satisfied. The Planning Director's and City Engineer's decision may be appealed to the Planning Commission by the applicant, and the Planning Commission shall make its decision based on testimony from the applicant and the Director.

Finding: The applicant has submitted the required application materials for the proposed partition. This standard is met.

85.110 STAGED DEVELOPMENT

The applicant may elect to develop the site in stages. Staged development shall be subject to the provisions of CDC 99.125. However, notwithstanding the provisions of CDC 99.125, in no case shall the time period for final platting and recording all stages with the County be greater than five years without refiling the application.

Finding: The applicant is not proposing a staged development. The proposed partition will allow for the future development of the site consistent with the requirements of this section, however, the site has several existing constraints which will need to be addressed prior to future development.

85.120 PARTIAL DEVELOPMENT

Where the tentative subdivision or partition plan is limited to only part of the potential development site, and the unsubdivided portion of the property is greater than 300 percent of the minimum lot size allowed in the underlying zoning district, a tentative layout for the streets for the unsubdivided portion shall be required.

Finding: The applicant is not proposing development of only part of the site, rather it is a consolidation of the site into three parcels that will allow for future development consistent with the requirements of each zoning district and on-site mapped resources. This standard is met.

85.140 PRE-APPLICATION CONFERENCE REQUIRED

A. An applicant shall participate in a pre-application conference with staff prior to the submission of a complete tentative plan.

- B. The Planning staff shall explain the applicable plan policies, ordinance provisions, opportunities, and constraints which may be applicable to the site and type of proposed land division.
- C. The City Engineering staff shall explain the public improvement requirements which may be applicable to the site and type of proposed land division, including potential for the applicant to apply for a waiver of street improvements.

Finding: The applicant held a pre-application conference with the City. This standard is met.

85.150 APPLICATION - TENTATIVE PLAN

- A. The applicant shall submit a completed application which shall include:
 - 1. The completed application form(s).
 - 2. Copies of the tentative plan and supplemental drawings shall include one copy at the original scale plus one copy reduced in paper size not greater than 11 inches by 17 inches. The applicant shall also submit one copy of the complete application in a digital format acceptable to the City. When the application submittal is determined to be complete, additional copies may be required as determined by the Community Development Department.
 - 3. A narrative explaining all aspects of land division per CDC 85.200.
- B. The applicant shall pay the requisite fee.

Finding: The applicant has submitted a tentative plan. This standard is met.

85.160 SUBMITTAL REQUIREMENTS FOR TENTATIVE PLAN

- A. A City-wide map shall identify the site. A vicinity map covering one-quarter-mile radius from the development site shall be provided in the application showing existing subdivisions, streets, and unsubdivided land ownerships adjacent to the proposed subdivision and showing how proposed streets and utilities may be extended to connect to existing streets and utilities.
- B. The tentative subdivision plan shall be prepared by a registered civil engineer and/or a licensed land surveyor. A stamp and signature of the engineer or surveyor shall be included on the tentative subdivision plan. A tentative minor partition plan (three lots or less) is only required to be drawn to scale and does not have to be prepared by an engineer or surveyor.
- C. The tentative plan of a subdivision or partition shall be drawn at a scale not smaller than one inch equals 100 feet, or, for areas over 100 acres, one inch equals 200 feet.
- D. The following general information shall be shown on the tentative plan of subdivision or partition:
 - Proposed name of the subdivision and streets; these names shall not duplicate
 nor resemble the name of any other subdivision or street in the City and shall
 be determined by the City Manager or designee. Street names should be easily
 spelled, pronounced, and of limited length. All new street names must, to the
 greatest extent possible, respect and be representative of the surrounding
 geography and existing street names. Street names should consider any

- prominent historical City figures or neighborhood themes that exist. Subdivision street names may not reference names of the builder or developer.
- 2. Date, north arrow, scale of drawing, and graphic bar scale.
- Appropriate identification clearly stating the drawing as a tentative plan. 3.
- 4. Location of the proposed division of land, with a tie to the City coordinate system, where established, and a description sufficient to define its location and boundaries, and a legal description of the tract boundaries.
- Names and addresses of the owner, developer, and engineer or surveyor.
- The following existing conditions shall be shown on the tentative plan of a subdivision Ε. or partition:
 - 1. The location, widths, and names of all existing or platted streets and rights-ofway within or adjacent to the tract (within 50 feet), together with easements and other important features such as section lines, donation land claim corners, section corners, City boundary lines, and monuments.
 - 2. Contour lines related to the U.S. Geological Survey datum or some other established benchmark, or other datum approved by the Planning Director and having the following minimum intervals:
 - a. Two-foot contour intervals for ground slopes less than 20 percent.
 - b. Five-foot contour intervals for ground slopes exceeding 20 percent.
 - 3. The location of any control points that are the basis for the applicant's mapping.
 - 4. The location, by survey, and direction of all watercourses and areas subject to periodic inundation or storm drainageway overflow or flooding, including boundaries of flood hazard areas as established by the U.S. Army Corps of **Engineers or the City zoning ordinance.**
 - 5. Natural features such as rock outcroppings, wetlands tied by survey, wooded areas, heritage trees, and isolated trees (six-inch diameter at five feet above grade) identified by size, type, and location. All significant trees and tree clusters identified by the City Arborist using the criteria of CDC 55.100(B)(2), and all heritage trees, shall be delineated. Trees on non-Type I and II lands shall have their "dripline plus 10 feet" protected area calculated per CDC 55.100(B)(2) and expressed in square feet, and also as a percentage of total non-Type I and II
 - 6. Existing uses of the property, including location of all existing structures. Label all structures to remain on the property after platting.
 - 7. Identify the size and location of existing sewers, water mains, culverts, drain pipes, gas, electric, and other utility lines within the site, and in the adjoining streets and property.
 - 8. Zoning on and adjacent to the tract.
 - 9. Existing uses to remain on the adjoining property and their scaled location.
 - 10. The location of any existing bicycle or pedestrian ways.
 - 11. The location of adjacent transit stops.

- F. The following proposed improvements shall be shown on the tentative plan or supplemental drawings:
 - 1. The street location, proposed name, right-of-way width, and approximate radius of curves of each proposed street and street grades. Proposed street names shall comply with the street naming method explained in CDC 85.200(A)(14).
 - 2. The type, method, and location of any erosion prevention and sediment control measures and/or facilities in accordance with the most current version of Clackamas County's Erosion/Sedimentation Control Plans Technical Guidance Handbook, which are necessary to prevent and control visible or measurable erosion as determined by the following criteria:
 - a. Deposition of soil, sand, dirt, dust, mud, rock, gravel, refuse, or any other organic or inorganic material exceeding one cubic foot in volume in a public right-of-way or public property, or into the City surface water management system either by direct deposit, dropping, discharge, or as a result of erosion; or
 - b. Flow of water over bare soils, turbid or sediment-laden flows, or evidence of on-site erosion such as rivulets or bare soil slopes, where the flow of water is not filtered or captured on the development site; or
 - c. Earth slides, mud flows, land slumping, slope failure, or other earth movement that is likely to leave the property of origin.
 Additional on-site measures may later be required if original measures prove to be inadequate in meeting these attainment standards. For the purposes of this code, "one cubic foot in volume" is defined to include the volume of material, wet or dry, at the time of deposition and includes any water of a discolored or turbid nature.
 - 3. Any proposed infrastructure improvements that address those identified in the City of West Linn Transportation System Plan.
 - 4. Any proposed bicycle or pedestrian paths. The location of proposed transit stops.
 - 5. Any easement(s) location, width, and purpose of the easement(s).
 - The configuration including location and approximate dimensions and area of each lot or parcel, and in the case of a subdivision, the proposed lot and block number.
 - 7. A street tree planting plan and schedule approved by the Parks Department.
 - 8. Any land area to be dedicated to the City or put in common ownership.
 - 9. Phase boundaries shall be shown.

Finding: The applicant has provided a land use plan set consistent with the requirements of this section.

85.170 SUPPLEMENTAL SUBMITTAL REQUIREMENTS FOR TENTATIVE SUBDIVISION OR PARTITION DI AN

The following information shall be submitted to supplement the tentative subdivision plan:

A. General.

1. Narrative stating how the plan meets each of the applicable approval criteria and each subsection below.

Finding: The applicant has provided a narrative stating how the plan meets or can meet the applicable approval criteria. This standard is met.

2. Statement or affidavit of ownership of the tract (County Assessor's map and tax lot number).

Finding: The applicant has provided a statement of ownership. This standard is met.

3. A legal description of the tract.

Finding: The applicant has provided a legal description of the property. This standard is met.

4. If the project is intended to be phased, then such a proposal shall be submitted at this time with drawing and explanation as to when each phase will occur and which lots will be in each phase.

Finding: The development is not proposed to be phased at this time. The proposed partition will consolidate the site into three manageable parcels to allow for testing of the site and redevelopment. At this time, the future development of the site is contingent on the results of testing of the site. Future development will be proposed at the time that the site has been fully evaluated and designed. This standard is not applicable.

5. Where the land to be subdivided or partitioned contains only a part of the contiguous land owned by the developer, the Commission or Planning Director, as applicable, shall require a master plan of the remaining portion illustrating how the remainder of the property may suitably be subdivided.

Finding: The land proposed to be partitioned is under contiguous ownership by the developer. This standard is met.

6. Where the proposed subdivision site includes hillsides, as defined in CDC 02.030 Type I and II lands, or any lands identified as a hazard site in the West Linn Comprehensive Inventory Plan Report, the requirements for erosion control as described in CDC 85.160(F)(2) shall be addressed in a narrative.

Finding: The proposed partition does not include hillsides. The requirements of this section are not applicable.

7. Table and calculations showing the allowable number of lots under the zone and how many lots are proposed.

Finding: The table below provides the calculations showing the number of allowable lots under the zoning of each parcel and how many lots are proposed as part of this partition. The calculation for the allowable number of lots does not account for undevelopable areas of each lot.

| | Parcel 1 | Parcel 2 | Parcel 3 |
|------|----------|----------|----------|
| Zone | R-10 | Gl | Gl |

| Lot Area | 486,002.5 sq.ft. | 957,851.6 sq.ft. | 51,953 sq.ft. |
|--------------------------|------------------|------------------|---------------|
| Number of Allowable Lots | 47 | N/A | N/A |
| Proposed Number of Lots | 1 | 1 | 1 |

8. Map and table showing square footage of site comprising slopes by various classifications as identified in CDC 55.110(B)(3).

Finding: The proposed lot consolidation partition will not include development of the lots at this time. Development of the site in the future will include the identification of areas of the site comprising slopes by the classifications found in CDC 55.110(B)(3).

B. Transportation.

Centerline profiles with extensions shall be provided beyond the limits of the
proposed subdivision to the point where grades meet, showing the finished grade
of streets and the nature and extent of street construction. Where street
connections are not proposed within or beyond the limits of the proposed
subdivision on blocks exceeding 330 feet, or for cul-de-sacs, the tentative plat or
partition shall indicate the location of easements that provide connectivity for
bicycle and pedestrian use to accessible public rights-of-way.

Finding: The proposed partition will not create new streets. The requirements of this section are not applicable to the proposed development.

2. Traffic impact analysis (TIA).

Finding: The proposed partition will consolidate the site into three manageable parcels to allow for future development, including a residential subdivision. The proposed consolidation will result in fewer lots on the site and will not impact the transportation system or number of trips generated by the proposed lots. A traffic study has not been provided with the partition but will be provided if required by the proposed future development of the site. This standard is met.

C. Grading.

- 1. If areas are to be graded, a plan showing the location of cuts, fill, and retaining walls, and information on the character of soils, shall be provided. The grading plan shall show proposed and existing contours at intervals per CDC 85.160(E)(2).
- 2. The grading plan shall demonstrate that the proposed grading to accommodate roadway standards and create appropriate building sites is the minimum amount necessary.
- 3. The grading plan must identify proposed building sites and include tables and maps identifying acreage, location and type of development constraints due to site characteristics such as slope, drainage and geologic hazards. For Type I, II, and III lands (refer to definitions in Chapter 02 CDC), the applicant must provide a geologic report, with text, figures and attachments as needed to meet the industry standard of practice, prepared by a certified engineering geologist and/or a geotechnical professional engineer, that includes:

- a. Site characteristics, geologic descriptions and a summary of the site investigation conducted;
- b. Assessment of engineering geological conditions and factors;
- c. Review of the City of West Linn's Natural Hazard Mitigation Plan and applicability to the site; and
- d. Conclusions and recommendations focused on geologic constraints for the proposed land use or development activity, limitations and potential risks of development, recommendations for mitigation approaches and additional work needed at future development stages including further testing and monitoring.

Finding: The proposed partition will not include any grading. The requirements of this section are not applicable.

D. Water.

- A plan for domestic potable water supply lines and related water service facilities, such as reservoirs, etc., shall be prepared by a licensed engineer consistent with the adopted Comprehensive Water System Master Plan and most recently adopted updates and amendments.
- 2. Location and sizing of the water lines within the development and off-site extensions. Show on-site water line extensions in street stubouts to the edge of the site, or as needed to complete a loop in the system.
- 3. Adequate looping system of water lines to enhance water quality.
- 4. For all non-single-family developments, calculate fire flow demand of the site and demonstrate to the Fire Chief. Demonstrate to the City Engineer how the system can meet the demand.

Finding: Development is not proposed on the site as part of this lot consolidation partition. No new water service is requested at this time. New parcels will be provided with water service from either the existing 6" water on the perimeter of the site, or new service to be shown on the Preliminary Utility Plan, with subsequent submittals, per city standards.

E. Sewer.

- A plan prepared by a licensed engineer shall show how the proposal is consistent
 with the Sanitary Sewer Master Plan, Public Works Design Standards, and
 subsequent updates and amendments. Agreement with that plan must
 demonstrate how the sanitary sewer proposal will be accomplished and how it is
 efficient. The sewer system must be in the correct zone.
- Sanitary sewer information will include plan view of the sanitary sewer lines, including manhole locations and depths, and show how each lot or parcel would be sewered.

Finding: Development is not proposed on the site as part of this lot consolidation partition. No new sewer service is requested at this time. New parcels will be provided with sewer service from either the existing sewer line adjacent to the site, or new service to be shown on the Preliminary Utility Plan, with subsequent submittals, per city standards.

F. Storm. A storm detention and treatment plan and narrative compliant with CDC 92.010(E) must be submitted for storm drainage and flood control including profiles of proposed drainageways with reference to the most recently adopted Storm Drainage Master Plan.

Development is not proposed on the site at this time; therefore, stormwater detention and treatment are not proposed. Future development will address the stormwater detention and treatment needs with subsequent submittals, per city standards.

G. Service provider permit. A Tualatin Valley Fire and Rescue service provider permit shall be provided.

Finding: Development is not proposed at this time; therefore, fire service is not necessary until future development is proposed.

85.180 REDIVISION PLAN REQUIREMENT

A redivision plan shall be required for a partition or subdivision, where the property could be developed at a higher density, under existing/proposed zoning, if all services were available and adequate to serve the use.

- The redivision plan is a sketch plan. A land survey and an engineering drawing are not required except where there are unique soil, topographic, or geologic conditions. Under the provisions of CDC 99.035, administrative procedures, the Planning Director may require additional information.
- B. The applicant shall submit a topographic map based on available information and a subdivision layout in accordance with standards set forth in this chapter and the zoning district in which the property is located.
- A building permit issued shall be for a specified future lot or parcel and the building shall meet the setback provisions of the zoning district in which the property is located.
- D. The redivision plan is considered a guide. Its purpose is to assure the efficient use of land and orderly growth. At such time as the property owner applies to redivide the land, a different proposal may be submitted for approval provided it meets all of the requirements. The redivision plan is not binding on the applicant or the City at the time a formal application is submitted under this chapter.
- E. The Planning Director shall approve the redivision plan in the manner set forth in CDC 99.060(A)(2), except that no notice shall be given. The applicant may appeal the Planning Director's decision as provided by CDC 99.240(A).
- The Planning Director's decision shall be based on the following findings: F.
 - 1. The redivision plan complies with the applicable requirements of this chapter and zoning district in which the property is located.
 - 2. There are adequate water and sewage systems available for the proposed use.

Finding: The applicant has provided a future development plan for the site. This standard is met.

85.200 APPROVAL CRITERIA

No tentative subdivision or partition plan shall be approved unless adequate public facilities will be available to provide service to the partition or subdivision area prior to final plat approval and the Planning Commission or Planning Director, as applicable, finds that the following standards have been satisfied, or can be satisfied by conditions of approval:

A. Streets.

- Purpose and guiding principles. The purpose of these standards is to promote 1. safe, efficient, and convenient options for walking, bicycling, and driving while accommodating access to individual properties, as needed, and access to transit. The following principles shall guide land division applications:
 - The location, width and grade of streets shall be considered in their relation to existing and planned streets, to the generalized or reasonable layout of streets on adjacent undeveloped lots or parcels, to topographical conditions, to public convenience and safety, to accommodate various types of transportation (automobile, bus, pedestrian, bicycle), and to the proposed use of land to be served by the streets.
 - b. The functional class of a street aids in defining the primary function and associated design standards for the facility. The hierarchy of the facilities within the network in regard to the type of traffic served (through or local trips), balance of function (providing access and/or capacity), and the level of use (generally measured in vehicles per day) are generally dictated by the functional class.
 - The street system shall assure an adequate traffic or circulation system with intersection angles, grades, tangents, and curves appropriate for the traffic to be carried.
 - Streets should provide for the continuation, or the appropriate projection, of existing principal streets in surrounding areas and should not impede or adversely affect development of adjoining lands or access thereto.
 - To accomplish this, the emphasis should be upon a connected continuous pattern of local, collector, and arterial streets rather than discontinuous curvilinear streets and cul-de-sacs. Deviation from this pattern of connected streets should only be permitted in cases of extreme topographical challenges including excessive slopes (35 percent plus), hazard areas, steep drainageways, wetlands, etc. In such cases, deviations may be allowed but the connected continuous pattern must be reestablished once the topographic challenge is passed.
- 2. In situations where the level-of-service or volume-to-capacity performance standard for an affected City or State roadway is currently failing or projected to fail to meet the standard at a date determined within a traffic impact analysis, and an improvement project is not programmed, the development shall avoid further degradation of the affected transportation facility. Mitigation must be provided to bring the facility performance standard to existing conditions at the time of occupancy.
- Tree protection. Streets shall be laid out to avoid and protect significant trees and 3. significant tree clusters, but not to the extent that it would compromise

connectivity requirements per this subsection A, or bring the achievable density below 70 percent of the maximum density for the developable net area. The developable net area is calculated by taking the total site acreage and deducting Type I and II lands; then up to 20 percent of the remaining land may be excluded as necessary for the purpose of protecting significant trees and tree clusters as provided in CDC 55.100(B)(2) or 55.105(B)(2), as applicable.

- 4. Street connections. The developer shall make all local street connections identified in the Transportation System Plan, Table 17 and Figure 12, that are within the boundaries of the project.
- 5. Street improvements.
 - a. Streets that are internal to the land division site are the responsibility of the developer. All streets bordering the development site are to be developed by the developer with, typically, half-street improvements to the City of West Linn Public Works Design Standards. Additional travel lanes may be required to be consistent with adjacent road widths or to be consistent with the adopted Transportation System Plan (TSP), Tables 26 through 30 and Exhibits 6 through 9.
 - b. Waiver of required street improvements and in-lieu fee. An applicant may submit a written request for a waiver of abutting street improvements if the improvement would be prohibited by the TSP. When a requested waiver is granted, the applicant shall pay an in-lieu fee equal to the estimated cost, accepted by the City Engineer, of the otherwise required street improvements. As a basis for this determination, the City Engineer shall consider the cost of similar improvements in recent development projects and may require up to three estimates from the applicant. The amount of the fee shall be established prior to the Planning Commission's decision on the associated application. The in-lieu fee shall be used for in-kind or related improvements.
 - c. Right-of-way widths shall depend upon which classification of street is proposed. The right-of-way widths are established in the adopted TSP, Exhibits 6 through 9.
 - d. Public Works Design Standards. Street design shall conform to the standards of the applicable roadway authority; for City streets that is the West Linn Public Works Design Standards manual. Where a conflict occurs between this code and the Public Works Design Standards manual, the provisions of this code shall govern.
- 6. Street widths. Street widths shall depend upon the classification of street proposed. The classifications and required cross sections are established in the adopted TSP, Tables 26 through 30 and Exhibits 6 through 9.
 - Table 85-1 identifies street width standards (curb to curb) in feet for various street classifications. The standard width shall be required unless the applicant or their

- engineer can demonstrate that site conditions, topography, or site design require the reduced minimum width through a discretionary review.
- 7. The decision-making body shall consider the City Engineer's recommendations on the desired right-of-way width, pavement width and geometry for streets within or adjacent to the subdivision. To approve a street design less than the width in Table 85-1, the applicant shall demonstrate with proper documentation that one of the following applies:
 - a. The street design will help protect a water resource area and complies with the submittal requirements and approval standards found in Chapter 32 CDC.
 - The street design will help protect a flood management area and complies with the submittal requirements and approval standards found in Chapter 27 CDC.
 - c. The street design will help protect the Willamette River Greenway, Tualatin River Greenway, or a habitat conservation area and complies with the submittal requirements and approval standards found in Chapter 28 CDC.
 - d. The street design will help protect steep slopes and complies with the submittal requirements found in CDC 85.170(C) and approval standards found in subsection E of this section.
 - e. The street design will help protect a significant tree cluster and complies with subsection (J)(9) of this section.
- 8. Reserve strips. Reserve strips or street plugs controlling the access to streets are not permitted unless owned by the City.
- 9. Alignment. All streets other than local streets or cul-de-sacs shall be in alignment with existing streets by continuations of the centerlines thereof. The staggering of street alignments resulting in "T" intersections shall leave a minimum distance of 200 feet between the centerlines of streets having approximately the same direction and otherwise shall not be less than 100 feet. Exceptions to these requirements shall only be approved if the applicant demonstrates that compliance is not practical through a discretionary review.
- 10. Future extension of streets. The street system of a proposed development shall be designed to connect to existing, proposed, and planned streets adjacent to the development. Wherever a proposed development abuts unplatted land or a future development phase of an existing development, street stubs shall be provided to allow access to future abutting subdivisions and to logically extend the street system into the surrounding area. Where the stubbed street is over 100 feet long, street ends shall contain temporary turnarounds built to Oregon Fire Code standards and shall be designed to facilitate future extension in terms of grading, width, and temporary barricades.
- 11. Intersection angles.
 - a. Except as specified in subsection (A)(11)(c) of this section, street intersections shall be located and designed as follows:

- 1) Streets shall be located and designed to intersect at, or close to, right angles (i.e., 90 degrees or within three degrees of 90 degrees).
- 2) All legs of an intersection shall meet the above standard for at least 100 feet back from the point of intersection.
- 3) No more than two streets shall intersect, i.e., creating a four-legged intersection, at any one point.
- 4) Street jogs and intersection offsets of less than 125 feet are not permitted.

b. Curb radii.

- 1) Intersections which are not at right angles shall have minimum corner radii of 15 feet along right-of-way lines which form acute angles.
- 2) Right-of-way lines at intersections with arterial streets shall have minimum curb radii of not less than 35 feet.
- 3) Other street intersections shall have curb radii of not less than 25 feet.
- 4) All radii shall maintain a uniform width between the roadway and the right-of-way lines.
- c. Through a discretionary review, applicants may request the City consider modifications of the standards in subsections (A)(11)(a) and (b) of this section; provided, that the following are met:
 - Where an intersection is constrained by topography, the applicant may propose lesser intersection angles. However, intersection angles of less than 60 degrees are not allowed unless a special intersection design is requested and approved.
 - 2) The intersection of more than two streets at any one point or a street jogs or intersection offset of less than 125 feet is necessary because no alternative design exists.
- 12. Additional right-of-way for existing streets. Wherever existing street rights-of-way adjacent to or within a tract are of inadequate widths based upon the standards of this chapter, additional right-of-way shall be dedicated at the time of subdivision or partition.

13. Cul-de-sacs.

- a. New cul-de-sacs and other closed-end streets (not including stub streets intended to be connected) are not allowed unless the applicant demonstrates as part of a discretionary review that one or more of the following criteria are met:
 - Due to existing slopes on the site that exceed 25 percent, it is not feasible to construct a street connection that does not exceed the maximum grade allowed by the Public Works Design Standards; or
 - 2) It is not feasible to construct a street connection using the constrained cross-section design, as provided in Exhibits 6 through 9 of the TSP, that avoids one or more of the following:
 - (A) A natural resource protected by Chapter 32 CDC;

- (B) Existing transportation or utility facilities, buildings, or other existing development on adjacent land; or
- (C) Existing easements or leases.
- b. New cul-de-sacs and other closed-end streets, consistent with subsection (A)(13)(a) of this section, shall not exceed 200 feet in length or serve more than 25 dwelling units and shall comply with all adopted Tualatin Valley Fire and Rescue (TVFR) access standards.
- c. Applicants for a proposed subdivision, partition or a multifamily, commercial or industrial development accessed by an existing cul-de-sac/closed-end street shall demonstrate that the proposal is consistent with all applicable traffic standards and TVFR access standards.
- d. All cul-de-sacs and other closed-end streets shall include direct pedestrian and bicycle accessways from the terminus of the street to an adjacent street or pedestrian and bicycle accessways unless the applicant demonstrates that such connections are precluded by a physical constraint consistent with subsection (A)(13)(a) of this section.
- e. All cul-de-sacs/closed-end streets shall terminate with a turnaround built to one of the following specifications (measurements are for the traveled way and do not include planter strips or sidewalks).
- 14. Street names. No street names shall be used which will duplicate or be confused with the names of existing streets within the City. Street names that involve difficult or unusual spellings are discouraged. Street names shall be subject to the approval of the Planning Commission or Planning Director, as applicable. Continuations of existing streets shall have the name of the existing street. Streets, drives, avenues, ways, boulevards, and lanes shall describe through streets. Place and court shall describe cul-de-sacs. Crescent, terrace, and circle shall describe loop or arcing roads.
- 15. Grades and curves. Grades and horizontal/vertical curves shall meet the West Linn Public Works Design Standards.
- 16. Access to local streets.
 - a. Except as provided in subsection (A)(16)(c) of this section, intersection of a local residential street with an arterial street shall be prohibited by the decision-making authority if one or more alternatives exist for providing interconnection of proposed local residential streets with other local streets.
 - b. Where a residential subdivision or partition abuts or contains an existing or proposed major arterial street, the design shall incorporate at least three of the following measures to protect residential properties from incompatible land uses, and to ensure separation of through traffic and local traffic: marginal access streets, reverse-frontage lots with lot depth of at least 100 feet, visual barriers, noise barriers, berms, no-access reservations along side and rear property lines, and/or other similar measures proposed by the applicant.

- c. At the applicant's request, the City may consider design alternatives to subsections (A)(16)(a) and (b) of this section through a discretionary review.
- 17. Alleys. Alleys shall be provided in commercial and industrial districts unless other permanent provisions for access to off-street parking and loading facilities are made as approved by the decision-making authority. While alley intersections and sharp changes in alignment should be avoided, the corners of necessary alley intersections shall have radii of not less than 10 feet. Alleys may be provided in residential subdivisions or multifamily projects. The decision to locate alleys shall consider the relationship and impact of the alley to adjacent land uses. In determining whether it is appropriate to require alleys in a subdivision or partition, the following factors and design criteria should be considered:
 - a. The alley shall be self-contained within the subdivision. The alley shall not abut undeveloped lots or parcels which are not part of the project proposal. The alley will not stub out to abutting undeveloped parcels which are not part of the project proposal.
 - b. The alley will be designed to allow unobstructed and easy surveillance by residents and police.
 - c. The alley should be illuminated. Lighting shall meet the West Linn Public Works Design Standards.
 - d. The alley should be a semi-private space where strangers are tacitly discouraged.
 - Speed bumps may be installed in sufficient number to provide a safer environment for children at play and to discourage through or speeding traffic.
 - f. Alleys should be a minimum of 14 feet wide, paved with no curbs.
- 18. Sidewalks. Sidewalks shall be installed per CDC 92.010(H), Sidewalks. The residential sidewalk width is six feet plus planter strip as specified below. Sidewalks in commercial zones shall be constructed per subsection (A)(6) of this section. See also subsection C of this section. If part of a discretionary review, sidewalk width may be reduced with City Engineer approval to the minimum amount (e.g., four feet wide) necessary to respond to site constraints such as grades, mature trees, rock outcroppings, etc., or to match existing sidewalks or right-of-way limitations.
- 19. Planter strip. The planter strip is between the curb and sidewalk providing space for a grassed or landscaped area and street trees. The planter strip shall be at least six feet wide to accommodate a fully matured tree without the boughs interfering with pedestrians on the sidewalk or vehicles along the curbline. If part of a discretionary review, planter strip width may be reduced or eliminated, with City Engineer approval, when it cannot be corrected by site plan, to the minimum amount necessary to respond to site constraints such as grades, mature trees, rock outcroppings, etc., or in response to right-of-way limitations.
- 20. Streets and roads shall be dedicated without any reservations or restrictions.

- 21. All lots in a subdivision shall have access to a public street. Lots created by partition may have access to a public street via an access easement pursuant to the standards and limitations set forth for such accessways in Chapter 48 CDC.
- 22. Gated streets. Gated streets are prohibited in all residential areas on both public and private streets. A driveway to an individual home may be gated.
- 23. Entryway treatments and street isle design. When the applicant proposes to construct certain walls, planters, and other architectural entryway treatments within a subdivision, the following standards shall apply:
 - a. All entryway treatments except islands shall be located on private property and not in the public right-of-way.
 - b. Planter islands may be allowed provided there is no structure (i.e., brick, signs, etc.) above the curbline, except for landscaping. Landscaped islands shall be set back a minimum of 24 feet from the curbline of the street to which they are perpendicular.
 - c. All islands shall be in public ownership. The minimum aisle width between the curb and center island curbs shall be 14 feet. Additional width may be required as determined by the City Engineer.
 - d. Brick or special material treatments are acceptable at intersections with the understanding that the City will not maintain these sections except with asphalt overlay, and that they must meet the Americans with Disabilities Act (ADA) standards. They shall be laid out to tie into existing sidewalks at intersections.
 - Maintenance for any common areas and entryway treatments (including islands) shall be guaranteed through homeowners association agreements, CC&Rs, etc.
 - f. Under Chapter 52 CDC, subdivision monument signs shall not exceed 32 square feet in area.
- 24. Based upon the determination of the City Manager or the Manager's designee, the applicant shall construct or cause to be constructed, or contribute a proportionate share of the costs, for all necessary off-site improvements identified by the traffic impact analysis commissioned to address CDC 85.170(B)(2) that are required to mitigate impacts from the proposed subdivision. The proportionate share of the costs shall be determined by the City Manager or Manager's designee, who shall assume that the proposed subdivision provides improvements in rough proportion to identified impacts of the subdivision. Off-site transportation improvements will include bicycle and pedestrian improvements as identified in the adopted City of West Linn TSP, Figures 6, 7 and 10 and Tables 4 and 6.

Finding: No new streets are proposed as part of the proposed lot consolidation. Future development of the site will address adjacent street improvements. This standard is met.

B. Blocks and lots.

Purpose. The length, width, and shape of blocks shall be designed with due regard
for the provision of adequate building sites for the use contemplated;
consideration of the need for traffic safety, convenience, access, circulation, and
control; and recognition of limitations and opportunities of topography and solar
access.

2. Sizes.

- a. Except as required under subsection (B)(2)(c) of this section, block lengths shall not exceed 800 feet, except for blocks adjacent to arterial streets or unless topographical conditions or the layout of adjacent streets justifies a variation as part of a discretionary review.
- Designs of proposed intersections shall demonstrate sight distances consistent with the West Linn Public Works Design Standards.
- c. Subdivisions of five or more acres that involve construction of a new street shall have block lengths of no more than 530 feet, unless an exception is granted as part of a discretionary review, based on one or more of the following:
 - 1) Due to existing slopes on the site that exceed 25 percent, it is not feasible to meet the block length standard without exceeding the maximum street grade allowed by the Public Works Design Standards.
 - 2) Physical conditions preclude a block length 530 feet or less. Such constraints may include, but are not limited to, the existence of natural resource areas under protection by requirements of Chapter 32 CDC or Titles 3 and 13 of the UGMFP or by State or Federal law; rail lines; or freeways.
 - 3) Buildings, leases, easements or covenants that existed prior to May 1, 1995, or other pre-existing development on adjacent lands, including previously subdivided but vacant lots or parcels, physically preclude a block length 530 feet or less, considering the potential for redevelopment.
 - 4) An existing public street or streets terminating at the boundary of the development site have a block length exceeding 530 feet, or are situated such that the extension of the street(s) into the development site would create a block length exceeding 530 feet. In such cases, the block length shall be as close to 530 feet as practicable.
- d. If block lengths are greater than 530 feet, accessways on public easements or right-of-way for pedestrians and cyclists shall be provided not more than 330 feet apart.
- e. If streets must cross water features protected pursuant to UGMFP Title 3, a crossing must be provided every 800 to 1,200 feet unless habitat quality or the length of the crossing prevents a full street connection.

Finding: No new streets are proposed. The development pattern in this area is already established and/or inhibited by wetlands and sensitive habitat areas. No public streets

in the wetland areas are proposed and no changes to the existing block pattern are proposed. Block standards will be addressed as part of the future development of the site.

- 3. Lot size and shape. Lot or parcel sizes and dimensions shall conform to the minimum standards of the CDC, unless as allowed by planned unit development (PUD). No lot or parcel shall be dimensioned to contain part of an existing or proposed street. All lots or parcels shall be buildable. "Buildable" describes lots that are free of constraints such as wetlands, drainageways, etc., that would make home construction impossible.
 - a. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street parking and service facilities required by the type of use proposed.

Finding: The proposed partition will consolidate the site into three lots that will allow for testing and future redevelopment of the site. All parcels are impacted by wetlands and drainageways which have been delineated. Parcel 1 is able to be developed in the future consistent with the zoning standards. This standard is met.

4. Access. Access to subdivisions, partitions, and lots shall conform to the provisions of Chapter 48 CDC, Access, Egress and Circulation.

Finding: All of the proposed lots are accessible from the existing streets. This standard is met.

5. Through lots and parcels. Through lots and parcels have frontage on a street at the front and rear property lines. Through lots and parcels shall be avoided except where they are necessary to avoid residential lots with frontage on arterial streets. Additional exceptions may be granted as part of a discretionary review if an applicant proposes through lots to provide separation from adjacent non-residential activities, or to overcome specific disadvantages of topography and orientation. As part of the discretionary review, a planting screen or impact mitigation easement at least 10 feet wide, and across which there shall be no right of access, may be required along the line of building sites abutting such a traffic artery or other incompatible use.

Finding: Double-frontage parcels are not proposed. This standard is met.

6. Lot and parcel side lines. The side lot lines of lots and parcels shall run at right angles to the street upon which they face, except that on curved streets they shall be radial to the curve.

Finding: The side lot lines of the proposed parcels run at right angles to the street upon which they face. This standard is met.

7. Flag lots. Flag lots are permitted only where it can be shown that there is adequate lot area to divide a property into two or more lots but there is not enough street frontage to meet the standard minimum requirement and where

creation of a street is not necessary to meet connectivity standards. A single flag lot shall have a minimum street frontage of 15 feet for its accessway. Where two to four flag lots share a common accessway, the minimum street frontage and accessway shall be eight feet in width per lot. Common accessways shall have mutual maintenance agreements and reciprocal access and utility easements. The following dimensional requirements shall apply to flag lots:

Finding: Flag lots are not proposed. Setbacks will continue to comply with zoning requirements, as discussed above under R-10 standards. This standard is met.

- 8. Large lots or parcels. In dividing tracts into large lots or parcels that are more than double the minimum area designated by the zoning district:
 - a. Those lots must be arranged so as to allow further subdivision, and must contain such easements and site restrictions as will provide for extension and opening of future streets where it would be necessary to serve potential lots; or
 - Alternately, in order to prevent further subdivision or partition of oversized and constrained lots or parcels, restrictions may be imposed on the subdivision or partition plat.

Finding: This is a large lot parcel, and the 3-lot partition is intended to allow for subsequent subdivision that will conform with this requirement and zoning code. This standard is met.

C. Pedestrian and bicycle trails.

- 1. When pedestrian and bicycle accessways are required pursuant to subsection (B)(2)(d) of this section, trails or multiuse pathways shall be installed, consistent and compatible with Federal ADA requirements and with the Oregon Transportation Planning Rule. Trails shall also accommodate bicycle or pedestrian traffic between neighborhoods and activity areas such as schools, libraries, parks, or commercial districts. Trails shall also be required where designated by the Parks Master Plan.
- 2. The all-weather surface (asphalt, etc.) trail shall be eight feet wide at minimum for bicycle use and six feet wide at minimum for pedestrian use. Trails within 10 feet of a wetland or natural drainageway shall not have an all-weather surface, but shall have a soft surface as approved by the Parks Director. These trails shall be contained within a corridor dedicated to the City that has a minimum width of 20 feet. Sharp curves, twists, and blind corners on the trail shall be avoided. Deviations from the corridor and trail width are permitted only through a discretionary review where topographic and ownership constraints require it.
- 3. Defensible space shall also be enhanced by the provision of a three- to four-foothigh matte black chain link fence or acceptable alternative along the edge of the corridor. The fence shall help delineate the public and private spaces.
- 4. The bicycle or pedestrian trails that traverse multifamily and commercial sites shall follow the standards in subsection (C)(2) of this section, but do not need to

- be defined by a fence unless required by the decision-making authority as part of a discretionary review.
- 5. Except for trails within 10 feet of a wetland or natural drainageway, soft surface or gravel trails may only be used in place of a paved, all-weather surface where it can be shown to the Planning Director as part of a discretionary review that the principal users of the path will be recreational, non-destination-oriented foot traffic, and that alternate paved routes are nearby and accessible.
- 6. The trail grade shall not exceed 12 percent, and may increase to no more than 15 percent for a maximum of 50 feet, with a resting interval of no more than 12 percent for a minimum of five feet. In any location where topography requires steeper trail grades than permitted by this section, the trail shall incorporate a short stair section to traverse the area of steep grades.

Finding: There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only. While presently not applicable, it is the owner/developer intent to work on a cooperative basis on a comprehensive, integrated multi-modal system if a multi-modal, or pedestrian or bicycle trails are planned in this area. This standard is met.

D. Transit facilities.

- 1. The applicant shall consult with Tri-Met and the City Engineer to determine the appropriate location of transit stops, bus pullouts, future bus routes, etc., contiguous to or within the development site. If transit service is planned to be provided within the next two years, then facilities such as pullouts shall be constructed per Tri-Met standards at the time of development. More elaborate facilities, like shelters, need only be built when service is existing. Additional rights-of-way may be required of developers to accommodate buses.
- 2. The applicant shall make all transit-related improvements in the right-of-way or in easements abutting the development site, consistent with ODOT standards and in coordination with Tri-Met.
- Transit stops shall be served by striped and signed pedestrian crossings of the street within 150 feet of the transit stop. Illumination of the transit stop and crossing is required to enhance defensible space and safety. ODOT approval may be required.
- 4. Transit stops shall include a shelter structure bench plus eight feet of sidewalk to accommodate transit users, non-transit-related pedestrian use, and wheelchair users, unless a reduction is approved by Tri-Met. Tri-Met must approve the final configuration.

Finding: There is no Tri-Met bus service in this area. Transit facilities are not proposed.

- E. Grading. Grading of building sites shall conform to the following standards unless physical conditions demonstrate the propriety of other standards:
 - 1. All cuts and fills shall comply with the excavation and grading provisions of the Building Code and the following:

- a. Cut slopes shall not exceed one and one-half feet horizontally to one foot vertically (i.e., 67 percent grade).
- Fill slopes shall not exceed two feet horizontally to one foot vertically (i.e., 50 percent grade). Please see the following illustration.
- 2. If areas are to be graded, compliance with CDC 85.170(C) is required.
- 3. The proposed grading shall be the minimum grading necessary to meet roadway standards, pursuant to the West Linn Public Works Design Standards, and to create buildable sites, considering maximum allowed driveway grades.
- 4. Type I lands shall require a geologic report submitted by a certified engineering geologist, and Type I and Type II lands shall require a geologic hazard report stamped by a certified geotechnical professional engineer, consistent with the submittal requirements in CDC 85.170(C)(3).

Finding: There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only. No grading activities on the building sites are planned at this time. This standard is met.

5. The review authority may impose conditions, including limits on type or intensity of land use, necessary to mitigate known risks of landslides or property damage, based on the conclusions and recommendations of the geologic report.

Finding: Actual grades are unconfirmed. The actual grades will be confirmed with a topographic survey prior to submission of a future application and Preliminary Plat for Proposed Parcel 1. Type I land is defined as slopes greater than 35% grade over 50% or more of a site. If slopes over 35% grade are confirmed, over 50% of the site then a geologic hazard report will be submitted by an engineering geologist for Type 1 and Type II lands. There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only.

- 6. On land with slopes in excess of 12 percent, cuts and fills shall be regulated as follows:
 - a. Toes of cuts and fills shall be set back from the boundaries of separate private ownerships at least three feet, plus one-fifth of the vertical height of the cut or fill. Where an exception is required from that requirement, slope easements shall be provided.
 - b. Cuts shall not remove the toe of any slope where a severe landslide or erosion hazard exists.
 - c. Any structural fill shall be designed by a registered engineer in a manner consistent with the intent of this code and standard engineering practices, and certified by that engineer that the fill was constructed as designed.
 - d. Retaining walls shall be constructed pursuant to Section 2308(b) of the Oregon State Structural Specialty Code.

Finding: The proposed partition will not include development. Cuts and fills are not proposed.

- 7. Land over 50 percent slope shall be developed only where the applicant cannot meet the standards of Chapter 24 CDC. In such cases, the development will provide that:
 - a. At least 70 percent of the land over 50 percent slope will remain free of structures or impervious surfaces.
 - b. Emergency access can be provided per the TVF&R service provider permit.
 - Design and construction of the project will not cause erosion or land slippage per the geologic report and geologic hazard report.
 - d. Grading, stripping of vegetation, and changes in terrain are the minimum necessary to construct the development in accordance with subsection J of this section.

Finding: There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only. No lot grading is planned at this time. The future grading plans for the construction of new homes will comply with these standards and will be reviewed at the time of building permit. This standard is met.

- 8. Land over 50 percent slope shall be developed only where density transfer is not feasible. The development will provide that:
 - a. At least 70 percent of the site will remain free of structures or impervious surfaces.
 - b. Emergency access can be provided.
 - Design and construction of the project will not cause erosion or land slippage.
 - d. Grading, stripping of vegetation, and changes in terrain are the minimum necessary to construct the development in accordance with subsection J of this section.

Finding: There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only. No lot grading is planned at this time. The future grading plans for the construction of new homes will comply with these standards and will be reviewed at the time of building permit. This standard is met.

F. Water.

- A plan for domestic water supply lines or related water service facilities shall be prepared consistent with the adopted Comprehensive Water System Master Plan, updated in 2008, and subsequent superseding revisions or updates. The plan shall include:
 - Location and sizing of the water lines consistent with the Water System
 Master Plan and West Linn Public Works Design Standards.
 - b. For all non-single-family developments, there shall be a demonstration of adequate fire flow to serve the site, as demonstrated by consistency with West Linn Public Works Design Standards.
 - c. A written statement, signed by the City Engineer, that water service can be made available to the site by the construction of on-site and off-site improvements and that such water service has sufficient volume and

pressure to serve the proposed development's domestic, commercial, industrial, and fire flows.

Finding: There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only. No new water service is requested at this time. New parcels will be provided with water service from either the existing 6 inch water on the perimeter of the site, or new service to be shown on the Preliminary Utility Plan, with subsequent submittals, per city standards. This standard is met.

G. Sewer.

- 1. A plan prepared by a licensed engineer shall show how the proposal is consistent with the current Sanitary Sewer Master Plan and subsequent updates and amendments applicable at the time the proposal is submitted. Agreement with that plan must demonstrate how the sanitary sewer proposal will be accomplished and how it is gravity-efficient. The sewer system must be in the correct basin and allow for full gravity service.
- 2. Sanitary sewer information will include plan view of the sanitary sewer lines, including manhole locations and depth or invert elevations.
- 3. Sanitary sewer lines shall be located in the public right-of-way, particularly the street, unless the applicant can demonstrate as part of a discretionary review why the alternative location is necessary and meets accepted engineering standards.
- 4. Sanitary sewer line shall be at a depth that can facilitate connection with down-system properties in an efficient manner.
- 5. For non-residential development, the sanitary sewer line should be designed to minimize the amount of lineal feet in the system.
- 6. The sanitary sewer line shall avoid disturbance of wetland and drainageways. In those cases where that is unavoidable, disturbance shall be mitigated pursuant to Chapter 32 CDC, Water Resource Area Protection, all trees replaced, and proper permits obtained. Dual sewer lines may be required so the drainageway is not disturbed.
- 7. Sanitary sewer shall be extended or stubbed out to adjacent undeveloped land or a point in the street that allows for connection with adjacent or nearby properties.
- 8. The sanitary sewer system shall be built pursuant to DEQ, City, and Tri-City Service District sewer standards. The design of the sewer system shall be prepared by a licensed engineer, and the applicant must be able to demonstrate the ability to satisfy these submittal requirements or standards at the preconstruction phase.
- A written statement, signed by the City Engineer, that sanitary sewers with sufficient capacity to serve the proposed development and that adequate sewage treatment plant capacity is available to the City to serve the proposed development.

Finding: There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only. No new sewer service is requested at this time. New parcels will be provided with sewer service from either the existing service on the perimeter of the site, or new service to be shown on the Preliminary Utility Plan, with subsequent submittals, per city standards. This standard is met.

H. Storm detention and treatment. All proposed storm detention and treatment facilities comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards, as demonstrated by stormwater plan and report stamped by a professional engineer.

Development is not proposed on the site at this time; therefore, stormwater detention and treatment are not proposed. Future development will address the stormwater detention and treatment needs with subsequent submittals, per city standards.

I. Utility easements. Subdivisions and partitions shall establish utility easements to accommodate the required service providers as specified in the West Linn Public Works Design Standards.

Finding: There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only. Public utility easements will be provided consistent with City standards, as shown on the Tentative Plan and Preliminary Utility Plan, with subsequent submittals. This standard is met.

- J. Supplemental provisions.
 - Wetland and natural drainageways. Wetlands and natural drainageways shall be protected as required by Chapter 32 CDC, Water Resource Area Protection.

Finding: There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only.

> The wetlands have been delineated as part of the DEQ approvals. There is no work proposed in the wetlands as part of this partition submission. The wetland areas will be further delineated by a survey. Subsequent proposed work, and submittals defining the work will be in compliance with all governmental unit standards. This criterion will be met with subsequent submittal for Phase 1 Preliminary Plat.

> Note: There is a beaver dam located near 4th street that has artificially raised the water level in the stream. It is the owner's intent have a professional trapper relocate the beaver, and then remove the beaver dam so the water level can return to its natural, historical level.

Willamette and Tualatin Greenways. The Willamette and Tualatin River 2. Greenways shall be protected as required by Chapter 28 CDC, Willamette and **Tualatin River Protection.**

Finding: There is no proposed work on the property. The proposal is a request for approval for a 3-lot partition only. This criterion will be met with subsequent submittal for Phase 1 Preliminary Plat.

The subject property is located within the Willamette Greenway Area and in a Habitat Conservation Area. There is no work proposed in the Willamette Greenway Area, or in the Habitat Area. As the wetland and habitat areas are delineated subsequent submittals will comply to governmental standards for these areas.

3. Street trees. Street trees are required as identified in Section 8.720 of the municipal code and Chapter 54 CDC.

Finding: No new street tree is proposed. No new horizontal work or street work is proposed with this proposal. When street trees or horizontal work will be installed, it will be provided with the new home construction, per City standards with subsequent submittals.

4. Lighting. All subdivision street or alley lights shall meet West Linn Public Works Design Standards.

Finding: There is no new street lighting proposed. When lighting will be installed, it will be provided with the new home construction, per City standards with subsequent submittals.

5. Dedications and exactions. The City may require an applicant to dedicate land and/or construct a public improvement that provides a benefit to property or persons outside the property that is the subject of the application when the exaction is roughly proportional. No exaction shall be imposed unless supported by a determination that the exaction is roughly proportional to the impact of development.

Finding: There are no new lots, or horizontal work proposed to which would require dedications and exactions. When dedications and exactions are required, it will be provided, per City standards with subsequent submittals.

6. Underground utilities. All utilities, such as electrical, telephone, and television cable, that may at times be above ground or overhead shall be buried underground in the case of new development. Exceptions shall be permitted in those cases where adjacent properties have above-ground utilities and where the development site's frontage is under 200 feet and the site is less than one acre. High voltage transmission lines, as classified by Portland General Electric or electric service provider, are also exempted. Where adjacent future development is planned or proposed, conduits may be required at the direction of the City Engineer. All services shall be underground with the exception of standard abovegrade equipment such as some meters, etc.

Finding: There is no new underground utility work proposed. When underground utilities are required, they will be installed per City standards with subsequent submittals.

7. Density requirement. Density shall occur at 70 percent or more of the maximum density allowed by the underlying zoning. These provisions do not apply when density is transferred from Type I and II lands as defined in CDC 02.030.

Development of Type I or II lands are exempt from these provisions. Land divisions of three lots or less are also exempt.

Finding: The proposed partition will consolidate the site into three lots that will allow for testing and redevelopment of the site. The site is proposed for future development in accordance with the Density standards under a future application. The Applicant has provided a future development plan illustrating how the site could be developed in the future.

8. Mix requirement. The "mix" rule means that developers shall have no more than 15 percent of the R-2.1 and R-3 development as single-family residential (including duplex, triplex, quadplex, and townhouse development). The intent is that the majority of the site shall be developed as medium high density multifamily housing.

Finding: The property is zoned R-10 and GI and therefore this provision does not apply.

9. Heritage trees/significant tree and tree cluster protection. All heritage trees, as defined in Section 8.710 of the municipal code, shall be protected. If requested by the applicant, diseased heritage trees, as determined by the City Arborist, may be removed. Significant trees and significant tree clusters, as defined in CDC 2.030, shall be protected pursuant to CDC 55.100(B)(2) or 55.105(B)(2), as applicable.

Finding: There are no identified heritage trees on the site, however there is at least one 7 ft diameter tree on the site to which the owner/developer surmises could potentially be a candidate for heritage tree designation. If identified by subsequent tree survey, then the owner/developer is receptive to heritage tree designation. While there is no known, identified significant cluster on the site, if one is identified by a subsequent tree survey and the cluster will be protected on a subsequent submittal. This criterion will be met after the tree survey identifies any significant trees and subsequent submittal for Phase 1 Preliminary Plat.

Chapter 55 DESIGN REVIEW

55.100 APPROVAL STANDARDS - CLASS II DESIGN REVIEW

Design Review is only applicable to significant trees as cross referenced by CDC 85.200(J) (9).

- E. Relationship to the natural and physical environment.
 - The buildings and other site elements shall be designed and located so that all heritage trees, as defined in the municipal code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction.
 - 2. All heritage trees, as defined in the municipal code, all trees and clusters of trees ("cluster" is defined as three or more trees with overlapping driplines; however, native oaks need not have an overlapping dripline) that are considered significant by the City Arborist, either individually or in consultation with certified arborists or similarly qualified professionals, based on accepted arboricultural standards including consideration of their size, type, location, health, long term survivability, and/or numbers, shall be protected pursuant to the criteria of subsections (B)(2)(a) through (f) of this section. (....)

While unconfirmed, it is presumed that the tree survey will identify significant trees on Finding: the property so the provisions of Chapter 55 will apply at the time these trees are identified. This criterion will be met after the tree survey identifies any significant trees and subsequent submittal for Phase 1 Preliminary Plat. This standard is met.

Chapter 92 REQUIRED IMPROVEMENTS

92.010 PUBLIC IMPROVEMENTS FOR LAND DIVISIONS

The following improvements shall be installed at the expense of the developer and meet all **City codes and standards:**

- A. Streets within subdivisions.
 - 1. All streets within a subdivision, including alleys, shall be graded for the full right-ofway width and improved in accordance with the West Linn Public Works Design Standards and with the street cross sections in Exhibits 6 through 9 of the Transportation System Plan, unless the applicant requests an exception as part of a discretionary review and the decision-making authority makes the following findings:
 - a. The right-of-way cannot be reasonably improved in a manner consistent with City road standards or with City standards for the protection of wetlands and natural drainageways.
 - b. The right-of-way does not provide a link in a continuous pattern of connected local streets, or, if it does provide such a link, that an alternative street link already exists or the applicant has proposed an alternative street which provides the necessary connectivity, or the applicant has proven that there is no feasible location on the property for an alternative street providing the link.

Finding: The applicant is proposing a lot consolidation to reduce the number of lots on the site

to allow for future development consistent with the underlying zoning requirements. The proposed partition will include right-of-way dedication along the frontages of 5th Avenue, 4th Street, and 7th Street. The applicant is not proposing dedications on 4th Avenue, as the applicant is proposing a vacation of this right-of-way which does not provide a through connection as it is located in a delineated natural resource area. The vacation will occur under a separate process.

Street improvements are not proportional to the proposed partition and will be completed when future development of the site occurs.

- 2. When the decision-making authority makes these findings, the decision-making authority may impose any of the following conditions of approval:
 - a. A condition that the applicant initiate vacation proceedings for all or part of the right-of-way.
 - b. A condition that the applicant build a trail, bicycle path, or other appropriate way.

Finding: The applicant acknowledges that the decision-making authority may impose conditions of approval in accordance with this subsection.

E. If the applicant initiates vacation proceedings pursuant to subsection (A)(2)(a) of this section, and the right-of-way cannot be vacated because of opposition from adjacent property owners, the City Council shall consider and decide whether to process a Cityinitiated street vacation pursuant to Chapter 271 ORS.

Finding: The applicant is not proposing a right-of-way vacation as part of this partition application. The vacation of 4th Street will occur under a separate process. The right-ofway of 4th Street is wholly surrounded by the subject site and is not utilized to access any adjacent properties. Any future right-of-way vacation would be in accordance with this section.

F. Construction staging area shall be established and approved by the City Engineer. Clearing, grubbing, and grading for a development shall be confined to areas that have been granted approval in the land use approval process only. Clearing, grubbing, and grading outside of land use approved areas can only be approved through a land use approval modification and/or an approved Building Department grading permit for survey purposes. Catch basins shall be installed and connected to pipe lines leading to storm sewers or drainageways.

Finding: Construction is not proposed as part of the proposed partition. The requirements of this section are not applicable.

B. Extension of streets to subdivisions. The extension of subdivision streets to the intercepting paving line of existing streets with which subdivision streets intersect shall be graded for the full right-of-way width and improved to a minimum street structural section and width of 24 feet.

Finding: The proposed partition will not include the extension of streets. The requirements of this section are not applicable.

- C. Streets within the rights-of-way abutting a subdivision shall:
 - 1. Be graded for the full right-of-way width and approved in accordance with the West **Linn Public Works Design Standards**;
 - 2. Install pedestrian and bicycle infrastructure and two full travel lanes adjacent to the subdivision in accordance with CDC 85.200(A)(3);
 - 3. Install required stormwater and utility facilities adjacent to the subdivision in accordance with the West Linn Public Works Design Standards; and
 - 4. Comply with adopted West Linn Public Works Design Standards.

Finding: The proposed partition will include right-of-way dedication along the frontages of 5th Avenue, 4th Street, and 7th Street. The applicant is not proposing dedications on 4th Avenue, as the applicant is proposing a vacation of this right-of-way which does not provide a through connection as it is located in a delineated natural resource area. The vacation will occur under a separate process. Street improvements are not proportional to the proposed partition and will be completed when future development of the site occurs. The requirements of this section are not applicable.

D. Monuments. Upon completion of the first pavement lift of all street improvements, monuments shall be installed and/or reestablished at every street intersection and all points of curvature and points of tangency of street centerlines with an iron survey control rod. Elevation benchmarks shall be established at each street intersection monument with

a cap (in a monument box) with elevations to a U.S. Geological Survey datum that exceeds a distance of 800 feet from an existing benchmark.

Street improvements are not proportional to the proposed partition and will be completed when future development of the site occurs. The requirements of this section are not applicable.

- E. Storm detention and treatment. For Type I, II and III lands (refer to definitions in Chapter 02 CDC), a registered civil engineer must prepare a storm detention and treatment plan, at a scale sufficient to evaluate all aspects of the proposal, and a statement that demonstrates:
 - 1. The location and extent to which grading will take place indicating general contour lines, slope ratios, slope stabilization proposals, and location and height of retaining walls, if proposed.
 - 2. All proposed storm detention and treatment facilities comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards.
 - 3. There will be no adverse off-site impacts, including impacts from increased intensity of runoff downstream or constrictions causing ponding upstream.
 - 4. There is sufficient factual data to support the conclusions of the plan.
 - 5. Per CDC 99.035, the Planning Director may require the information in subsections (E)(1), (2), (3) and (4) of this section for Type IV lands if the information is needed to properly evaluate the proposed site plan.

Finding: The proposed partition will not include the construction of any improvements that would require stormwater detention and treatment. The requirements of this section are not applicable.

- F. Sanitary sewers. Sanitary sewers shall be installed in accordance with the West Linn Public Works Design Standards to serve the subdivision and to connect the subdivision to existing mains.
 - 1. If the area outside the subdivision to be directly served by the sewer line has reached a state of development to justify sewer installation at the time, the Planning Commission may recommend to the City Council construction as an assessment project with such arrangement with the subdivider as is desirable to assure financing their share of the construction.
 - 2. If the installation is not made as an assessment project, the City may reimburse the subdivider an amount estimated to be a proportionate share of the cost for each connection made to the sewer by property owners outside of the subdivision for a period of 10 years from the time of installation of the sewers. The actual amount shall be determined by the City Administrator considering current construction costs.

Finding: The proposed partition will not include the construction of any improvements. The existing sanitary sewer lines are shown on the Existing Conditions Plan (Sheet C100). The requirements of this section are not applicable.

G. Water system. Water lines with valves and fire hydrants providing service to each building site in the subdivision and connecting the subdivision to City mains shall be installed. Prior to starting building construction, the design shall take into account provisions for extension beyond the subdivision and to adequately grid the City system. Hydrant spacing is to be based on accessible area served according to City standards. If required water mains will directly serve property outside the subdivision, the City may reimburse the developer an amount estimated to be the proportionate share of the cost for each connection made to the water mains by property owners outside the subdivision for a period of 10 years from the time of installation of the mains. If oversizing of water mains is required to areas outside the subdivision as a general improvement, but to which no new connections can be identified, the City may reimburse the developer that proportionate share of the cost for oversizing. The actual amount and reimbursement method shall be as determined by the City Administrator considering current or actual construction costs.

Finding: The proposed partition will not include the construction of any improvements. The existing water lines are shown on the Existing Conditions Plan (Sheet C100). The requirements of this section are not applicable.

H. Sidewalks.

- 1. Sidewalks shall be installed on both sides of a public street and in any special pedestrian way within the subdivision, except that in the case of primary or secondary arterials, or special type industrial districts, or special site conditions, the Planning Commission may approve a subdivision without sidewalks if requested by the applicant as part of a discretionary review, and only if alternate pedestrian routes are available. In the case of the through lots, provision of sidewalks along the frontage not used for access shall be the responsibility of the developer. On all other frontages, providing front and side yard sidewalks shall be the responsibility of the land owner at the time a request for a building permit is received. Additionally, deed restrictions and CC&Rs shall reflect that sidewalks are to be installed prior to occupancy and it is the responsibility of the lot or homeowner to provide the sidewalk, except as required above for through lots.
- 2. At the applicant's option, on local streets serving only single-family dwellings, sidewalks may be constructed during home construction, but a letter of credit shall be required from the developer to ensure construction of all missing sidewalk segments within four years of final plat approval pursuant to CDC 91.010(A)(2).
- 3. The sidewalks shall be located and designed consistent with the street cross sections in Exhibits 6 through 9 of the Transportation System Plan. If requested by the applicant through a discretionary review, reductions in sidewalk widths to preserve trees or other topographic features, inadequate right-of-way, or constraints may be permitted if approved by the City Engineer in consultation with the Planning Director.
- 4. Sidewalks shall be buffered from the roadway on high volume arterials or collectors by landscape strip or berm of three and one-half-foot minimum width.

- 5. If requested by the applicant through a discretionary review, the City Engineer may allow the installation of sidewalks on one side of any street only if the City Engineer finds that the presence of any of the factors listed below justifies such waiver:
 - a. The street has, or is projected to have, very low volume traffic density;
 - b. The street is a dead-end street;
 - c. The housing along the street is very low density; or
 - d. The street contains exceptional topographic conditions such as steep slopes, unstable soils, or other similar conditions making the location of a sidewalk undesirable.

Finding: The proposed partition will consolidate the site into three lots. The development will include right-of-way dedication along the frontages of 5th Avenue, 4th Street, and 7th Street. Street improvement, including sidewalks s are not proportional to the proposed partition and will be completed when future development of the site occurs. The requirements of this section are not applicable.

I. Bicycle routes. As part of a discretionary review, and if appropriate to the extension of a system of bicycle routes, existing or planned, the Planning Commission may require the installation of separate bicycle lanes within streets and separate bicycle paths.

Finding: New bicycle routes are not proposed as part of this partition. The requirements of this section are not applicable.

J. Street name signs. All street name signs and traffic control devices for the initial signing of the new development shall be installed by the City with sign and installation costs paid by the developer.

Finding: New streets are not proposed. The requirements of this section are not applicable.

K. Dead-end street signs. Signs indicating "future roadway" shall be installed at the end of all discontinued streets. Signs shall be installed by the City per City standards, with sign and installation costs paid by the developer.

Finding: New streets are not proposed as part of this partition. The requirements of this section are not applicable.

L. Signs indicating future use shall be installed on land dedicated for public facilities (e.g., parks, water reservoir, fire halls, etc.). Sign and installation costs shall be paid by the developer.

Public facilities are not proposed as part of this partition. The requirements of this Finding: section are not applicable.

M. Street lights. Street lights shall be installed and shall be served from an underground source of supply. The street lighting shall meet IES lighting standards. The street lights shall be the shoe-box style light (flat lens) with a 30-foot bronze pole in residential (nonintersection) areas. The street light shall be the cobra head style (drop lens) with an approximate 50-foot (sized for intersection width) bronze pole. The developer shall submit to the City Engineer for approval of any alternate residential, commercial, and industrial lighting, and alternate lighting fixture design. The developer and/or homeowners association is required to pay for all expenses related to street light energy and maintenance costs until annexed into the City.

Streetlights are not proposed as part of this partition. The requirements of this section Finding: are not applicable.

N. Utilities. The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting, and cable television, shall be placed underground. Exceptions shall be permitted in those cases where adjacent properties have above-ground utilities and where the development site's frontage is under 200 feet and the site is less than one acre. High voltage transmission lines, as classified by Portland General Electric or electric service provider, are also exempted. For non-residential development where adjacent future development is planned or proposed, conduits may be required at the direction of the City Engineer.

Finding: The proposed partition will not include the construction of any improvements. The existing utility lines are shown on the Existing Conditions Plan (Sheet C100). The requirements of this section are not applicable.

O. Curb cuts and driveways. Curb cuts and driveway installations are not required of the subdivider at the time of street construction, but, if installed, shall be according to City standards. Proper curb cuts and hard-surfaced driveways shall be required at the time buildings are constructed.

Finding: The proposed partition will not include any new driveways or curb cuts. The requirements of this section are not applicable.

P. Street trees. Street trees shall be provided by the City Parks and Recreation Department in accordance with standards as adopted by the City in the Municipal Code. The fee charged the subdivider for providing and maintaining these trees shall be set by resolution of the City Council.

Finding: The proposed partition will include right-of-way dedications but will not include the construction of any improvements. The requirements of this section are not applicable.

Q. Joint mailbox facilities shall be provided in all residential subdivisions, with each joint mailbox serving at least two, but no more than eight, dwelling units. Joint mailbox structures shall be placed in the street right-of-way adjacent to roadway curbs. Proposed locations of joint mailboxes shall be designated on a copy of the tentative plan of the subdivision, and shall be approved as part of the tentative plan approval. In addition, sketch plans for the joint mailbox structures to be used shall be submitted and approved by the City Engineer prior to final plat approval, to ensure they do not conflict with any other City standards.

Finding: Joint mailbox facilities are not proposed. The requirements of this section are not applicable.

92.020 IMPROVEMENTS IN PARTITIONS

The same improvements shall be installed to serve each parcel of a partition as are required of a subdivision, as specified in CDC 92.010. However, if the approval authority finds that the nature of development in the vicinity of the partition makes installation of some improvements unreasonable, at the written request of the applicant those improvements may be waived. If the street improvement requirements are waived, the applicant shall pay an inlieu fee for off-site street improvements, pursuant to the provisions of CDC 85.200(A)(1).

In lieu of accepting an improvement, the Planning Director may recommend to the City Council that the improvement be installed in the area under special assessment financing or other facility extension policies of the City.

Finding: The applicant is proposing a lot consolidation to reduce the number of lots on the site to allow for future development consistent with the underlying zoning requirements. The proposed partition will include right-of-way dedication along the frontages of 5th Avenue, 4th Street, and 7th Street. The applicant is not proposing dedications on 4th Avenue, as the applicant is proposing a vacation of this right-of-way which does not provide a through connection as it is located in a delineated natural resource area. The vacation will occur under a separate process.

> Street improvements are not proportional to the proposed partition and will be completed when future development of the site occurs.

SUMMARY AND CONCLUSION

Based upon the materials submitted herein, the Applicant respectfully requests approval from the West Linn's Planning Department for this Partition application.

DEVELOPMENT REVIEW CHECKLIST

The application form and supporting materials should be submitted electronically through https://westlinnoregon.gov/planning/submit-land-use-application as one (1) .pdf file. To create a single PDF file, go to Adobe Acrobat Free Merge PDF online tool. Other free Acrobat PDF tools like converting a file to PDF or reducing the file size are available on the Adobe website.

Supporting reports may be uploaded separately through this web form *if* the file size is too large. The separate submissions should be numbered (i.e., Submittal 1 of 2) and noted under transmittal contents. All plan set files MUST be flattened and reduced.

Submission requirement to upload through the web form:

- · .pdf format.
- Individual file size no larger than 128 MB.
- Do not attach 'zip' files. Our server will reject all 'zip' files.
- Reduce and flatten all plan sets BEFORE uploading plan sets. The raster/vector settings should be optimized for printing.

| comp | plete application must include the following: | | | | | | |
|------|--|--|--|--|--|--|--|
| ~ | | | | | | | |
| V | Vicinity Map showing the site within the City. | | | | | | |
| V | Site Plan drawn to scale showing the: | | | | | | |
| | ☐ Taxlot and address of the project, | | | | | | |
| | ☐ Area of the site (acres or square feet), | | | | | | |
| | ☐ Zoning and Neighborhood Association, | | | | | | |
| | □ Location and dimensions of existing and proposed buildings, structures, | | | | | | |
| | Location of existing and proposed on-site driveways and off-street parking, | | | | | | |
| | Configuration and dimensions of all existing and proposed lots and tracts, including a proposed park, open space, and or drainage tracts or easements, | | | | | | |
| | Location and width of existing and proposed easement for access, drainage, etc., and | | | | | | |
| | Location of existing and proposed trees and other proposed landscaping. | | | | | | |
| | ☐ Location of existing public and private utilities, easements, and 100-year floodplain, | | | | | | |
| | Sensitive areas, including the location of on-site wetlands and riparian areas, | | | | | | |
| | ☐ Location of existing off-site driveways across the street, | | | | | | |
| | ☐ If applicable, internal circulation system, name, and location of existing and proposed | | | | | | |
| | roadways and roadway easements (private and public), and | | | | | | |
| | ☐ Location and width of existing and proposed on-site pedestrian and bicycle facilities on-site. | | | | | | |
| | If applicable, a Utility Plan and Landscape plan, drawn to scale. | | | | | | |
| | If applicable, Building elevation drawings with exterior elevations for every side of each structure, height | | | | | | |
| | including building materials and floor levels, drawn to scale. | | | | | | |
| V | A project narrative outlining the project's scope in detail, including the changes to the site, structure, | | | | | | |
| | landscaping, parking, land use, and lot consolidations. | | | | | | |
| ~ | Complete written responses to identified approval criteria in the Community Development Code (CDC). | | | | | | |
| | A Service Provider Letter from Tualatin Valley Fire and Rescue - https://www.tvfr.com/399/Service- | | | | | | |
| | Provider-Permit Please contact Jason Arn at jason.arn@tvfr.com with any questions about TVF&R | | | | | | |
| | requirements; | | | | | | |
| | If required, documentation of any required meeting with the respective City-recognized neighborhood association per CDC <u>99.038</u> . | | | | | | |
| | Any other materials identified by city staff at the pre-application meeting. | | | | | | |

For applications that the Planning Commission decides, the applicant or applicant's representative should present their proposal to the PC at the public hearing.



Command & Business Operations Center and North Operating Center 11945 SW 70th Avenue Tigard, Oregon 97223-8566 503-649-8577 South Operating Center 8445 SW Elligsen Road Wilsonville, Oregon 97070-9641 503-649-8577 Training Center 12400 SW Tonquin Road Sherwood, Oregon 97140-9734 503-259-1600

FIRE DEPARTMENT ACCESS AND WATER SUPPLY PERMIT CHECKLIST

| Project Name | Address and/or Legal Description | TVF&R Permit # |
|-----------------------|---|------------------|
| | | |
| Description of | | Jurisdiction: |
| Proposed Work: | | |
| Bldg. | Type of Construction: | Fire Sprinklers: |
| Square | Type IA | YNN |
| Footage: | | |
| Fire Alarms: | Bldg. Height: (Measured to gutter line or top of parapet) | ERRC |
| $Y \square N \square$ | | MERRC |
| | | N/A 📋 |

Complete checklist below if the submittal involves constructing or altering a building.

| ITEM # | PROVIDED | | REQUIREMENT | CODE REF | | |
|-----------|---|--|---|--------------------------|--|--|
| 1 | Υ | Fire service plans shall consist of a site plan and elevation views of buildings. The site plan shall be labeled as FS-1. Elevation view sheets shall be FS-2, FS-3, etc. | | | | |
| 2 | Y N/A Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building or facility. An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet. (OFC 503.1.1) | | | | | |
| 3 | Υ | N/A Dead end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround. Diagrams can be found in the corresponding guide located at: http://www.tvfr.com/DocumentCenter/View/1296 . | | | | |
| 4 | Υ | N/A | Buildings exceeding 30 feet in height or three stories in height shall have at least two separate means of fire apparatus access. | | | |
| 5 | Y | N/A | Buildings or facilities having a gross building area of more than 62,000 square feet shall have at least two approved separate means of fire apparatus access. Exception: Projects having a gross building area of up to 124,000 square feet that have a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems. | | | |
| 6 | Υ | N/A | | | | |
| 7 | Y N/A Buildings with a vertical distance between the grade plane and exceeds 30 feet in height shall be provided with a fire apparatus use by aerial apparatus with an unobstructed driving surface w | | Buildings with a vertical distance between the grade plane and the highest roof surface that exceeds 30 feet in height shall be provided with a fire apparatus access road constructed for use by aerial apparatus with an unobstructed driving surface width of not less than 26 feet. For the purposes of this section, the highest roof surface shall be determined by | OFC D105.1, D105.2 | | |

| ITEM # | PROVIDED REQUIREMENT | | CODE REF | | | |
|-----------|----------------------|-----|--|---------------------------------|--|--|
| | | | measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of the parapet walls, whichever is greater. Any portion of the building may be used for this measurement, provided that it is accessible to firefighters and is capable of supporting ground ladder placement. | OFC | | |
| 8 | Y | N/A | Developments of one- or two-family dwellings, where the number of dwelling units exceeds 30, shall be provided with separate and approved fire apparatus access roads and shall meet the requirements of Section D104.3. Exception: Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with section 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the International Fire Code, access from two directions shall not be required. | | | |
| 9 | Υ | N/A | At least one of the required aerial access routes shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial access road is positioned shall be approved by the Fire Marshal. Overhead utility and power lines shall not be located over the aerial access road or between the aerial access road and the building. | | | |
| 10 | Υ | N/A | | | | |
| 11 | Υ | N/A | N/A Fire apparatus access roads shall have an unobstructed driving surface width of not less than 20 feet (26 feet adjacent to fire hydrants and an unobstructed vertical clearance of not less than 13 feet 6 inches. | | | |
| 12 | Υ | N/A | The fire district will approve access roads of 12 feet for up to three dwelling units (Group R-3) and accessory (Group U) buildings. | OFC 503.1.1 | | |
| 13 | Υ | N/A | Where access roads are less than 20 feet and exceed 400 feet in length, turnouts 10 feet wide and 30 feet long may be required and will be determined on a case by case basis. | | | |
| 14 | Y | N/A | Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one of both sides of the roadway and in turnarounds as needed. Signs shall read "NO PARKING FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. | | | |
| 15 | Υ | N/A | Where required, fire apparatus access roadway curbs shall be painted red (or as approved) and marked "NO PARKING FIRE LANE" at 25-foot intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background | OFC 503.3 | | |
| 16 | Υ | N/A | Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet and shall extend 20 feet before and after the point of the hydrant. | OFC D103.1 | | |
| 17 | Υ | N/A | Where access roads are less than 20 feet and exceed 400 feet in length, turnouts 10 feet wide and 30 feet long may be required and will be determined on a case by case basis. | OFC 503.2.2 | | |
| 18 | Y | | | OFC 503.2.3 | | |
| 19 | Υ | N/A | The inside turning radius and outside turning radius shall not be less than 28 feet and 48 feet respectively, measured from the same center point. | | | |
| 20 | Υ | N/A | Fire apparatus access roadway grades shall not exceed 15%. Alternate methods and materials may be available at the discretion of the Fire Marshal (for grade exceeding 15%). | & D103.3 OFC D103.2 | | |
| 21 | Y | N/A | Approved forest dwellings (in which the structure meets all County forest dwelling fire siting, fire retardant roof, and spark arrestor requirements) are allowed up to 20% maximum grade. Access roads greater than 20% shall be considered on a case-by-case basis. Forest dwelling access roads shall be an all-weather surface capable of supporting imposed loads of not less than 37,000 pounds gross vehicle weight and be no less than 12 feet minimum width. All other access requirements, including turnarounds shall be determined upon a heavy brush unit response capability to the individual property. | OFC 503.1.1 & D102.1.1 | | |

| ITEM # | PROVIDED REQUIREMENT | | CODE REF | |
|-----------|----------------------|-----|--|--------------------------------|
| 22 | Υ | N/A | Turnarounds shall be as flat as possible and have a maximum of 5% grade with the exception of crowning for water run-off. | OFC 503.2.7 & D103.2 |
| 23 | Υ | N/A | Intersections shall be level (maximum 5%) with the exception of crowning for water run-off. | |
| 24 | Υ | N/A | Portions of aerial apparatus roads that will be used for aerial operations shall be as flat as possible. Front to rear and side to side maximum slope shall not exceed 10%. | OFC D103.2 |
| 25 | Y | N/A | Gates securing fire apparatus roads shall comply with all of the following: Minimum unobstructed width shall be not less than 20 feet (or the required roadway surface width). Gates shall be set back at minimum of 30 feet from the intersecting roadway or as approved. Electric gates shall be equipped with a means for operation by fire department personnel. Electric automatic gates shall comply with ASTM F 2200 and UL 325. | OFC D103.5, & 503.6 |
| 26 | Υ | N/A | Private bridges shall be designed and constructed in accordance with the State of Oregon Department of Transportation and American Association of State Highway and Transportation Officials Standards <i>Standard Specification for Highway Bridges</i> . Vehicle load limits shall be posted at both entrances to bridges when required by the Fire Marshal. | OFC 503.2.6 |
| 27 | Y | N/A | Applicants shall provide documentation of a fire hydrant flow test or flow test modeling of water availability from the local water purveyor if the project includes a new structure or increase in the floor area of an existing structure. Tests shall be conducted from a fire hydrant within 400 feet for commercial projects, or 600 feet for residential development. Flow tests will be accepted if they were performed within 5 years as long as no adverse modifications have been made to the supply system. Water availability information may not be required to be submitted for every project. | OFC Appendix B |
| 28 | Υ | N/A | Where a portion of a commercial building is more than 400 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the building, on-site fire hydrants and mains shall be provided. | OFC 507.5.1 |
| 29 | Υ | N/A | Where the most remote portion of a residential structure is more than 600 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the structure(s), on-site fire hydrants and mains shall be provided. | OFC 507.5.1 |
| 30 | Υ | N/A | Rural one-and-two-family dwellings, where there is no fixed and reliable water supply and there is approved access, shall not be required to provide a firefighting water supply. | OFC B103 |
| 31 | Υ | N/A | Detached U occupancies, in rural areas, that are in excess of 3,600 square feet are not required to have a water supply when they have approved fire department access. | OFC D102 |
| 32 | Υ | N/A | Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway unless approved by the Fire Marshal. | |
| 33 | Υ | N/A | Where fire hydrants are subject to impact by a motor vehicle, guard posts, bollards or other approved means of protection shall be provided. | OFC 507.5.6 & OFC 312 |
| 34 | Υ | N/A | FDCs shall be located within 100 feet of a fire hydrant (or as approved). Hydrants and FDC's shall be located on the same side of the fire apparatus access roadway or drive aisle, fully visible, and recognizable from the street or nearest point of the fire department vehicle access or as otherwise approved. | OFC 912.2.1 & NFPA 13 |

| ITEM # | / PROVIDED | | REQUIREMENT | CODE REF |
|-----------|------------|---|--|--------------|
| 35 | Υ | N/A | In new buildings where the design reduces the level of radio coverage for public safety communications systems below minimum performance levels, a distributed antenna system, signal booster, or other method approved by TVF&R and Washington County Consolidated Communications Agency shall be provided. http://www.tvfr.com/DocumentCenter/View/1296 . • Emergency responder radio system testing and/or system installation is required for this building. Please contact me (using my contact info below) for further information including an alternate means of compliance that is available. If the alternate method is preferred, it must be requested from TVF&R prior to issuance of building permit. • Testing shall take place after the installation of all roofing systems; exterior walls, glazing and siding/cladding; and all permanent interior walls, partitions, ceilings, and glazing. MERRC Q&A MERRC Q&A MERRC Permit Application MERRC Permit Application MERRC Permit Application | |
| 36 | Y | N/A A Knox box for building access may be required for structures and gates. See Appendix B for further information and detail on required installations. Order via www.knoxbox.com or contact TVF&R for assistance and instructions regarding installation and placement. | | OFC 506.1 |



700 NE Multnomah Street, Suite 190 Portland, OR 97232 Phone (503) 230-8488 Fax (503) 296-5869

WFG National Title Insurance Company Attn: Trevor Cheyne 700 NE Multnomah Street, Suite 190 Portland, OR 97232

Date Prepared: October 9, 2023

SECOND SUPPLEMENTAL PRELIMINARY TITLE REPORT

Order Number: 22-437322
Escrow Officer: Trevor Cheyne
Phone: (503) 444-7047
Fax: (503) 296-5869
Email: tcheyne@wfgtitle.com

Borrower(s): SDG-2, LLC, a Delaware limited liability company

Property: 1317 7th Street, West Linn, OR 97068

THE PRIOR REPORT IS REVISED FOR THE FOLLOWING: Updated Effective Date; Amended Lender

WFG National Title Insurance Company, is prepared to issue a title insurance policy, as of the effective date and in the form and amount shown on Schedule A, subject to the conditions, stipulations and exclusions from coverage appearing in the policy form and subject to the exceptions shown on Schedule B. This Report (and any Amendments) is preliminary to and issued solely for the purpose of facilitating the issuance of a policy of title insurance at the time the real estate transaction in question is closed and no liability is assumed in the Report. The Report shall become null and void unless a policy is issued and the full premium paid.

This report is for the exclusive use of the person to whom it is addressed. Title insurance is conditioned on recordation of satisfactory instruments that establish the interests of the parties to be insured; until such recordation, the Company may cancel or revise this report for any reason.

SCHEDULE A

- 1. The effective date of this preliminary title report is 8:00 A.M. on 3rd day of October, 2023
- 2. The policies and endorsements to be insured and the related charges are:

Policy/Endorsement Description

Liability

Charge

ALTA 2006 Ext. Loan Policy

\$2,000,000.00

\$3,600.00

Short Term Rate

\$3,600.00

Proposed Insured: Ricky and Vicki Suran, with rights of survivorship, and Randall and Sharlyne Kinnison, with rights of survivorship

Government Service Fee:

\$140.00

This is a preliminary billing only, a consolidated statement of charges, credits and advances, if any, in connection with this order will be provided at closing.

3. Title to the land described herein is vested in:

SDG-2, LLC, a Delaware limited liability company

4. The estate or interest in land is:

Fee Simple

5. The land referred to in this report is described as follows:

SEE ATTACHED EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

EXHIBIT "A" LEGAL DESCRIPTION

PARCEL I:

All of Tracts 7 and 8, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon.

TOGETHER WITH that portion of vacated 5th Street which inured thereto by reason of Vacation Ordinance No. 811, recorded December 12, 1969, as Recorder's Fee No. 69-25835.

PARCEL II:

A tract of land in the Ambrose Fields Donation Land Claim, being in Section 1 and Section 2, in Township 3 South, Range 1 East, of the Willamette Meridian, in the County of Clackamas and State of Oregon, more particularly described as follows:

Beginning at a point in the line between the Robert Moore Donation Land Claim and Ambrose Fields Donation Land Claim, which is North 37° 30' West, 6.40 chains from the Southeast corner of the Ambrose Fields Donation Land Claim; thence North 37° 30' West, (North 38° 12' West, according to the Plat of WILLAMETTE AND TUALATIN TRACTS), a distance of 12.16 chains, tracing the Northeast boundary of the Ambrose Fields Donation Land Claim to the Southeast boundary of the M.K. Perrin Donation Land Claim No. 50; thence South 62° 30' West, 5.04 chains tracing said Southeast boundary of the M.K. Perrin Donation Land Claim No. 50; thence South 39° East, 19.68 chains to the left bank (high water mark) of the Willamette River; thence down stream North 53° 45' East, 1.45 chains to the Southwesterly line of the tract of land owned by the Crown Zellerbach Corporation; thence North 39° West, 6.10 chains, more or less, to the most Westerly corner of the Crown Willamette Corporation Tract; thence North 53° East, 3.20 chains to the place of beginning.

EXCEPT that part thereof lying Northwesterly of a line drawn from the most Easterly corner of Lot A, Tract 13, WILLAMETTE AND TUALATIN TRACTS, to the most Westerly corner of Tract 8, WILLAMETTE AND TUALATIN TRACTS, the course of which line is recited in Deeds as North 69° 39' East.

PARCEL III:

All of Lot "A" of Tract 13, and all of Tract 9 of WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon, in the Records of Clackamas County, being a portion of that land described in Deed dated September 9, 1913, from Bertha P. Kanney and C.W. Kanney, her husband, recorded September 18, 1913, on Page 21 in Book 133, Deed Records.

ALSO, beginning at a point which is the East corner of Lot "A", Tract 13 of WILLAMETTE AND TUALATIN TRACTS; thence North 39° 00' West, 122.5 feet, more or less, along the Northeast line of said Lot "A", Tract 13, which is also the Southwest line of the property, now or formerly owned by Hawley Pulp & Paper Company to the North corner of said Lot "A", Tract 13, of said WILLAMETTE AND TUALATIN TRACTS; thence Northeasterly 332.5 feet, more or less, along the Northwest line of the property, now or formerly owned by Hawley Pulp & Paper Company, to a point which is the North corner thereof; thence South 38° 12' East, 145.0 feet, more or less, along the Northeast line of the property, now or formerly owned by Hawley Pulp & Paper Company, which line is also the Southwest line of said Tract 9 of said WILLAMETTE AND TUALATIN TRACTS to a point which is the West corner of Tract 8 of said WILLAMETTE AND TUALATIN TRACTS; thence South 69° 39' West 337.0 feet, more or less, to the East corner of said Lot "A", Tract 13, WILLAMETTE AND TUALATIN TRACTS, which is the place of beginning, being all the land described in Deed dated June 30, 1913, from Hawley Pulp & Paper Company to Portland, Eugene & Eastern Railway Company recorded July 9, 1913, on Page 195, in Book 131, Deed Records of Clackamas County.

EXCEPTING THEREFROM that portion as described in Street Dedication recorded January 6, 1970, as Recorder's Fee No. 70 269.

PARCEL IV:

Tracts 14 and 15, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon.

TOGETHER WITH that portion of Vacated 7th Street which inured thereto by reason of Vacation Ordinance No. 835, recorded December 31, 1970, as Recorder's Fee No. 70 28678.

EXCEPTING THEREFROM that portion as described in Street Dedication recorded January 6, 1970, as Recorder's Fee No. 70 269.

PARCEL V:

All of Tract 6, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon.

TOGETHER WITH that portion of vacated 5th Street which inured thereto by reason of Vacation Ordinance No. 811, recorded December 12, 1969, as Recorder's Fee No. 69-25835.

EXCEPTING THEREFROM that portion as described in Street Dedication recorded January 6, 1970, as Recorder's Fee No. 70-269.

PARCEL VI:

Intentionally Deleted

EXCEPTING THEREFROM that portion as described in Deed to Tri-City Service District recorded June 27, 1990, as Recorder's Fee No. 90-30398.

PARCEL VII:

All that real property situated, of the Willamette Meridian, in the County of Clackamas and State of Oregon, described as:

Beginning at a point bearing South 53° 45' West, 17.87 chains and North 34° 45' West, 208 feet from the Southeast corner of the Ambrose Fields Donation Land Claim, Township 3 South, Range 1 East, of the Willamette Meridian, in the County of Clackamas and State of Oregon, said point being the Southeast corner of Block 16, WILLAMETTE AND TUALATIN TRACTS; thence North 34° 45' West, 452 feet along the Northeasterly line of Block 16 to the most Southerly corner of Lot "D", Block 17; thence North 53° 46' East, 330 feet along the Southeasterly line of said Block 17, and the Northeasterly extension thereof; thence South 34° 45' East, 457 feet along the Southwesterly line of Seventh Street to a point on the Southerly extension of the Southeast line of Block 15, WILLAMETTE AND TUALATIN TRACT, said point being 30 feet Southwesterly from the most Southerly corner of said Block 15; thence Southwesterly 330 feet, more or less, to the point of beginning.

EXCEPTING THEREFROM that portion as described in Street Dedication recorded December 30, 1970, as Recorder's Fee No. 70-28681.

PARCEL VIII:

A part of the Donation Land Claim No. 52 of Ambrose Field in Section 2, Township 3 South, Range 1 East, of the Willamette Meridian, in the County of Clackamas and State of Oregon, to wit:

Beginning on the left bank of the Willamette River where the Northern boundary line of said claim intersects said river; running thence North 39° West along said boundary 6.40 chains; thence South 53° West, 3.20 chains; thence South 39° East, 6.40 chains to the bank of the Willamette River; thence North 53° 45' East along the meanders of said river to the place of beginning.

SAVE AND EXCEPT THEREFROM a strip of land described as follows:

Beginning at a T-rail at the initial point of said WILLAMETTE AND TUALATIN TRACTS; thence South 34° 08' 55" West, 559.95 feet to an iron rod at the intersection of the Southerly line of Lot "E", Tract 6, said WILLAMETTE AND TUALATIN TRACTS, with the Westerly line of that parcel known as Parcel II, as described in Fee No. 70 269,

recorded January 6, 1970, Clackamas County Record of Deeds, said line now known as the Westerly right-of-way of Fourth Street; thence South 54° 23' 00" West, 398.67 feet along the Southerly line of said Tract 6 to an iron rod, which is a point identified in this Deed as Point "B"; thence South 39° 00' East, 168.90 feet to an unmonumented point which is the true point of beginning of the parcel; thence South 54° 23' 00" West, 209.50 feet to an unmonumented point; thence South 39° East, 10.0 feet, more or less, to the high water line of the left bank of the Willamette River; thence along said high water line, Northeasterly to the point of intersection with a line having a bearing of North 39° 00' West and passing through the true point of beginning of this parcel; thence North 39° 00' West, 10.0 feet, more or less, to the true point of beginning of this parcel.

PARCEL IX:

All of Lots "B" and "C" of Tract 13, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon.

PARCEL X:

Intentionally Deleted

PARCEL XI:

Lots "A", "B", "C" and "D", Block 5, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon.

EXCEPT that part of Lot "A", described as follows:

Beginning at a point in the Westerly side of Fourth Street, 96 feet Southerly from the most Northerly corner of said Lot "A"; thence Southerly along the Westerly side of Fourth Street, 50 feet; thence Westerly at right angles, 80 feet to a point; thence Northerly parallel with Fourth Street, 50 feet to a point; thence Easterly at right angles to Fourth Street, 80 feet to the place of beginning.

PARCEL XII:

Part of Lot "A" in Tract 5, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon, described as follows:

Beginning at a point in the Westerly side of Fourth Street, 96 feet Southerly from the most Northerly corner of said Lot "A"; thence Southerly along the Westerly side of Fourth Street, 50 feet; thence Westerly at right angles, 80 feet to a point; thence Northerly parallel with Fourth Street, 50 feet to a point; thence Easterly at right angles to Fourth Street, 80 feet to the place of beginning.

SCHEDULE B

GENERAL EXCEPTIONS

- 1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
- 2. Facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
- 3. Easements, or claims of easement, not shown by the public records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
- 4. Any encroachment (of existing improvements located on the subject land onto adjoining land or of existing improvements located on adjoining land onto the subject land), encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the subject land.
- 5. Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

SPECIAL EXCEPTIONS

- 6. Any adverse claim based upon the assertion that:
 - a) Said land or portion thereof is now or at any time has been below the high water mark of the Willamette River.
 - b) Said land has been removed from or brought within the boundaries of the premises by the process of erosion or an avulsive movement of the Willamette River or has been formed by a process of accretion or reliction or has been created by artificial fill.
 - c) Rights of the public and governmental bodies in and to any portion of the premises herein described lying below the high water mark of the Willamette River, including any ownership rights which may be claimed by the State of Oregon below the high water mark.
- 7. Rights of governmental bodies in and to any portion of the premises lying within <u>Bernert Creek</u> or tributary, for wetlands protection, flood control and protection of anadromous fish.
- 8. Easement, including the terms and provisions thereof:

For : Sewer line
Granted to : City of West Linn
Recorded : August 16, 1954
Recording No. : Book 485, Page 52
Affects : Parcels II and VIII

9. Easement for utilities, if any such exist, over and across the premises formerly included within the boundaries

of 5th Street as vacated by City of West Linn Ordinance No. 811: Recorded : December 12, 1969

Recording No. : <u>69-25835</u>

Affects : Darcels I and V

10. Easement for utilities, if any such exist, over and across the premises formerly included within the boundaries of 7th Street as vacated by City of West Linn Ordinance No. 835:

Recorded : December 31, 1970

Recording No. : <u>70-28678</u>
Affects : Parcel IV

11. Easements, including the terms and provisions thereof, as granted and as reserved by Deed:

Grantor : Crown Zellerbach Corporation

Grantee : Publishers Paper Co.

For : Pipeline, powerline and roadway

Recorded : January 6, 1971

Recording No. : <u>71-250</u>
Affects : Parcel VIII

And subject to the terms and provisions pertaining to above easement as contained in Agreement:

Recorded : January 6, 1971

Recording No. : 71-251

12. Terms and provisions of appurtenant easement:

For : Pipeline

Granted to : Publishers Paper Co., successors and assigns

Recorded : June 7, 1971 Recording No. : 71-12518

Affects : Easement rights appurtenant to Parcel IV

13. Conditions, Restrictions, Waiver of Right of Remonstrance and Covenants for Easements, including the terms

and provisions thereof in Deed (with advance notice required for some construction activity):

Grantor : Publishers Paper Co., nka Smurfit Newsprint Corporation

Grantee : Tri-City Service District

Recorded : June 27, 1990 Recording No. : 90-30398

And Assignment, including the terms and provisions thereof:

Assigner : Tri-City Service District
Assignee : Water Environment Services

Recorded : July 3, 2018
Recording No. : 2018-041534

14. Order on Consent, dated July 19, 2012, of State of Oregon Department of Environmental Quality, and First Amendment to Order on Consent, dated July 30, 2012, and the obligations, conditions, restrictions and

access rights contained therein, as disclosed by Deeds:

Between : Oregon Department of Environmental Quality
And : Clackamas County Service District No. 1

And : Tri-City Service District Recorded : August 10, 2017

Recording No. : Adgust 10, 2017-054628

and

 Recorded
 : August 9, 2018

 Recording No.
 : 2018-049378

And Assignment Agreement, including the terms and provisions thereof:

Assignor : Clackamas County Service District No. 1

Assignee : Water Environment Services

Recorded : July 3, 2018
Recording No. : <u>2018-041419</u>

15. Terms and provisions of "Purchase and Sale Agreement, dated September 18, 2020, as shown in Deed:

Between : Water Environment Services, Grantor

And : SDG-2, LLC, a Delaware limited liability company, Grantee

Recorded : September 18, 2020

Recording No. : 2020-077135

as amended or modified by transfer and conveyance of Parcel VI therein to Water Environmental Services by Bargain and Sale Deed recorded December 8, 2021 as Recording No. 2021-106863.

16. Easement, including the terms and provisions thereof:

For : Permanent surface water, storm drainage and sanitary sewer

Granted to : Water Environment Services

Recorded : December 8, 2021 Recording No. : 2021-106865

Affects : Parcels II, V and VIII

17. Taxes, including the current fiscal year, not levied due to assessor records showing ownership or use by a

governmental entity. If the exempt status is terminated, an additional tax may be levied.

 Levy Code
 : 003-002

 Property ID No.
 : 00747534

 Map Tax Lot No.
 : 31E02 00401

 Affects
 : Parcel VII

18. Unpaid Taxes for 2022-2023:

Levied Amount : \$7,859.70, plus interest

and

Unpaid Taxes for 2021-2022:

Levied Amount : \$7,460.91 plus interest

Property ID No. : <u>00747730</u> Levy Code : <u>003-002</u>

Map Tax Lot No. : 31E02AA00800
Affects : Parcels I, III, IX and IV

19. Unpaid Taxes for 2022-2023:

Levied Amount : \$16,355.23, plus interest

and

Unpaid Taxes for 2021-2022:

Levied Amount : \$15,525.44 plus interest

 Property ID No.
 : 00747507

 Levy Code
 : 003-002

 Map Tax Lot No.
 : 31E02 00100

 Affects
 : Parcels II and VIII

20. Unpaid Taxes for 2022-2023:

Levied Amount : \$3,655.49, plus interest

and

Unpaid Taxes for 2021-2022:

Levied Amount : \$3,470.04 plus interest

Property ID No. : <u>00744261</u> Levy Code : <u>003-002</u>

Map Tax Lot No. : 31E01BB00100

Affects : Parcel V and additional property

21. Unpaid Taxes for 2022-2023:

Levied Amount : \$4,272.14, plus interest

and

Unpaid Taxes for 2021-2022:

Levied Amount : \$4,055.39 plus interest

Property ID No. : <u>00747696</u> Levy Code : <u>003-002</u>

Map Tax Lot No. : 31E02AA00200

Affects : Parcel XI

22. Unpaid Taxes for 2022-2023:

Levied Amount : \$257.50, plus interest

and

Unpaid Taxes for 2021-2022:

Levied Amount : \$244.44 plus interest

 Property ID No.
 : 00747687

 Levy Code
 : 003-002

 Map Tax Lot No.
 : 31E02AA00100

 Affects
 : Parcel XII

23. City liens, if any, of the City of West Linn. We find none as of August 7, 2023.

24. Trust Deed, Assignment of Rents, Security Agreement and Fixture Filing, including the terms and provisions

thereof to secure the amount noted below and other amounts secured thereunder, if any:

Grantor

: SDG-2, LLC, a Delaware limited liability company

Trustee : WFG National Title Insurance Company

Beneficiary : Water Environment Services

Dated : September 18, 2020 Recorded : September 18, 2020

Recording No. : <u>2020-077136</u> Amount : \$2,000,000.00

- 25. Any unrecorded leases or rights of tenants in possession.
- 26. Parties in possession, or claiming to be in possession, other than the vestees shown herein. For the purposes of ALTA Extended coverage, we will require an Affidavit of Possession be completed and returned to us. Exception may be taken to such matters as may be shown thereby.
- 27. Statutory liens for labor or materials, including liens for contributions due to the State of Oregon for unemployment compensation and for workmen's compensation, which have now gained or hereafter may gain priority over the lien of the insured mortgage where no notice of such liens appear of record.
- 28. 2023-2024 taxes, a lien not yet due and payable.

END OF EXCEPTIONS

NOTE: We find no judgments or federal or state tax liens against SKG-2 LLC.

NOTE: The Oregon Corporation Commission disclosed that SDG-2, LLC, is an active foreign limited liability

company:

Filed : October 18, 2018 Member : Robert J Schultz

Registered Agent : Buckley Law Registered Agent Services, Inc.

NOTE: The Delaware Division of Corporations disclosed that SDG-2, LLC, is an active Delaware limited liability

company:

Filed : June 18, 2018

Registered Agent : Northwest Registered Agent Service, Inc.

NOTE: LINKS FOR ADDITIONAL SUPPORTING DOCUMENTS:

Assessor's Maps

Plat Map Vesting Deed Aerial Photo

Photos - GoogleEarth-rTM

Legal Description Reference 131-195

Legal Description Reference 133-21

Legal Description Reference 69 25835

Legal Description Reference 70 269

Legal Description Reference 70 28678

Legal Description Reference 70 28681

Legal Description Reference 90 30398

Aerial Photo - PortlandMaps - Parcels I - III - IX and IV

Aerial Photo - PortlandMaps - Parcels II and VIII

Aerial Photo - PortlandMaps - Parcel V and Deleted Parcel VI

<u>Aerial Photo - PortlandMaps - Parcel VII</u> <u>Aerial Photo - PortlandMaps - Parcel XI</u> <u>Aerial Photo - PortlandMaps - Parcel XII</u>

NOTE: The following is incorporated herein for information purposes only and is not part of the exception from coverage (Schedule B-II of the prelim and Schedule B of the policy): The following instrument(s), affecting said property, is (are) the last instrument(s) conveying subject property filed for record within 24 months of the effective date of this preliminary title report: None of Record

NOTE: In no event shall WFG National Title Insurance Company have any liability for the tax assessor's imposition of any additional assessments for omitted taxes unless such taxes have been added to the tax roll and constitute liens on the property as of the date of closing. Otherwise, such omitted taxes shall be the sole responsibility of the vestee(s), herein.

NOTE: Due to current conflicts or potential conflicts between state and federal law, which conflicts may extend to local law, regarding marijuana, if the transaction to be insured involves property which is currently used or is to be used in connection with a marijuana enterprise, including but not limited to the cultivation, storage, distribution, transport, manufacture, or sale of marijuana and/or products containing marijuana, the Company declines to close or insure the transaction, and this Preliminary Title Report shall automatically be considered null and void and of no force and effect.

NOTE: The following applicable recording fees will be charged by the county:

Clackamas County-First Page \$93.00 Each Additional Page \$5.00 Non-standard Document Fee \$20.00 E-recording Fee \$3.00

NOTE: IMPORTANT INFORMATION REGARDING PROPERTY TAX PAYMENTS

Fiscal Year: July 1st through June 30th

Taxes become a lien on real property, but are not yet payable.

Taxes become certified and payable (approximately on this date)

First one third payment of taxes are due

Second one third payment of taxes are due

Final payment of taxes are due

July 1st

October 15th

November 15th

February 15th

May 15th

Discounts: If two thirds are paid by November 15th, a 2% discount will apply.

If the full amount of the taxes are paid by November 15th, a 3% discount will apply.

Interest: Interest accrues as of the 15th of each month based on any amount that is unpaid by the due date.

No interest is charged if the minimum amount is paid according to the above mentioned payment

schedule.

NOTE: THE FOLLOWING NOTICE IS REQUIRED BY STATE LAW: YOU WILL BE REVIEWING, APPROVING AND SIGNING IMPORTANT DOCUMENTS AT CLOSING. LEGAL CONSEQUENCES FOLLOW FROM THE SELECTION AND USE OF THESE DOCUMENTS. YOU MAY CONSULT AN ATTORNEY ABOUT THESE DOCUMENTS. YOU SHOULD CONSULT AN ATTORNEY IF YOU HAVE QUESTIONS OR CONCERNS ABOUT THE TRANSACTION OR ABOUT THESE DOCUMENTS. IF YOU WISH TO REVIEW TRANSACTION DOCUMENTS THAT YOU HAVE NOT SEEN, CONTACT THE ESCROW AGENT.

End of Report

Your Escrow Officer

Trevor Cheyne

WFG National Title Insurance Company 700 NE Multnomah Street, Suite 190

Portland, OR 97232

Phone: (503) 444-7047 Fax: (503) 296-5869

Email: TeamTrevor@wfgnationaltitle.com

Your Title Officer

Rosa Stombaugh WFG National Title Insurance Company 12909 SW 68th Pkwy., Suite 350 Portland, OR 97223

Phone: (503) 431-8526

Fax: (503) 684-2978
Email: rstombaugh@wfgtitle.com



WFG National Title Insurance Company is prepared to issue, as of the date specified in the attached Preliminary Title Report (the Report), a policy or policies of title insurance as listed in the Report and describing the land and the estate or interest set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as a General or Specific Exception or not excluded from coverage pursuant to the printed Exclusions and Conditions of the policy form(s).

The printed General Exceptions and Exclusions from the coverage of the policy or policies are listed in Exhibit One to the Report. In addition, the forms of the policy or policies to be issued may contain certain contract clauses, including an arbitration clause, which could affect the party's rights. Copies of the policy forms should be read. They are available from the office which issued the Report.

The Report (and any amendments) is preliminary to and issued solely for the purpose of facilitating the issuance of a policy of title insurance at the time the real estate transaction in question is closed and no liability is assumed in the Report.

The policy(s) of title insurance to be issued will be policy(s) of WFG National Title Insurance Company.

Please read the Specific Exceptions shown in the Report and the General Exceptions and Exclusions listed in Exhibit One carefully. The list of Specific and General Exceptions and Exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy to be issued and should be read and carefully considered.

It is important to note that the Report is not an abstract of title, a written representation as to the complete condition of the title of the property in question, and may not list all liens, defects and encumbrances affecting title to the land.

The Report is for the exclusive use of the parties to this transaction, and the Company does not have any liability to any third parties or any liability under the terms of the policy(s) to be issued until the full premium is paid. Until all necessary documents are recorded in the public record, the Company reserves the right to amend the Report.

Countersigned

Exhibit One 2006 American Land Title Association Loan Policy 6-17-06 EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

- 1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 - or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
 - (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
- 2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
- . Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage
- Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
- 5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
- 6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
- 7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

THE ABOVE POLICY FORM MAY BE ISSUED TO AFFORD EITHER Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE

- 1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
- 2. Facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
- 3. Easements, or claims of easement, not shown by the public records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
- 4. Any encroachment (of existing improvements located on the subject land onto adjoining land or of existing improvements located on adjoining land onto the subject land), encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the subject land.
- 5. Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

2006 AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY 6-17-06 EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

- 1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land:
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 - or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
- 2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
- Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10; or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
- 4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
- 5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE

- 1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records; proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
- 2, Facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
- 3. Easements, or claims of easement, not shown by the public records; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
- 4. Any encroachment (of existing improvements located on the subject land onto adjoining land or of existing improvements located on adjoining land onto the subject land), encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the subject land.

Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.



Plain English Privacy Statement for Appraisal, Title & Escrow Customers

WFG believes it is important to protect your privacy and confidences. We recognize and respect the privacy expectations of our customers. We believe that making you aware of how we collect information about you, how we use that information, and with whom we share that information will form the basis for a relationship of trust between us. This Privacy Policy provides that explanation. We reserve the right to change this Privacy Policy from time to time.

Williston Financial Group, LLC, WFG National Title Insurance Co. and each of the affiliates listed below (collectively "WFG" or the "WFG Family") are obligated to comply with Federal and state privacy laws. While there are some common requirements to those laws, the definitions and duties differ significantly from law-to-law and state-to-state. A privacy statement drafted to comply with all of the applicable privacy laws and their differing definitions would likely be confusing. Therefore, in an attempt to better communicate our privacy policies, WFG designed this "Plain English" explanation, followed by the Gramm-Leach-Billey Act model form and website links to State-Specific Privacy Notices in order to provide you with the complete, legal privacy notices and disclosures required under Federal and applicable State Laws.

WFG's primary business is providing appraisal, title insurance and, escrow services for the sale or refinance of real property. This can be a complicated process, involving multiple parties, many of whom have been selected by our customers, each filling a specialized role. In part, you have hired WFG to coordinate and smooth the passage of the information necessary for an efficient settlement or closing.

In the course of this process, WFG collects a significant amount of personal and identifying information about the parties to a transaction, including sensitive items that include but are not limited to: your contact information including email addresses, Social Security numbers, driver's license and, other identification numbers and information; financial, bank and insurance information; information about past and proposed mortgages and loans; about properties you currently or previously owned; your mortgage application package; and the cookie, IP address, and other information captured automatically by computer systems.

Much of this information is gathered from searches of public land records, tax, court and credit records to make certain that any liens, challenges, or title defects are addressed properly. Some of the information that is collected is provided by you, or the computer systems you use. We also may receive information from real estate brokers and agents, mortgage brokers and, others working to facilitate your transaction. We also may receive information from public, private or governmental databases including credit bureaus, 'no-fly' lists, and terrorist 'watch lists', as well as from your lenders and credit bureaus.

What Information is Shared?

WFG DOES NOT SELL any of your information to non-affiliated companies for marketing or any other purpose.

However, some of the same information <u>does get shared</u> with persons inside and outside the WFG Family in order to facilitate and complete your transaction.

For example:

- Information, draft documents, and closing costs will pass back and forth between WFG and your mortgage broker and lender to facilitate your transaction.
- Information, including purchase agreements and amendments, will pass back and forth between WFG and
 the real estate agents and brokers, the mortgage brokers and lenders, the lawyers and accountants, and
 others involved in facilitating the transaction.
- WFG may order property searches and examinations from title searchers, abstractors and title plants.
- WFG may use third parties to obtain tax information, lien information, payoff information, condominium and, homeowners' association information and payoff information.
- Third parties may be engaged to prepare documents in connection with your transaction.
- Surveys, appraisals and, inspections may be ordered.

- Within the WFG Family of companies, we may divide up the work to handle each closing in the most
 efficient manner possible and to meet specific legal and licensing requirements. Certain parts of your
 closing (for example a search or disbursement) may be handled by another division or company within the
 WFG Family.
- When it is time for signatures, your complete closing package may be sent to a notary, remote online notary, or notary service company who will arrange to meet with you to sign documents. The notary will, in turn, send signed copies back to us along with copies of your driver's license or other identity documents usually by mail, UPS, Federal Express or another courier service.
- Your deed, mortgage and other documents required to perfect title will be recorded with the local recorder
 of deeds.
- In some cases, we use an outside service to coordinate the recording or electronic-recording of those
 instruments, and they will receive copies of your deeds, mortgages and other recordable documents to
 process, scan and send on to the recording office.
- Various government agencies get involved. The law requires us to provide certain information to the IRS, the US Treasury, local and state tax authorities and other governmental agencies.

You have a choice in the selection of a mortgage broker, lender, real estate broker or agent and others that make up your 'transaction team.' Information flows to and from the members of the transaction team you have selected to facilitate an efficient transaction for you.

When WFG selects and engages a third-party provider, we limit the scope of the information shared with that third party to the information reasonably necessary for that service provider to provide the requested services. With most, we have entered into express agreements in which they expressly commit to maintain a WFG customer's information in strict confidence and use the information only for purposes of providing the requested services, clearing title, preventing fraud and addressing claims under our title insurance policies.

How does WFG use your Information?

We may use your personal information in a variety of ways, including but not limited to:

- Provide the products, services and title insurance you have requested and to close and facilitate your transaction.
- Coordinate and manage the appraisal process.
- Handle a claim or provide other services relating to your title insurance policies.
- Create and manage your account.
- Operate and improve WFG's applications and websites, including WFG MyHome[®], WFG's secure communication and transaction portal. Your information is used for access management, payment processing, site administration, internal operations, troubleshooting, data analysis, testing, research, and for statistical purposes.
- Respond to your requests, feedback, or inquiries.
- Comply with laws, regulations, and other legal requirements.
- Comply with relevant industry standards and our policies, including managing WFG's risk profile through reinsurance.
- Protect and enforce your rights and the rights of other users against unlawful activity, including identity theft and fraud.
- Protect and enforce our collective rights arising under any agreements entered into between WFG and you
 or any other third party;
- Protect the integrity and maintain security of our applications, websites, and products;
- Operate, evaluate, and improve our business; and
- Provide you with information about products, services, and promotions, from WFG or third parties that may interest you.

How Do We Store and Protect Your Personal Information?

Although no system can guarantee the complete security of your personal information, we will use our best efforts to maintain commercially reasonable technical, organizational, and physical safeguards, consistent with applicable law, to protect your personal information and our systems and sites from malicious intrusions or hacking.

How Long Do We Keep Your Personal Information?

We keep your personal information for as long as necessary to comply with the purpose for which it was collected, our business needs, and our legal and regulatory obligations. We may store some personal information indefinitely. If we dispose of your personal information, we will do so in a way that is secure and appropriate to the nature of the information subject to disposal.

Computer Information

When you access a WFG website, or communicate with us by e-mail, we may automatically collect and store more information than you are expressly providing when you fill out a survey or send an email. This may include:

- Your IP Address.
- Your email address, your alias and, social media handles.
- The type of browser and operating system you use.
- The time of your visit.
- The pages of our site you visit.
- Cookies.

In order to provide you with customized service, we make use of Web browser cookies. Cookies are files that help us identify your computer and personalize your online experience. You may disable cookies on your computer, but you may not be able to download online documents or access certain sites unless cookies are enabled.

The technical information we collect is used for administrative and technical purposes and to prevent fraud and provide identity verification. For instance, we may use it to count the number of visitors to our site and determine the most popular pages. We may also use it to review types of technology you are using, determine which link brought you to our Web site, assess how our advertisements on other sites are working, help with maintenance, and improve our customers' experience.

We may compare information gathered on previous visits to verify that we are interacting with the same parties and not a potential imposter.

If we ask you to fill out any forms or surveys, we will use the information we receive only for the specific purposes indicated in those forms or surveys.

The information you and your transaction team send us in emails or attached to an email, or provide through any of our online tools, is used for purposes of providing title, escrow and appraisal management services and used for the purposes described above.

Links to Third Party Sites

Our Applications and Websites may contain links to third-party websites and services. Please note that these links are provided for your convenience and information, and the websites and services may operate independently from us and have their own privacy policies or notices, which we strongly suggest you review. This Privacy Notice applies to WFG's applications and websites only.

Do Not Track

Because there is not an industry-standard process or defined criteria to permit a user to opt-out of tracking their online activities (Do Not Track or DNT), our websites do not currently change the way they operate based upon detection of a "Do Not Track" or similar signal. Likewise, we cannot assure that third parties are not able to collect information about your online activities on WFG websites or applications.

Social Media Integration

Our applications, websites, and products contain links to and from social media platforms. You may choose to connect to us through a social media platform, such as Facebook, Twitter, Google, etc. When you do, we may collect additional information from or about you, such as your screen names, profile picture, contact information, contact list, and the profile pictures of your contacts, through the social media platform. The social media platforms may also collect information from you.

When you click on a social plug-in, such as Facebook's "Like" button, Twitter's "tweet" button or the Google+, that particular social network's plugin will be activated and your browser will directly connect to that provider's servers. Your action in clicking on the social plug-in causes information to be passed to the social media platform.

We do not have control over the collection, use and sharing practices of social media platforms. We, therefore, encourage you to review their usage and disclosure policies and practices, including their data security practices, before using social media platforms.

How Can You "Opt-Out?"

We do not sell your information; therefore there is no need to opt-out of such reselling. Under various laws, you can opt-out of the sharing of your information for more narrow purposes. For additional detail, consult the Links under the "Legal" Notices attached below.

The "Legal" Notices

To comply with various federal and state laws, we are required to provide more complete legal notices and disclosures. In reviewing these, you will find that these notices incorporate the definitions and terminology used in the respective privacy laws which can often be somewhat convoluted and may even seem inconsistent with the descriptions above. The state-specific statutes may also give residents of those states additional rights and remedies.

Privacy Notice for California Residents - https://national.wfgnationaltitle.com/privacy-notice-california
Privacy Notice for Oregon Residents - https://national.wfgnationaltitle.com/privacy-notice-oregon

How to Contact Us

If you have any questions about WFG's privacy policy or how we protect your information, please contact WFG:

• By email: Consumerprivacy@willistonfinancial.com

• By telephone: 833-451-5718

• By fax: 503-974-9596

• By mail: 12909 SW 68th Pkwy, Suite 350, Portland, OR 97223

In-person: 12909 SW 68th Pkwy, Suite 350, Portland, OR 97223

WFG FAMILY

WILLISTON FINANCIAL GROUP LLC
WFG NATIONAL TITLE INSURANCE COMPANY
WFG LENDER SERVICES, LLC
WFGLS TITLE AGENCY OF UTAH, LLC
WFG NATIONAL TITLE COMPANY OF WASHINGTON, LLC
WFG NATIONAL TITLE COMPANY OF CALIFORNIA
WFG NATIONAL TITLE COMPANY OF TEXAS, LLC D/B/A WFG NATIONAL TITLE COMPANY
UNIVERSAL TITLE PARTNERS, LLC
VALUTRUST SOLUTIONS, LLC
WILLISTON ENTERPRISE SOLUTIONS & TECHNOLOGY, LLC
WFG NATIONAL TITLE COMPANY OF CLARK COUNTY, WA, LLC D/B/A WFG NATIONAL TITLE

Revised 6.12.20

Can you limit this

No

sharing?

| FACTS | WHAT DOES WILLISTON FINANCIAL GROUP DO | | | | | |
|-------|--|--|--|--|--|--|
| | WITH YOUR PERSONAL INFORMATION? | | | | | |
| Why? | Financial companies choose how they share your personal information. Federal law gives | | | | | |
| | consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we | | | | | |
| | collect, share, and protect your personal information. Please read this notice carefully to understand | | | | | |
| | what we do. | | | | | |
| What? | The types of personal information we collect and share depend on the product or service you have | | | | | |
| | with us. This information can include: | | | | | |
| | Social Security number and other government identification information | | | | | |
| | Your name, address, phone, and email | | | | | |
| | Information about the property, any liens and restrictions | | | | | |
| | Financial Information including credit history and other debt | | | | | |
| | Financial account information, including wire transfer instructions. | | | | | |
| How? | All financial companies need to share customers' personal information to run their everyday | | | | | |
| | business. In the section below, we list the reasons financial companies can share their customers' | | | | | |
| | personal information; the reasons Williston Financial Group chooses to share; and whether you can | | | | | |
| | limit this sharing. | | | | | |

Reasons we can share your personal information

For our everyday business purposes—

Does Williston Financial Group share?

Yes

| Torour overyddy bdeiniodo parpodol | | | | | |
|---|---|---|----------------------|--|--|
| such as to process yo | ur transactions, maintain your | | | | |
| | court orders and legal | | | | |
| investigations, or repo | | | | | |
| For our marketing pur | poses— | Yes | No | | |
| to offer our products a | | | | | |
| For joint marketing wit | h other financial companies | No | We don't share | | |
| | yday business purposes— | Yes | No | | |
| information about your | r transactions and experiences | | | | |
| For our affiliates' every | yday business purposes— | No | We don't share | | |
| information about your | r creditworthiness | | | | |
| For our affiliates to ma | arket to you | No | We don't share | | |
| For nonaffiliates to ma | rket to you | No | We don't share | | |
| To limit | Call 833-451-5718—our | menu will prompt you through your choice(s) | | | |
| our sharing | Visit us online: http://bit.l | y/WFGsConsumerPrivacyInformationRequest | Page or e-mailing us | | |
| | at consumerprivacy@wil | listonfinancial.com | | | |
| | Mail the form below | | | | |
| | | | | | |
| | Please note: | | | | |
| | | | | | |
| | If you are a new customer, we can begin sharing your information from the date we sent this notic | | | | |
| When you are no longer our customer, we continue to share your information as described in this | | | | | |
| notice. | | | | | |
| | However, you can contact us at a | ny time to limit our sharing. | | | |
| | | | | | |

Mail-In Form If you have a joint Mark any/all you want to limit: policy, your choices Do not share information about my creditworthiness with your affiliates for their everyday will apply to business purposes. everyone on your Do not allow your affiliates to use my personal information to market to me. account. Do not share my personal information with nonaffiliates to market their products and services to me. Name Mail to: Williston Financial **Address** Group PRIVACY DEPT City, State, Zip 12909 SW 68th Pkwy, File Number #350 Portland, OR 97223

Call 833-451-5718 or Email consumerprivacy@willistonfinancial.com

Questions?

Page 2

| Who we are | |
|--|--|
| Who is providing this notice | Williston Financial Group, LLC and its affiliates and subsidiaries as listed below: |
| What we do | |
| How does Williston Financial Group protect my personal information? | To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings. We limit access to your information to employees that need to use the information to process or protect transaction. We take industry standard (IPSEC) measures to protect against malicious intrusions or hacking |
| How does Williston Financial Group collect my personal information? | We collect your personal information, for example, when you Apply for insurance Engage us to provide appraisal, title and escrow services Give us your contact information Provide your mortgage information Show your driver's license We also collect your personal information from others, such as real estate agents and brokers, mortgage brokers, lenders, credit bureaus, affiliates, and others |
| Why can't I limit all sharing? | Federal law gives you the right to limit only |
| What happens when I limit sharing for an account I hold jointly with someone else? | Your choices will apply to everyone on your policy. |
| Definitions | |
| Affiliates | Companies related by common ownership or control. They can be financial and nonfinancial companies. Our affiliates include companies with a common corporate identity, including those listed below. |
| Nonaffiliates | Companies not related by common ownership or control. They can be financial and nonfinancial companies. Nonaffilliates we share with can include real estate agents and brokers, mortgage brokers, lenders, appraisers, abstractors and title searchers and others as appropriate to facilitate your transaction. |
| Joint marketing | A formal agreement between nonaffiliated financial companies that together market financial products or services to you. Williston Financial Group does not jointly market. |

Other important information

As a resident or citizen of certain states, we may have to provide additional state specific privacy notices and you may have rights other than as set forth above. The links below will provide state specific information:

Privacy Notice for California Residents - https://national.wfgnationaltitle.com/privacy-notice-california

Privacy Notice for Oregon Residents - https://national.wfgnationaltitle.com/privacy-notice-oregon

EXHIBIT A LEGAL DESCRIPTION

PARCEL I:

All of Tracts 7 and 8, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon.

TOGETHER WITH that portion of vacated 5th Street which inured thereto by reason of Vacation Ordinance No. 811, recorded December 12, 1969, as Recorder's Fee No. 69-25835.

PARCEL II:

A tract of land in the Ambrose Fields Donation Land Claim, being in Section 1 and Section 2, in Township 3 South, Range 1 East, of the Willamette Meridian, in the County of Clackamas and State of Oregon, more particularly described as follows:

Beginning at a point in the line between the Robert Moore Donation Land Claim and Ambrose Fields Donation Land Claim, which is North 37° 30' West, 6.40 chains from the Southeast corner of the Ambrose Fields Donation Land Claim; thence North 37° 30' West, (North 38° 12' West, according to the Plat of WILLAMETTE AND TUALATIN TRACTS), a distance of 12.16 chains, tracing the Northeast boundary of the Ambrose Fields Donation Land Claim to the Southeast boundary of the M.K. Perrin Donation Land Claim No. 50; thence South 62° 30' West, 5.04 chains tracing said Southeast boundary of the M.K. Perrin Donation Land Claim No. 50; thence South 39° East, 19.68 chains to the left bank (high water mark) of the Willamette River; thence down stream North 53° 45' East, 1.45 chains to the Southwesterly line of the tract of land owned by the Crown Zellerbach Corporation; thence North 39° West, 6.10 chains, more or less, to the most Westerly corner of the Crown Willamette Corporation Tract; thence North 53° East, 3.20 chains to the place of beginning.

EXCEPT that part thereof lying Northwesterly of a line drawn from the most Easterly corner of Lot A, Tract 13, WILLAMETTE AND TUALATIN TRACTS, to the most Westerly corner of Tract 8, WILLAMETTE AND TUALATIN TRACTS, the course of which line is recited in Deeds as North 69° 39' East.

PARCEL III:

All of Lot "A" of Tract 13, and all of Tract 9 of WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon, in the Records of Clackamas County, being a portion of that land described in Deed dated September 9, 1913, from Bertha P. Kanney and C.W. Kanney, her husband, recorded September 18, 1913, on Page 21 in Book 133, Deed Records.

ALSO, beginning at a point which is the East corner of Lot "A", Tract 13 of WILLAMETTE AND TUALATIN TRACTS; thence North 39° 00' West, 122.5 feet, more or less, along the Northeast line of said Lot "A", Tract 13, which is also the Southwest line of the property, now or formerly owned by Hawley Pulp & Paper Company to the North corner of said Lot "A", Tract 13, of said WILLAMETTE AND TUALATIN TRACTS; thence Northeasterly 332.5 feet, more or less, along the Northwest line of the property, now or formerly owned by Hawley Pulp & Paper Company, to a point which is the North corner thereof, thence South 38° 12' East, 145.0 feet, more or less, along the Northeast line of the property, now or formerly owned by Hawley Pulp & Paper Company, which line is also the Southwest line of said Tract 9 of said WILLAMETTE AND TUALATIN TRACTS to a point which is the West corner of Tract 8 of said WILLAMETTE AND TUALATIN TRACTS; thence South 69° 38' West 337.0 feet, more or less, to the East corner of said Lot "A", Tract 13, WILLAMETTE AND TUALATIN TRACTS, which is the place of beginning, being all the land described in Deed dated June 30, 1913, from Hawley Pulp & Paper Company to Portland, Eugene & Eastern Railway Company recorded July 9, 1913, on Page 195, in Book 131, Deed Records of Clackamas County.

EXCEPTING THEREFROM that portion as described in Street Dedication recorded January 6, 1970, as Recorder's Fee No. 70 269.

PARCEL IV:

Tracts 14 and 15, WILLAMETTE AND TUALATIN TRACTS, of the Williamette Meridian, in the County of Clackamas and State of Oregon.

TOGETHER WITH that portion of Vacated 7th Street which inured thereto by reason of Vacation Ordinance No. 835, recorded December 31, 1970, as Recorder's Fee No. 70 28678.

EXCEPTING THEREFROM that portion as described in Street Dedication recorded January 6, 1970, as Recorder's Fee No. 70 269.

PARCEL V:

All of Tract 6; WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon.

TOGETHER WITH that portion of vacated 5th Street which inured thereto by reason of Vacation Ordinance No. 811, recorded December 12, 1969, as Recorder's Fee No. 69-25835.

EXCEPTING THEREFROM that portion as described in Street Dedication recorded January 6, 1970, as Recorder's Fee No. 70-269.

PARCEL VI:

Intentionally Deleted

EXCEPTING THEREFROM that portion as described in Deed to Tri-City Service District recorded June 27, 1990, as Recorder's Fee No. 90-30398.

PARCEL VII:

All that real property situated, of the Willamette Meridian, in the County of Clackarnas and State of Oregon, described as:

Beginning at a point bearing South 53° 45' West, 17.87 chains and North 34° 45' West, 208 feet from the Southeast comer of the Ambrose Fields Donation Land Claim, Township 3 South, Range 1 East, of the Willamette Meridian, in the County of Clackamas and State of Oregon, said point being the Southeast comer of Block 16, WILLAMETTE AND TUALATIN TRACTS; thence North 34° 45' West, 452 feet along the Northeasterly line of Block 16 to the most Southerly corner of Lot "D", Block 17; thence North 53° 46' East, 330 feet along the Southeasterly line of said Block 17, and the Northeasterly extension thereof; thence South 34° 45' East, 457 feet along the Southwesterly line of Seventh Street to a point on the Southerly extension of the Southeast line of Block 15, WILLAMETTE AND TUALATIN TRACT, said point being 30 feet Southwesterly from the most Southerly corner of said Block 15; thence Southwesterly 330 feet, more or less, to the point of beginning.

EXCEPTING THEREFROM that portion as described in Street Dedication recorded December 30, 1970, as Recorder's Fee No. 70-28681.

PARCEL VIII:

A part of the Donation Land Claim No. 52 of Ambrose Field in Section 2, Township 3 South, Range 1 East, of the Willamette Meridian, in the County of Clackamas and State of Oregon, to wit:

Beginning on the left bank of the Willamette River where the Northern boundary line of said claim intersects said river; running thence North 39° West along said boundary 6.40 chains; thence South 53° West, 3.20 chains; thence South 39° East, 6.40 chains to the bank of the Willamette River, thence North 53° 45' East along the meanders of said river to the place of beginning.

SAVE AND EXCEPT THEREFROM a strip of land described as follows:

Beginning at a T-rail at the initial point of said WILLAMETTE AND TUALATIN TRACTS, thence South 34° 08' 55" West, 559.95 feet to an iron rod at the intersection of the Southerly line of Lot "E", Tract 6, said WILLAMETTE AND TUALATIN TRACTS, with the Westerly line of that parcel known as Parcel II, as described in Fee No. 70 269,

recorded January 6, 1970, Clackamas County Record of Deeds, said line now known as the Westerty right-of-way of Fourth Street; thence South 54° 23' 00" West, 398.67 feet along the Southerty line of said Tract 6 to an iron rod, which is a point identified in this Deed as Point "B"; thence South 39° 00' East, 168.90 feet to an unmonumented point which is the true point of beginning of the parcel; thence South 54° 23' 00" West, 209.50 feet to an unmonumented point; thence South 39° East, 10.0 feet, more or less, to the high water line of the left bank of the Willamette River; thence along said high water line, Northeasterly to the point of intersection with a line having a bearing of North 39° 00' West and passing through the true point of beginning of this parcel; thence North 39° 00' West, 10.0 feet, more or less, to the true point of beginning of this parcel;

PARCEL IX:

All of Lots "B" and "C" of Tract 13, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon.

PARCEL X:

Intentionally Deleted

PARCEL XI:

Lots "A", "B", "C" and "D", Block 5, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon.

EXCEPT that part of Lot "A", described as follows:

Beginning at a point in the Westerly side of Fourth Street, 96 feet Southerly from the most Northerly corner of said Lot "A"; thence Southerly along the Westerly side of Fourth Street, 50 feet; thence Westerly at right angles, 80 feet to a point; thence Northerly parallel with Fourth Street, 50 feet to a point; thence Easterly at right angles to Fourth Street, 80 feet to the place of beginning.

PARCEL XII:

Part of Lot "A" in Tract 5, WILLAMETTE AND TUALATIN TRACTS, of the Willamette Meridian, in the County of Clackamas and State of Oregon, described as follows:

Beginning at a point in the Westerly side of Fourth Street, 96 feet Southerly from the most Northerly corner of said Lot "A"; thence Southerly along the Westerly side of Fourth Street, 50 feet; thence Westerly at right angles, 80 feet to a point; thence Northerly parallel with Fourth Street, 50 feet to a point; thence Easterly at right angles to Fourth Street, 80 feet to the place of beginning.



FIRE CODE / LAND USE / BUILDING REVIEW APPLICATION

North Operating Center

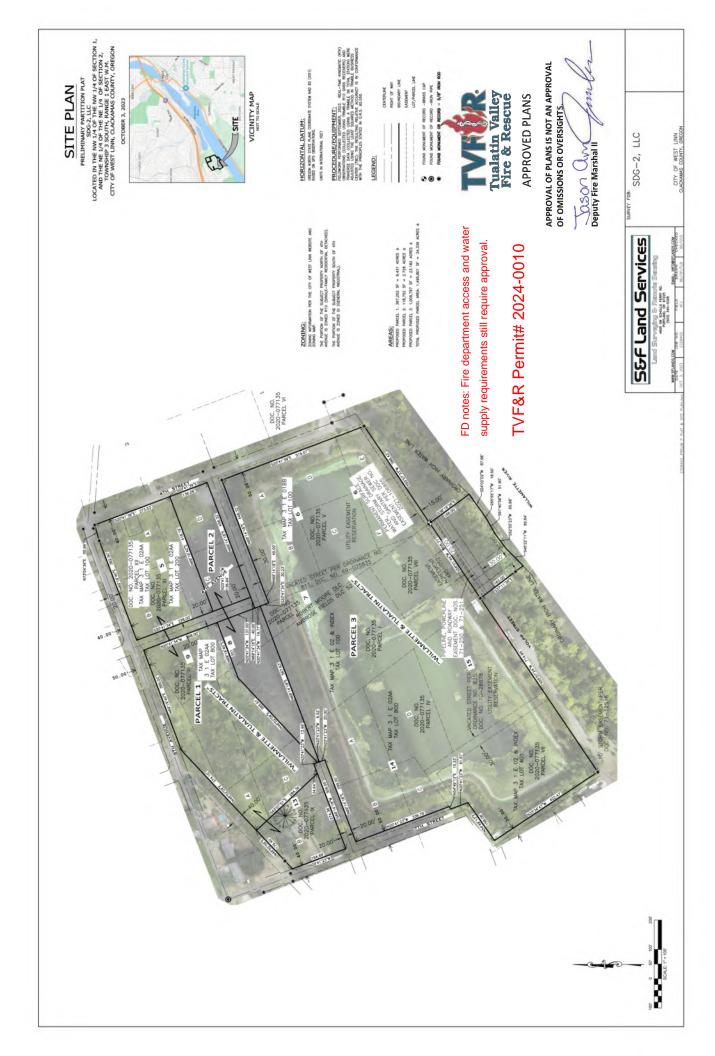
11945 SW 70th Avenue Tigard, OR 97223 Phone: 503-649-8577 South Operating Center 8445 SW Elligsen Rd Wilsonville, OR 97070

Phone: 503-649-8577

REV 6-30-20

Project Information Permit/Review Type (check one): Applicant Name: SDG-2, LLC (Bob Schultz, Manager) Address: 3242 Wild Rose Loop, West Linn, OR 97068 (m) 971-732-0347 (Bob Schultz) Phone: □ Emergency Radio Responder Coverage Install/Test Email: Duke.pdx@gmail.com & Schultz.christine8@gmail.com □LPG Tank (Greater than 2,000 gallons) Site Address: This site consists of 22 parcels and is about 36 acres. We ☐Flammable or Combustible Liquid Tank Installation typically use 1317 7th Street, West Linn, OR as the address doe the property. (Greater than 1,000 gallons) See Exhibit A: EXISTING CONDITIONS MAP & Exhibit C Legal Description Exception: Underground Storage Tanks (UST) City: West Linn are deferred to DEQ for regulation. Map & Tax Lot #: □ Explosives Blasting (Blasting plan is required) Parcel # 00747730: map 31E02AA & tax lot 31E02AA00800, Parcel # 00747730, map 31E02AA & tax lot 31E02AA00800 □Exterior Toxic, Pyrophoric or Corrosive Gas Installation (in excess of 810 cu.ft.) Parcel # 00747696, map 31E02AA & tax lot 31E02AA00200 Parcel # 00747687, map 31E02AA & tax lot 31E02AA00100 ☐Tents or Temporary Membrane Structures (in excess of 10,000 square feet) Parcel # 00747534, map 31E02 & tax lot 31E02 00401 Parcel # 00747507, map 31E02 & tax lot 31E02 00100 ☐Temporary Haunted House or similar Parcel # 0074426, map 31E01BB & tax lot 31E01BB00100 (but only those lands □OLCC Cannabis Extraction License Review to west of 4th street) □Ceremonial Fire or Bonfire Business Name: SDG-2, LLC (For gathering, ceremony or other assembly) Land Use/Building Jurisdiction: This property is split zoned, Residential, and Industrial, located in the City of West Linn For Fire Marshal's Office Use Only Land Use/ Building Permit: THIS IS NOT A LAND USE APPLICATION. TVFR Permit # 2024 - 0010 Choose from: Beaverton, Tigard, Newberg, Tualatin, North Plains, West Linn, Wilsonville, Permit Type: SPP West Linn Sherwood, Rivergrove, Durham, King City, Washington County, Clackamas County, Multnomah County, Yamhill County **Project Description** Submittal Date: 1-9-24 This submittal is for consolidating 22 parcels via a partitioning process to create Assigned To: OFM Arn 3 outlots conforming with the State of Oregon, Department of Environmental Quality previously approved parcel consolidation plan. See DEQ Exhibit C: DEQ Due Date: ///A APPROVED OUTLOT PHASING PLAN. Fees Due: Fees Paid:

| Approval/Inspection (For Fire Marshal's Control of the Control of | |
|---|--|
| 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 fire service plan | |
| See Attached Conditions: ☐ Yes ☐ No | |
| Site Inspection Required: ☐ Yes SNo | Final TVFR Approval Signature & Emp ID Date |





Department of Environmental Quality

Northwest Region

700 NE Multnomah Street, Suite 600 Portland, OR 97232 (503) 229-5263 FAX (503) 229-6945 TTY 711

May 2, 2022

Robert J. Schultz SDG-2, LLC 22870 Weatherhill Road West Linn, Oregon, 97068

RE: Blue Heron Lagoons Prospective Purchaser Agreement, Order on Consent 12-02. Out Area A & B Residential Development, West Linn, Oregon. ECSI #5717

Dear Mr. Schultz,

Environmental cleanup work at the Blue Heron Lagoon site in West Linn, Oregon is being managed pursuant to a Prospective Purchaser Agreement (PPA) between SDG-2, LLC and the Oregon Department of Environmental Quality (DEQ), to facilitate beneficial reuse of this former industrial property. However, the lagoon itself which served the former Blue Heron Paper Mill to receive paper process waste, occupies only about 2/3 of the total land area included in the PPA. While the other 1/3 of the property, referred to as out areas A and B, were not used in an industrial capacity and are now proposed for residential development (see attached Exhibit).

The total project area covered by the Blue Heron PPA is approximately 35.5 acres. The area currently proposed for residential development is approximately 11.9 acres.

SDG-2, LLC has requested approval from DEQ to proceed with development of out areas A and B prior to remediation of the lagoon. DEQ has reviewed correspondence from project consultant Lynn Green, in response to DEQ questions and concerns regarding planning and residential development of out areas A and B at the Blue Heron Lagoon site. This correspondence addressed the preservation of wetlands in the planned residential development area, future access for environmental sampling in the wetlands, and plans for remediation of the lagoon itself.

DEQ has concluded the proposed cleanup and development activities are consistent with the PPA, and approves development of out areas A and B for residential development prior to remediation of the lagoon.

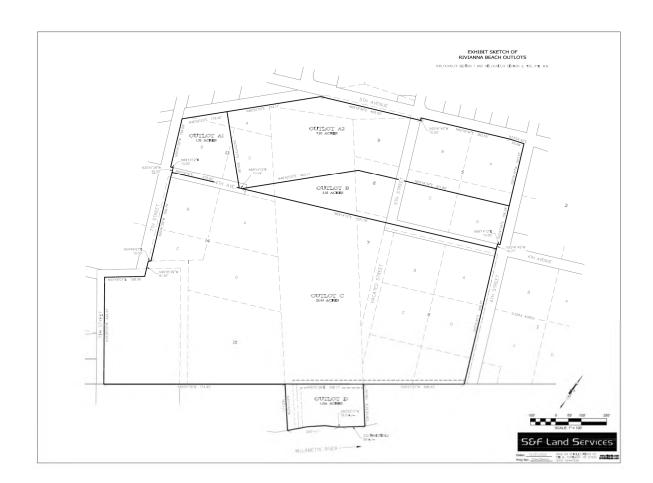
If you have any questions, please contact me.

Sincerely,

Kenneth Thiessen, RG, CEG

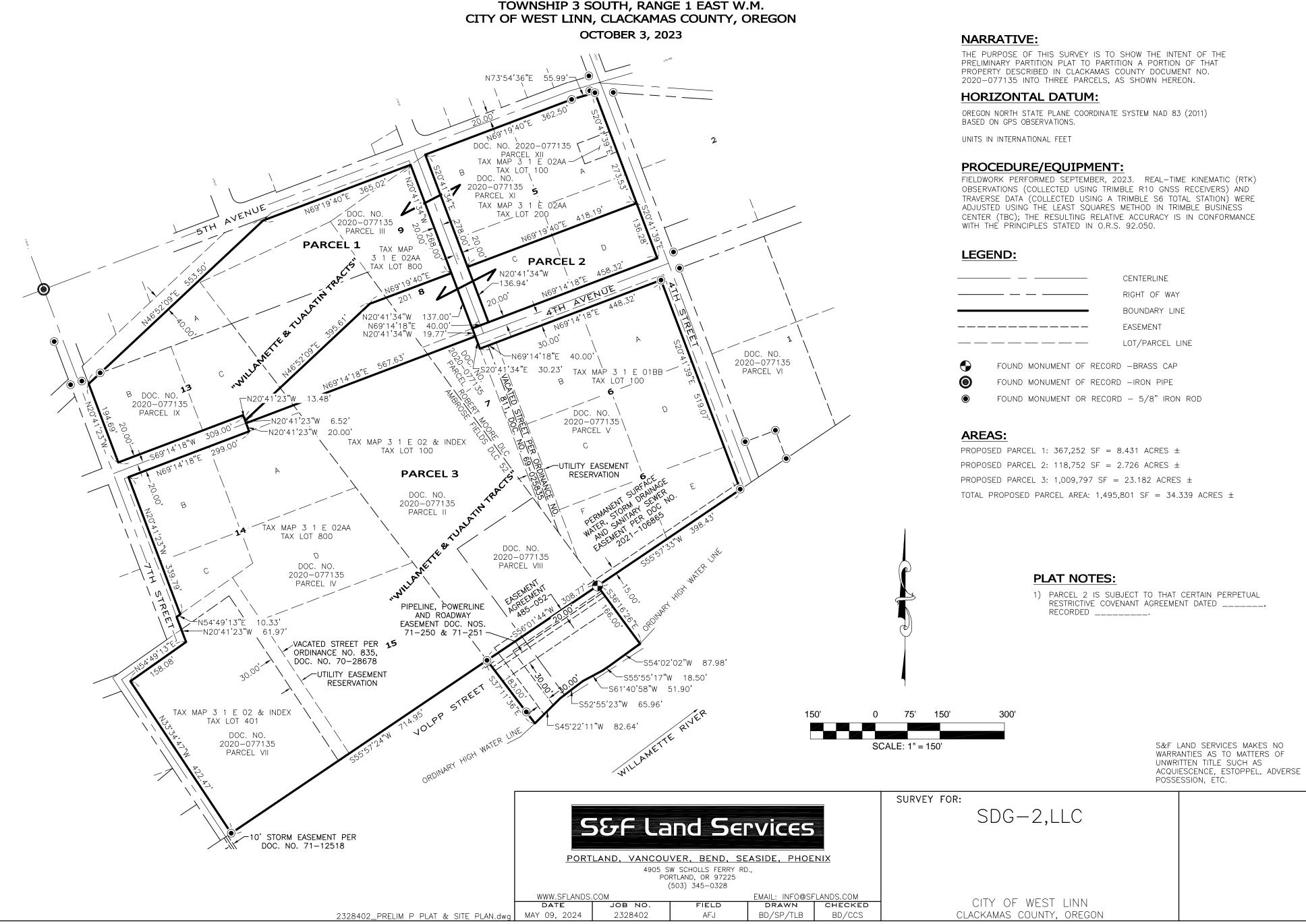
Northwest Region Cleanup Section

cc: Lynn Green, CEG, EVREN NW, via email James Estes, PC, Buckley Law, via email Cheyenne Chapman, PC, DEQ HQ, via email Mark Pugh, RG, DEQ NWR, via email ECSI #5717



PRELIMINARY PARTITION PLAT

SHULTZ DEVELOPMENT GROUP
LOCATED IN THE NW 1/4 OF THE NW 1/4 OF SECTION 1,
AND THE NE 1/4 OF THE NE 1/4 OF SECTION 2,
TOWNSHIP 3 SOUTH, RANGE 1 EAST W.M.
CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON



Wetland Delineation for Rivianna Beach Development in West Linn, Clackamas County, Oregon

| Township | Range | Section | Tax Lots (Portions) |
|----------|--------|---------|---|
| | | 2 | 100, 401, 3 rd Avenue Right-of-Way (ROW), Volpp Street ROW |
| 3 South | 1 East | 2AA | 200, 100, 800, 4 th Street ROW, 5 th Avenue ROW, 4 th Avenue ROW, 5 th Avenue ROW, 7 th Street ROW |
| | | 1BB | 100, 4th Street ROW, 5th Avenue ROW |
| 2 South | 1 East | 36CC | 900, 1201, 4 th Street ROW |

Prepared for

Forward Vision Development

c/o Aaron Murphy, PE, Senior Project Manager 3J Consulting 9600 SW Nimbus Ave #100 Beaverton, OR 97008

Prepared by

Alex Sherman and Carlee Michelson, PWS John van Staveren, SPWS

Pacific Habitat Services, Inc.

9450 SW Commerce Circle, Suite 180 Wilsonville, Oregon 97070

PHS Project Number: 7298

April 10, 2024



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I. INTRODUCTION

Pacific Habitat Services, Inc. (PHS) conducted a wetland delineation on the following tax lots:

| Township | Range | Section | Tax Lots (Portions) |
|----------|--------|---------|---|
| | | 2 | 100, 401, 3 rd Avenue Right-of-Way (ROW), Volpp Street ROW |
| 3 South | 1 East | 2AA | 100, 200, 800, 4 th Street ROW, 5 th Avenue ROW, 4 th Avenue ROW, 5 th Avenue ROW, 7 th Street ROW |
| | | 1BB | 100, 4th Street ROW, 4th Avenue ROW |
| 2 South | 1 East | 36CC | 900, 1201, 4 th Street ROW |

The study area is located adjacent to the north bank of the Willamette River in West Linn, Clackamas County, Oregon. Figures, including a map depicting the location of the wetlands and other waters are in Appendix A. Data sheets documenting onsite conditions are provided in Appendix B. Photos of the onsite existing conditions are included in Appendix C.

II. RESULTS AND DISCUSSION

A. Landscape Setting and Land Use

The study area is surrounded by medium to dense residential development and public streets. Directly east of the site is undeveloped forested area with a Blue Heron Mill Settling Pond #1. The site is bordered to the north by 5th Avenue, to the west by 7th Street, to the south by Volpp Street and partially by the Willamette River, and to the east by open space. Fourth (4th) Street crosses through the central east side of the study area. The small portion of Willamette River within the study area resides within River Mile 28.00. There are undeveloped ROWs for 4th Avenue and 5th Street within the study area.

The study area includes a clay-lined excavated settling pond called the Blue Heron Mill Settling Pond #2, which occupies most of the study area's southern portion. North of the settling pond, and approximately 8-10 feet lower in elevation, resides a wetland complex impounded by beaver activity. Active beaver were seen during the delineation field work within the wetland complex, and several nutria were present within the upslope settling pond. Due to beaver dam impoundment causing fluctuations in water levels, there are several different hydroperiods present on site. East of the beaver dam, flow exhibits an Ordinary High Water (OHW), which continues through a culvert below 4th Street and continues east beyond the study area.

To the north, steep slopes contain wetlands where groundwater emerges toward the toe of slope. This is evident through several seeps south of 5^{th} Avenue.

The study area east of 4th Street has an herbaceous layer consisting of reed canarygrass (*Phalaris arundinacea*, FACW) which inhabits most of the streambanks and wetlands on either side with occasional patches of soft rush (*Juncus effusus*, FAC). The understory and canopy on the north side of the stream is inhabited mostly by native willow (*Salix sp.*, FACW) intermixed with Oregon ash (*Fraxinus latifolia*, FACW), and to the south is dense Himalayan blackberry (*Rubus armeniacus*, FAC) with Oregon ash. The northeast corner of the site contains an open field of tall

fescue (*Schedonorus arundinaceus*, FAC) with dozens of emergent black cottonwood (*Populus balsamifera*, FAC) saplings with a dense patch of slough sedge (*Carex obnupta*, FACW) swamp rose (*Rosa pisocarpa*, FAC), English hawthorn (*Crataegus monogyna*, FAC), and Oregon ash.

The berm surrounding the Blue Heron Mill Settling Pond #2 is covered with a mix of grasses, moss, Himalayan blackberry, and ponderosa pine (*Pinus ponderosa*, FACU). North of the beaver pond within the impounded wetland complex is a multistory canopy of red alder (*Alnus rubra*, FAC) with an understory of English ivy (*Hedera helix*, FACU), sword fern (*Polystichum munitum*, FACU), Himalayan blackberry, beaked hazelnut (*Corylus cornuta*, FACU), English holly (*Ilex aquifolium*, FACU), and trailing blackberry (*Rubus ursinus*, FACU).

The study area is situated in the Tanner Creek-Willamette River watershed (6th level 12-digit HUC: 170900070405). Most of the study area is within the 100-year floodplain of the Willamette River except for upslope areas south of 5th Avenue.

Natural Resources Conservation Service (NRCS) mapped soils in the study area includes Woodburn silt loam, 8 to 15 percent slopes, Wapato silty clay loam, and Newberg fine sandy loam. The Wapato soils is considered hydric.

B. Site Alterations

From 1952 to 1970, onsite conditions were a mix of agricultural fields and forested slopes on the north end of the site. Fifth Avenue (5th) Avenue and 4th Street have been present since at least 1952, but not necessarily as asphalt roads. Between 1956 and 1960, 7th street was constructed, along with an existing residence on the west side of the site. An old remnant outbuilding structure exists west of 4th Street, near the intersection with 5th Avenue. Volpp Street became a more established road between 1960 and 1970. Between 1970 and 1981, the southern portion of the site had been developed into a lined settling pond for water treatment associated with the Blue Heron Mill. A drainageway can be seen at the location north of the existing pond since 1952, where Wetland A and Stream 1 are currently mapped (www.historicaerials.com). Imagery from 2005 shows the pond being dry and revealing the pond's bed liner. This could indicate that the pond experienced lesser flooding in the past and that the extent of ponding has grown over time.

Several snags are present along the periphery of Wetland A, indicating more intense flooding and a fluctuating water table, likely caused through impoundment. Construction of the northern berm and the steep topography of north of the settling pond has created conditions for upslope runoff from 5th Avenue to become impounded. Ponding is further intensified by onsite beaver activity. Current onsite conditions include a beaver dam west and near 4th Street. Peak flooding engulfs the settling pond's west, north and east sides at the bottom of the outer side of the berms.

No recent alterations or disturbances were observed onsite at the time of the site visit in January 2024, but as stated above, the presence of beaver was observed including a dam west of 4th Street. Water seasonally flows over 4th Street during the wet season, which was observed during the delineation.

C. Precipitation Data and Analysis

PHS conducted the wetland delineation fieldwork on January 26 and 29 0f 2024 For climate analysis, PHS used the Direct Antecedent Rainfall Analysis Method (DAREM). DAREM categorizes observed precipitation for the three months preceding the site visit into three categories: drier than normal, normal, or wetter than normal, and weights the monthly categories relative to the date of the field work. The weighted average is then applied for the wetland hydrology assessment. Precipitation data for the prior three (3) months as well as the WETS table was obtained from OREGON CITY, OR station, approximately one kilometer south of the study area. As shown in Table 1, the weighted average precipitation for the three months preceding the late January 2024 fieldwork was normal.

Table 1: Comparison of recorded monthly precipitation at the OREGON CITY, OR Weather Station to the WETS Tables, prior to the January 2024 wetland delineation field work.

| Prior Month | | TS ¹ Percentile | Measured | Condition*: | Condition Value | Month | Multiply |
|-------------|------|-------------------------------|--------------------------------|---------------------|-----------------------------------|---------------------|-----------------------------------|
| Name | (inc | hes) 70 th | Rainfall ² (inches) | Dry, Wet, Normal | (1=dry, 2=normal, or 3=wet) | Weight ³ | Previous two columns ⁴ |
| October | 2.47 | 4.83 | 3.40 | Normal | 2 | 1 | 2 |
| November | 4.22 | 6.95 | 4.07 | Dry | 1 | 2 | 2 |
| December | 4.95 | 8.11 | 8.26 | Wet | 3 | 3 | 9 |
| | | | | | | Sum | 13 |

¹ WETS Table for the OREGON CITY, OR Weather Station; Source: (https://agacis.rcc-acis.org/?fips=41005)

Recorded precipitation for the 14 days preceding the January 29 fieldwork was 5.34 inches, which is 188 percent of normal (2.84 inches). Precipitation on the day of January 26, 2024, was recorded at 0.48 inches. No precipitation was recorded on the day of the January 29, 2024, fieldwork. Precipitation accumulation for the water year to date was 19.79 inches (92% of normal).

D. Methods

Wetland Methodology

PHS identified jurisdictional wetlands in the study area 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 conclusions drawn by PHS were based on the methods outlined in the regional supplement, which requires a predominance of hydrophytic plant species, one indicator of hydric soil, and either one primary or two secondary indicators of hydrology to designate a sample point as a wetland. The delineation field work took place on January 26 and 29, 2024.

Observed precipitation is the precipitation recorded at the OREGON CITY, OR, OR Weather Station. Source: (https://agacis.rcc-acis.org/?fips=41005)

Month Weight: most recent month = 3, 2nd most recent month = 2, third most recent month = 1

⁴ Sum Total: sum of eighth column: drier (sum 6-9), normal (sum 10-14), wetter (sum 15-18)

Wetland boundaries in the study area were closely associated with a break in topography and an obvious contrast in vegetation. Wetland A's southern boundary is closely correlated with the flood limit of the beaver pond against the settling pond's berm. The northern boundary is not defined by the surface water elevation of Wetland A, but rather seeps that emerge at the base of slope south of 5th Avenue. Soil indicators used to identify the boundary included redox dark surface and depleted below dark surface accompanied by hydrology indicators of a high water table, and/or other primary hydrology indicators like saturation, surface water, and inundation visible in aerial imagery.

Wetland B had a gradual slope, which limited the use of topography as an aid for delineating the wetland. Numerous excavations were required to determine the presence of hydric soils and hydrology since the area had a wide swath of Oregon ash saplings emerging in the field. Vegetation transitions from a scrub-shrub community to an herbaceous upland community with patchy Himalayan blackberry.

Other Waters Methodology

OHW of the Willamette River was determined using elevation contours derived from the Public Lands Maps (DSL, 1975). The OHW elevation of the Willamette River was determined to be 62.6 feet NAVD88. OHW elevation corresponding to the site's river mile (28) was converted to NAVD88 datum from NGVD29, which roughly corresponded to sample point location 11 at 62.6 feet, which was taken above the field-indicators of OHW.

E. Description of all Wetlands and Other Waters

PHS identified the jurisdictional limits of two wetlands and two other waters within the study area. Descriptions of the delineated resources are provided below.

Wetland A

Wetland A (9.03 acres) has multiple Cowardin classes due to different hydroperiods and dominant vegetation. Wetland A is compartmentalized into the following Cowardin and HGM classes:

| Cowardin (Class and Subclass) | Water Regime Modifiers | Special Modifiers | Hydrogeomorphic (HGM) Class |
|--|-----------------------------|----------------------|-----------------------------|
| Palustrine, unconsolidated bottom, mud, (PUB3) | intermittently exposed (G) | Beaver (b) | Riverine |
| Palustrine, aquatic bed rooted vascular (PAB3F) | semipermanently flooded (F) | Beaver (b) | Riverine |
| Palustrine, forested broad-leaved deciduous (PFO1) | seasonally flooded (C) | N/A | Slope |

Areas of the wetland adjacent to the bottom of the slope that runs along 5th Avenue are dominated by dense Himalayan blackberry. The blackberry thicket is mostly the vegetation on the upland side of the wetland boundary. The vegetation community between the blackberry and flooded areas corresponds to the PFO Cowardin class with an overstory of red alder and Oregon ash; a shrub understory of English holly, English hawthorn, beaked hazelnut, sword fern, and Douglas spirea (*Spiraea douglasii*, FACW); and a ground cover of English ivy, trailing blackberry, a species of

Geranium, and cleavers (*Galium aparine*, FACU). The vegetation community in the PAB Cowardin class is predominantly reed canarygrass. Wetland A continues west beyond the study area.

Wetland B

Wetland B (0.88 acres) is located east of Wetland A and is hydrologically connected to Stream 1 (discussed below). The wetland is composed of two Cowardin classes as listed below both with HGM classifications of Riverine and Slope.

| Cowardin (Class and Subclass) | Water Regime Modifiers | Special Modifiers | Hydrogeomorphic (HGM) Class |
|---|----------------------------------|----------------------|--------------------------------|
| Palustrine, scrub shrub persistent (PSS1) | seasonally flooded (C) | N/A | Riverine |
| palustrine emergent persistent (PEM1) | seasonally flooded/saturated (E) | N/A | Riverine/Slope |

The emergent vegetation community consists mainly of slough sedge, tall fescue, and reed canarygrass. The scrub-shrub vegetation community is composed of native willow species with an understory closer to the stream of soft rush and reed canarygrass. Upslope of the stream, vegetation consists of Himalayan blackberry, English ivy, and bracken fern (*Pteridium aquilinum*, FACU). Wetland B continues east beyond the study area.

Stream 1

The onsite stream (363 linear feet; 57-feet width is hydrologically connected to Wetlands A and B. Stream flow starts on the west side of 4th Street, and flows through Wetland A. The stream is culverted below 4th Street, and flows through Wetland B, it continues eastward off-site, eventually flowing into the Willamette River. The Cowardin classification for Stream 1 is riverine, aquatic bed rooted vascular (R2AB3) with a HGM of Riverine.

Willamette River

The Willamette River overlaps slightly with the study area at the southeast end; 307 linear feet of the river is present within the study area. The width of the river is approximately 1,012 feet. The river has a Cowardin classification of riverine lower perennial unconsolidated bottom (R2UB3) with an HGM classification of Riverine.

Blue Heron Lagoon/ Blue Heron Mill Settling Pond #2

The Blue Heron Lagoon (15.11 acres) was constructed sometime in the 1970's as part of the Blue Heron Mills wastewater treatment system and was constructed in hydric soil (Wapato). The mill is no longer in operation. The pond was constructed using an engineered berm atop an alluvial terrace of the Willamette River and has a clay liner. The lagoon was supplied with water from the Blue Heron mill via a 3-mile pipeline that ran along the bottom of the Willamette River from the mill to the lagoon. Water was subsequently drained from the lagoon to the Willamette River via NPDES permit. The constructed berm caused impoundment of surface water and created a wetland upslope (west) of the lagoon. The lagoon's Cowardin Class is PUB3 and the HGM class is Depressional.

F. Deviation from Local and/or National Wetland Inventories

The Local Wetland Inventory (LWI) for the City of West Linn (approved in 2005), identified wetland in general agreement with the boundaries delineated by PHS in January 2024.

G. Mapping Method

PHS flagged the limits of wetlands and other waters within the study area with blue pin flags; neon pink tape was used for sample point locations. The wetland boundaries, the OHW of Stream 1, and sample points were pinpointed using a sub-meter accuracy Trimble GPS unit. The OHW of the Willamette River was based on the Public Lands map under Jurisdiction of the Oregon State Land Board (1975). Other features on the map are professionally surveyed with sub-centimeter accuracy by 3J Consulting.

H. Additional Information

As stated above, the Blue Heron Lagoon/ Blue Heron Mill Settling Pond #2 was constructed within hydric soil; however, per an email on March 5, 2024, from Chris Stevenson, Department of State Lands, the pond will not be jurisdictional at the state level as it is assumed it was legally constructed and has a liner.

I. Results and Conclusions

PHS delineated two wetlands and two other waters within the study area, as summarized in Tables 2A and 2B.

Table 2A: Summary of Wetlands within the Study Area

| Wetland Name | Area (acres) | Cowardin Class | HGM Class |
|---------------|--------------|------------------|-----------------|
| Wetland A | 9.03 | PUB3, PAB3, PFO1 | Slope, Riverine |
| Wetland B | 0.88 | PSS1, PEM1 | Slope, Riverine |
| Wetland Total | 9.91 | | |

Table 2B: Summary of Other Waters within the Study Area

| Water Name | Linear Feet | Width | Cowardin Class | HGM Class |
|------------------|-------------|------------|-----------------------|-----------|
| Stream 1 | 363 | 57feet | R2AB | Riverine |
| Willamette River | 307 | 1,010 feet | R2UB | Riverine |
| Waters Total | 670 | | | |

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.

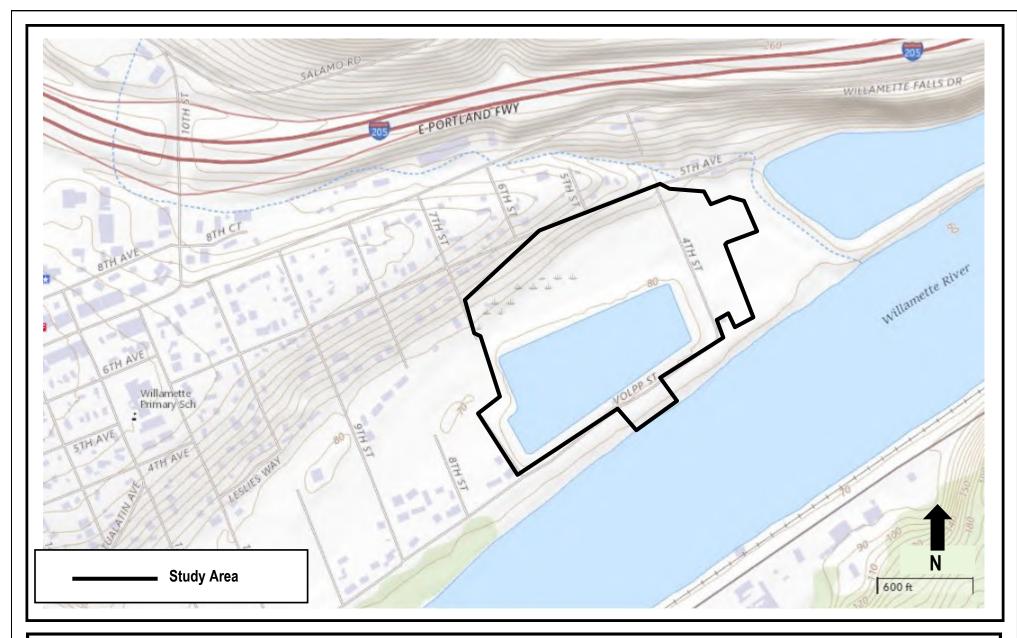
III. REFERENCES

- Adamus, P.R. and D. Field. 2001 Guidebook for Hydrogeomorphic (HGM)-based Assessment of Oregon Wetland and Riparian Study areas. Willamette Valley Ecoregion, Riverine Impounding and Slopes/Flats Subclasses. Oregon Division of State Lands, Salem, OR.
- GoogleEarth Map, 2024. Aerial photograph, Photo date: February 2024
- Munsell Color, 2010. *Munsell Soil Color Charts*. Grand Rapids, Michigan. 2009 Year Revised, 2010 Production.
- Natural Resources Conservation Service (NRCS), 2023. WETS Table and monthly rainfall data for the OREGON CITY, OR Weather Station; Source: (http://agacis.rcc-acis.org/?fips=41005)
- Personal Communication, March 2024. Email exchange between John van Staveren, PHS and Chris Stevensen, Dept. of State Lands regarding West Linn question.
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- US Department of Agriculture, Natural Resources Conservation Service, 2024. Web Soil Survey for Clackamas County.
- US Fish and Wildlife Service, 2024. National Wetland Inventory, *Wetland Mapper https://www.fws.gov/wetlands/data/mapper.html*
- US Geological Survey, 2024. 7.5 topographic map. West Linn, Oregon (2020)

Appendix A

Figures

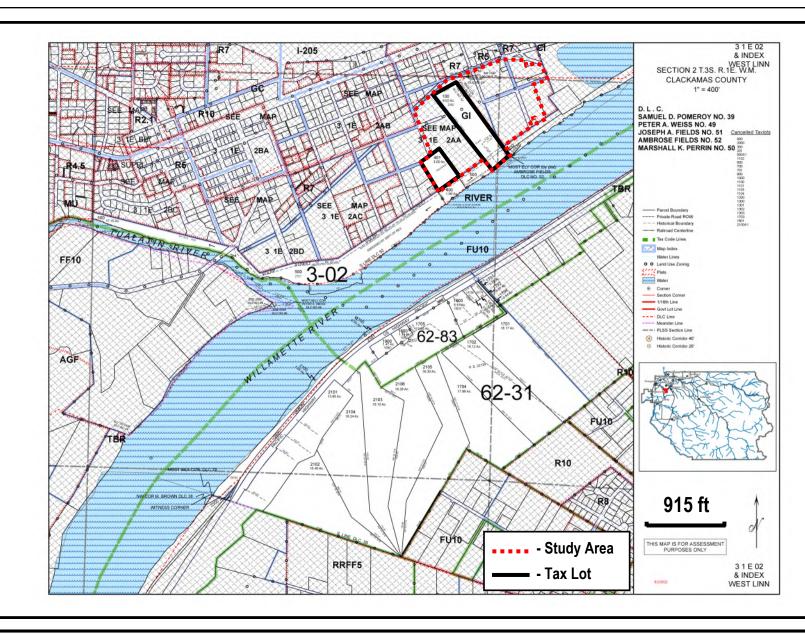






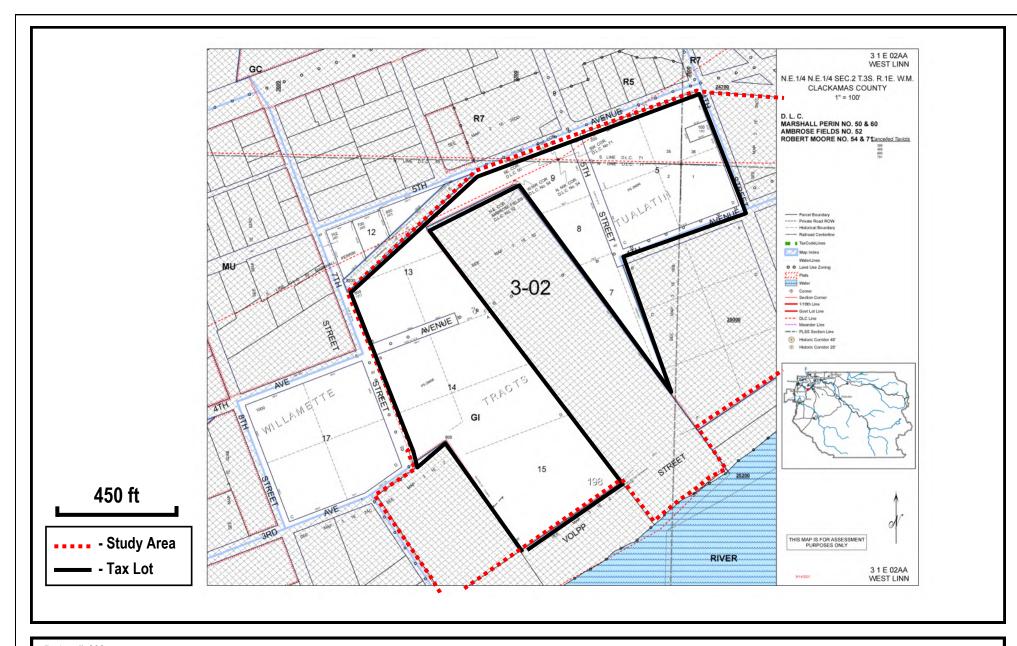
General Location and Topography
Rivianna Beach Development - West Linn, Oregon
United States Geological Survey (USGS) Canby, Oregon 7.5 quadrangle, 2020
(viewer.nationalmap.gov/basic)

FIGURE



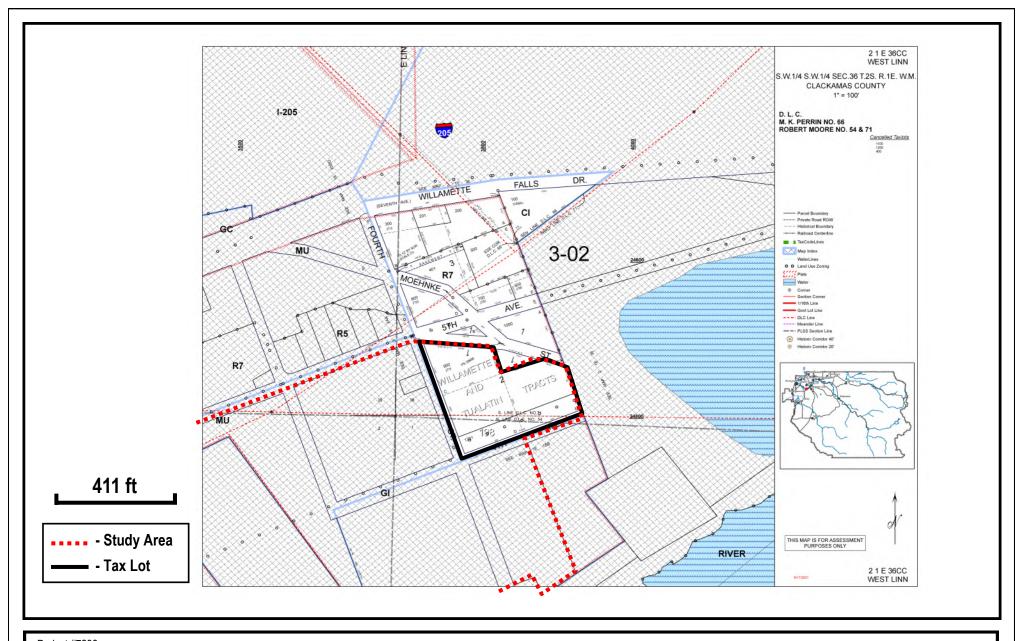


Tax Lot Map Rivianna Beach Development - West Linn, Oregon The Oregon Map (ormap.net) FIGURE 2A



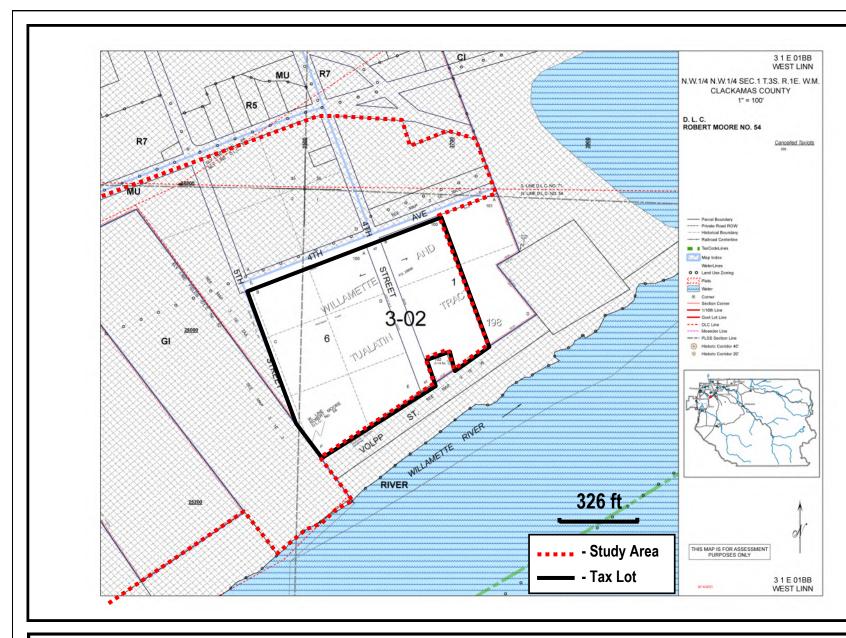


Tax Lot Map Rivianna Beach Development - West Linn, Oregon The Oregon Map (ormap.net) FIGURE 2B



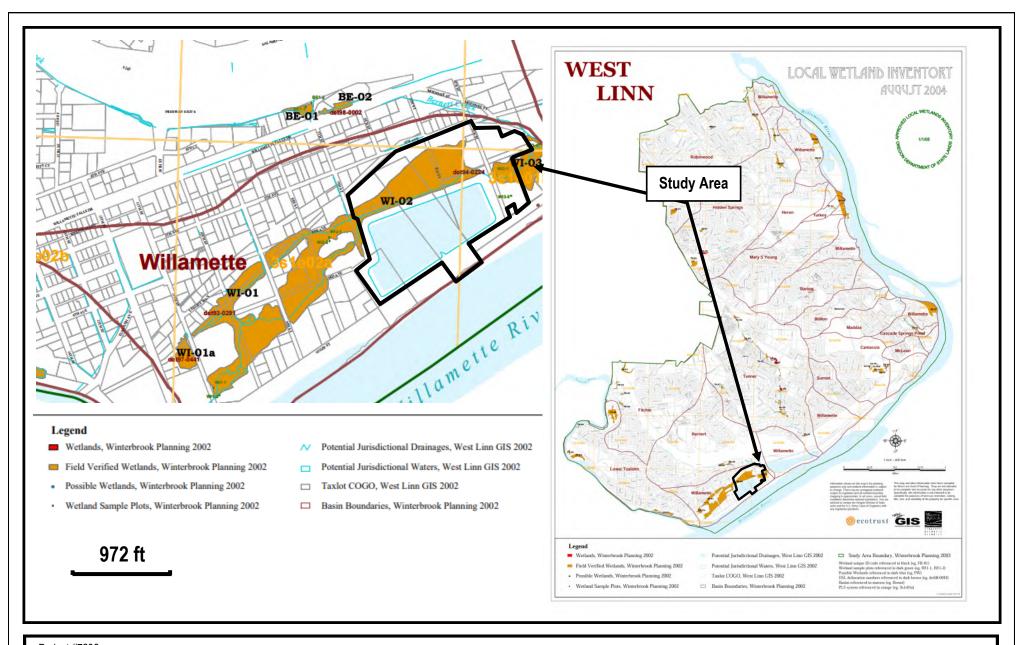


Tax Lot Map Rivianna Beach Development - West Linn, Oregon The Oregon Map (ormap.net) FIGURE 2C



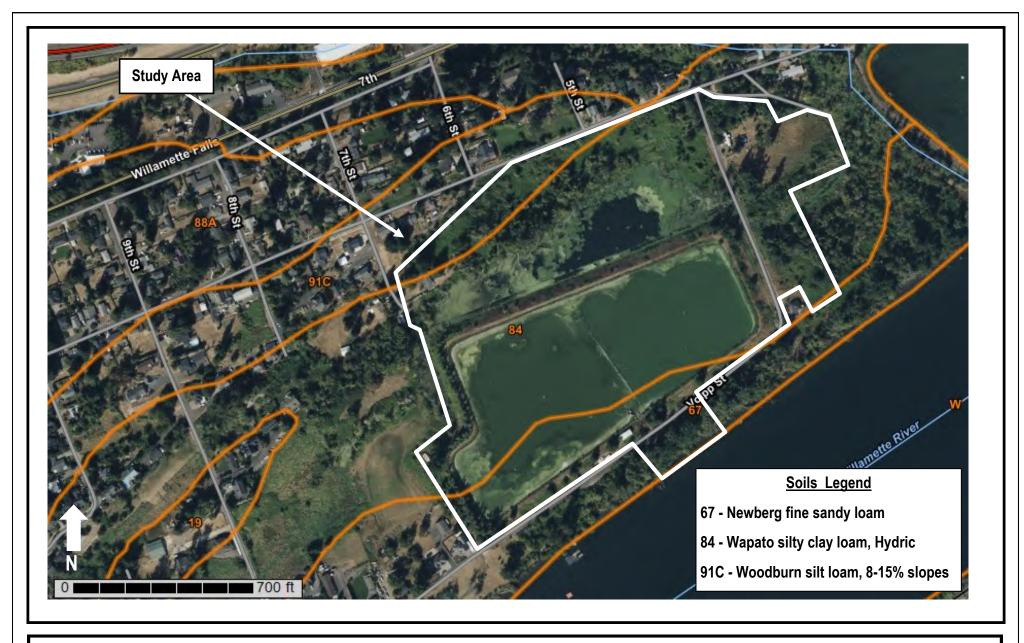


Tax Lot Map Rivianna Beach Development - West Linn, Oregon The Oregon Map (ormap.net) FIGURE 2D





Local Wetlands Inventory Rivianna Beach Development - West Linn, Oregon Winterbrook Planning, 2005 FIGURE



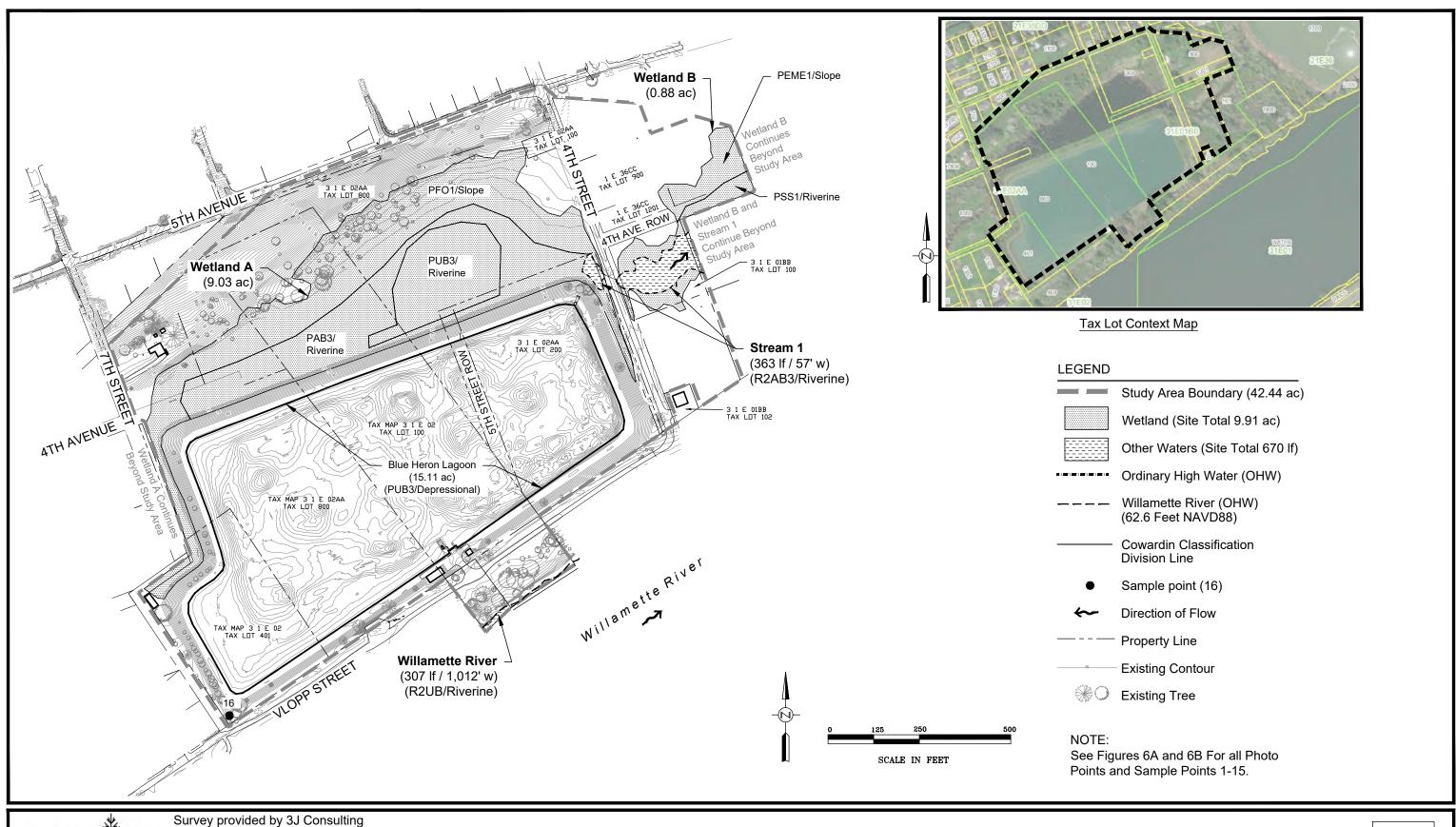


Rivianna Beach Development - West Linn, Oregon Natural Resources Conservation Services, Web Soil Survey, 2023 (websoilsurvey.sc.egov.usda.gov) **FIGURE**





Aerial Photo (February, 2024) Rivianna Beach Development - West Linn, Oregon GoogleEarth, 2024 FIGURE



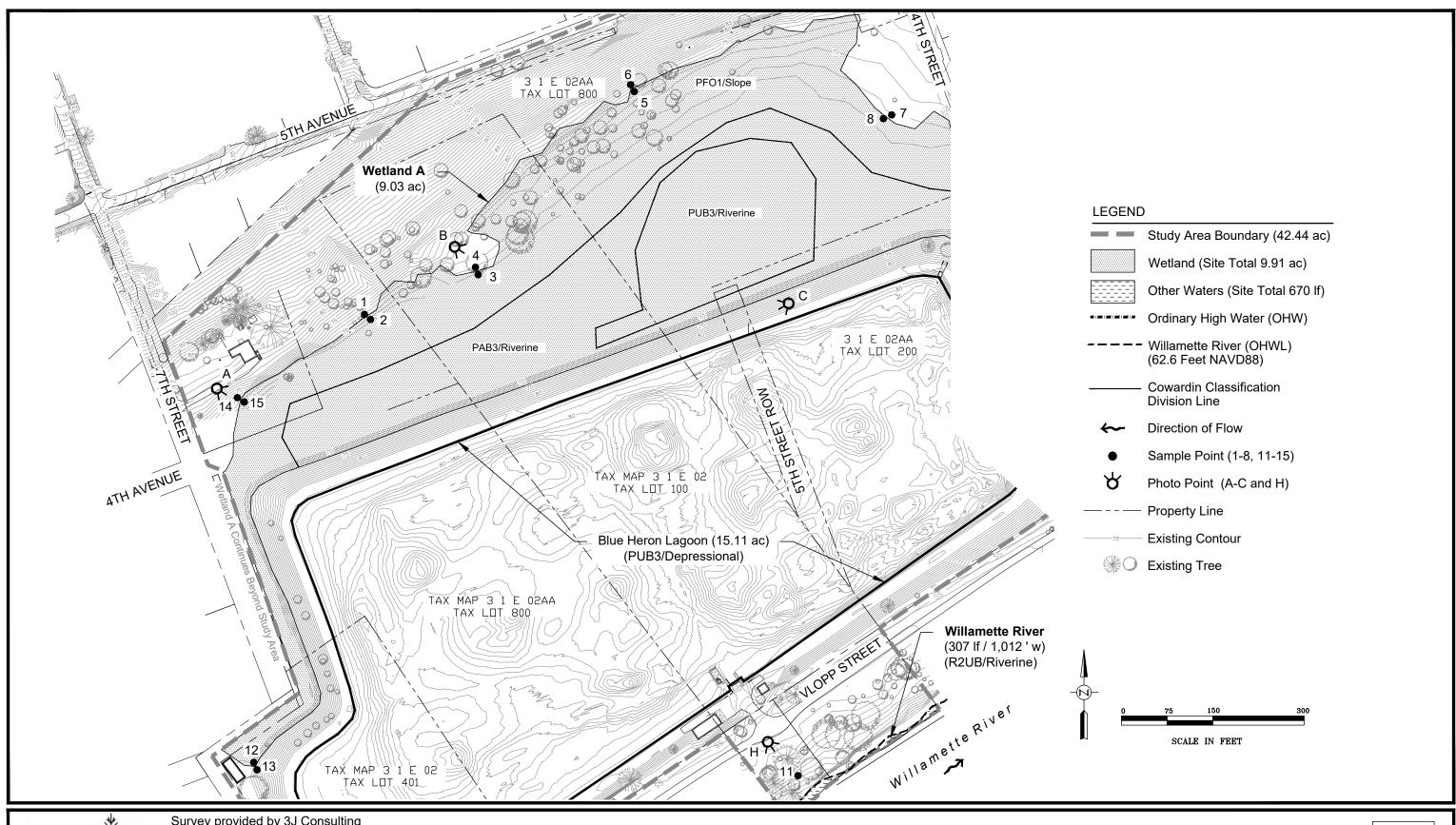


Survey provided by 3J Consulting
Survey accuracy is sub-centimeter.
Sample points, wetland flags collected by PHS with
submeter accuracy using Trimble GPS (Geo7x)
Ordinary High Water of Willamette River determined by
Public Lands Map, DSL 1975

Wetland Delineation Overview Riviannna Beach Development - West Linn, Oregon

FIGURE 6

4-10-2024



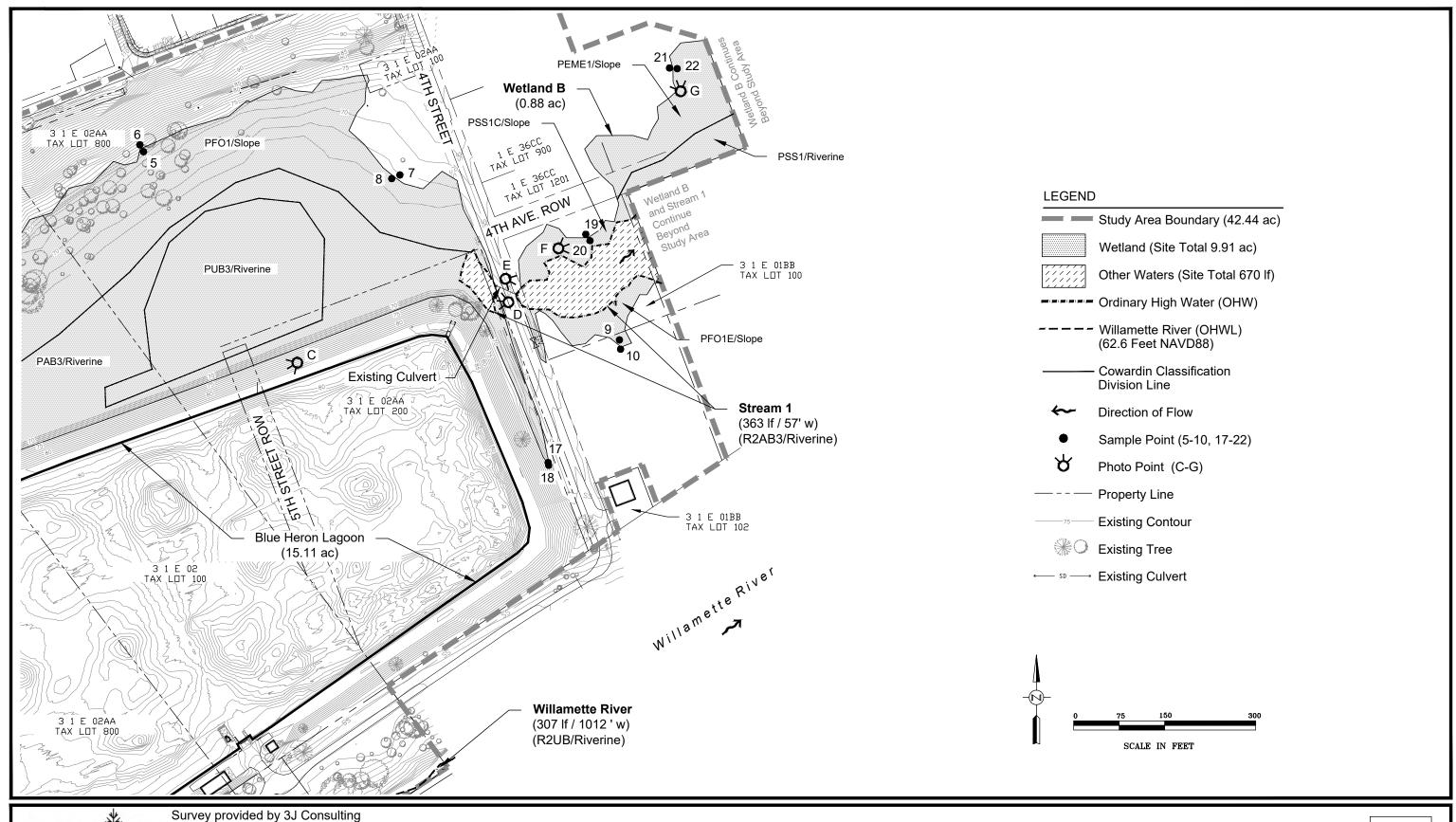


Survey provided by 3J Consulting Survey accuracy is sub-centimeter. Sample points, wetland flags collected by PHS with submeter accuracy using Trimble GPS (Geo7x) Ordinary High Water of Willamette River determined by Public Lands Map, DSL 1975

Wetland Delineation
Riviannna Beach Development - West Linn, Oregon

FIGURE 6A

4-10-2024





Survey provided by 3J Consulting
Survey accuracy is sub-centimeter.
Sample points, wetland flags collected by PHS with
submeter accuracy using Trimble GPS (Geo7x)
Ordinary High Water of Willamette River determined by
Public Lands Map, DSL 1975

Wetland Delineation
Riviannna Beach Development - West Linn, Oregon



4-10-2024

Appendix B

Wetland Determination Data Sheets



PHS#

7298

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

| all Map Unit Name: Wapato sitly clay loam NWI Classification: PFO1A NWI Classification: NWI Classification: (If no, explain in Remarks) ve expectation: Soil or Hydrology agridocated daturbed? Are "Normal Circumstances' present? (Viv) Y naturally problematic?! If needed oxplain any answers in Romanks.) UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. watch college and hydrology Present? Ves No X Sampled Area within a Westand? Ves No X Settlation: Solic coll Present? Ves No X Sabolute Species? Status Dominant Species That are OBL, FACW, or FAC: 1 (A) Frovaliance Index Worksheet: Stratum (plot size: 98 X FAC Total Number of Dominant Species That are OBL, FACW, or FAC: 100% (AVB) Prevalence Index Worksheet: Stratum (plot size: 98 X FAC Total Scover of Multiply by: O = Total Cover 98 * Total Cover 100 * FACW species 100 * FACW | roject/Site: F | Rivianna Bea | ch Deve | lopment | City/County: | West | Linn/Clackamas | Sampling | g Date: | 1/26 | /2024 |
|--|-----------------------|----------------------|--------------|-------------|---------------|--|---------------------------|---------------|--------------|----------------------|-----------|
| Lacar relief (contrave, convex, convex | plicant/Owner: | Forward \ | /ision De | evelopmer | ıt | | State: | OR | Sar | npling Point: | 1 |
| Local relater (concave, correcx, note): None Siepe (%) 10 Entregen (RR): LRRA Levi 45.3451 Leng 122.5437 Datum Worstell Wapato sity clay form Sing 10 Leng 122.5437 Datum Worstell Wapato sity clay form PFO A Wapato sity clay sity clay form PFO A Wapato sity clay form PFO A Wapato sity clay sity clay form PFO A Wapato sity clay sity | · /estigator(s): | | AS/CM | | Section, T | ownship, Range: | | S 2, T : | | · | |
| Lat | | | | | | · - | | | | Slope (%): | 10 |
| Wapsto silty clay loam | ubregion (LRR): | | | | | • | | -122.6 | 3437 | · · · · - | WGS84 |
| re climatichlydrologic conditions on the site typical for this time of year? ve opegatation | | e: | | Wapa | | | | | | _ | |
| a vegetation Soil or Hydrology alignificantly disturbed? Are "Normal Circumstances" present? (YN) Y a vegetation Soil or Hydrology naturally problematic? If needed, explain any answers in Remarks.) UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Vegetation Present? Yes No X claim Hydrology New Yes X claim Hydrology New Yes X claim Hydrology New Hydrology New Hydrology Invest to present, unless disturbed or problematic Provider Vegetation (Explain) indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Hydrology New Hyd | • | | on the site | | | | | | | | |
| UMMARY OF FINDINGS — Attach site map showing sampling point locations, transacts, important features, etc. very directly five Size services of Program of Size services of Size se | • | - | | | - - | | | | • | | |
| UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Indipolytic Vegetation Present? Yes | | | | _ | | | | · | - | <u> </u> | |
| Sampled Area within a Wetland? Yos X No X X No X X No X X No X X X X X X X X X | | | | ya.o.o.g, _ | Therenon, p | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | i, Oxpiairi a, a | manc., | | | |
| Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X Sampled Area within a Wetland? Yes No X No Yes X No Yes X No Yes Yes X Yes X Yes X | UMMARY OF | FINDINGS | - Atta | ch site m | ap showing sa | mpling point | locations, transect | s, importar | nt feature | s, etc. | |
| ### According to the provided and provided Species of Parts. ### According to the provided and | ydrophytic Vegeta | ition Present? | Yes - | X | No | Is Sampled A | rea within | | | | |
| ### According to the image of plants. ### According to the image of plants around in a page of plants. ### According to the image of plants around in a page of plants. ### According to the image of plants around in a page of plants. ### According to the image of plants around in a page of plants. ### According to the image of plants. #### According to the image of plants. ##### According to the image of plants. ##### According to the image of plants. ###### According to the image of plants. ########### According to the image of plants. ################################### | ydric Soil Present | .? | Yes | | No X | | 1/ | | No_ | X | |
| April | etland Hydrology | Present? | Yes | | No X | | | | | | |
| absolute | emarks: | | | | | | | | | | |
| absolute Species Dominant Species Status | | | | | | | | | | | |
| absolute | COETATION | Use seier | -tific no | | ta | | | | | | |
| Species Status Species Status Number of Dominant Species | EGETATION | - USE SCIEN | itiric nai | | | Indicator | Dominance Test wo | rkehoot: | | | |
| That are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B) Rubus armeniacus 98 X FAC Prevalence Index Worksheet: Total % Cover of Multiply by: OBL Species x 1 = 0 FACW species x 2 = 0 FACW species x 3 = 0 FACW Species x 4 = 0 UPL Species x 4 = 0 UPL Species x 5 = 0 Column Totals 0 (A) 0 (B) Prevalence Index BIA = #DIV/0! Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation A 2 - Dominance Test is >50% 3 - 3 - Prevalence Index is 3.0¹ 4 - Morphological Adaptions' (provide supporting data in Remarks or on a separate sheet) S - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation indicators of hydric solal and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | | | | | Dominance rest wo. | Rancet. | | | |
| Total Number of Dominant Species Across All Strata: 1 (B) | ee Stratum (pl | ot size: | ? |) | | | Number of Dominant Spe | ecies | | | |
| Total Number of Dominant Species Across All Strata: 1 | | | | | | | That are OBL, FACW, or | FAC: | 1 | (| (A) |
| Species Across All Strata: 1 (B) Species Across All Strata: 1 (B) | <u> </u> | | | | | | | | | | |
| Percent of Dominant Species Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B) | | | | | | | Total Number of Dominal | nt | | | |
| Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B) | ļ | | | | | | Species Across All Strata | ı: <u> </u> | 1 | | (B) |
| Rubus armeniacus | | | | 0 | = Total Cover | | | | | | |
| Prevalence Index Worksheet: Total % Cover of Multiply by: | apling/Shrub Strat | tum (plot size | e: 15 |) | | | Percent of Dominant Spe | ecies | | | |
| Prevalence Index Worksheet: Total % Cover of Multiply by: OBL Species X 1 = 0 FACW species X 2 = 0 FACW species X 3 = 0 FACW species X 4 = 0 FACW species X 5 = 0 Table species X 5 = 0 T | Rubus arme | niacus | | 98 | X | FAC | That are OBL, FACW, or | r FAC: | 100 | % | (A/B) |
| Total % Cover of Multiply by: OBL Species | | | | | | | | | | | |
| OBL Species | - | | | | | | | | | | |
| 98 | · | | | | | | - | <u>M</u> | | _ | |
| FAC Species | · | | | | | | · | | - | | |
| FACU Species | | | | 98 | = Total Cover | | · · | | _ | | |
| Phalaris arundinacea 2 | erh Stratum (pl | ot size: | 5 |) | | | • | | - | | |
| Column Totals 0 (A) 0 (B) Prevalence Index =B/A = #DIV/0! Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤ 3.0¹ 4 - Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | | 2 | | FACW | | | - | | |
| Prevalence Index =B/A = #DIV/0! Hydrophytic Vegetation Indicators: Hydrophytic Vegetation Indicators: | | | | | | <u>.</u> | · | 0 (A | - | | (B) |
| Hydrophytic Vegetation Indicators: Hydrophytic Vegetation Indicators: | | | | | | | | | <i>'</i> – | | |
| Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 2 = Total Cover A-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | 1 | | | | | | Prevalence Index = | :B/A = | #DIV | //0! | |
| 1- Rapid Test for Hydrophytic Vegetation X 2- Dominance Test is >50% X 2- Dominance Test is >50% 3-Prevalence Index is ≤ 3.0¹ 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | ; <u> </u> | | | | | | | | | | |
| X 2- Dominance Test is >50% 2 = Total Cover 3-Prevalence Index is ≤ 3.0¹ 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | 3 | | | | | | Hydrophytic Vegetat | ion Indicato | ors: | | |
| 2 = Total Cover 3-Prevalence Index is ≤ 3.0¹ | 7 | | | | | | . | 1- Rapid Test | for Hydrophy | tic Vegetatior | 1 |
| 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Separe Ground in Herb Stratum 98 4-Morphological Adaptations¹ (provide supporting 4-Morphological Adaptations² (provide supporting s | 3 | | | | | | · | • | | | |
| data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Bare Ground in Herb Stratum 98 data in Remarks or on a separate sheet) 1 | | | | 2 | = Total Cover | | | | | | يس ودافدت |
| 5- Wetland Non-Vascular Plants 1 Problematic Hydrophytic Vegetation 1 (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Bare Ground in Herb Stratum 98 5- Wetland Non-Vascular Plants 1 Problematic Hydrophytic vegetation 1 Stratum Problematic Hydrophytic Vegetation Yes X No | /dulling Stratu | (nlot size: | | ١ | | | | • | | | |
| Problematic Hydrophytic Vegetation¹ (Explain) O = Total Cover Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Bare Ground in Herb Stratum 98 Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | • | <u>η</u> (μισι δίλο. | | - ' | | | | | | | 1 |
| 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Bare Ground in Herb Stratum 98 Vegetation Yes X No | | | | | | | · | • | | | vnlain) |
| disturbed or problematic. Hydrophytic Bare Ground in Herb Stratum 98 Vegetation Yes X No | | | | | = Total Cover | | · | • | | | |
| 6 Bare Ground in Herb Stratum 98 Vegetation Yes X No | | | | | | | | | ulology | DO PIOCE, | IIIOGO |
| | | | | | | | Hydrophytic | | 3.5 | | |
| | | | | | | | | | v | NI - | |

| | | | PHS # | 7298 | _ | | Sampling Po | oint: <u>1</u> |
|---|--|---|---|--|--|---|---|---|
| | iption: (Describe to t | the depth | needed to docume | | | ce of indicators.) | | |
| Depth | Matrix | 0/ | 0.1 | Redox Features | Loc ² | T . | 5 | |
| (Inches) | Color (moist) | <u>%</u> | Color (moist) | % Type | LOC | Texture | R | emarks |
| 0-9 | 10YR 3/2 | 100 | | | | Silt Loam | | |
| 9-12 | 10YR 3/2 | 80 | | | | Silt Loam | | |
| 9-12 | 10YR 3/1 | 20 | | | | Silt Loam | - | |
| 12-18 | 10YR 3/1 | 100 | | | | Silt Loam | | |
| | | | | | | | _ | |
| | | | | | | | | |
| | · | | | | - | | _ | |
| Type: C=Con | centration, D=Depletion | on, RM=Re | educed Matrix, CS= | Covered or Coated S | Sand Grains. | | ² Location: PL=Pore Lini | ng, M=Matrix. |
| lydric Soil | Indicators: (Appli | cable to | all LRRs, unles | s otherwise note | d.) | Indic | cators for Problemati | c Hydric Soils³: |
| | Histosol (A1) | | | Sandy Re | edox (S5) | | 2 cm Mud | k (A10) |
| | Histic Epipedon (A2) | | | Stripped | Matrix (S6) | | Red Pare | nt Material (TF2) |
| | Black Histic (A3) | | | Loamy M | ucky Mineral (F1) (| except MLRA 1) | Very Shal | low Dark Surface (TF12) |
| | Hydrogen Sulfide (A4 | .) | | Loamy G | leyed Matrix (F2) | | | plain in Remarks) |
| | Depleted Below Dark | - | (11) | | Matrix (F3) | | | , |
| | Thick Dark Surface (A | ` | , | | ark Surface (F6) | | | |
| | Sandy Mucky Mineral | , | | | Dark Surface (F7) | | | ic vegetation and wetland |
| | Sandy Gleyed Matrix | ` ' | | | epressions (F8) | | | sent, unless disturbed or ematic. |
| | Garidy Oleyed Matrix | (04) | | Redox De | spressions (i o) | • | ргол | emado. |
| Depth (inche | s): | | | | | Hydric Soil Pre | esent? Yes | No X |
| Depth (inche | | | | | | Hydric Soil Pre | esent? Yes | NoX |
| Depth (inche: | | s: | | | | Hydric Soil Pre | esent? Yes | No <u>X</u> |
| Depth (inchesternates: HYDROLC Vetland Hy | OGY | | uired; check all t | hat apply) | | Hydric Soil Pre | | ns (2 or more required) |
| Depth (inchese Remarks: HYDROLC Vetland Hy Primary Indi | DGY rdrology Indicators | | uired; check all t | Water sta | nined Leaves (B9) (| | Secondary Indicato | rs (2 or more required) ined Leaves (B9) |
| Depth (inchesternation) Remarks: HYDROLO Vetland Hy Primary Indi | OGY vdrology Indicators cators (minimum o | f one req | uired; check all t | 11 37 | | | Secondary Indicato | rs (2 or more required) |
| Primary Indi | OGY rdrology Indicators cators (minimum o Surface Water (A1) | f one req | uired; check all t | Water sta | and 4B) | | Secondary Indicato Water sta | rs (2 or more required) ined Leaves (B9) |
| Pepth (inchesternates: HYDROLC Vetland Hy Primary Indi | OGY ordrology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 | f one req | uired; check all t | Water sta | and 4B) | | Secondary Indicato Water sta (MLRA1, | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) |
| Pepth (inchesternarks: HYDROLC Vetland Hy Primary Indi | ocators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) | f one req | uired; check all t | Water sta 1, 2, 4A, Salt Crus Aquatic Ir | and 4B) t (B11) | Except MLRA | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) |
| Primary Indi | OGY rdrology Indicators cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) | f one req | uired; check all t | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger | and 4B) t (B11) nvertebrates (B13) s Sulfide Odor (C1) | Except MLRA | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) |
| Pepth (inchesternates: HYDROLC Vetland Hy Primary Indi | ody rdrology Indicators cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B | f one req 2) 32) | uired; check all t | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized | and 4B) t (B11) nvertebrates (B13) s Sulfide Odor (C1) | Except MLRA g Living Roots (C3) | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery |
| Pepth (inchesternation) Remarks: HYDROLC Vetland Hy Primary Indi | ocators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) | f one req 2) 32) | uired; check all t | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence | and 4B) t (B11) nvertebrates (B13) s Sulfide Odor (C1) Rhizospheres alon | Except MLRA g Living Roots (C3) C4) | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas: Saturation Geomorp Shallow A | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) on Visible on Aerial Imagery hic Position (D2) |
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| Depth (inchese Remarks: HYDROLC Wetland Hy Primary Indi | ogy Indicators Icators (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) | f one req 2) 32) 4) B6) | , | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of | and 4B) t (B11) evertebrates (B13) s Sulfide Odor (C1) Rhizospheres alone of Reduced Iron (Con) on Reduction in Plo | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp Shallow A Fac-Neut | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery hic Position (D2) equitard (D3) ral Test (D5) |
| HYDROLC Wetland Hy Primary Indi | rdrology Indicators (cators (minimum or 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 | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of | and 4B) t (B11) nvertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Place or Stressed Plants (| Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp Shallow A Fac-Neut | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery inic Position (D2) iquitard (D3) ral Test (D5) int Mounds (D6) (LRR A) |
| Depth (inchese Remarks: HYDROLC Wetland Hy Primary Indi | 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 (Inundation Visible on Sparsely Vegetated C | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of | and 4B) t (B11) nvertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Place or Stressed Plants (| Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp Shallow A Fac-Neut | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery inic Position (D2) iquitard (D3) ral Test (D5) int Mounds (D6) (LRR A) |
| Pepth (inchese Remarks: HYDROLC Vetland Hy Primary Indi | 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 (Inundation Visible on Sparsely Vegetated Corvations: | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of | and 4B) t (B11) nvertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Place or Stressed Plants (| Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp Shallow A Fac-Neut | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery inic Position (D2) iquitard (D3) ral Test (D5) int Mounds (D6) (LRR A) |
| Field Obser | OGY Idrology Indicators Idrology Idrology Indicators Idrology I | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) No <u>X</u> | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex | and 4B) t (B11) nvertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Place or Stressed Plants (| Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas: Saturation Geomorp Shallow A Fac-Neut Raised Ai Frost-Hea | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery inic Position (D2) iquitard (D3) ral Test (D5) int Mounds (D6) (LRR A) |
| Primary Indi Field Obser Surface Water Water Table F Saturation Pre | DGY rdrology Indicators 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 (Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes esent? Yes | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) No <u>X</u> | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of | and 4B) It (B11) Invertebrates (B13) In Sulfide Odor (C1) Rhizospheres along In Reduced Iron (Con Reduction in Place In Stressed Plants (Explain in Remarks) | Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp Shallow A Fac-Neut | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery inic Position (D2) iquitard (D3) ral Test (D5) int Mounds (D6) (LRR A) |
| Primary Indi Field Obser Surface Water Table F Saturation Pre includes capilla | 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 (Inundation Visible on Sparsely Vegetated Corvations: Ir Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) No X No X No X | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex | and 4B) t (B11) nvertebrates (B13) s Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Ploor Stressed Plants (con In Remarks) >18 >18 | Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp Shallow A Fac-Neut Raised Ai Frost-Hea | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery hic Position (D2) equitard (D3) ral Test (D5) int Mounds (D6) (LRR A) ave Hummocks (D7) |
| Primary Indi Field Obser Surface Water Table F Saturation Pre includes capilla | DGY rdrology Indicators 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 (Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes esent? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) No X No X No X | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex | and 4B) t (B11) nvertebrates (B13) s Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Ploor Stressed Plants (con In Remarks) >18 >18 | Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp Shallow A Fac-Neut Raised Ai Frost-Hea | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery hic Position (D2) equitard (D3) ral Test (D5) int Mounds (D6) (LRR A) ave Hummocks (D7) |
| Primary Indi Field Obser Surface Water Table F Saturation Pre includes capilla | 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 (Inundation Visible on Sparsely Vegetated Corvations: Ir Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) No X No X No X | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex | and 4B) t (B11) nvertebrates (B13) s Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Ploor Stressed Plants (con In Remarks) >18 >18 | Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp Shallow A Fac-Neut Raised Ai Frost-Hea | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery hic Position (D2) equitard (D3) ral Test (D5) int Mounds (D6) (LRR A) ave Hummocks (D7) |
| Primary Indi Field Obser Surface Water Table F Saturation Pre includes capilla | 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 (Inundation Visible on Sparsely Vegetated Corvations: Ir Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) No X No X No X | Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex | and 4B) t (B11) nvertebrates (B13) s Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Ploor Stressed Plants (con In Remarks) >18 >18 | Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Secondary Indicato Water sta (MLRA1, Drainage Dry-Seas Saturation Geomorp Shallow A Fac-Neut Raised Ai Frost-Hea | rs (2 or more required) ined Leaves (B9) 2, 4A, and 4B) Patterns (B10) on Water Table (C2) in Visible on Aerial Imagery hic Position (D2) equitard (D3) ral Test (D5) int Mounds (D6) (LRR A) ave Hummocks (D7) |

PHS#

7298

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

| in Map Unit Name: Wapato sitly clay joan NWi Classification: PF01A or dimatich/pstroglog conditions on the site bysical for this time of year? Yes X No (if no. explain in Remarks) e vegetation Soil or Hydrology significantly disturbed? Are "Normal Cizcumstancery Present?" (Viv) Y we vegetated Soil professory: For Site Sampled Area within a Westand? Westand. Westand? Westand? Westand. Westand? Westand. Wes | roject/Site: Rivianna Beach Development City/County: West | | | | | Linn/Clackamas | Sam | ıpling Date: | 1/26 | 6/2024 | |
|--|---|---|---|---|---|---|---|----------------|--|--|--|
| Light Ligh | Forward V | ision De | evelopme | ent | | | State: | OR | S | ampling Point: | 2 |
| Light Ligh | | | • | | Section, To | wnship, Range: | | S 2 | _ | | |
| Legion (LRR): LRRA | · · · · · · · · · · · · · · · · · · · | | | | | | | | | | 10 |
| Map Unit Name: Wapato sitty clay loam | , , | LRR | | | | · | | | | | |
| se climaticity/protogogic conditions on the abit typical for this time of year? very designation Soil or Hydrology agindicarily disturbed? Are "Normal Ciscrossances" present? (Y/N) Y very explainin Soil or Hydrology naturally problematic? If needed, explain any answers in Remarks.) UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. With the property of the sample of point in a Westand? Ves X No S Sampled Area within a Westand? Ves X No S Semipled Area within a Westand? Ves X No S Semipled Area within a Westand? Ves X No S Semipled Area within a Westand? Ves X No Second Species? Status Borninant Species That are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species That are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Rubus armeniacus Salax sp 10 X (FAC) Face Second Second Strates 40 = Total Cover 40 = Total Cover And Second | | | | ato sil | | | <u> </u> | | | | |
| e vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? (YN) Y u vegetation Present? Ves X No oridic Soil Tresent? Ves X No origin Soil Tresent. Ves | | n the site | | | | | | Sollious. | | | |
| UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. drophylic Vegletion Present? | | | | | | | - | " =roos | | • | |
| UMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Instruction Indicator In | | | | | | | | • | nt? (Y/N) | T | |
| Sampled Area within a Wetland? Yes X No Sampled Area within a Wetland? Yes X No Sampled Area within a Wetland? Yes X No Sampled Area within a Wetland? Yes X No | _ Soii | _ Or n | ydrology | —' | naturally proble | natic? It neeueu | l, explain any answers ાા ત્રન્ | marks.) | | | |
| Sampled Area within a Wetland? Yes X No | FINDINGS | - Atta | ch site n | nap s | howing sar | npling point | locations, transects | s, impo | rtant featur | es, etc. | |
| Sampled Area within a Wetland? Yes X No | | | | | | | | | | - | |
| ### EGETATION - Use scientific names of plants. ### absolute | | Yes | | | | | | X | No |) | |
| ### Rate Ground in Herb Stratum (plot size: | | - | | | | a vvetiai | na? | - | _ | | |
| Dominance Species Dominant Species Statum Statum Species Statum Species Statum Stat | TOOCIA. | | | _ ''` - | | | | | | | |
| Absolute Species Dominant Species Status | | | | | | | | | | | |
| absolute Species? Status Species? Status Species? Status Species Spe | | | | | | | | | | | |
| absolute Species? Status Species? Status Species? Status Species Spe | Use scien | tific na | mas of r | alants | | | | | | | |
| | USE SCIEN | tille ma | | | | Indicator | Dominance Test wor | keheet. | | | |
| That are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B) Rubus armeniacus 30 X FAC Salix sp 10 X (FAC) Prevalence Index Worksheet: Total % Cover of Multiply by: OBL Species x 1 = 0 FACW species x 2 = 0 FACW species x 3 = 0 FACW species x 4 = 0 UPL Species x 4 = 0 UPL Species x 5 = 0 Column Totals 0 (A) 0 (B) Prevalence Index BI/A = #DIV/01 Hydrophytic Vegetation Indicators: 1 Rapid Test for Hydrophytic Vegetation Ocody Vine Stratum (plot size: 5) 0 = Total Cover 0 = Total Cover 1 Indicators of Hydric Soli and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | | | | | Dominiance 1000 to. | Names. | | | |
| Total Number of Dominant Species Across All Strata: 3 (B) | t size: | |) | | | | Number of Dominant Spe | cies | | | |
| Total Number of Dominant Species Across All Strata: 3 (B) | | | | | | <u></u> | That are OBL, FACW, or | FAC: | | 3 | (A) |
| Species Across All Strata: 3 (B) | | | | | | | | | | | • |
| Percent of Dominant Species Salix sp | | | | | | | Total Number of Dominar | nt | | | |
| Percent of Dominant Species Salix sp | | | | | | | Species Across All Strata | : | | 3 | (B) |
| Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B) Provalence Index Worksheet: Total % Cover of Multiply by: 40 = Total Cover Phalaris arundinacea 70 X FACW Prevalence Index Worksheet: Total % Cover of Multiply by: PACW Species x1 = 0 FACW Species x3 = 0 FACW Species x3 = 0 FACW Species x4 = 0 UPL Species x5 = 0 Column Totals 0 (A) 0 (B) Prevalence Index = B/A = #DIV/0! Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% 3-Prevalence Index = Soo% 3-Prevalence Index is \$3.0° 4-Morphological Adaptations' (provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants' Problematic Hydrophytic Vegetation (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | 0 | | = Total Cover | | | | | | (- / |
| Rubus armeniacus 30 | / 1-4-1 | 45 | | | | | 5 | | | | |
| Salix sp | | <u>; 15</u> | —′ | | ~ | -10 | · · | | 46 | | |
| Prevalence Index Worksheet: Total % Cover of Multiply by: | iacus | | | | | | That are OBL, FACVV, or | FAC: | 10 | 0% | (A/B) |
| Total % Cover of Multiply by: OBL Species | | | 10 | — - | X | (FAC) | 1 | | | | |
| OBL Species x1 = 0 FACW species x2 = 0 FAC Species x3 = 0 FACU Species x4 = 0 FACU Species x5 = 0 Column Totals 0 (A) 0 (B) Prevalence Index =B/A = #DIV/0! Hydrophytic Vegetation Indicators: Total Cover Total Cover Total Cover | | | | — - | | | | orksheet | | | |
| 40 | | | | | | | | | | - | |
| FAC Species | | | | | | | · - | | _ | | |
| FACU Species | | | 40 | * | = Total Cover | | - · · · · · · · · · · · · · · · · · · · | | | | |
| Phalaris arundinacea 70 X FACW UPL Species Column Totals 0 (A) 0 (B) Prevalence Index = B/A = #DIV/0! Hydrophytic Vegetation Indicators: 1- Rapid Test for Hydrophytic Vegetation X 2- Dominance Test is >50% 3-Prevalence Index is ≤ 3.0¹ 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | 4 ales. | E | ١. | | | | - | | _ | | |
| Column Totals Prevalence Index =B/A = #DIV/0! Hydrophytic Vegetation Indicators: 1- Rapid Test for Hydrophytic Vegetation X 2- Dominance Test is >50% 3-Prevalence Index is ≤ 3.0¹ 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | 70 | | v | - A C\A/ | - | | _ | | |
| Prevalence Index =B/A = #DIV/0! Hydrophytic Vegetation Indicators: Hydrophytic Vegetation Indicators: | | | /0 | — - | X | FACW | · - | | _ | | |
| Prevalence Index =B/A = #DIV/0! Hydrophytic Vegetation Indicators: Hydrophytic Vegetation Indicators: 1- Rapid Test for Hydrophytic Vegetation X 2- Dominance Test is >50% 3- Prevalence Index is ≤ 3.0¹ 4- Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) Problematic Hydrophytic Vegetation¹ (Explain) Hydrophytic Vegetation² Hydrophytic Vegetation² Hydrophytic Vegetation² Vege | | | | — - | | | Column Totals | 0 | _(A) | 0 | (B) |
| Hydrophytic Vegetation Indicators: Hydrophytic Vegetation Indicators: | | | | — - | | | | | "" | | |
| Hydrophytic Vegetation Indicators: 1- Rapid Test for Hydrophytic Vegetation X 2- Dominance Test is >50% X 2- Dominance Test is >50% 3-Prevalence Index is ≤ 3.0¹ 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | | | | | Prevalence Index = | B/A = | #DI | V/0! | |
| 1- Rapid Test for Hydrophytic Vegetation X 2- Dominance Test is >50% 70 = Total Cover 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | | | | | | | | | |
| X 2- Dominance Test is >50% | | | | | | | | | | | |
| Total Cover 3-Prevalence Index is ≤ 3.0¹ 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) | | | | | | | · | - | | - | n |
| 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | | | | | · | | | | |
| data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | 70 | ; | = Total Cover | | | | | | |
| 5- Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | / I-4 simo. | | | | | | | | | | |
| Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | (plot size: | | _) | | | | | | | |) |
| D = Total Cover Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No | | | | | | | · | | | | |
| disturbed or problematic. Hydrophytic Bare Ground in Herb Stratum 30 Vegetation Yes X No | | | | | | | · | | | | |
| Bare Ground in Herb Stratum 30 Hydrophytic Vegetation Yes X No | | | 0 | ; | = Total Cover | | • | nd wetlan | d hydrology mu | st be present, | unless |
| Bare Ground in Herb Stratum 30 | | | | | | | disturbed or problematic. | | | | |
| | | | | | | | lea a calcast. | | | | |
| | vrh Stratum | | 30 | | | | | Yes | , x | No | |
| 1 2 5 Bare Ground in He | | terrace, etc.:) terrace, etc.:) continuous of soil Soil FINDINGS ion Present? - Use scien of size: Image: proper size of size | Forward Vision De AS/CM terrace, etc.:) LRR/ : gic conditions on the site Soil or H Soil or H FINDINGS - Attaining Present? Yes Present? Yes - Use scientific na of size: Image: 15 niacus of size: 5 ndinacea | Forward Vision Developme AS/CM terrace, etc.:) Hills LRRA : Wap: gic conditions on the site typical for the soil or Hydrology Soil or Hydrology FINDINGS - Attach site in the site site site in the site site site site site site site sit | Forward Vision Development AS/CM terrace, etc.:) Hillslope LRRA : Wapato sil gic conditions on the site typical for this time Soil or Hydrology Soil or Hydrology FINDINGS - Attach site map silion Present? Yes X No Yes X No Present? Yes X No The scientific names of plants absolute % cover with size: Indicate 30 Indicate 30 Indicate 40 The scientific size 5 Attach 30 Indicate 70 The scientific size 5 Attach 30 Indicate 70 Indicate 70 Indicate 70 | Forward Vision Development AS/CM Section, To terrace, etc.:) Hillslope LRRA Lat: Wapato silty clay loam gic conditions on the site typical for this time of year? Soil or Hydrology significantly dist Soil or Hydrology naturally probler FINDINGS – Attach site map showing sand ion Present? Yes X No Yes X No Present? Yes X No Present? Yes X No Oresent? Yes X No In this idea of the side of the | Forward Vision Development AS/CM AS/CM AS/CM Section, Township, Range: Local relief (co LRRA Lat: Wapato silty clay loam gic conditions on the site typical for this time of year? Soil or Hydrology significantly disturbed? Soil or Hydrology naturally problematic? If needed in the site of year? FINDINGS – Attach site map showing sampling point in Present? Yes | State: AS/CM | State Dominant Species State Dominant Species State Dominant Species Species | State Stat | State: OR Sampling Point: ASICM Section, Township, Range: S2, T3S, R1E |

| | | | PHS# | 7298 | | | | Sampling Point: 2 |
|--|--|---|---|--|---|--|---|---|
| | iption: (Describe to t | the depth | needed to docume | | | firm the abso | ence of indicators.) | |
| Depth | Matrix | | <u> </u> | Redox F | - 1 | Loc ² | | |
| (Inches) | Color (moist) | <u>%</u> | Color (moist) | % | Type' | LOC | Texture | Remarks |
| 0-3 | 10YR 3/1 | 100 | | | | | Silt Loam | |
| 2-11 | 10YR 3/1 | 95 | 10YR 3/6 | 5 | С | M | Sandy Clay Loam | Fine |
| 11-16 | 10YR 4/1 | 90 | 10YR 3/6 | 10 | С | M | Sandy Clay Loam | Fine |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| ype: C=Con | centration, D=Depletion | on, RM=Re | educed Matrix, CS= | Covered or Co | pated Sand | Grains. | | ² Location: PL=Pore Lining, M=Matrix. |
| - | Indicators: (Appli | | | | | | | tors for Problematic Hydric Soils ³ : |
| | Histosol (A1) | | | Sa | indy Redox | (S5) | | 2 cm Muck (A10) |
| | Histic Epipedon (A2) | | | | ripped Mati | | | Red Parent Material (TF2) |
| | Black Histic (A3) | | | | | ` , |) (except MLRA 1) | Very Shallow Dark Surface (TF12) |
| | Hydrogen Sulfide (A4 | 1) | | | | d Matrix (F2) | , , , | Other (explain in Remarks) |
| | | • | \11\ | | | | | Outer (explain in Remarks) |
| | Depleted Below Dark | • | XII) | | pleted Mat | | | |
| | Thick Dark Surface (A | - | | | | Surface (F6) | _, | ³ Indicators of hydrophytic vegetation and wetland |
| | Sandy Mucky Mineral | ` , | | | - | k Surface (F | 7) | hydrology must be present, unless disturbed or |
| | Sandy Gleyed Matrix | (S4) | | Re | dox Depre | ssions (F8) | | problematic. |
| | · | | | | | | Hydric Soil Prese | ent? Yes X No |
| Remarks: | OGY | | | | | | Hydric Soil Prese | ent? Yes <u>X</u> No |
| emarks: HYDROLO Vetland Hy | DGY rdrology Indicator | | uired: check all th | nat anniv) | | | Hydric Soil Prese | |
| emarks: HYDROLO Vetland Hy | OGY odrology Indicator icators (minimum o | | uired; check all th | 11 7/ | ater staine | d Leaves (B9 | | Secondary Indicators (2 or more required) |
| HYDROLO Vetland Hy | OGY rdrology Indicator cators (minimum o Surface Water (A1) | of one req | uired; check all th | W | ater stained 2, 4 A , and | | Hydric Soil Prese | |
| HYDROLO Vetland Hy Primary Indi | OGY ordrology Indicator ocators (minimum o Surface Water (A1) High Water Table (A2 | of one req | uired; check all th | Wa | 2, 4A, and | 4B) | | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| HYDROLO Vetland Hy | OGY rdrology Indicator cators (minimum of Surface Water (A1)) High Water Table (A2) Saturation (A3) | of one req | uired; check all th | | 2, 4A, and alt Crust (B | 4B) 11) |) (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) |
| HYDROLO Vetland Hy Primary Indi | OGY rdrology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) | of one req | uired; check all th | | 2, 4A, and Ilt Crust (B | 4B) 11) tebrates (B13 |) (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| HYDROLO Vetland Hy Primary Indi | ody rdrology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (E | of one req | uired; check all th | Wa 1, Sa Aq Hy | 2, 4A, and Ilt Crust (B' Juatic Inverrigen Su | 4B) 11) tebrates (B13) Ifide Odor (C |) (Except MLRA 3) | 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 |
| HYDROLO Vetland Hy Primary Indi | OGY rdrology Indicator cators (minimum of Surface Water (A1)) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) | of one req 2) 32) | uired; check all th | | 2, 4A, and alt Crust (Biguatic Inver- adrogen Su kidized Rhiz | 4B) 11) tebrates (B13 lfide Odor (C |) (Except MLRA 3) 1) 2) 2) 3) 2) 3) 3) 4) 3) 4) 5) 6) 6) 6) 6) 7) 7) 8) 8) 8) 8) 1) 9) 9) 1) 9) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) | 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) |
| HYDROLO Vetland Hy Primary Indi | ocators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- | of one req 2) 32) | uired; check all th | Wa 1, Sa Aq Hy Ox | 2, 4A, and It Crust (B' quatic Inverted of Suid See See See See See See See See See Se | 4B) 11) tebrates (B13) Iffide Odor (C zospheres ald Reduced Iron |) (Except MLRA 3) 1) ong Living Roots (C3) (C4) | 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) |
| HYDROLO Vetland Hy Primary Indi | OGY Indrology Indicator Icators (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) | of one req 2) 32) 4) | uired; check all th | W: 1, Sa Aq Hy Ox Pro | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhiz esence of I | 4B) 11) tebrates (B13 lifide Odor (C zospheres ald Reduced Iron Reduction in F |) (Except MLRA 3) 1) 2) 2) 3) 2) 3) 3) 4) 3) 4) 5) 6) 6) 6) 6) 7) 7) 8) 8) 8) 8) 1) 9) 9) 1) 9) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) | 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) |
| HYDROLO Vetland Hy Primary Indi | rdrology Indicator ficators (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 (| of one req 2) 32) 4) | | W: 1, Sa Aq Hy Ox Prr | 2, 4A, and Ilt Crust (B' quatic Inver- rdrogen Su didized Rhiz esence of I ecent Iron F | 4B) 111) tebrates (B13 lfide Odor (C zospheres ald Reduced Iron Reduction in F | 3) 1) (Except MLRA 3) 1) ong Living Roots (C3) (C4) Plowed Soils (C6) s (D1) (LRR A) | 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) |
| HYDROLO Wetland Hy Primary Indi | OGY Indrology Indicator Icators (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) | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) | W: 1, Sa Aq Hy Ox Prr | 2, 4A, and Ilt Crust (B' quatic Inver- rdrogen Su didized Rhiz esence of I ecent Iron F | 4B) 11) tebrates (B13 lifide Odor (C zospheres ald Reduced Iron Reduction in F | 3) 1) (Except MLRA 3) 1) ong Living Roots (C3) (C4) Plowed Soils (C6) s (D1) (LRR A) | 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) |
| HYDROLO Wetland Hy Primary Indi X X | OGY Indicator Icators (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 (Inundation Visible on Sparsely Vegetated C | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) | W: 1, Sa Aq Hy Ox Prr | 2, 4A, and Ilt Crust (B' quatic Inver- rdrogen Su didized Rhiz esence of I ecent Iron F | 4B) 111) tebrates (B13 lfide Odor (C zospheres ald Reduced Iron Reduction in F | 3) 1) (Except MLRA 3) 1) ong Living Roots (C3) (C4) Plowed Soils (C6) s (D1) (LRR A) | 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) |
| HYDROLC Vetland Hy Primary Indi X X | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations: | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) urface (B8) | Walls and the second se | 2, 4A, and alt Crust (B quatic Inver- drogen Su didized Rhiz esence of I ecent Iron F unted or St her (Explai | 4B) 111) tebrates (B13 lfide Odor (C zospheres ald Reduced Iron Reduction in F | 3) 1) (Except MLRA 3) 1) ong Living Roots (C3) (C4) Plowed Soils (C6) s (D1) (LRR A) | 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) |
| HYDROLO Vetland Hy Primary Indi X X X | OGY Indrology Indicator Icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | of one req 2) 32) 4) (B6) Aerial Ima Concave Si | gery (B7) urface (B8) | W: 1, Sa Aq Hy Ox Prr Re Stt Ott | 2, 4A, and alt Crust (Biguatic Inversed Region Suited Rhizesence of Recent Iron Funted or State (Explain Ches): | 4B) 111) tebrates (B13 lifide Odor (C zospheres ald Reduced Iron Reduction in F ressed Plants n in Remarks | B) (Except MLRA B) ong Living Roots (C3) (C4) Plowed Soils (C6) (C1) (LRR A) B) | 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) |
| Field Observater Table Fortunation Pre | DGY rdrology 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 (Inundation Visible on Sparsely Vegetated Corvations: The Present? Yes Present? Yes Present? Yes | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) urface (B8) | Walls and the second se | 2, 4A, and alt Crust (Biguatic Inverted rogen Suitidized Rhizesence of Becent Iron Funted or State (Explain ches): | 4B) 111) tebrates (B13 lfide Odor (C zospheres ald Reduced Iron Reduction in F | B) (Except MLRA B) ong Living Roots (C3) (C4) Plowed Soils (C6) (C1) (LRR A) B) | 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) |
| HYDROLO Wetland Hy Primary Indi X X X | DGY rdrology 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 (Inundation Visible on Sparsely Vegetated Corvations: The Present? Yes Present? Yes Present? Yes | 2) 32) 4) (B6) Aerial Ima | gery (B7) urface (B8) No <u>X</u> No | W: 1, Sa Aq Hy Ox Prr Re Stt Ott | 2, 4A, and alt Crust (Biguatic Inverted rogen Suitidized Rhizesence of Becent Iron Funted or State (Explain ches): | 4B) 111) tebrates (B13 Ifide Odor (C zospheres ald Reduced Iron Reduction in F ressed Plants n in Remarks | B) (Except MLRA B) ong Living Roots (C3) (C4) Plowed Soils (C6) (C1) (LRR A) B) | 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) |
| HYDROLO Wetland Hy Primary Indi X X X Field Obset Surface Wate Vater Table Fe Saturation Pre Includes capilla | DGY rdrology 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 (Inundation Visible on Sparsely Vegetated Corvations: The Present? Yes Present? Yes Present? Yes | 2) 32) 4) (B6) Aerial Ima Concave St | gery (B7) urface (B8) No No No | W: 1, Sa Aq Hy Ox Pre Sti Ott Depth (in Depth (in | 2, 4A, and alt Crust (B' quatic Inverted or St esence of B' ecent Iron F unted or St her (Explain ches): ches): | 4B) 111) tebrates (B13 lifide Odor (C zospheres ald Reduced Iron Reduction in F ressed Plants n in Remarks |) (Except MLRA 3) 1) ong Living Roots (C3) (C4) Plowed Soils (C6) s (D1) (LRR A) s) 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 Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| HYDROLO Vetland Hy Primary Indi X X X Field Obset Surface Wate Vater Table Festuration Pre Includes capilla | 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 (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | 2) 32) 4) (B6) Aerial Ima Concave St | gery (B7) urface (B8) No No No | W: 1, Sa Aq Hy Ox Pre Sti Ott Depth (in Depth (in | 2, 4A, and alt Crust (B' quatic Inverted or St esence of B' ecent Iron F unted or St her (Explain ches): ches): | 4B) 111) tebrates (B13 lifide Odor (C zospheres ald Reduced Iron Reduction in F ressed Plants n in Remarks |) (Except MLRA 3) 1) ong Living Roots (C3) (C4) Plowed Soils (C6) s (D1) (LRR A) s) 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 Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |

PHS#

7298

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

| roject/Site: Rivianna E | Beach Develo | opment | City/County: | West | Linn/Clackamas | Sampling Date: | 1/26/2024 | | |
|----------------------------------|---|---------------|----------------------------|------------------|---|-------------------------|--------------------|-------------------|--|
| pplicant/Owner: Forwar | wner: Forward Vision Development | | | | State: | State: OR S | | Sampling Point: 3 | |
| nvestigator(s): | AS | | Section, To | ownship, Range: | | S 2, T 3S, R 1E | <u> </u> | | |
| andform (hillslope, terrace, etc | :.:) <u>Hi</u> | illslope/Stre | eambank | Local relief (co | oncave, convex, none): | None | Slope (%): | 5 | |
| Subregion (LRR): | LRRA | | Lat: | 45.34 | Long: _ | -122.6430 | Datum: | WGS84 | |
| Soil Map Unit Name: | | | silty clay loam | | NWI Clas | ssification: | PFO1A | | |
| re climatic/hydrologic condition | | | | Yes | | (if no, expla | ain in Remarks) | | |
| re vegetation Soil | or Hy | drology | significantly dist | urbed? | Are "Normal Circumstanc | es" present? (Y/N) | Y | | |
| re vegetation Soil | or Hy | drology | naturally problem | matic? If needer | d, explain any answers in Rer | narks.) | | | |
| SUMMARY OF FINDING | CS - Attac | sh cito mar | - showing car | lina noint | · locations transacts | important foati | uroo oto | | |
| ydrophytic Vegetation Present | | | p snowing san No | Thing bonn | . IOCALIONS, LIANSECIS | , Illiportant leate | ires, etc. | | |
| ydric Soil Present? | Yes | | No | Is Sampled A | | • | NI ₂ | | |
| • | Yes | | | a Wetla | ind? Yes_ | <u>X</u> 1 | No | | |
| /etland Hydrology Present? | 165 | | No | | | | | | |
| emarks: | | | | | | | | | |
| | | | | | | | | | |
| EGETATION - Use sc | ientific nar | mes of pla | nts. | | | | | | |
| LODINION COLUM | 101111111111111111111111111111111111111 | absolute | | Indicator | Dominance Test worl | ksheet: | | | |
| | | % cover | Species? | Status | . | | | | |
| ree Stratum (plot size: | 30) | | | | Number of Dominant Spec | | _ | | |
| 1 Alnus rubra | | 70 | X | FAC | That are OBL, FACW, or F | -AC: | 2 (| (A) | |
| 2 | | | | | . T. () North an of Dominan | | | | |
| 3 4 | | | | | Total Number of Dominant | | 3 (| ٦ | |
| + | | 70 | = Total Cover | | Species Across All Strata: | | | (B) | |
| " /O! -!- O!!- | . 45 | | - 10tal 00vci | | | | | | |
| | t size: 15 | - ′ | v | 540 | Percent of Dominant Spec | | A=0/ | (A /D) | |
| 1 Rubus armeniacus | | 80 | X | FAC | That are OBL, FACW, or | FAC: | 67% (| (A/B) | |
| ² 3 | | | - —— | | Prevalence Index Wo | wkshoot: | | | |
| 1 | | | - —— | | Total % Cover of | Multiply by: | | | |
| · 5 | | | | | OBL Species | x 1 = | 0 | | |
| | | 80 | = Total Cover | | FACW species | x 2 = | 0 | | |
| | | | - | | FAC Species | x 3 = | 0 | | |
| lerb Stratum (plot size: |) | | | | FACU Species | x 4 = | 0 | | |
| 1 | | | - —— | | UPL Species | x 5 = | 0 | | |
| 2 | | | | | Column Totals | 0 (A) | (| В) | |
| 3 4 | | | | | Prevalence Index =E | 2/^ _ # | DIV/0! | | |
| ⁴ 5 | | | | | . Lievalence muex -F | /A = | ואוטי | | |
| 5 6 | | | | | Hydrophytic Vegetati | on Indicators: | | | |
| 7 | | | | | • | 1- Rapid Test for Hydro | ophytic Vegetation | ı | |
| 8 | | - | | | • | 2- Dominance Test is > | · · | | |
| | | 0 | = Total Cover | | | 3-Prevalence Index is ≤ | | | |
| | | | • | | | 4-Morphological Adapta | | | |
| Voody Vine Stratum (plot siz | ze: 15 | - ′ | | | | data in Remarks or on | | | |
| 1 Hedera helix | | 15 | X | FACU | | 5- Wetland Non-Vascul | | 1.2-1 | |
| 2 | | 45 | T-t-l Cover | | · | Problematic Hydrophyti | | | |
| | | 15 | = Total Cover | | ¹ Indicators of hydric soil ar disturbed or problematic. | id wetland nydrology ii | nust be present, u | ıless | |
| | | | | | Hydrophytic | | | | |
| | n 1 | 100 | | | Vegetation | Yes X | No_ | | |
| % Bare Ground in Herb Stratun | " | | | | Present? | | | | |

| | | | _ | | | | | |
|--|--|--|---|---|--|--|---|--|
| Profile Descri | iption: (Describe to | the depth r | needed to docume | nt the indicat | or or confir | m the abser | nce of indicators.) | |
| Depth | Matrix | | | Redox Fe | | | , | |
| (Inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0-4 | 10YR 3/1 | 100 | | | | | Silt Loam | |
| 4-10 | 10YR 3/1 | 95 | 7.5YR 3/4 | 5 | С | М | Silt Loam | Fine |
| | | | | | , | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | - |
| | | | | | | | | 21 |
| | centration, D=Depleti | | | | | irains. | l a al i | ² Location: PL=Pore Lining, M=Matrix. |
| - | Indicators: (Appli | icable to | ali LRRS, unies: | | | 0=) | inaid | cators for Problematic Hydric Soils ³ : |
| | Histosol (A1) | | | | ndy Redox (| • | | 2 cm Muck (A10) |
| | Histic Epipedon (A2) | | | | ipped Matrix | | | Red Parent Material (TF2) |
| | Black Histic (A3) | | | | - | | except MLRA 1) | Very Shallow Dark Surface (TF12) |
| | Hydrogen Sulfide (A4 | -) | | Loa | amy Gleyed | Matrix (F2) | | Other (explain in Remarks) |
| | Depleted Below Dark | Surface (A | (11) | De | pleted Matrix | x (F3) | | |
| · | Thick Dark Surface (A | A12) | | | dox Dark Su | ırface (F6) | | 30 6 7 7 1 1 6 7 6 1 9 1 |
| | Sandy Mucky Minera | I (S1) | | De | pleted Dark | Surface (F7) | | ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or |
| | Sandy Gleyed Matrix | (S4) | | Re | dox Depress | sions (F8) | | problematic. |
| Restrictive | Layer (if present) | : | | | | | | |
| Туре: | | | oots | | | | | |
| | | | 7010 | | | | | |
| Depth (inches | s): | | 10 | | | | Hydric Soil Pre | esent? Yes X No |
| | s): | | 10 | | | | Hydric Soil Pre | esent? Yes X No |
| Remarks: | ogy | | 10 | | | | Hydric Soil Pre | esent? Yes X No |
| Remarks: | <u> </u> | | 10 | | | | Hydric Soil Pre | esent? Yes X No |
| Remarks: HYDROLO Wetland Hy | ogy | s: | | | | | | Secondary Indicators (2 or more required) |
| Remarks: HYDROLO Wetland Hy Primary India | IGY drology Indicator | s: | | Wa | | | Hydric Soil Pre | Secondary Indicators (2 or more required) Water stained Leaves (B9) |
| HYDROLO Wetland Hy Primary Indic | OGY drology Indicator cators (minimum c | s: f one req | | Wa | ater stained I 2, 4A, and 4 | | | Secondary Indicators (2 or more required) |
| HYDROLO Wetland Hy Primary India | OGY drology Indicator cators (minimum c Surface Water (A1) | s: f one req | | Wa | | В) | | Secondary Indicators (2 or more required) Water stained Leaves (B9) |
| HYDROLO Wetland Hydrimary India X X | OGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) | s: f one req | | Wa 1, 2 Sa Aq | 2, 4A, and 4 It Crust (B11 uatic Inverte | B)) brates (B13) | (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| HYDROLO Wetland Hy Primary India X X | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) | s: f one requ | | Waana Waana Aqii Salaa Aqii Hyo | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfice | B)) brates (B13) de Odor (C1) | (Except MLRA | 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 (|
| HYDROLO Wetland Hy Primary Indic X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) | s: f one requ | | Wa 1, 2 Sal Aq Hyu Ox | 2, 4A, and 4 It Crust (B11 uatic Inverte drogen Sulfic idized Rhizo | B)) brates (B13) de Odor (C1) spheres alor | (Except MLRA | 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 (|
| HYDROLO Wetland Hyo Primary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- | s: of one required: | | We | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfice idized Rhizo esence of Re | B)) brates (B13) de Odor (C1) spheres alor educed Iron (| (Except MLRA Ig Living Roots (C3) C4) | 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) |
| HYDROLO Wetland Hy Primary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) | s: f one requ 2) 32) | | Wa Na Na Na Na Na Na Na | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulficidized Rhizo essence of Recent Iron Re | B)) brates (B13) de Odor (C1) spheres alor educed Iron (duction in Pl | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| HYDROLO Wetland Hy Primary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3 Iron Deposits (B5) Surface Soil Cracks (B3) | s: of one required: 2) 32) 4) B6) | uired; check all th | Ma 1, 2 Sal Aq Hyu Ox Pre Re | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfice idized Rhizon esence of Resident Iron Resident Iron Resident Iron Resident Iron Street | brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants | (Except MLRA Ig Living Roots (C3) C4) | 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) |
| HYDROLO Wetland Hyo Yrimary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on | s: of one required 32) 4) B6) Aerial Image | uired; check all th | Ma 1, 2 Sal Aq Hyu Ox Pre Re | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfice idized Rhizon esence of Resident Iron Resident Iron Resident Iron Resident Iron Street | B)) brates (B13) de Odor (C1) spheres alor educed Iron (duction in Pl | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| HYDROLO Wetland Hy Primary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3 Iron Deposits (B5) Surface Soil Cracks (B3) | s: of one required 32) 4) B6) Aerial Image | uired; check all th | Ma 1, 2 Sal Aq Hyu Ox Pre Re | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfice idized Rhizon esence of Resident Iron Resident Iron Resident Iron Resident Iron Street | brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| HYDROLO Wetland Hy Primary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundator) | s: of one required 32) 4) B6) Aerial Image | uired; check all th | Ma 1, 2 Sal Aq Hyu Ox Pre Re | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfice idized Rhizon esence of Resident Iron Resident Iron Resident Iron Resident Iron Street | brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| HYDROLO Wetland Hy Primary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B2) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorial Control Contr | s: of one required 32) 4) B6) Aerial Image | uired; check all th | Ma 1, 2 Sal Aq Hyu Ox Pre Re | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfid idized Rhizo esence of Re- cent Iron Re- unted or Stre- ner (Explain | brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| HYDROLO Wetland Hy Primary India X X Field Obser | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Crvations: | s: of one required 32) 4) B6) Aerial Image | uired; check all th | Waanaa Aqaa Aqaa Aqaa Aqaa Aqaa Aqaa Aqaa | 2, 4A, and 4 It Crust (B11 uatic Inverte drogen Sulfid idized Rhizo esence of Re cent Iron Re unted or Stre her (Explain | brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) (D1) (LRR A) | 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) |
| HYDROLO Wetland Hy Primary India X X X Field Obser Surface Water Water Table P Saturation Pre | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3 Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible o | s: f one required: 2) 32) 4) B6) Aerial Image | uired; check all th gery (B7) urface (B8) | Wa 1, 2 Sal Aql Hyu Ox Pre Re Stu Oth | 2, 4A, and 4 It Crust (B11 uatic Inverte drogen Sulfic idized Rhizo esence of Re cent Iron Re unted or Stre ner (Explain i | brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants in Remarks) | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) (D1) (LRR A) | 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 (Cartering Complete Complet |
| X X X Sirilate A Saturation Pre includes capillar | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3 Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Tracks (Inundation Visible o | s: f one required: 2) 32) 4) B6) Aerial Image Concave Su | gery (B7) urface (B8) No No | Ma 1, 2 Sal Aq Hy Ox Pre Re Stu Oth Depth (inc | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfid idized Rhizo esence of Re cent Iron Re unted or Stre her (Explain in ches): | B)) brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants in Remarks) 4 0 | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) (D1) (LRR A) Wetland Hy | 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 (C2) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| HYDROLO Wetland Hy Primary India X X X Field Obser Surface Water Water Table P Saturation Pre includes capillar | cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorial Control of Present? Yes Sesent? Yes Sesent? Yes Sesent? Yes Sesent? Yes Sesent? Yes Sery fringe) | s: f one required: 2) 32) 4) B6) Aerial Image Concave Su | gery (B7) urface (B8) No No | Ma 1, 2 Sal Aq Hy Ox Pre Re Stu Oth Depth (inc | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfid idized Rhizo esence of Re cent Iron Re unted or Stre her (Explain in ches): | B)) brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants in Remarks) 4 0 | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) (D1) (LRR A) Wetland Hy | 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) |
| HYDROLO Wetland Hy Primary India X X X Field Obser Surface Water Water Table P Saturation Pre includes capillar | cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorial Control of Present? Yes Sesent? Yes Sesent? Yes Sesent? Yes Sesent? Yes Sesent? Yes Sery fringe) | s: f one required: 2) 32) 4) B6) Aerial Image Concave Su | gery (B7) urface (B8) No No | Ma 1, 2 Sal Aq Hy Ox Pre Re Stu Oth Depth (inc | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfid idized Rhizo esence of Re cent Iron Re unted or Stre her (Explain in ches): | B)) brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants in Remarks) 4 0 | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) (D1) (LRR A) Wetland Hy | 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 (C2) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| HYDROLO Wetland Hy Primary India X X X Field Obser Surface Water Water Table P Saturation Pre includes capillar | cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorial Control of Present? Yes Sesent? Yes Sesent? Yes Sesent? Yes Sesent? Yes Sesent? Yes Sery fringe) | s: f one required: 2) 32) 4) B6) Aerial Image Concave Su | gery (B7) urface (B8) No No | Ma 1, 2 Sal Aq Hy Ox Pre Re Stu Oth Depth (inc | 2, 4A, and 4 It Crust (B11 uatic Inverted drogen Sulfid idized Rhizo esence of Re cent Iron Re unted or Stre her (Explain in ches): | B)) brates (B13) de Odor (C1) spheres alor educed Iron (duction in PI ssed Plants in Remarks) 4 0 | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) (D1) (LRR A) Wetland Hy | 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) |

7298

| Project/Site: Rivia | anna Beach Deve | elopment | City/County: | West | Linn/Clackamas | Sampling Date: | 1/26 | /2024 |
|--|------------------------|---------------------|---------------------|---------------------|--|---|--|--------------|
| Applicant/Owner: F | orward Vision D | evelopment | | | State: | OR | Sampling Point: | 4 |
| Investigator(s): | AS | | Section, To | wnship, Range: | | S 2, T 3S, R | 1E | |
| Landform (hillslope, terr | ace, etc.:) | Hillslope | - 1 | Local relief (co | ncave, convex, none): | None | Slope (%): | 5 |
| Subregion (LRR): | LRR | Α | Lat: | 45.34 | 53 Long: | -122.6430 | Datum: | WGS84 |
| Soil Map Unit Name: | | Wapato s | - ilty clay loam | | NWI Cla | assification: | PFO1A | |
| Are climatic/hydrologic | conditions on the site | | | Yes | | - | olain in Remarks) | |
| Are vegetation | Soil or H | Hydrology | significantly dist | urbed? | Are "Normal Circumstan | ces" present? (Y/N) | Υ | |
| | | | _ | | l, explain any answers in Re | emarks.) | | |
| | | , 0, | <u>.</u> | | , , | , | | |
| SUMMARY OF FI | NDINGS - Atta | ch site map | showing san | npling point | locations, transects | s, important fea | tures, etc. | |
| Hydrophytic Vegetation | Present? Yes | X No | | Is Sampled Ar | ea within | | | |
| Hydric Soil Present? | Yes | No | X | a Wetla | | | No X | |
| Wetland Hydrology Pres | sent? Yes | X No | | | | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| VEGETATION - U | se scientific na | • | | | 1 | | | |
| 1 | | absolute % cover | Dominant Species? | Indicator Status | Dominance Test wo | rksheet: | | |
| Tree Stratum (plot size | ze: 30 |) | Opecies: | Otatus | Number of Dominant Spe | ecies | | |
| 1 Alnus rubra | | .′ 40 | X | FAC | That are OBL, FACW, or | | 3 | (A) |
| 2 Fraxinus latifoli | a | 30 | X | FACW | | | _ | ` ' |
| 3 | | | | | Total Number of Domina | nt | | |
| 4 | | | | | Species Across All Strata | : | 5 | (B) |
| | | 70 | = Total Cover | | | | _ | |
| Sapling/Shrub Stratum | (plot size: 15 |) | | | Percent of Dominant Spe | cies | | |
| 1 Rubus armeniae | | ′ | X | FAC | That are OBL, FACW, or | | 60% | (A/B) |
| 2 Ilex aquifolium | | 20 | X | FACU | | | _ | , |
| 3 Polystichum mu | unitum | 5 | | FACU | Prevalence Index W | orksheet: | | |
| 4 | | | | | Total % Cover of | Multiply b | oy: | |
| 5 | | | | | OBL Species | x 1 = | 0 | |
| | | 55 | = Total Cover | | FACW species | x 2 = | | |
| | | | | | FAC Species | x 3 = | | |
| Herb Stratum (plot siz | ze: | , | | | FACU Species | × 4 = | | |
| 1 | | | | | UPL Species | x 5 = | | (D) |
| 3 | | <u> </u> | | | Column Totals | 0 (A) | | (B) |
| 4 | | | | | Prevalence Index = | R/A = | #DIV/0! | |
| 5 | | | | | Trevalence index = | | <i></i> | |
| | | | | | Hydrophytic Vegetat | ion Indicators: | | |
| 6 | | | | | | 1- Rapid Test for Hyd | drophytic Vegetation | 1 |
| 7 | | | | | I — | | . , , | |
| - | | | | | Х | 2- Dominance Test is | 3 - 00 /0 | |
| 7 | | 0 | = Total Cover | | | 3-Prevalence Index i | $s \le 3.0^{1}$ | |
| 7 8 | | 0 | = Total Cover | | | 3-Prevalence Index i 4-Morphological Ada | $s \le 3.0^1$ ptations ¹ (provide s | |
| 7 8 Woody Vine Stratum | (plot size: 15 |) | | | | 3-Prevalence Index i 4-Morphological Ada data in Remarks or c | $s \le 3.0^1$ ptations ¹ (provide son a separate sheet | |
| 7 8 <u>Woody Vine Stratum</u> 1 <u>Hedera helix</u> | (plot size: 15 | 0 35 | = Total Cover | FACU | | 3-Prevalence Index i 4-Morphological Ada data in Remarks or o 5- Wetland Non-Vas | s ≤ 3.0 ¹ ptations ¹ (provide s in a separate sheet cular Plants ¹ |) |
| 7 8 Woody Vine Stratum | (plot size:15 | 35 | x | FACU | | 3-Prevalence Index i 4-Morphological Ada data in Remarks or of 5- Wetland Non-Vas Problematic Hydroph | s $\leq 3.0^1$ ptations ¹ (provide s in a separate sheet cular Plants ¹ ytic Vegetation ¹ (E. |) xplain) |
| 7 8 <u>Woody Vine Stratum</u> 1 <u>Hedera helix</u> | (plot size: 15 |) | | FACU | ¹ Indicators of hydric soil a | 3-Prevalence Index i 4-Morphological Ada data in Remarks or of 5- Wetland Non-Vas Problematic Hydroph | s $\leq 3.0^1$ ptations ¹ (provide s in a separate sheet cular Plants ¹ ytic Vegetation ¹ (E. |) xplain) |
| 7 8 Woody Vine Stratum 1 Hedera helix | (plot size:15 | 35 | x | FACU | | 3-Prevalence Index i 4-Morphological Ada data in Remarks or of 5- Wetland Non-Vas Problematic Hydroph | s $\leq 3.0^1$ ptations ¹ (provide s in a separate sheet cular Plants ¹ ytic Vegetation ¹ (E. |) xplain) |
| 7 8 Woody Vine Stratum 1 Hedera helix | · | 35 | x | FACU | ¹ Indicators of hydric soil a disturbed or problematic. | 3-Prevalence Index i 4-Morphological Ada data in Remarks or of 5- Wetland Non-Vas Problematic Hydroph | s $\leq 3.0^1$ ptations ¹ (provide s in a separate sheet cular Plants ¹ ytic Vegetation ¹ (E. |) xplain) |

| SOIL | | PHS# | 7298 | | | Sampling Point: 4 |
|---|----------------|------------------------|----------------------------|------------------------------------|----------------------|--|
| Profile Description: (Describe | to the depth | needed to docume | ent the indicator or cor | nfirm the absen | ce of indicators.) | |
| Depth Matr | | | Redox Features | . 2 | | |
| (Inches) Color (moist) | % | Color (moist) | % Type ¹ | Loc ² | Texture | Remarks |
| 0-7 10YR 3/1 | 100 | | | | | |
| 7-10 10YR 4/1 | 100 | | | | | · |
| | | | | | | |
| | | | | | | |
| | _ | | | | | |
| | | | | | | |
| | | | | | | |
| | | | Od Otd O | | | 21 |
| Type: C=Concentration, D=Dep Hydric Soil Indicators: (Ap | | | | | Indic | ² Location: PL=Pore Lining, M=Matrix. eators for Problematic Hydric Soils ³ : |
| Histosol (A1) | pilcable to | an Lixixs, unies | Sandy Redo | | maic | 2 cm Muck (A10) |
| | 0) | | | ` , | | |
| Histic Epipedon (A | .2) | | Stripped Ma | | | Red Parent Material (TF2) |
| Black Histic (A3) | | | | ky Mineral (F1) (e | except MLRA 1) | Very Shallow Dark Surface (TF12) |
| Hydrogen Sulfide | | | | ed Matrix (F2) | | Other (explain in Remarks) |
| Depleted Below D | ark Surface (A | A11) | Depleted Ma | ` , | | |
| Thick Dark Surfac | e (A12) | | | Surface (F6) | | ³ Indicators of hydrophytic vegetation and wetland |
| Sandy Mucky Mine | eral (S1) | | Depleted Da | ark Surface (F7) | | hydrology must be present, unless disturbed or |
| Sandy Gleyed Mat | rix (S4) | | Redox Depr | essions (F8) | | problematic. |
| Restrictive Layer (if preser | nt): | | | | | |
| Type: | | | | | | |
| Depth (inches): | | | | | Hydric Soil Pre | sent? Yes No X |
| Remarks: | | | | | | |
| HYDROLOGY | ore: | | | | | |
| Wetland Hydrology Indicat | | uiradi abaak all t | hat apply) | | | Coopeday Indicators (2 or more required) |
| Primary Indicators (minimun | | uirea, check aii t | | ad Lagyas (BO) (| Except MI DA | Secondary Indicators (2 or more required) |
| Surface Water (A1 | - | | 1, 2, 4A, and | ed Leaves (B9) (l d 4B) | Except WLRA | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| High Water Table | (A2) | | | • | | |
| X Saturation (A3) | | | Salt Crust (E | • | | Drainage Patterns (B10) |
| Water Marks (B1) | (DO) | | | ertebrates (B13) | | Dry-Season Water Table (C2) |
| Sediment Deposits | , , | | | ulfide Odor (C1) | - I i i i D t - (02) | Saturation Visible on Aerial Imagery (|
| Drift Deposits (B3) | | | | | g Living Roots (C3) | Geomorphic Position (D2) |
| Algal Mat or Crust | | | | Reduced Iron (C | • | Shallow Aquitard (D3) |
| Iron Deposits (B5) | | | | Reduction in Pla | ` ′ | Fac-Neutral Test (D5) |
| Surface Soil Crack | | (DZ) | | Stressed Plants (| DI) (LKK A) | Raised Ant Mounds (D6) (LRR A) |
| Inundation Visible | | | Other (Expla | ain in Remarks) | | Frost-Heave Hummocks (D7) |
| Sparsely Vegetate | u Concave St | шасе (Бо) | | | | |
| Field Observations: | | | | | | |
| Surface Water Present? Yes | | No <u>X</u> | Depth (inches): | | | |
| Water Table Present? Yes | X | No | Depth (inches): | 6 | Wetland Hyd | drology Present? |
| Saturation Present? Yes (includes capillary fringe) | X | No | Depth (inches): | 4 | | Yes X No |
| Describe Recorded Data (stream | gauge, moni | toring well, aerial pl | notos, previous inspection | ons), if available | : | |
| , | - | • | · | | | |
| | | | | | | |
| emarks: | | | | | | |
| oamo. | | | | | | |
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7298

| Beach Deve | lopment | City/County: | West | Linn/Clackamas | Sampling Date: | 1/26/ | 2024 |
|-----------------|---|--|--|---|---|---|------------------------------|
| rd Vision D | evelopmer | nt | | State: | OR | Sampling Point: | 5 |
| AS | | Section, To | ownship, Range: | | S 2, T 3S, R 1 | E | |
| o.:) | Hills | slope | Local relief (co | ncave, convex, none): | None | Slope (%): | 20 |
| LRR | Α | Lat: | 45.34 | 61 Long: | -122.6420 | Datum: | WGS84 |
| | Wapa | ato silty clay loam | | NWI Clas | ssification: | PAB/UBH | |
| ns on the site | typical for th | nis time of year? | Yes | X No | (if no, expl | ain in Remarks) | |
| or F | łydrology | significantly dis | turbed? | Are "Normal Circumstanc | es" present? (Y/N) | Y | |
| or F | lydrology | naturally proble | ematic? If needed | I, explain any answers in Rer | narks.) | | |
| | | | | | | | |
| | ch site m | nap showing sai | mpling point | locations, transects | , important feat | ures, etc. | |
| t? Yes | X | No | Is Sampled Ar | rea within | | | |
| Yes | X | No | | | X | No | |
| Yes | X | No | | | | | |
| | | | • | | | | |
| | | | | | | | |
| | | | | | | | |
| ientific na | | | | <u> </u> | | | |
| | | | Indicator Status | Dominance Test work | ksheet: | | |
| |) | <u></u> | | Number of Dominant Spec | cies | | |
| | | | | That are OBL, FACW, or F | AC: | 1 (| (A) |
| | | | | | | | |
| | | | | Total Number of Dominan | t | | |
| | | | | Species Across All Strata: | | 1 (| (B) |
| | 0 | = Total Cover | | | | _ | |
| size: 15 |) | | | Percent of Dominant Spec | ies | | |
| | ′ 100 | х | FAC | · | | 100% | (A/B) |
| | | | | | | | , |
| | | | | Prevalence Index Wo | rksheet: | | |
| | | | | Total % Cover of | Multiply by | <u>: </u> | |
| | | | | OBL Species | x 1 = | 0 | |
| | 100 | = Total Cover | | FACW species | x 2 = | 0 | |
| | ` | | | | | | |
| | | | | | | | |
| | | | | | | | В) |
| | | | | Column Totals | <u> </u> | (| ,D) |
| | | | - | Prevalence Index =F | 8/A = # | DIV/0! | |
| | | | | | | | |
| | | | | Hydrophytic Vegetati | on Indicators: | | |
| | | | | | | ophytic Vegetation | |
| | | | | X | 2- Dominance Test is | >50% | |
| | 0 | = Total Cover | <u> </u> | | 3-Prevalence Index is | ≤ 3.0 ¹ | |
| | | | | | | | |
| ze: |) | | | | | | |
| | | | | | 5- Wetland Non-Vascu | | |
| | | | | | Problematic Hydrophy | | |
| | · — | | | ¹ Indicators of hydric soil ar | id wetland hydrology i | must be present, u | niess |
| | 0 | = Total Cover | | | , ., | • | |
| | 0 | = Total Cover | | disturbed or problematic. | , | • | |
| n | 100 | = Total Cover | | | Yes X | No | |
| t | AS c.:) LRR ons on the site or H GS - Atta nt? Yes Yes Yes Yes t size: 15 | AS LRRA Wapa ons on the site typical for the or Hydrology or Hydrology Of Hydrology Of Hydrology GS - Attach site months AS Vas X Yes X Yes X Yes X Yes X Yes 1 A Third T | Hillslope LRRA Lat: Wapato silty clay loam ons on the site typical for this time of year? or Hydrology significantly dis | AS Section, Township, Range: Local relief (co LRRA | AS Section, Township, Range: C:) Hillslope | AS Section, Township, Range: S 2, T 3S, R 1 C: Hillslope | AS Section, Township, Range: |

| SOIL | | | PHS# | 7298 | _ | | Sampling Point: 5 |
|---|---|---|---|--|---|---|---|
| Profile Descrip | otion: (Describe to t | he depth r | needed to docume | | | nce of indicators.) | |
| Depth | Matrix | | | Redox Feature | | | |
| (Inches) | Color (moist) | % | Color (moist) | % Type | Loc ² | Texture | Remarks |
| 0-6 | 10YR 4/2 | 100 | | | | Silt Loam | |
| 6-8 | 10YR 4/1 | 100 | | | | Sandy Clay Loam | · |
| 8-16 | 10YR 4/1 | 90 | 10YR 4/6 | | M | Sandy Clay Loam | · |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Type: C=Conc | entration, D=Depletion | on, RM=Re | duced Matrix, CS= | Covered or Coated | Sand Grains. | | ² Location: PL=Pore Lining, M=Matrix. |
| Hydric Soil I | ndicators: (Appli | cable to | all LRRs, unles | s otherwise note | ed.) | Indica | ators for Problematic Hydric Soils ³ : |
| | Histosol (A1) | | | Sandy R | edox (S5) | | 2 cm Muck (A10) |
| | Histic Epipedon (A2) | | | Stripped | Matrix (S6) | | Red Parent Material (TF2) |
| E | Black Histic (A3) | | | Loamy M | lucky Mineral (F1) (| except MLRA 1) | Very Shallow Dark Surface (TF12) |
| - F | Hydrogen Sulfide (A4 | .) | | Loamy G | Gleyed Matrix (F2) | | Other (explain in Remarks) |
| X | Depleted Below Dark | Surface (A | .11) | Depleted | I Matrix (F3) | | |
| т | Thick Dark Surface (A | A12) | | Redox D | ark Surface (F6) | | |
| | Sandy Mucky Mineral | (S1) | | Depleted | I Dark Surface (F7) | | ³ Indicators of hydrophytic vegetation and wetland |
| | Sandy Gleyed Matrix | | | | epressions (F8) | | hydrology must be present, unless disturbed or problematic. |
| Restrictive I | ayer (if present): | | | | | | |
| Depth (inches) |): | | | | | Hydric Soil Pres | eent? Yes X No |
| Depth (inches) |): | | | | | Hydric Soil Pres | sent? Yes X No |
| Depth (inches) Remarks: HYDROLOG | GY | | | | | Hydric Soil Pres | sent? Yes <u>X</u> No |
| Depth (inches) Remarks: HYDROLOG Wetland Hyd | GY drology Indicator | | uirod: abook all t | hat apply) | | Hydric Soil Pres | |
| Depth (inches) Remarks: HYDROLOG Wetland Hyd Primary Indic | GY drology Indicator eators (minimum o | | uired; check all tl | | ained Leaves (RQ) | | Secondary Indicators (2 or more required) |
| Depth (inches) Remarks: HYDROLOG Wetland Hyd Primary Indic | GY drology Indicator ators (minimum o Surface Water (A1) | f one requ | uired; check all tl | Water st | ained Leaves (B9) | | |
| Primary Indic | GY drology Indicator eators (minimum o Gurface Water (A1) High Water Table (A2 | f one requ | uired; check all tl | Water st 1, 2, 4A, | and 4B) | | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| HYDROLOG Wetland Hyd Primary Indic X X S | GY drology Indicator eators (minimum of Surface Water (A1) digh Water Table (A2) Saturation (A3) | f one requ | uired; check all tl | Water st 1, 2, 4A, Salt Crus | and 4B) st (B11) | (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) |
| Primary Indic X X V | GY drology Indicator eators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | f one requ | uired; check all tl | Water st 1, 2, 4A, Salt Crus Aquatic I | and 4B) st (B11) nvertebrates (B13) | (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| HYDROLOG Wetland Hyd Primary Indic X X S | GY drology Indicator eators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (E | f one requ | uired; check all tl | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) | (Except MLRA | 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 (|
| HYDROLOG Wetland Hyd Primary Indic X X S V S | GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) | f one requ | uired; check all tl | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon | (Except MLRA | 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) |
| HYDROLOG Wetland Hyd Primary Indic X X S V S A | GY drology Indicator eators (minimum of Burface Water (A1) digh Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) | f one requ | uired; check all tl | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (| (Except MLRA Ig Living Roots (C3) C4) | 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) |
| Primary Indic | GY drology Indicator eators (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) | f one requ 2) 32) 4) | uired; check all ti | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent I | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (con Reduction in Plane) | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| HYDROLOG Wetland Hyd Primary Indic X X S S S S S S S S S S S S S S S S S | GY Arology 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 (| f one requ 2) 32) 4) B6) | | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent Is | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (ron Reduction in Ple or Stressed Plants | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| Primary Indic X X S L A L A L L L L L L L L L | GY drology Indicator cators (minimum of Surface Water (A1) digh 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 | f one requests 2) 32) 4) B6) Aerial Imag | gery (B7) | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent Is | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (con Reduction in Plane) | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| Primary Indic X X X S In S S S S S S S S S S S S S S S S S S 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) ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated C | f one requests 2) 32) 4) B6) Aerial Imag | gery (B7) | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent Is | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (ron Reduction in Ple or Stressed Plants | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| Primary Indic X X S Field Observ | GY drology Indicator cators (minimum of Burface Water (A1) digh 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 Covations: | f one requests 2) 32) 4) B6) Aerial Imag | gery (B7) urface (B8) | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent II Stunted Other (E | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (ron Reduction in Ploor Stressed Plants xplain in Remarks) | (Except MLRA Ing Living Roots (C3) C4) Dowed Soils (C6) | 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) |
| Primary Indic X X X S Field Observ Surface Water | GY drology Indicator eators (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 Covations: Present? Yes | f one request. 2) 32) 4) B6) Aerial Imageoncave Su | gery (B7) ırface (B8) No <u>X</u> | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent Is Stunted Other (E | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (ron Reduction in Ple or Stressed Plants xplain in Remarks) | (Except MLRA Ig Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| Primary Indic X X X S Field Observ Surface Water I Water Table Pr | 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) For Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations: Present? Yes Present? Yes | f one request. 2) 32) 4) B6) Aerial Image Concave Su | gery (B7) irface (B8) No <u>X</u> No | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent Ii Stunted Other (E | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (ron Reduction in Ple or Stressed Plants explain in Remarks) | (Except MLRA Ig Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| Primary Indic | GY drology Indicator eators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Fron Deposits (B5) Surface Soil Cracks (Indicated Sparsely Vegetated Covations: Present? Yes Seent? Yes Seent? Yes | f one request. 2) 32) 4) B6) Aerial Imageoncave Su | gery (B7) ırface (B8) No <u>X</u> | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent Is Stunted Other (E | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (ron Reduction in Ple or Stressed Plants explain in Remarks) | (Except MLRA Ig Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| Primary Indic X HYDROLOG Wetland Hyd Primary Indic X Field Observ Surface Water Water Table Pr Saturation Pres (includes capillary | GY drology Indicator eators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Fron Deposits (B5) Surface Soil Cracks (Indicated Sparsely Vegetated Covations: Present? Yes Seent? Yes Seent? Yes | f one requests 2) 32) 4) B6) Aerial Image Concave Su X X | gery (B7) urface (B8) No No No | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent II Stunted Other (E Depth (inches): Depth (inches): | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (ron Reduction in Ploor Stressed Plants xxplain in Remarks) | (Except MLRA Ig Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hydi | 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) |
| Primary Indic Wetland Hyd Primary Indic X X S III S Field Observ Surface Water Water Table Pr Saturation Pres (includes capillary | GY Irology Indicator Eators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Fron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations: Present? Yes Easent? Yes | f one requests 2) 32) 4) B6) Aerial Image Concave Su X X | gery (B7) urface (B8) No No No | Water st 1, 2, 4A, Salt Crus Aquatic I Hydroge Oxidized Presence Recent II Stunted Other (E Depth (inches): Depth (inches): | and 4B) st (B11) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres alon e of Reduced Iron (ron Reduction in Ploor Stressed Plants xxplain in Remarks) | (Except MLRA Ig Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hydi | 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) |

7298

| roject/Site: F | Rivianna Bead | ch Deve | lopment | | City/County: | West | Linn/Clackamas | 8 | Sampling Date: | 1/26 | /2024 |
|------------------------------|-------------------|--------------|-----------|----------|---------------------|------------------------|--|-----------------|---|-------------------|-----------|
| olicant/Owner: | Forward V | ision D | evelopme | ent | | | | State: O | R § | Sampling Point: | 6 |
| estigator(s): | | AS | | | Section, To | ownship, Range: | | - ; | S 2, T 3S, R 1E | | |
| ndform (hillslope, | , terrace, etc.:) | | Hills | slope | · · | Local relief (co | oncave, convex, none) | | None | Slope (%): | 25 |
| ubregion (LRR): | | LRR | Ā | | Lat: | 45.346 | 62 | Long: | -122.6421 | Datum: | WGS84 |
| oil Map Unit Name | e: | | Wap | ato si | - ilty clay loam | | | WI Classifica | ation: | PAB/UBH | |
| e climatic/hydrolo | | n the site | | | | Yes | | No | | n in Remarks) | |
| e vegetation | | | | | significantly dist | turbed? | Are "Normal Circu | - | | Y | |
| re vegetation | | _ | Hydrology | | | | d, explain any answers | • | ` , | | |
| | | _ | ya.o.og, | | 110.00.0 | 11440 | 1, OAPIGII. G., J | , | •) | | |
| UMMARY OF | FINDINGS | - Atta | ch site n | nap ຮ | showing san | npling point | locations, trans | sects, im | portant featu | res, etc. | |
| ydrophytic Vegeta | ition Present? | Yes | X | No | | I. Compled A | | | | | |
| ydric Soil Present | .? | Yes | | No | Х | Is Sampled Ar a Wetlar | | Yes X | N | lo | |
| etland Hydrology | Present? | Yes | Х | No | | | | | | | |
| emarks: | | | | | | | _ | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| EGETATION | - Use scien | tific na | mes of r | nlant | <u> </u> | | | | | | |
| | - 000 00.0 | tino | absolu | • | Dominant | Indicator | Dominance Tes | t workshe | et: | | |
| | | | % cov | | Species? | Status | . [| | | | |
| ee Stratum (pl | ot size: | |) | | | | Number of Domina | nt Species | | | |
| | | | | | | | That are OBL, FAC | W, or FAC: | | 1 | (A) |
| | | | | | | | . | | | | |
| 3 | | | | _ | | | Total Number of Do | ominant | | | |
| | | | | | | | Species Across All | Strata: | | 1 | (B) |
| | | | 0 | _ | = Total Cover | | | | | | |
| apling/Shrub Strat | tum (plot eize | e: 15 | ` | | | | Porcent of Domina | -+ Charies | | | |
| | |): <u>10</u> |) 100 | | X | FAC | Percent of Dominal | • | 1 | 00% | /A/D) |
| Rubus arme | Niacus | | 100 | | | FAU | That are OBL, FAC | W, OLIAC. | | JU% | (A/B) |
| <u> </u> | | | | | | | Prevalence Inde | ··· Worksh | ~~4. | | |
|) ! | | | | <u> </u> | | | • | 3X MADIVOIT | | | |
| · | | | | | | | Total % Cover of | | Multiply by: | _ 0 | |
| | | | 100 | | T-tal Cover | | OBL Species | | x 1 = | 0 | |
| | | | 100 | | = Total Cover | | FACW species FAC Species | | x 2 = x 3 = | 0 | |
| erb Stratum (pl | lot size: | |) | | | | FACU Species | | x 4 = | 0 | |
| SID Ottatuili (Pi | | | , | | | | UPL Species | | x5= | | |
| | | | | | | | Column Totals | | | | (B) |
| - 3 | | | | — | | | Ooiuiiiii 10 | , | (/`) | | (6) |
| , I | | | | — | | | . Prevalence Ir | odev =R/A = | #Г | OIV/0! | |
| <u> </u> | | | | | | | Flevalerioc II | IUEX -D/A - | | 10/0: | |
| | | | | — | | | Hydrophytic Ve | actation Ir | | | |
| , | | | | | | | Hydrophydd vo | _ | oid Test for Hydrop | obytic Vegetatio | n |
| | | | | | | | · | | oid Test for Hydrop minance Test is >5 | | 1 |
| | | | | <u> </u> | - Tatal Cover | | · | | valence Index is ≤ | | |
| | | | | _ | = Total Cover | | | | vaience index is ≤ phological Adaptat | | unnorting |
| | m (plot size: | |) | | | | <u> </u> | | n Remarks or on a | | |
| oody Vine Stratur | <u>11</u> (F | | _′ | | | | | | tland Non-Vascula | | , |
| | | | · —— | — | | | <u> </u> | | ematic Hydrophytic | | vnlain) |
| | | | | | | | . I | | | | |
| 1 | | | | _ | - Total Cover | | Indicators of hydric | socil and wet | Stand hydrology mi | | |
| Voody Vine Stratur 1 2 | | | 0 | | = Total Cover | | ¹ Indicators of hydrid disturbed or proble | | tland hydrology m | usi be present, t | |
| 1 | | | 0 | <u> </u> | = Total Cover | | | | tland hydrology m | ust be present, | |
| 1 | lerb Stratum | | 100 | | = Total Cover | | disturbed or proble | matic. | tland hydrology mu | No_ | |

| SOIL | | | PHS# | 7298 | _ | | Sampling Point: | |
|--|--|--|---|--|--|---|---|-----------------------------|
| | iption: (Describe to t | the depth i | needed to docume | | onfirm the absen | ce of indicators.) | | |
| Depth | Matrix | | | Redox Features | . 2 | | | |
| (Inches) | Color (moist) | % | Color (moist) | % Type' | Loc ² | Texture | Remarks | |
| 0-16 | 10YR 4/2 | 100 | | | | Silt Loam | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | • | |
| | | | | | _ | | | |
| | | | | | | | 2 | |
| | centration, D=Depletion | | | | | la ali a | ² Location: PL=Pore Lining, M=Matrix. | 3. |
| - | Indicators: (Appli | icable to | all LRRS, unles | | | indic | ators for Problematic Hydric Soils | ; : |
| | Histosol (A1) | | | Sandy Red | | | 2 cm Muck (A10) | |
| | Histic Epipedon (A2) | | | Stripped M | | | Red Parent Material (TF2) | |
| | Black Histic (A3) | | | Loamy Mu | cky Mineral (F1) (| except MLRA 1) | Very Shallow Dark Surface | e (TF12) |
| | Hydrogen Sulfide (A4 | !) | | Loamy Gle | eyed Matrix (F2) | | Other (explain in Remarks |) |
| | Depleted Below Dark | Surface (A | A11) | Depleted N | Matrix (F3) | | | |
| | Thick Dark Surface (A | A12) | | Redox Dar | k Surface (F6) | | | |
| | Sandy Mucky Mineral | I (S1) | | Depleted D | Dark Surface (F7) | | ³ Indicators of hydrophytic vegetation and | |
| | Sandy Gleyed Matrix | (S4) | | Redox De | oressions (F8) | | hydrology must be present, unless distr problematic. | urbea or |
| | Layer (if present): | | | | | T | · | |
| | s): | | | | | Hydric Soil Pre | sent? Yes No | Х |
| Remarks: | | | | | | Hydric Soil Pre | sent? Yes No | X |
| Remarks: | | | | | | Hydric Soil Pre | sent? Yes No | X |
| | | | | | | Hydric Soil Pre | sent? Yes No | X |
| HYDROLO | | rs: | | | | Hydric Soil Pre | sent? Yes No | X |
| HYDROLC | OGY | | uired; check all th | nat apply) | | Hydric Soil Pre | Secondary Indicators (2 or more r | |
| HYDROLC Vetland Hy Primary Indi | DGY rdrology Indicator | | uired; check all th | Water stai | ned Leaves (B9) (| | | equired) |
| HYDROLC Vetland Hy Primary Indi | OGY odrology Indicator icators (minimum o | of one req | uired; check all th | , | | | Secondary Indicators (2 or more r | equired) |
| HYDROLO Vetland Hy Primary Indi | OGY rdrology Indicator cators (minimum o Surface Water (A1) | of one req | uired; check all th | Water stai | nd 4B) | | Secondary Indicators (2 or more r | equired) |
| HYDROLC Vetland Hy Primary Indi X X | OGY ordrology Indicator ocators (minimum o Surface Water (A1) High Water Table (A2 | of one req | uired; check all th | Water stai 1, 2, 4A, a Salt Crust | nd 4B) | | Secondary Indicators (2 or more rows water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) | equired) |
| HYDROLO Vetland Hy Primary Indi X X | OGY rdrology Indicator cators (minimum of Surface Water (A1)) High Water Table (A2) Saturation (A3) | of one req | uired; check all th | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv | nd 4B) (B11) | Except MLRA | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) | required) |
| HYDROLC Vetland Hy Primary Indi X X | OGY rdrology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) | of one req | uired; check all th | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) | Except MLRA | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (| equired)) C2) al Imagery |
| HYDROLC Vetland Hy Primary Indi X X | ody rdrology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (E | of one requipers of one | uired; check all th | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen Oxidized F | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) | Except MLRA g Living Roots (C3) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria | equired)) C2) al Imagery |
| HYDROLC Vetland Hy Primary Indi X X | OGY rdrology Indicator cators (minimum of Surface Water (A1)) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) | of one requipers of one | uired; check all th | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen Oxidized F Presence | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along | Except MLRA g Living Roots (C3) C4) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) | equired)) C2) al Imagery |
| HYDROLC Vetland Hy Primary Indi X X | OGY Indrology Indicator Icators (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) | of one req 2) 32) 4) | uired; check all th | Water stai 1, 2, 4A, a Salt Crust Aquatic In Hydrogen Oxidized F Presence of Recent Iro | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres alonor (C) Rhizospheres alonor (C) | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) | required)) C2) al Imagery |
| HYDROLC Vetland Hy Primary Indi X X | ocators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- | of one req (2) (32) (4) (86) | | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (C | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) | equired)) C2) al Imagery |
| HYDROLC Vetland Hy Primary Indi X X | rdrology Indicator ficators (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 (| of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Plo | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (| equired)) C2) al Imagery |
| HYDROLO Wetland Hy Primary Indi X X | OGY Indicator Icators (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 (Inundation Visible on Sparsely Vegetated C | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Plo | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (| equired)) C2) al Imagery |
| HYDROLC Vetland Hy Primary Indi X X | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations: | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) urface (B8) | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Con Reduction in Plo | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (| equired)) C2) al Imagery |
| HYDROLC Wetland Hy Primary Indi X X X Field Obser | OGY Indrology Indicator Icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | of one request. 2) 32) 4) (B6) Aerial Image | gery (B7) urface (B8) | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Cn) Reduction in Plo Stressed Plants (Islain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (Frost-Heave Hummocks (I | equired)) C2) al Imagery |
| HYDROLC Wetland Hy Primary Indi X X X Field Obser Surface Water Water Table F | rdrology Indicator feators (minimum of Surface Water (A1)) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations: Teresent? Yes Present? Yes | of one request. 32) 4) (B6) Aerial Image Concave Su | gery (B7) urface (B8) No <u>X</u> No | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp Depth (inches): | (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Cn) Reduction in Plo Stressed Plants (plain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (Frost-Heave Hummocks (I | equired)) C2) al Imagery |
| Primary Indi X X | DGY rdrology 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 (Inundation Visible on Sparsely Vegetated Corvations: The Present? Yes Present? Yes Present? Yes | of one request. 2) 32) 4) (B6) Aerial Image | gery (B7) urface (B8) | Water stai 1, 2, 4A, a Salt Crust Aquatic Inv Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) Rhizospheres along of Reduced Iron (Cn) Reduction in Plo Stressed Plants (Islain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (Frost-Heave Hummocks (I | equired)) C2) al Imagery (|
| HYDROLC Wetland Hy Primary Indi X X X Field Obser Surface Water Water Table F Saturation Pre includes capilla | DGY rdrology 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 (Inundation Visible on Sparsely Vegetated Corvations: The Present? Yes Present? Yes Present? Yes | 2) 32) 4) (B6) Aerial Imag | gery (B7) urface (B8) No No No | Water stai 1, 2, 4A, a Salt Crust Aquatic Interpretation Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp Depth (inches): Depth (inches): | rind 4B) (B11) Vertebrates (B13) Sulfide Odor (C1) Rhizospheres alondof Reduced Iron (Cin Reduction in Plot Stressed Plants (Islain in Remarks) 2 0 | Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (Frost-Heave Hummocks (I | equired)) C2) al Imagery |
| HYDROLC Wetland Hy Primary Indi X X X Field Obser Surface Water Water Table F Saturation Pre includes capilla | 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 (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | 2) 32) 4) (B6) Aerial Imag | gery (B7) urface (B8) No No No | Water stai 1, 2, 4A, a Salt Crust Aquatic Interpretation Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp Depth (inches): Depth (inches): | rind 4B) (B11) Vertebrates (B13) Sulfide Odor (C1) Rhizospheres alondof Reduced Iron (Cin Reduction in Plot Stressed Plants (Islain in Remarks) 2 0 | Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (Frost-Heave Hummocks (I | equired)) C2) al Imagery |
| HYDROLC Wetland Hy Primary Indi X X X Field Obser Surface Water Vater Table F Saturation Pre Includes capilla | 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 (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | 2) 32) 4) (B6) Aerial Imag | gery (B7) urface (B8) No No No | Water stai 1, 2, 4A, a Salt Crust Aquatic Interpretation Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp Depth (inches): Depth (inches): | rind 4B) (B11) Vertebrates (B13) Sulfide Odor (C1) Rhizospheres alondof Reduced Iron (Cin Reduction in Plot Stressed Plants (Islain in Remarks) 2 0 | Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (Frost-Heave Hummocks (I | equired)) C2) al Imagery |
| HYDROLC Wetland Hy Primary Indi X X X Field Obser Surface Water Water Table F Saturation Pre includes capilla | 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 (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | 2) 32) 4) (B6) Aerial Imag | gery (B7) urface (B8) No No No | Water stai 1, 2, 4A, a Salt Crust Aquatic Interpretation Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp Depth (inches): Depth (inches): | rind 4B) (B11) Vertebrates (B13) Sulfide Odor (C1) Rhizospheres alondof Reduced Iron (Cin Reduction in Plot Stressed Plants (Islain in Remarks) 2 0 | Except MLRA g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Secondary Indicators (2 or more r Water stained Leaves (B9 (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (Saturation Visible on Aeria Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (Frost-Heave Hummocks (I | equired)) C2) al Imagery |

7298

| roject/Site: Rivianna Bea | ach Develo | pment | City/County: | West | Linn/Clackamas | Sampling Date: | 1/26/ | 2024 |
|-------------------------------------|----------------|---------------------|--------------------|---------------------|--|-------------------------|--------------------------------|-----------|
| pplicant/Owner: Forward | Vision Dev | elopment | | | State: | OR | Sampling Point: | 7 |
| nvestigator(s): | CM/AS | | Section, To | ownship, Range: | | S 2, T 3S, R 1 | <u> </u> | |
| andform (hillslope, terrace, etc.:) | | Slope | e | Local relief (co | oncave, convex, none): | None | Slope (%): | 3 |
| Subregion (LRR): | LRRA | | Lat: | 45.34 | Long: | -122.6404 | Datum: | WGS84 |
| oil Map Unit Name: | | Wapato | silty clay loam | | NWI Cla | ssification: | N/A | |
| re climatic/hydrologic conditions | on the site ty | pical for this t | time of year? | Yes | X No | (if no, expla | ain in Remarks) | |
| re vegetation Soil | or Hyd | drology | significantly disf | turbed? | Are "Normal Circumstance | ces" present? (Y/N) | Υ | |
| re vegetation Soil | or Hyd | drology | naturally proble | matic? If needed | d, explain any answers in Re | marks.) | | |
| <u> </u> | _ | | _ | | | | | |
| SUMMARY OF FINDINGS | | n site mar | p showing san | npling point | locations, transects | i, important featu | ıres, etc. | |
| ydrophytic Vegetation Present? | Yes | X N | No | Is Sampled A | rea within | | | |
| ydric Soil Present? | Yes | N | No X | a Wetla | | | No X | |
| etland Hydrology Present? | Yes | X N | No | | | | | |
| emarks: | | | | -1 | | | | |
| | | | | | | | | |
| | | | | | | | | |
| EGETATION - Use scie | ntific nam | | | | | | | |
| | | absolute % cover | | Indicator Status | Dominance Test wor | ksheet: | | |
| ree Stratum (plot size: | 30) | 70 00101 | | <u> </u> | Number of Dominant Spe | cies | | |
| Crataegus monogyna | | 10 | X | FAC | That are OBL, FACW, or | | 2 (| (A) |
| 2 | | | - | | ' | | | . , |
| 3 | | | | | Total Number of Dominan | nt | | |
| 1 | | | | | Species Across All Strata: | : | 3 (| (B) |
| | | 10 | = Total Cover | | ' | | | |
| apling/Shrub Stratum (plot siz | ze: 15 | 1 | • | | Percent of Dominant Spec | ciae | | |
| Rubus armeniacus | .e. <u></u> | _/ 100 | x | FAC | That are OBL, FACW, or | | 67% (| (A/B) |
| Corylus cornuta | | 20 | | FACU | i i i i i i i i i i i i i i i i i i i | | <u> </u> | , (2) |
| <u>coryrae comata</u> | | | | | Prevalence Index Wo | orksheet: | | |
| | | | - | | Total % Cover of | Multiply by: | | |
| 5 | | | <u> </u> | | OBL Species | x 1 = | ₀ | |
| | | 120 | = Total Cover | | FACW species | x 2 = | 0 | |
| | | | • | | FAC Species | x 3 = | 0 | |
| erb Stratum (plot size: |) | | | | FACU Species | x 4 = | 0 | |
| | | | | | UPL Species | x 5 = | 0 | |
| 2 | | | | | Column Totals | 0 (A) | 0 (| (B) |
| | | | | | | " | D1) //01 | |
| <u> </u> | | | | | Prevalence Index = | 3/A = #1 | DIV/0! | |
| 5 | | | | | Hydrophytic Vegetati | ion Indicators: | | |
| 7 | | | | | • | 1- Rapid Test for Hydro | anhytia Vagatatian | |
| 3 | | | | | | 2- Dominance Test is > | | ı |
| | | 0 | = Total Cover | | . | 3-Prevalence Index is | | |
| | | | _ | | | 4-Morphological Adapta | | upporting |
| oody Vine Stratum (plot size: | 30 |) | | | | data in Remarks or on | a separate sheet) | i. |
| Hedera helix | | 20 | X | FACU | | 5- Wetland Non-Vascu | lar Plants ¹ | |
| 2 | | | | | | Problematic Hydrophyt | ic Vegetation ¹ (Ex | plain) |
| _ | | 20 | = Total Cover | | ¹ Indicators of hydric soil a | nd wetland hydrology n | nust be present, u | nless |
| | | | | | disturbed or problematic. | | | |
| | | | | | Hydrophytic | | | |
| 5 Bare Ground in Herb Stratum | 10 | 00 | | | Vegetation | Yes X | No | |

| Depth | | SOIL | | | PHS# | 7298 | <u> </u> | | | Sampling Point: 7 |
|--|---|---|---|--|---|--|--|---|--|---|
| Color (moist) Ns. Color (moist) Ns. Type Los Testure Remarks | Color (most) Size (most) Size Type Loc Teatre Remarks | Profile Descri | ption: (Describe to t | the depth r | needed to docume | | | firm the abse | nce of indicators.) | |
| 10-14 | 10-14 10YR 3/3 100 10YR 3/3 100 M Silty Clay Loam Fine 11-4-17 10YR 3/2 98 2.5Y 5/1 2 D M Silty Clay Loam Fine 14-4-17 10YR 3/2 95 2.5Y 5/1 5 D M Silty Clay Loam Fine 14-4-17 10YR 3/2 95 2.5Y 5/1 5 D M Silty Clay Loam Fine 14-4-17 10YR 3/2 95 2.5Y 5/1 5 D M Silty Clay Loam Fine 14-4-17 10YR 3/2 95 2.5Y 5/1 5 D M Silty Clay Loam Fine 14-4-17 10YR 3/2 95 2.5Y 5/1 5 D M Silty Clay Loam Fine 14-4-17 10YR 3/2 95 2.5Y 5/1 5 D M Silty Clay Loam Fine 14-4-17 10YR 3/2 95 2.5Y 5/1 5 D M Silty Clay Loam Fine 14-4-17 10YR 3/2 95 2.5Y 5/1 5 D M Silty Clay Loam Fine 14-4-17 10YR 3/2 10 10 10 10 10 10 10 10 10 10 10 10 10 | Depth | | | | | | 2 | | |
| 10-14 | 10-14 10YR 3/2 98 2.5Y 5/1 5 D M Sitty Clay Loam Fine 14-17 10YR 3/2 95 2.5Y 5/1 5 D M Sitty Clay Loam Fine 14-17 10YR 3/2 95 2.5Y 5/1 5 D M Sitty Clay Loam Fine 14-17 10YR 3/2 95 2.5Y 5/1 5 D M Sitty Clay Loam Fine 15-2 | (Inches) | Color (moist) | % | Color (moist) | % | Type' | Loc² | Texture | Remarks |
| 14-17 10VR 3/2 95 2.5V 5/1 5 D M Sitty Clay Loam Fine Type: Cr-Concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. Type: Cr-Concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. Type: Cr-Concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. Type: Cr-Concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. Type: Cr-Concentration, D=Depletion, RM-Reduced Matrix, CS=Covered or Coated Sand Grains. Indicators (P1-Pore Lining, Mr-Matrix, CS=Covered or Coated Sand Grains. Indicators (P1-Pore Lining, Mr-Matrix, CS=Covered or Coated Sand Grains. Indicators (P1-Pore Lining, Mr-Matrix, CS=Covered or Coated Sand Grains. Indicators (P1-Pore Lining, Mr-Matrix, CS=Covered or Coated Sand Grains. Indicators (P1-Pore Lining, Mr-Matrix, CS=Covered or Coated Sand Grains. Indicators (P1-Pore Lining, Mr-Matrix, CS=Covered Or Coated Sand Grains. Indicators (Matrix, CS) Red Parent Material (P2) Depleted Matrix (P3) Thick Dark Surface (P1-2) Depleted Matrix (P3) Depleted Matrix (P3) Redox Dark Surface (P1-2) Poption (Paperson): Type: Seat-rictive Layer (if present): Type: Seat-rictive Layer (if present): Type: Seat-rictive Layer (if present): Type: Seator (Indicators (P1-Pore Lining, Mr-Matrix, Coated P1-Pore Lining, Mr-Matrix, Call P1-Pore Lini | 144-17 10YR 3/2 95 2.5Y 6/1 5 D M Silty Clay Loam Fine Type C-Concentration, D-Depetation, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Pripe C-Concentration, D-Depetation, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Pripe C-Concentration, D-Depetation, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Platford (A1) Indicators for Problematic Hydric Solis ³ : 1 Historic Epicodon (A2) Sandy Readox (SS) 2 million (A2) Historic Epicodon (A2) Simppod Matrix (F3) Road Paront Matrix (F4) Very Shallow Dark Surface (F1) Hydrogen Sulfido (A4) Loarny Oldyord Matrix (F2) Very Shallow Dark Surface (F1) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Sandy Muchy Minoral (S1) Depleted Dark Surface (FD) Sandy Muchy Minoral (S1) Depleted Dark Surface (FD) Sandy Gleyed Matrix (C4) Redox Depressions (F8) Problematic Sandy Depleted Dark Surface (FP) Hydrology must be practicular unless disturbed in Problematic Sandy Depleted Dark Surface (F1) Wetand Hydrology Indicators: **POROLOGY** Wetand Hydrology Present? **POROLOGY** Wetand Hydrology Present? **POROLOGY** **POROLOGY** Wetand Hydrology Present? **Yes X No Depth (Inch | 0-10 | 10YR 3/3 | 100 | | | | | Silty Clay Loam | |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains: **Judicators: (Applicable to all LRRs, unless otherwise noted.) Historoi (A1) Historoi (A1) Historoi (A2) Stripped Matrix (S6) Depleted Delow Dark Surface (A1) Depleted Below Dark Surface (A1) Sandy Gleyed Matrix (F2) Depleted Below Dark Surface (A1) Sandy Gleyed Matrix (F2) Depleted Delow Dark Surface (A1) Sandy Mucky Mineral (F1) Sandy Gleyed Matrix (F2) Depleted Delow Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F2) Person (F7) Problematic Redox Depressions (F8) **No X** **No X** **POROLOGY** **Worland Hydrology Indicators: **POROLOGY** **Worland Hydrology Indi | Type: C=Concentration, D=Depletion, RM=Reduced Mains, CS=Covered or Coated Sand Grains. **Location** PL=Pore Lining, MeMatrix, Phytric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) | 10-14 | 10YR 3/2 | 98 | 2.5Y 5/1 | 2 | D | M | Silty Clay Loam | Fine |
| Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histo (A3) Loamy Mackor (S5) Black Histo (A3) Loamy Mackor Mineral (F1) (except MLRA1) Depleted Below Dark. Surface (F12) Hydrogen Sulfide (A4) Depleted Below Dark. Surface (A11) Depleted Matrix (F2) Sandy Rodo Dark Surface (F12) Trick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Below Dark. Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (K4) Redox Depressions (F8) Primary Indicators of hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No X Water stained Leaves (B9) (Except MLRA High Water Table (A2) Salt Crust (B11) Water Marks (B12) Sediment Deposits (B2) Hydrogen Sulface (C3) Algal Mat or Crust (B4) Froesence of Reduced Inn (C4) Surface Soil Cracks (B9) Recent for Redoution in Plowed Soils (C5) Recent for Redoution in Plowed Soils (C5) Recent for Deposits (B2) Algal Mat or Crust (B4) Froesence of Reduced Inn (C4) Surface Soil Cracks (B9) Recent for Redoution in Plowed Soils (C5) Recent for Redoution in Plowed Soils (C5) Recent for Redoution in Plowed Soils (C5) Recent for Reduction in Plowed Soils (C5) Fac-Neutral Test (B5) Recent for Reduction in Plowed Soils (C5) Fac-Neutral Test (B5) Frest-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Wettant Hydrology Present? Yes X No Depth (inches): 15 Wettant Hydrology Present? Yes X No Depth (inches): 0-2; 122 Wettant Hydrology Present? | Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoi (A1) Histosoi (A1) Histosoi (A2) Black Histo (A3) Loamy Mucky Mineral (F1) (except Mark 1) Depleted Behack (A10) Popleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Trick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Marinx (F2) Popleted Marinx (F2) Trick Dark Surface (A12) Redox Dark Surface (F6) Sandy Gleyed Marinx (S4) Popleted Warrinx (F2) Popl | 14-17 | 10YR 3/2 | 95 | 2.5Y 5/1 | 5 | D | М | Silty Clay Loam | Fine |
| Histosol (A1) Sandy Rodox (S5) 2 cm Musck (A10) 2 Sutyped Matrix (S8) Red Parent Material (TF2) 4 Histosol (A1) 4 Sandy Rodox (S5) 2 cm Musck (A10) 4 Histosol (A2) 5 Sutyped Matrix (S8) Red Parent Material (TF2) 4 Histosol (A1) 4 Very Shallow Dark Surface (F12) 4 Hydrogen Sulfide (A4) 4 Loamy Gleyed Matrix (F2) 5 Cheevept MLRA1 (Myrogen Sulfide (A4) 4 Loamy Gleyed Matrix (F2) 5 Cheevept MLRA1 (Myrogen Sulfide (A4) 4 Loamy Gleyed Matrix (F2) 5 Cheevept MLRA1 (Myrogen Sulfide (A4) 4 Loamy Gleyed Matrix (F2) 5 Cheevept MLRA1 (Myrogen Sulfide (A4) 4 Loamy Gleyed Matrix (F2) 5 Cheevept MLRA1 (Myrogen Sulfide (A4) 4 Loamy Gleyed Matrix (F2) 5 Cheevept MLRA1 (Myrogen Sulfide (A4) 4 Loamy Gleyed Matrix (F2) 6 Cheevept MLRA1 (Myrogen Sulfide (A4) 4 Loamy Gleyed Matrix (F2) 6 Cheevept Musch Surface (F6) 7 Hydrogen Sulfide (A4) 4 Redox Depressions (F8) 7 Hydrogen Sulfide (A4) 8 Redox Depressions (F8) 8 Present? Yes No Sulfide (A4) 8 No Sulfide (A4 | Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoi (A1) Histosoi (A1) Histosoi (A2) Bilack Histo (A3) Loamy Mucky Mineral (F1) (except Marks (E9) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (A12) Sandy Mucky Mineral (A12) Redox Dark Surface (F6) Sandy Gleyed Marks (E3) Thick Dark Surface (A11) Depleted Dark Surface (F6) Sandy Gleyed Marks (E3) Redox Dark Surface (F8) Problematic Layer (If present): Type: Depth (inches): Hydric Soil Present? Yes No X Water stained Leaves (B9) (Except MLRA (MLRA1, 2.4A, and 4B) Water stained Leaves (B9) Water Marks (B1) Aquatic Invertebrates (B13) Seldment Deposite (B3) Soldment Deposite (B3) Agail Mat or Crust (B4) Presente or Reduced fron (C4) Agail Mat or Crust (B4) Presente or Reduced fron (C4) Redox Depth (inches): Hydric Soil Present? Yes Surface (B1) Presence of Reduced fron (C4) Saluration Valse on Aerial Imagery (B7) Soldment Deposite (B3) Soldment Deposite (B3) Agail Mat or Crust (B4) Presence of Reduced fron (C4) Redox Depth (inches): Hydric Soil Present? Yes No Depth (inches): Surface Water (A1) Presented Reduced fron (C4) Redox Depth (inches): Soldment Deposite (B5) Redox Depth (inches): Soldment Deposite (B6) Surface (B5) Redox Depth (inches): Surface (B6) Redox Depth (inches): Surface (B6) Wetland Hydrology Present? Yes No Depth (inches): Surface Water (A1) Wetland Hydrology Present? Yes No Depth (inches): Surface Water (A1) Presented Concave Surface (B8) Presided Concave Surface (B8) Presi | | | | | | | | | |
| Histosol (A1) Sandy Redox (S5) Sandy Redox Dark Surface (F12) Sandy Mucky Mineral (F1) (except MLRA1) Very Shallow Dark Surface (F12) Other (explain in Remarks) Sandy Mucky Mineral (S1) Sandy Redox Depressions (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Present? Yes No X Settrictive Layer (If present): Fype: Speth (inches): Hydric Soil Present? Yes No X Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Mater Marks (S1) Sandy | Hidicators: (Applicable to all LRRs, unless otherwise noted.) Hidicators: (Applicable to all LRRs, unless otherwise noted.) Hidicators (A1) Hidicators (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MirRx 1) Popieted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Popieted Below Dark Surface (A12) Popieted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S2) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S3) Popieted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Gleyed Matrix (S3) Redox Darpressions (F8) Redox Darpressions (F | | | | | | | | | |
| Histosol (A1) Sandy Redox (S5) Sandy Redox Dark Surface (F12) Sandy Mucky Mineral (F1) (except MLRA1) Very Shallow Dark Surface (F12) Other (explain in Remarks) Sandy Mucky Mineral (S1) Sandy Redox Depressions (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Present? Yes No X Settrictive Layer (If present): Fype: Speth (inches): Hydric Soil Present? Yes No X Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Mater Marks (S1) Sandy | Hidicators: (Applicable to all LRRs, unless otherwise noted.) Hidicators: (Applicable to all LRRs, unless otherwise noted.) Hidicators (A1) Hidicators (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MirRx 1) Popieted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Popieted Below Dark Surface (A12) Popieted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S2) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S3) Popieted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Gleyed Matrix (S3) Redox Darpressions (F8) Redox Darpressions (F | | | | | | | | | |
| Histosol (A1) Sandy Redox (S5) Sandy Redox (S6) Sandy Redox (S6) Sandy Redox Dark Surface (F12) Sandy Mucky Moreal (F1) (except MLRA1) Very Shallow Dark Surface (F12) Other (explain in Remarks) Sandy Mucky Mineral (S1) Sandy | Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Sandy Redox (S5) 2 cm Muck (A10) Person (A2) Sitiped Matrix (S6) Red Parent Material (TF2) Person (A2) Sitiped Matrix (S6) Red Parent Material (TF2) Other (explain in Remarks) Person (A2) Sitiped Matrix (S6) Red Parent Material (TF2) Very Shallow Dark Surface (TF1 Person (A2) Sitiped Matrix (S6) Red Parent Material (TF2) Person (A2) Sitiped Matrix (F2) Other (explain in Remarks) Person (A2) Person (A2) Redox Dark Surface (F6) Person (A2) Redox Darressions (F8) Problematic Problemati | | | | | | | | | |
| Histosol (A1) Sandy Redox (S5) Sandy Redox Dark Surface (A12) Sandy Mucky Mineral (F1) (except MLRA1) Very Shallow Dark Surface (F12) Other (explain in Remarks) Sandy Mucky Mineral (S1) Sandy San | Hidicators: (Applicable to all LRRs, unless otherwise noted.) Hidicators: (Applicable to all LRRs, unless otherwise noted.) Hidicators (A1) Hidicators (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MirRx 1) Popieted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Popieted Below Dark Surface (A12) Popieted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S2) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S3) Popieted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Gleyed Matrix (S3) Redox Darpressions (F8) Redox Darpressions (F | | | | | | | | | - |
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Radox (S5) 2 cm Musk (A10) Histosol (A2) Stripped Matrix (S6) Red Parent Material (TF2) Black Histo (A3) Loamy Musky Mineral (F1) (except MLRA1) Very Shallow Dark Surface (F12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thick Dark Surface (A12) Redox Dark Surface (F12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Pripe: Depth (inches): Perpentify (A1) Redox Dark Surface (A12) Redox Dark Surface (F7) Wettand Hydrology Indicators: Hydric Soil Present? Yes No No X Water stained Leaves (B9) (Except MLRA (MLRA1, 2.4A, and 4B) (MLRA1, 2.4A, and 4B) High Water Table (A2) Aquatic Invertebrates (B13) DrySeason Water Table (C2) Apgal Mat or Crust (B4) Presence of Reduced from (C4) Saturation Visible on Aerial Imagery (B7) Apgal Mat or Crust (B4) Presence of Reduced from (C4) Saturation Visible on Aerial Imagery (B7) Depth (Inches): Recent Iron Reduction in Plowed Soils (C5) Fac-Neutral Test (D5) Surface Soil Cracks (B6) Surface (F1) DrySeason Water (F1) Remarks (D7) Squarsely Vegetated Concave Surface (B8) Field Observations: Wettand Hydrology Present? Yes X No Depth (Inches): 15 Wettand Hydrology Present? Yes X No Depth (Inches): 0-2; 12 Yes X No | Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosei (A1) Histosei (A2) Histosei (A3) Loamy Redox (S5) Parametric Hydric Soils: 2 cm Muck (A10) Black Histo (A3) Loamy Mucky Mineral (F1) (except Mark (F2) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Gleyed Marix (S4) Redox Daryessions (F8) Problematic Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No X Water stained Leaves (B9) (Except MLRA (MLRA1, 2, 4A, and 48) Water stained Leaves (B9) (Except MLRA (MLRA1, 2, 4A, and 48) Water Marks (B1) Secondary Indicators (C1) Aquatic Invertebrates (B13) Serious (B12) Sediment Deposits (B2) Application (A) Application (A) Sediment Deposits (B3) Derived Beroams (B3) Application (B3) Application (B3) No Sufface (B13) Presence of Reduced Iron (C4) Shallow Aquation (Na) Iron Deposits (B5) Recent Iron Reduced or States (B10) Recent Iron Reduced (B10) Recent on Reduced Iron (C4) Shallow Aquation (Na) Frost-Heave Hummocks (D7) Serious Water Attion (B6) Recent Iron Reduced iron (C4) Shallow Aquation (D6) (RR A) Restriction Remarks Prost-Heave Hummocks (D7) Pros | | | | | | | | | |
| Histosol (A1) Histic Epipedon (A2) Histic Epipedon (A2) Stirpped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Popleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Problematic Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No No X Water stained Leaves (B9) (Except MLRA (MLRA1, 2, 4A, and 4B) Muster Stained Name (S1) Saltrace Water (A1) Water stained Leaves (B9) (Except MLRA (MLRA1, 2, 4A, and 4B) Muster Stained Deposits (B1) Sediment Deposits (B2) Prisener of Reduced Into (C4) Agal Matr Or Crust (B4) Into Deposits (B3) Surface Water (A1) Presence 7 Pressence 7 Pessence 7 Pressence (B4) Redox Depressions (P1) Water Stained Leaves (B9) Muster Stained Number Stained Leaves (B9) Muster Stained Leaves (B9) M | Histosol (A1) Histo Epipedro (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF1) Hydrogen Sulfide (A4) Depleted Matrix (F2) Other (explain in Remarks) Depleted Sandy Dark Surface (A11) Depleted Matrix (F2) Thick Dark Surface (A12) Rodox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Indicators of hydrophytic vegetation and wells surface (F8) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Restrictive Layer (if present): Pype: Depth (inches): Hydric Soil Present? Yes No X Remarks: Hydric Soil Present? Yes No X Remarks: Hydric Soil Present? Yes No X Secondary Indicators (2 or more required; check all that apply) Secondary Indicators (2 or more required; check all that apply) Secondary Indicators (2 or more required; check all that apply) Secondary Indicators (2 or more required; check all that apply) Water stained Leaves (89) (Except MLRA Water stained Leaves (89) Water Marks (81) Aquatic Inventebrates (813) Dys-Season Water Table (C2) Sediment Deposits (83) Oxidized Rhizospheros along Living Roots (C3) Geomorphic Position (C2) Algal Mat or Crust (84) Presence of Reduced Iron (C4) Santarion (Visible on Aerial Imagery (87) Spanely Vegetated Concave Surface (88) Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Vater Table Present? Yes No Depth (inches): Wetland Hydrology Present? Ves X No Depth (inches): Vestantion Provisite or Aerial Imagery (87) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Type: C=Cond | centration, D=Depletion | on, RM=Re | duced Matrix, CS=0 | Covered or Co | oated Sand | d Grains. | | ² Location: PL=Pore Lining, M=Matrix. |
| Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dank Surface (A11) Depleted Below Dank Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Pepleted Dark Surface (F6) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F8) Restrictive Layer (if present): Prippe: Depth (inches): Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Water Salar (B11) Water Marks (B1) Aquatic invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrigos Sulfrace (B4) Presence of Reduced fron (C4) Saluration (Visible on Aerial Imagery (B7) Aplad Mater Crust (B4) Presence of Reduced fron (C4) Spansely Vegetated Concave Surface (B8) Finest-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) | Histic Epipedon (A2) Black Histic (A3) Loamy Milecky Mineral (F1) (except MLRA 1) Loamy Gleyed Matrix (F2) Other (explain in Remarks) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Barrix (F3) Primary Indicators (P6) Sandy Gleyed Matrix (F3) Redox Dark Surface (F7) **Indicators of hydrophytic vegetation and wellar specific or specif | Hydric Soil | Indicators: (Appli | icable to | all LRRs, unless | s otherwise | noted.) | | Indica | ators for Problematic Hydric Soils ³ : |
| Black Histic (A3) Hydrogen Sulfide (A4) Depleted Bellow Dark Surface (A11) Depleted Matrix (F2) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (B1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Redox Depressions (F8) Popplit (Inches): Wettand Hydrology Indicators: **Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water stained Leaves (B9) Water Marks (B1) Water Marks (B1) Aquatic Invertebrates (B13) Dys-Season Water Table (A2) Algal Mat or Crust (B4) Presence of Reduced Iron (Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Vegetation Sparsely Vegetated Concave Surface (B8) Very Surface Water (A1) Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (C4) Sparsely Vegetated Concave Surface (B8) First-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Very Surface Water (Vas.) Sparsely Vegetated Concave Surface (B8) First-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Very Surface Water (Vas.) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Field Observations: Very Surface Water (Vas.) Surface Water (Vas.) Very Surface Water (Vas.) Surface Water (A1) Surface Water (A | Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Redox Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Prosent? Yes No X Restrictive Layer (If present): Verification (F7) Present? Yes No X Restrictive Layer (If present): Verification (F7) Present? Yes No X Restrictive Layer (If present): Verification (F7) Present? Yes No X Restrictive Layer (If present): Verification (F7) Present? Yes No X Restrictive Layer (If present): Verification (F7) Present? Yes No X Restrictive Layer (If present): Verification (F7) Present? Yes No X Restrictive Layer (If present): Verification (F7) Present? Yes No X Restrictive Layer (If present): Verification (F7) Present? Yes No X Restrictive Layer (If present): Verification (F7) Present? Yes No Condary Indicators (2 or more required): Restrictive Layer (If present): Verification (F7) Present? Yes No Condary Indicators (2 or more required): Restrictive Layer (If present): Verification (F7) Present? Yes No Condary Indicators (2 or more required): Restrictive Layer (If present): Verification (F7) Valuer stained Leaves (B9) (Except MLRA Water Table (F7) Saraely Mater (F1) Verification (F1) Verification (F1) Verification (F1) Verification (F1) Verification (F1) Ve | ļ | Histosol (A1) | | | Sa | ndy Redox | k (S5) | | 2 cm Muck (A10) |
| Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sendy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sendy Gleyed Matrix (S4) Redox Depressions (F8) Primary Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Primary Indicators (F7) Primary Indicators (minimum of one required; check all that apply) Surface Water (A11) High Water Table (A2) Water stained Leaves (B9) (Except MLRA (MLRA, 2, 4A, and 4B) Water Matrix (B1) Drainage Patterns (B10) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Sparsely Vegetated Concave Surface (B8) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Root | Hydrogen Sulfide (A4) Depleted Bellow Dark Surface (A11) Depleted Matrix (F2) Performant (F3) | | Histic Epipedon (A2) | | | Str | ripped Matı | rix (S6) | | Red Parent Material (TF2) |
| Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sendy Gleyed Matrix (F3) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sendy Gleyed Matrix (S4) Redox Depressions (F8) Primary Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Primary Indicators (F7) Primary Indicators (minimum of one required; check all that apply) Surface Water (A11) High Water Table (A2) Water stained Leaves (B9) (Except MLRA (MLRA, 2, 4A, and 4B) Water Matrix (B1) Drainage Patterns (B10) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Sparsely Vegetated Concave Surface (B8) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Root | Hydrogen Sulfide (A4) Depleted Bellow Dark Surface (A11) Depleted Matrix (F2) Performant (F3) | | | | | | | | (except MLRA 1) | |
| Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Redox Dark Surface (F7) Redox Dark Surface (F8) Redox Dark Surface (F7) Redox Dark Surface (F8) Redox Dark S | Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Secondary Mineral (S1) Secondary (FP) Permarks: Primary Indicators (Indicators (Indicators (PS) Primary Indicators (Indicators (PS) Primary Indicators (Indicators (PS) Prim | | |) | | | | | | |
| Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Pepleted Dark Surface (F7) Redox Depressions (F8) Restrictive Layer (if present): Pripe: | Thick Dark Surface (A12) Sandy Micky Mineral (S1) Sandy Diesy Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Redox Depressions (F8) Restrictive Layer (if present): Primary Indicators (Present) | | | | .11\ | | | | | Carol (explain in Nellialks) |
| Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Present of hydrolyptic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No X Remarks: Hydric Soil Present? No X Remarks: Hydric Soil Present? Yes No X Remarks: Hydric Soil Present? Yes No X Redox Depressions (F8) Hydric Soil Present? Yes No X Redox Depressions (F8) Hydric Soil Present? Yes No Depth (inches): 15 Wetland Hydrology must be present? Yes No No Pepth (inches): 15 Wetland Hydrology unless distanced and hydrology Present? Yes X No No Pepth (inches): 162-212 Hydrogen Sulface Water (F7) Hydric Soil Present? Yes X No Depth (inches): 15 Wetland Hydrology Present? Yes X No No Pepth (inches): 15 Wetland Hydrology Present? Yes X No No Pepth (inches): 15 Wetland Hydrology Present? Yes X No No Pepth (inches): 162-212 | Sandy Mucky Mineral (S1) | | • | • | X11) | | • | ` ' | | |
| Sandy Gleyed Matrix (S4) | Sandy Gleyed Matrix (S4) Redox Depressions (F8) hydrology must be present, unless disturbed of problematic. Restrictive Layer (if present): | | | • | | | | | | ³ Indicators of hydrophytic vegetation and wetland |
| Restrictive Layer (if present): Type: | Restrictive Layer (if present): | | Sandy Mucky Mineral | I (S1) | | | • | ` ' | | |
| Type: Depth (inches): Hydric Soil Present? Yes | Type: | ; | Sandy Gleyed Matrix | (S4) | | Re | edox Depre | essions (F8) | | problematic. |
| Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Naturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Surface Water Nation A8 Surface Water Nation (A8) Dry Season Water Table (C2) Saturation (C4) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Stained Leaves (B9) (Except MLRA Water Stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (B10) Saturation Visible on Aerial Imagery (B2) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes X No Depth (inches): Wetland Hydrology Present? Yes X No | Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required: Surface Water (A1) High Water Table (A2) High Water Table (A2) X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Image Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Water stained Leaves (B9) (MLRA1 Ayater Table (Leaves (B9) (Except MLRA Mater Stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Water Stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Water Stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Water Stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Water Stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Muster Stained Leaves (B9) Saturation Presence of Reduced Iron (C1) Saturation Presence of Reduced Iron (C2) Saturation Presence of Reduced Iron (C4) Shallow Aquitard (D3) Frost-Neutral Test (D5) Raised Ant Mounds (D6) (LRR 4) Raised Ant Mounds (D6) (LRR 4) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Water Table Present? Yes X No Depth (inches): Depth (inches): Depth (inches): Vestinated Present? Yes X No Depth (inches): Yes X No Depth (inches): Yes X No Depth (inches): Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | |): | | | | | | Hydric Soil Pres | ent? Yes NoX |
| Surface Water (A1) High Water Table (A2) 1, 2, 4A, and 4B) Water stained Leaves (B9) (Except MLRA High Water Table (A2) 1, 2, 4A, and 4B) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Stained Leaves (B9) (Except MLRA (MLRA1, 2, 4A, and 4B) Mater stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Saturation Visible on Aerial Imagery (C2) Shallow Aquitard (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Fac-Neutral Test (D5) Fac-Neutral Test (D5) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): 15 Wetland Hydrology Present? Yes X No | Surface Water (A1) High Water Table (A2) High Water Table (A2) X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Dra | Remarks: | GY | | | | | | Hydric Soil Pres | ent? Yes NoX |
| High Water Table (A2) X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Dry-Season Water Table (C2) Sediment Deposits (B2) Drift Deposits (B3) Adjustic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes | High Water Table (A2) X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Dray-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Image Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): Water Table Present? Yes X No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Remarks: HYDROLO Wetland Hy | GY drology Indicator | | | | | | Hydric Soil Pres | |
| X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Field Observations: Water Table Present? Yes No X Depth (inches): 15 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): 0-2; 12 Yes X No | X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Image Drift Deposits (B3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): Water Table Present? Yes X No Depth (inches): 0-2; 12 Yes X No Depth (inches): 15 Yes X No Depth (inches): 0-2; 12 Yes X No Depth (inches): 15 Yes X No Depth (inches): 0-2; 12 Yes X No Depth (in | Remarks: HYDROLO Wetland Hydelerimary India | GY drology Indicator cators (minimum o | | uired; check all th | | ator staine | d Logyes (RO) | | Secondary Indicators (2 or more required) |
| Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): 0-2; 12 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 12 Yes X No | Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imag Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Fac-Neutral Test (D5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): Water Table Present? Yes X No Depth (inches): Other (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | HYDROLO Wetland Hy | GY drology Indicator cators (minimum o Surface Water (A1) | of one requ | uired; check all th | Wa | | | | Secondary Indicators (2 or more required) Water stained Leaves (B9) |
| Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): Water Table Present? Yes X No Depth (inches): Drift Deposits (B2) Algal Mat or Crust (B4) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Seturation Present? Yes X No Depth (inches): Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 12 Yes X No | Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): Water Table Present? Yes X No Depth (inches): Other (inches): Other (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | HYDROLO Wetland Hydrimary India | GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 | of one requ | uired; check all th | Wa | 2, 4A, and | l 4B) | | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): Double Clark Rhizospheres along Living Roots (C3) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Fac-Neutral Test (D5) Fac-Neutral Test (D5) Fac-Neutral Test (D5) Recent Iron Reduction in Plowed Soils (C6) Fac-Neutral Test (D5) Fac-Neut | Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): Water Table Present? Yes X No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Oxidized Rhizospheres along Living Roots (C3) Shallow Aquitard (D3) Shallow Aquitard (D3) Fac-Neutral Test (D5) Fac-Neutral | HYDROLO Wetland Hyd Primary India | GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) | of one requ | uired; check all th | Wa 1, : Sa | 2, 4A, and alt Crust (B | 1 4B) 11) | (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) |
| Algal Mat or Crust (B4) | Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes | HYDROLO Wetland Hy Primary India | GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | of one requ | uired; check all th | Wa 1,Sa Aq | 2, 4A, and alt Crust (B | 1 4B) 11) rtebrates (B13) | (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches): Depth (| Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes | HYDROLO Wetland Hyd Primary India | GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (E | of one requ | uired; check all th | Wa 1, Sa Aq Hy | 2, 4A, and alt Crust (B ² quatic Inver | 14B) 11) rtebrates (B13) | (Except MLRA | 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 (|
| Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches): Dep | Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes | HYDROLO Wetland Hyd Primary India | GY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) | of one required on | uired; check all th | Waana Aq | 2, 4A, and alt Crust (B' nuatic Inver drogen Su kidized Rhi | 14B) 11) tebrates (B13) llfide Odor (C1 zospheres alor | (Except MLRA | 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) |
| Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches): Depth (inches): 0-2; 12 Other (Explain in Remarks) Frost-Heave Hummocks (D7) Frost-Heave Hummocks (D7) Wetland Hydrology Present? | Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | HYDROLO Wetland Hyd Primary India | GY drology Indicator cators (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 | of one required on | uired; check all th | Wand Name of State of | 2, 4A, and alt Crust (Bull Cru | 14B) 11) tebrates (B13) lifide Odor (C1 zospheres alor Reduced Iron (| (Except MLRA) ng Living Roots (C3) C4) | 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) |
| Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): 15 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): 0-2; 12 Yes X No | Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches): Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | HYDROLO Wetland Hy Primary India | 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 Iron Deposits (B5) | of one requipment of one required one requi | uired; check all th | W: 1, Sa Aq Hy Ox Pro | 2, 4A, and alt Crust (B quatic Inver rdrogen Su kidized Rhiz esence of I | 14B) 11) tebrates (B13) lifide Odor (C1 zospheres aloi Reduced Iron (| (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) | 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) |
| Field Observations: Surface Water Present? Yes | Field Observations: Surface Water Present? Yes | HYDROLO Wetland Hy Primary India | 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 Iron Deposits (B5) Surface Soil Cracks (| of one requiped (2) (32) (4) (B6) | | W: 1, Sa Aq Hy Ox Pre Re | 2, 4A, and alt Crust (B' quatic Inver rdrogen Su didized Rhiz esence of I ecent Iron F unted or St | 14B) 11) tebrates (B13) ilfide Odor (C1 zospheres alor Reduced Iron (Reduction in Pl tressed Plants | (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): 15 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): 0-2; 12 Yes X No | Surface Water Present? Yes | HYDROLO Wetland Hyd Primary India | 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 (Inundation Visible on | of one request. 32) 4) B6) Aerial Imag | gery (B7) | W: 1, Sa Aq Hy Ox Pre Re | 2, 4A, and alt Crust (B' quatic Inver rdrogen Su didized Rhiz esence of I ecent Iron F unted or St | 14B) 11) tebrates (B13) ilfide Odor (C1 zospheres alor Reduced Iron (Reduction in Pl tressed Plants | (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| Water Table Present? Yes X No Depth (inches): 15 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): 0-2; 12 Yes X No | Water Table Present? Yes X No Depth (inches): 15 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): 0-2; 12 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | HYDROLO Wetland Hyd Primary India | 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 (Inundation Visible on | of one request. 32) 4) B6) Aerial Imag | gery (B7) | W: 1, Sa Aq Hy Ox Pre Re | 2, 4A, and alt Crust (B' quatic Inver rdrogen Su didized Rhiz esence of I ecent Iron F unted or St | 14B) 11) tebrates (B13) ilfide Odor (C1 zospheres alor Reduced Iron (Reduction in Pl tressed Plants | (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| Saturation Present? Yes X No Depth (inches): 0-2; 12 Yes X No | Saturation Present? Yes X No Depth (inches): 0-2; 12 Yes X No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | HYDROLO Wetland Hy Primary India | 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 (Inundation Visible on Sparsely Vegetated C | of one request. 32) 4) B6) Aerial Imag | gery (B7) | W: 1, Sa Aq Hy Ox Pre Re | 2, 4A, and alt Crust (B' quatic Inver rdrogen Su didized Rhiz esence of I ecent Iron F unted or St | 14B) 11) tebrates (B13) ilfide Odor (C1 zospheres alor Reduced Iron (Reduction in Pl tressed Plants | (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| | (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | HYDROLO Wetland Hyd Primary India X Field Obser | 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 (Inundation Visible on Sparsely Vegetated Covations: | of one request. 32) 4) B6) Aerial Imag | gery (B7) urface (B8) | Walls and the second se | 2, 4A, and alt Crust (Biguatic Inver- adrogen Suidized Rhizesence of Becent Iron Funted or St her (Explain | 14B) 11) tebrates (B13) ilfide Odor (C1 zospheres alor Reduced Iron (Reduction in Pl tressed Plants | (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| I | | HYDROLO Wetland Hy Primary India X Field Obser Surface Water | 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 (Inundation Visible on Sparsely Vegetated Covations: Present? Yes | of one request. 2) 32) 4) B6) Aerial Image Concave Su | gery (B7) ırface (B8) No <u>X</u> | Water State Of the Depth (in | 2, 4A, and alt Crust (Biguatic Inversed on Sudiced Rhizesence of Fecent Iron Funted or Sther (Explainment): | 14B) 11) tebrates (B13) lifide Odor (C1 zospheres alor Reduced Iron (Reduction in Pl tressed Plants in in Remarks) | (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| | | HYDROLO Wetland Hyd Primary India X Field Obser Surface Water Water Table P Saturation Pres (includes capillar | 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 (Inundation Visible on Sparsely Vegetated Covations: Present? Yes resent? Yes sent? Yes y fringe) | of one required (2) 32) 4) B6) Aerial Image Concave Su | gery (B7) ırface (B8) No No No | W: 1, Sa Aq Hy Ox Pre Re Stu Ott Depth (in Depth (in | 2, 4A, and alt Crust (B' quatic Inver rdrogen Su didized Rhiz esence of B ecent Iron F unted or St her (Explai | 14B) 11) tebrates (B13) lifide Odor (C1 zospheres alor Reduced Iron (Reduction in Pl tressed Plants in in Remarks) 15 0-2; 12 | (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hydi | 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) |
| | | HYDROLO Wetland Hyde Primary India X Field Obser Surface Water Water Table P Saturation Presidincludes capillar | 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 (Inundation Visible on Sparsely Vegetated Covations: Present? Yes resent? Yes sent? Yes y fringe) | of one required (2) 32) 4) B6) Aerial Image Concave Su | gery (B7) ırface (B8) No <u>X</u> No No | W: 1, Sa Aq Hy Ox Pre Re Stu Ott Depth (in Depth (in | 2, 4A, and alt Crust (B' quatic Inver rdrogen Su didized Rhiz esence of B ecent Iron F unted or St her (Explai | 14B) 11) tebrates (B13) lifide Odor (C1 zospheres alor Reduced Iron (Reduction in Pl tressed Plants in in Remarks) 15 0-2; 12 | (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hydi | 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) |
| | emarks: | HYDROLO Wetland Hyde Primary India X Field Obser Surface Water Water Table P Saturation Pres | 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 (Inundation Visible on Sparsely Vegetated Covations: Present? Yes resent? Yes sent? Yes y fringe) | of one required (2) 32) 4) B6) Aerial Image Concave Su | gery (B7) ırface (B8) No <u>X</u> No No | W: 1, Sa Aq Hy Ox Pre Re Stu Ott Depth (in Depth (in | 2, 4A, and alt Crust (B' quatic Inver rdrogen Su didized Rhiz esence of B ecent Iron F unted or St her (Explai | 14B) 11) tebrates (B13) lifide Odor (C1 zospheres alor Reduced Iron (Reduction in Pl tressed Plants in in Remarks) 15 0-2; 12 | (Except MLRA) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hydi | 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) |

7298

| oject/Site: Rivianna Bea | ch Develo | pment | City/County: | West | Linn/Clackamas | Sampli | ng Date: | 1/26 | /2024 |
|------------------------------------|----------------|--------------|--------------------|-------------------|--|------------------|----------------|-----------------------------|--------|
| plicant/Owner: Forward \ | Vision Dev | /elopmer | nt | | Stat | e: OR | Sa | ampling Point: | 8 |
| restigator(s): | CM/AS | | Section, T | ownship, Range: | | S 2, T | 3S, R 1E | | |
| ndform (hillslope, terrace, etc.:) | | Slo | рре | Local relief (co | ncave, convex, none): | No | ne | Slope (%): | 2 |
| bregion (LRR): | LRRA | | Lat: | 45.34 | 60 Lon | g: -122 . | 6405 | Datum: | WGS84 |
| il Map Unit Name: | | Wapa | to silty clay loan | 1 | NWI | Classification: | | N/A | |
| e climatic/hydrologic conditions | on the site ty | pical for th | is time of year? | Yes | <u>X</u> N | lo(| if no, explain | in Remarks) | |
| vegetation Soil | or Hyd | drology | significantly di | sturbed? | Are "Normal Circumst | ances" present | ? (Y/N) | Y | |
| vegetation Soil | or Hyd | drology | naturally probl | ematic? If needed | d, explain any answers in | Remarks.) | | | |
| | | , | | | | | | | |
| IMMARY OF FINDINGS | | | | mpling point | locations, transec | cts, importa | int featur | es, etc. | |
| Irophytic Vegetation Present? | Yes | X | No | Is Sampled A | rea within | v | | | |
| Iric Soil Present? | Yes _ | X | No | a Wetla | nd? | es X | No | | |
| tland Hydrology Present? | Yes | Х | No | | | | | | |
| narks: | | | | | | | | | |
| | | | | | | | | | |
| GETATION - Use scie | ntific nam | nos of n | lante | | | | | | |
| OF IMITOR - USE SCIE | mine nan | absolut | | Indicator | Dominance Test w | orksheet: | | | |
| | | % cove | | Status | | | | | |
| e Stratum (plot size: | 30) | | | | Number of Dominant S | - | | | |
| Fraxinus latifolia | | 5 | x | FACW | That are OBL, FACW, | or FAC: | : | 2 | (A) |
| | | | | | | | | | |
| | | - | | | Total Number of Domir | | | • | (D) |
| | | 5 | = Total Cover | | Species Across All Stra | ata: | | 2 | (B) |
| | | | Total Cover | | | | | | |
| ling/Shrub Stratum (plot siz | e: 15 | | | | Percent of Dominant S | • | 40 | •0/ | (A (D) |
| Rubus armeniacus | | 100 | X | FAC | That are OBL, FACW, | or FAC: | 10 | 0% | (A/B) |
| Spiraea douglasii | | 5 | | FACW | Prevalence Index \ | Norkshoot: | | | |
| | | | | | Total % Cover of | | Multiply by: | | |
| | | | <u> </u> | | OBL Species | _ <u>-</u> | x 1 = | - 0 | |
| | | 105 | = Total Cover | | FACW species | | x 2 = | 0 | |
| | | | | | FAC Species | | x 3 = | 0 | |
| b Stratum (plot size: |) | | | | FACU Species | | x 4 = | 0 | |
| | | | | | UPL Species | | x 5 = | 0 | |
| | | | | | Column Totals | 0 (| A) | 0 | (B) |
| | | | | | . Donote a contra de de contra de co | D/A - | #DI | V/01 | |
| | | - | | | Prevalence Index | (=B/A = | #1 | V/0! | |
| | | | | | Hydrophytic Veget | ation Indicat | ors: | | |
| | | | | | | | | nytic Vegetation | 1 |
| | | | _ | | х | 2- Dominano | | | |
| | | 0 | = Total Cover | | | 3-Prevalence | e Index is ≤ 3 | 3.0 ¹ | |
| | | | _ | | | _ | | ons ¹ (provide s | |
| ody Vine Stratum (plot size: | | _) | | | | | | separate sheet |) |
| | | | | | . | 5- Wetland N | | | mlai-\ |
| | | | | | Indicators of building | | | Vegetation ¹ (Ex | |
| | | 0 | = Total Cover | | ¹ Indicators of hydric so disturbed or problemat | | yarology mu | sι νε present, ι | ııness |
| | | | | | Hydrophytic | | | | |
| | | ^^ | | | Vegetation | Yes | X | No | |
| Bare Ground in Herb Stratum | 1 | 00 | | | Present? | _ | | | |

| Profile Description: (Description to the depth several to document the Indicator or confirm the absence of Indicators.) Description Metrix Record Features | Profile Descri | | | PHS# | 7298 | | | | Sampling Point: 8 |
|--|--------------------------------------|---|--|--|--|---|--|--|---|
| | | iption: (Describe to | the depth | needed to docume | nt the indicate | or or con | firm the abse | nce of indicators.) | |
| 19783/2 93 2.57 5/1 5 D M Silty Clay Loam Medium | Depth | Matrix | | | | | | | |
| 16-15 | (Inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| | 0-6 | 10YR3/2 | 93 | 2.5Y 5/1 | | D | M | Silty Clay Loam | Medium |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. | | | | 10YR 3/4 | 2 | С | M | Silty Clay Loam | Medium |
| "Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. "Location: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histocol (A1) Histocol (A2) Histocol (A2) Sandy Redox (S5) Learny Mukry Minoral (F1) (except MLRA 1) Hydrogen Sudice (A4) Learny Mukry Minoral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Minoral (S1) Sandy Mucky Minoral (S1) Sandy Mucky Minoral (S1) Depleted Dark Surface (F6) Sandy Gieyed Matrix (F2) Depleted Dark Surface (A12) Redox Depressions (F8) Phydric Soil Present? Yes X No No Mater stained Leaves (B9) (Except MLRA Hydric Soil Present? Yes No Secondary Indicators (2 or more required). Water stained Leaves (B9) (Except MLRA Multiple Mater Table (A22) Mater Marks (B1) Aquatic invertebrates (B13) Primary Indicators (minimum of one required; check all that apply) Section Water (B13) Water Marks (B1) Aquatic invertebrates (B13) Mater Marks (B1) Aquatic invertebrates (B13) Aquatic invertebrates (B13 | 6-15 | 10YR 3/2 | 88 | 2.5Y 5/1 | 10 | D | M | Silty Clay Loam | Medium |
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histo (A3) Depleted Epipedon (A2) Depleted Black Histo (A3) Thick Dark Surface (A11) AX Depleted Matrix (F3) Thick Dark Surface (A12) Person (A11) AX Depleted Matrix (F2) Depleted Black Histo (A3) Depleted Dark Surface (A12) Person (A1 | | | | 10YR 3/4 | 2 | С | М | | Medium |
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A1) Histosol (A1) Histosol (A2) Black Histo (A3) Loarny Mucky Mineral (F1) (except MLRA 1) Depleted Below Dank Surface (A11) My Surface (A11) My Depleted Matrix (F2) Depleted Below Dank Surface (A11) My Depleted Matrix (F2) Depleted Below Dank Surface (A11) My Depleted Matrix (F2) Depleted Delow Dank Surface (A11) My Depleted Matrix (F2) Depleted Delow Dank Surface (A11) My Depleted Matrix (F2) Depleted Delow Dank Surface (A12) Prick Dank Surface (A12) Redox Depleted Delow Surface (F7) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Problematic Restrictive Layer (If present): Pype: Puppth (inches): Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) My High Water Table (A2) My High Water Ta | | | | | | | | | |
| Histosol (A1) Sandy Redox (S5) Secondary Indicators for Problematic Hydric Soils*: Histosol (A1) Sandy Redox (S5) Sed Parent Material (TF2) Histosol (A1) Settinged Matrix (S8) Red Parent Material (TF2) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (F12) Depleted Belox Dark Surface (A11) X Depleted Matrix (F2) Other (explain in Remarks) Depleted Belox Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F8) Present? Yes X No Primary Indicators (minimum of one required; check all that apply) Surface Water (A12) Water stained Leaves (B9) (Except MLRA X High Water Table (A2) Saturation (A3) Saturation (A3 | | | | | | | | | |
| Histosol (A1) Histic Epipadon (A2) Slarbped Matrix (S6) Plack Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Wery Shallow Dark Surface (A11) A Depleted Below Dark Surface (A11) A Depleted Below Dark Surface (A11) A Depleted Matrix (F2) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Redox Depressions (F8) Redox Depressions (F8) Retrictive Layer (if present): Vipe: Depth (inches): Hydric Soil Present? Yes X No No Natificate Water (A1) Water statined Leaves (B9) (Except MLRA (MLRA1, 2, 4A, and 4B) X Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Surface Water (A1) Incurred Rhands (B1) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Surface Water Febent? Yes X No Depth (inches): Surface Water Feben | - | | | | | | | I. die | |
| Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Loamy Mucky Mineral (F1) (except MLRA 1) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (F3) Redox Dark Surface (F6) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F8) Restrictive Layer (if present): IType: Depth (inches): Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) MLRA1, 2, 4A, and 4B) MLRA1, 2, 4A, and 4B) Water stained Leaves (B9) Water Marks (B1) Water Marks (B1) Sediment Deposits (B3) Sediment Deposits (B3) Ovidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Ovidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Ovidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Ovidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Ovidized Rhizospheres along Living Roots (C3) Sediment Deposits (B3) Ovidized Rhizospheres along Living Roots (C3) Sediment Deposits (B6) Surface Water (R4) Presence of Reduced Iron (P4) Sparsely Vegetated Concave Surface (B8) Frost-Heave Hummocks (D7) | - | | icable to | all LKKS, unles | | | | indica | • |
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| Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) X Depleted Matrix (F2) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Primary Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes X No Hydric Soil Present? Yes X No Hydric Soil Present? Yes X No Water stained Leaves (B9) (Except MLRA Hydric Soil Present? Or more required) Surface Water (A11) Water stained Leaves (B9) (Except MLRA High Water Table (A2) Acqualic Invertebrates (B13) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Soil Present (B13) Doin Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): 12 Wetter Marks (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): 12 Wettland Hydrology Present? Yes X No Depth (inches): 5 Surface Water Present? Yes X No Depth (inches): 5 Surface Power Yes X No | | Histic Epipedon (A2) | | | | | | | |
| Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Depleted Dark Surface (F7) Redox Depressions (F8) Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes | | Black Histic (A3) | | | | - | | (except MLRA 1) | Very Shallow Dark Surface (TF12) |
| Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Secondary Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes X No Depth (inches): Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Mater Stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Mater Soil Crask (B1) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) | | Hydrogen Sulfide (A4 | 4) | | Loa | amy Gleye | ed Matrix (F2) | | Other (explain in Remarks) |
| Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Andicators of hydrohytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes X No Remarks: Remarks: Remarks: Hydric Soil Present? Yes X No Remarks: Hydric Soil Present? Yes X No Remarks: Hydric Soil Present? Yes X No Remarks: Remarks: Hydric Soil Present? Yes X No Depth (inches): 12 Wetland Hydrology Indicators (Phydrophylic vegetation and wetland hydrology with problematic. Hydric Soil Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Presence (F7) Presenc | | Depleted Below Dark | k Surface (/ | A11) | X Dep | pleted Ma | trix (F3) | | |
| Sandy Mucky Mindra (S1) | | Thick Dark Surface (| (A12) | | Red | dox Dark \$ | Surface (F6) | | |
| Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes X No No Hydric Soil Present? Yes X No Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (At) Water stained Leaves (B3) (Except MLRA High Water Table (A2) 1, 2, 4A, and 4B) X High Water Table (A2) Saturation (A3) Sediment Deposits (B1) Mater Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Sutrace Soil Cracks (B6) Surface Water Present? Yes X No Depth (inches): Surface Water Present? Yes X No Depth (inches): Sutrace Water Present? Yes X No Depth (inches): Surface Water Present? Yes | | Sandy Mucky Minera | al (S1) | | Dep | pleted Dar | rk Surface (F7 | | , , , , |
| Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) X Saturation (A3) Saturation (A3) Sediment Deposits (B1) Drift Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Water (B1) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (B7) Drainage Patterns (B10) Saturation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Surface Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) (MLRA1, 2, 4A, and 4B) Mater stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Mater stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Saturation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Water Table Present? Yes No Depth (inches): Surface Wetland Hydrology Present? Yes X No | | Sandy Gleyed Matrix | (S4) | | Red | dox Depre | essions (F8) | | |
| Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water stained Leaves (B9) (Except MLRA X High Water Table (A2) X Saturation (A3) Water Marks (B1) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Water Nesent? Yes Water Table (Day No Water Marks (B1) Secondary Indicators (2 or more required) Water stained Leaves (B9) (Except MLRA Water Stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Dry-Season Water Table (C2) Saturation Visible on Aerial Beaver (D2) Saturation Visible on Aerial Imagery (C2) Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes X No No | | | | | | | | | |
| X | | | rs: | | | | | | |
| X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Water Table Present? Yes No X Depth (inches): 12 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): Surface Yes X No | Wetland Hy | drology Indicator | | uired; check all th | hat apply) | | | | Secondary Indicators (2 or more required) |
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| Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches): Surface Notice of Reduced Iron (C4) Shallow Aquitard (D3) Shallow Aquitard (D3) Shallow Aquitard (D3) Age-cent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Frost-Heave Hummocks (D7) Wetland Hydrology Present? Yes X No | Wetland Hy Primary Indi | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A | of one req | uired; check all th | Wa | 2, 4A, and | I 4B) | (Except MLRA | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes | Wetland Hy Primary Indi X X | cators (minimum c Surface Water (A1) High Water Table (A: Saturation (A3) | of one req | uired; check all th | Wa 1, 2 | 2, 4A, and It Crust (B | 1 4B) 11) | | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) |
| Iron Deposits (B5) | Wetland Hy Primary Indi X X | cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) | of one req | uired; check all th | Wa 1, 2 Sali | 2, 4A, and It Crust (B uatic Inver | 1 4B) 11) rtebrates (B13) | | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): Surface Water Present? Yes X No Depth (inches): Surface Yes X No Depth (inches): Yes X No Depth (inches): Surface Yes X No Depth (inches): Yes X No Dep | Wetland Hy Primary Indi X X | cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (I | of one req | uired; check all th | Wa 1, 2 Sal Aqu Hyo | 2, 4A, and It Crust (B uatic Inver drogen Su | 14B) 11) rtebrates (B13) ilfide Odor (C1 |) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery |
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| Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): Surface Yes X No | Wetland Hy Primary Indi X X | 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 | of one req 2) B2) | uired; check all th | Wa 1, 2 Sall Aqu Hyo Oxi | 2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi esence of I | 14B) 11) tebrates (B13) lifide Odor (C1 zospheres alor Reduced Iron |) ng Living Roots (C3) C4) | 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) |
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| Water Table Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): Surface Yes X No | Wetland Hy Primary Indi X X | 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 (| pof one request. 2) B2) 34) (B6) A Aerial Image | igery (B7) | Wa 1, 2 Sal Aqu Hyc Oxi Pre Rec | 2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi: esence of I cent Iron F | 14B) 11) tebrates (B13) ilfide Odor (C1 zospheres aloi Reduced Iron Reduction in P | ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| Saturation Present? Yes X No Depth (inches): Surface Yes X No | Primary Indi X X Field Obser | 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 (| pof one request. 2) B2) 34) (B6) A Aerial Image | igery (B7) urface (B8) | Wa 1, 2 Sall Aqu Hyc Oxi Pre Rec Stu Oth | 2, 4A, and It Crust (B uatic Inver drogen Su idized Rhi: esence of I cent Iron F unted or St ner (Explain | 14B) 11) tebrates (B13) ilfide Odor (C1 zospheres aloi Reduced Iron Reduction in P | ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |
| | Primary Indi X X Field Obser | 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 (Invations: The Present? Yes | ept one request. B2) B4) (B6) A Aerial Ima Concave S | igery (B7) urface (B8) No <u>X</u> | Wa 1, 2 Salt Aqu Hyc Oxi Pre Rec Stu Oth | 2, 4A, and It Crust (B uatic Inver drogen Su idized Rhiz esence of I cent Iron F unted or St ner (Explain | 14B) 11) tebrates (B13) lifide Odor (C1 zospheres aloi Reduced Iron Reduction in P tressed Plants in in Remarks) | ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | 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) |

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| ect/Site: Rivianna Be | each Devel | lopment | City/County: | West | Linn/Clackama | ıs | Sampling Date: | 1/2 | 29/2024 |
|----------------------------------|------------|------------|--------------------|------------------|-------------------|---------------------------------------|---------------------------------------|--------------------------------|-------------|
| licant/Owner: Forward | Vision De | velopmer | nt | | | State: C |)R | Sampling Point | t: 9 |
| estigator(s): | СМ | | Section, To | ownship, Range: | | | S 1, T 3S, R | 1E | |
| dform (hillslope, terrace, etc.: |) | Slo | ppe | Local relief (co | ncave, convex, no | ne): | None | Slope (%) |): 2 |
| region (LRR): | LRR/ | 4 | Lat: | 45.34 | 53 | Long: | -122.6390 | Datum | : WGS84 |
| Map Unit Name: | | Wapa | to silty clay loam | | | · · · · · · · · · · · · · · · · · · · | ation: | N/A | |
| climatic/hydrologic conditions | | | | Yes | Х | No | (if no, exp | olain in Remarks) |) |
| vegetation Soil | or Hy | ydrology | significantly dist | turbed? | Are "Normal C | rcumstances" p | present? (Y/N) | Υ | |
| vegetation Soil | | • | | | | wers in Remark | s.) | | _ |
| <u> </u> | | , ,, | | | , , , | | , | | |
| MMARY OF FINDING | S – Attac | ch site m | ap showing sar | npling point | locations, tr | ansects, in | portant fea | tures, etc. | |
| ophytic Vegetation Present? | Yes | Х | No | Is Sampled A | roa within | | | | |
| ic Soil Present? | Yes | X | No | a Wetla | | Yes | <u> </u> | No | _ |
| land Hydrology Present? | Yes | Х | No | | | | | | |
| arks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| GETATION - Use sci | entific na | mes of p | lants. | | | | | | |
| | | absolut | | Indicator | Dominance ' | Test worksh | eet: | | |
| Stratum (plot size: | 30 | % cove | er Species? | Status | Number of D | inant Cas-i- | | | |
| Fraxinus latifolia | | , 40 | X | FACW | Number of Dom | · | | 4 | (A) |
| riaxilius laulolla | | 40 | | FACW | That are OBL, I | -ACVV, OF FAC: | | 4 | _(A) |
| | | | | | Total Number o | f Dominant | | | |
| | | | | | Species Across | | | 5 | (B) |
| | | 40 | = Total Cover | | | 7 iii Oilata. | | | _(_) |
| ing/Charle Stratum | . 45 | | | | | | | | |
| " | ize: 15 | — ′ | v | FAC | Percent of Dom | • | | 000/ | (A /D) |
| Rubus armeniacus | | 100 | X | FAC | That are OBL, I | -ACW, or FAC | : <u> </u> | 80% | _(A/B) |
| | | | | | Prevalence I | nday Works | hoot: | | |
| | | | | | Total % Cover | | Multiply b | v. | |
| | | | | | OBL Spec | | x 1 = | | |
| | | 100 | = Total Cover | | FACW spe | | x 2 = | | _ |
| | | | | | FAC Spec | | x 3 = | | <u> </u> |
| Stratum (plot size: | 5 |) | | | FACU Spe | cies | x 4 = | 0 | _ |
| Phalaris arundinacea | | 10 | X | FACW | UPL Spec | cies | x 5 = | 0 | _ |
| Galium aparine | | 5 | X | FACU | Column To | otals | 0 (A) | 0 | _(B) |
| Geranium sp | | 5 | X | (FAC) | | | | | |
| | | | | | Prevalend | ce Index =B/A = | · | #DIV/0! | _ |
| | | | | | Harden ale 41 a | | | | |
| | | | | | Hydrophytic | | | lranh, tia \/agatati | |
| | | | _ | - | · [— | | ipid Test for Hyd ominance Test is | lrophytic Vegetati :>50% | IOH |
| | | 20 | = Total Cover | | · | | evalence Index is | | |
| | | | | | Ī — | | | otations ¹ (provide | supporting |
| | |) | | | | data | in Remarks or o | n a separate she | et) |
| dy Vine Stratum (plot size | · | | | | .] | 5- W | etland Non-Vas | cular Plants ¹ | |
| dy Vine Stratum (plot size | · | | | | | | omatic Hydroph | ytic Vegetation ¹ (| Explain) |
| ody Vine Stratum (plot size | · | | | | | Probl | emane myuropii | ylic vegetation (| |
| ody Vine Stratum (plot size | | | = Total Cover | | 1 | dric soil and w | | must be present | , unless |
| ody Vine Stratum (plot size | | 0 | = Total Cover | | disturbed or pro | dric soil and wo | | | , unless |
| dy Vine Stratum (plot size | | 0 | = Total Cover | | 1 | dric soil and wo | | | |

| SOIL | | | PHS # | 72 | | | | Sampling Point: 9 |
|--|---|--|---|-----------------------|--|---|--|--|
| | iption: (Describe to t | he depth i | needed to docume | | | nfirm the abse | ence of indicators.) | |
| Depth | Matrix | | 6.1 () | | Features | Loc ² | | |
| (Inches) | Color (moist) | <u>%</u> | Color (moist) | % | Type' | LOC | Texture | Remarks |
| 8-0 | 10YR 3/2 | 100 | | | | | Silty Clay Loam | |
| 8-17 | 10YR 3/1 | 90 | 10YR 5/6 | 10 | <u>C</u> | M | Silty Clay Loam | Coarse |
| | | | | | | | _ | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | ' | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | 2 |
| | centration, D=Depletion | | | | | | | ² Location: PL=Pore Lining, M=Matrix. |
| • | Indicators: (Appli | cable to | all LRRs, unles | | • | | Indica | ators for Problematic Hydric Soils ³ : |
| | Histosol (A1) | | | | Sandy Redo | | | 2 cm Muck (A10) |
| | Histic Epipedon (A2) | | | | Stripped Mat | trix (S6) | | Red Parent Material (TF2) |
| | Black Histic (A3) | | | | _oamy Muck | ky Mineral (F1) | (except MLRA 1) | Very Shallow Dark Surface (TF12) |
| | Hydrogen Sulfide (A4 |) | | I | _oamy Gleye | ed Matrix (F2) | | Other (explain in Remarks) |
| | Depleted Below Dark | Surface (A | N11) | ı | Depleted Ma | atrix (F3) | | |
| | Thick Dark Surface (A | A12) | | | Redox Dark | Surface (F6) | | |
| | Sandy Mucky Mineral | (S1) | | | Depleted Da | ark Surface (F7 | 7) | ³ Indicators of hydrophytic vegetation and wetland |
| | Sandy Gleyed Matrix | (S4) | | | - | essions (F8) | | hydrology must be present, unless disturbed or problematic. |
| | Layer (if present): | | | | • | . , | | · |
| Depth (inches | s): | | | | - - | | Hydric Soil Pres | eent? Yes <u>X</u> No |
| Depth (inches | | | | | - | | Hydric Soil Pres | ent? Yes X No |
| Depth (inches | | s: | | | - | | Hydric Soil Pres | sent? Yes <u>X</u> No |
| Depth (inchesternarks: HYDROLO Vetland Hy | OGY | | uired; check all tl | nat apply) | - | | Hydric Soil Pres | |
| Pepth (inchesternates: HYDROLO Vetland Hy Primary Indi | OGY drology Indicator | | uired; check all tl | , | Vater staine | ed Leaves (B9) | Hydric Soil Pres | Secondary Indicators (2 or more required) Water stained Leaves (B9) |
| Primary Indicates | OGY drology Indicator cators (minimum o | f one req | uired; check all tl | \ | Vater staine | | | Secondary Indicators (2 or more required) |
| Primary Indi | OGY rdrology Indicators cators (minimum o Surface Water (A1) | f one req | uired; check all tl | | | d 4B) | | Secondary Indicators (2 or more required) Water stained Leaves (B9) |
| Pepth (inches Remarks: HYDROLO Vetland Hy Primary India | OGY drology Indicators cators (minimum o Surface Water (A1) High Water Table (A2) | f one req | uired; check all tl | | 1, 2, 4A, and Salt Crust (E | d 4B) |) (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| Pepth (inchesternates: HYDROLO Vetland Hy Primary Indi | ody drology Indicators cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) | f one req | uired; check all tl | | 1, 2, 4A, and Salt Crust (E Aquatic Inve | d 4B) 311) |) (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| Primary Indi | ogy rdrology Indicator: cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | f one req | uired; check all tl | | 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St | d 4B) B11) ertebrates (B13 ulfide Odor (C2 |) (Except MLRA | 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: HYDROLO Vetland Hy Primary Indi | cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (E | f one req | uired; check all tl | | 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen Su Oxidized Rh | d 4B) B11) ertebrates (B13 ulfide Odor (C2 | (Except MLRA i) (Except MLRA ii) ing Living Roots (C3) | 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: HYDROLO Vetland Hy Primary India | cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B | f one req | uired; check all tl | | 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of | d 4B) B11) ertebrates (B13 ulfide Odor (C' izospheres ald | (Except MLRA i) (Except MLRA ii) ing Living Roots (C3) | 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 X Geomorphic Position (D2) |
| Pepth (inches Remarks: HYDROLO Vetland Hy Primary Indi | cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) | f one req 2) 32) 4) | uired; check all tl | | 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen Su Oxidized Rh Presence of Recent Iron | d 4B) 311) ertebrates (B13 ulfide Odor (C' izospheres ald Reduced Iron Reduction in F | (Except MLRA) (Except MLRA) (S) (1) (ng Living Roots (C3) (C4) | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) |
| HYDROLO Wetland Hy Primary Indi | cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) | f one req 2) 32) 4) B6) | | | 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S | d 4B) 311) ertebrates (B13 ulfide Odor (C' izospheres ald Reduced Iron Reduction in F | (C4) Plowed Soils (C6) (C1) (LRR A) | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) |
| HYDROLO Wetland Hy Primary India | cators (minimum o 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 (| f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | | 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S | d 4B) 311) ertebrates (B13 ulfide Odor (C2 izospheres alc Reduced Iron Reduction in F Stressed Plants | (C4) Plowed Soils (C6) (C1) (LRR A) | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| Depth (inchese Permarks: HYDROLO Wetland Hy Primary Indi | cators (minimum o 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 (Inundation Visible on Sparsely Vegetated C | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | | 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S | d 4B) 311) ertebrates (B13 ulfide Odor (C2 izospheres alc Reduced Iron Reduction in F Stressed Plants | (C4) Plowed Soils (C6) (C1) (LRR A) | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| Pepth (inches Remarks: HYDROLO Vetland Hy Primary India | 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 (Inundation Visible on Sparsely Vegetated Corvations: | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) | | 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen Su Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla | d 4B) 311) ertebrates (B13 ulfide Odor (C2 izospheres alc Reduced Iron Reduction in F Stressed Plants | (C4) Plowed Soils (C6) (C1) (LRR A) | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| Depth (inches Remarks: HYDROLO Wetland Hy Primary India | 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 (Inundation Visible on Sparsely Vegetated Covations: | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) ırface (B8) No <u>X</u> | Depth (| 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Dxidized Rh Presence of Recent Iron Stunted or S Other (Expla | d 4B) at 1) ertebrates (B13 ulfide Odor (C ² izospheres ald Reduced Iron Reduction in F stressed Plants ain in Remarks | i) (Except MLRA ii) ing Living Roots (C3) (C4) Plowed Soils (C6) is (D1) (LRR A) | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Primary India Field Obser Surface Water Table P | 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 (Inundation Visible on Sparsely Vegetated Covations: The Present? Yes Present? Yes | f one req 2) 32) 4) B6) Aerial Imag | gery (B7) urface (B8) NoX NoX | Depth (| 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla | d 4B) B11) ertebrates (B13 ulfide Odor (C2 izospheres alc Reduced Iron Reduction in Fetressed Plants ain in Remarks | i) (Except MLRA ii) ing Living Roots (C3) (C4) Plowed Soils (C6) is (D1) (LRR A) | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Primary Indi | 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 (Inundation Visible on Sparsely Vegetated Covations: The Present? Yes | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) ırface (B8) No <u>X</u> | Depth (| 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Dxidized Rh Presence of Recent Iron Stunted or S Other (Expla | d 4B) at 1) ertebrates (B13 ulfide Odor (C ² izospheres ald Reduced Iron Reduction in F stressed Plants ain in Remarks | i) (Except MLRA ii) ing Living Roots (C3) (C4) Plowed Soils (C6) is (D1) (LRR A) | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Primary India Field Obser Surface Water Water Table P Saturation Pre includes capilla | 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 (Inundation Visible on Sparsely Vegetated Covations: The Present? Yes | f one req | gery (B7) urface (B8) NoX NoX NoX | Depth (Depth (Depth (| 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Dxidized Rh Presence of Recent Iron Stunted or S Other (Expla | ad 4B) Batt) Batteriates (B13 ulfide Odor (C' izospheres alco Reduced Iron Reduction in Fetressed Plants ain in Remarks >17 0-1; >17 | (C4) Plowed Soils (C6) s (D1) (LRR A)) Wetland Hyd | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Primary India Field Obser Surface Water Water Table P Saturation Pre includes capilla | 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 (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | f one req | gery (B7) urface (B8) NoX NoX NoX | Depth (Depth (Depth (| 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Dxidized Rh Presence of Recent Iron Stunted or S Other (Expla | ad 4B) Batt) Batteriates (B13 ulfide Odor (C' izospheres alco Reduced Iron Reduction in Fetressed Plants ain in Remarks >17 0-1; >17 | (C4) Plowed Soils (C6) s (D1) (LRR A)) Wetland Hyd | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| HYDROLO Wetland Hy Primary India Field Obser Surface Water Vater Table P Saturation Pre Includes capilla | 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 (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | f one req | gery (B7) urface (B8) NoX NoX NoX | Depth (Depth (Depth (| 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Dxidized Rh Presence of Recent Iron Stunted or S Other (Expla | ad 4B) Batt) Batteriates (B13 ulfide Odor (C' izospheres alco Reduced Iron Reduction in Fetressed Plants ain in Remarks >17 0-1; >17 | (C4) Plowed Soils (C6) s (D1) (LRR A)) Wetland Hyd | 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 X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |

7298

| oject/Site: Rivianna Be | ach Develo | pment | City/County: | West | Linn/Clackamas | Sampling Da | te: <u>1</u> | 29/2024 |
|-----------------------------------|----------------|--------------------|--------------------|------------------|---|----------------------|---------------------------------|------------------|
| plicant/Owner: Forward | Vision Dev | /elopment | | | State | e: <u>OR</u> | Sampling Poi | nt: 10 |
| restigator(s): | CM | | Section, To | wnship, Range: | | S 1, T 3S, I | R 1E | |
| ndform (hillslope, terrace, etc.: | | Slope | | Local relief (co | ncave, convex, none): | None | Slope (% | b): 2 |
| bregion (LRR): | LRRA | | Lat: | 45.34 | 53 Long | g: -122.6390 | Datu | m: WGS8 4 |
| il Map Unit Name: | | Wapato s | ilty clay loam | | NWI C | Classification: | N/A | |
| e climatic/hydrologic conditions | on the site ty | pical for this tin | ne of year? | Yes | X N | o (if no, e | explain in Remarks | s) |
| e vegetation Soil | or Hyd | drology | significantly dist | turbed? | Are "Normal Circumsta | ances" present? (Y/N | I) Y | _ |
| vegetation Soil | or Hyd | drology | naturally proble | matic? If needed | d, explain any answers in f | Remarks.) | | |
| IMMADY OF FINDING | C A44 | h a:4aa. | ahawina aan | | | 4- : | | |
| JMMARY OF FINDING | | | | | . locations, transec | is, important ie | eatures, etc. | |
| drophytic Vegetation Present? | Yes | X No | | Is Sampled A | | _ | No. V | |
| Iric Soil Present? | _ | No | | a Wetla | nd? | s | No X | _ |
| tland Hydrology Present? | Yes _ | No | X | | | | | |
| narks: | | | | | | | | |
| | | | | | | | | |
| GETATION - Use scie | ntific nan | nes of plan | te . | | | | | |
| OLIAHON - USE SCIE | THE HALL | absolute | Dominant | Indicator | Dominance Test w | orksheet: | | |
| | | % cover | Species? | Status | | | | |
| e Stratum (plot size: | 30) | | | | Number of Dominant S | | | |
| Fraxinus latifolia | | 75 | <u> </u> | FACW | That are OBL, FACW, o | or FAC: | 2 | (A) |
| | | | | | | | | |
| | | | | | Total Number of Domin | | • | (D) |
| | | 75 | - Total Cayor | | Species Across All Stra | ta: | 2 | (B) |
| | | | = Total Cover | | | | | |
| oling/Shrub Stratum (plot si | ze: 15 | -′ | | | Percent of Dominant Sp | | 4000 | (4.15) |
| Rubus armeniacus | | 100 | X | FAC | That are OBL, FACW, | or FAC: | 100% | (A/B) |
| Fraxinus latifolia | | 5 | | FACW | Broyalanaa Inday V | Vorkoboot: | | |
| | | | | | Prevalence Index V | Multiply | v bv: | |
| | | | | | OBL Species | _ | 1 = 0 | |
| | | 105 | = Total Cover | | FACW species | | 2 = 0 | |
| | | | | | FAC Species | x | | _ |
| <u>b Stratum</u> (plot size: |) | | | | FACU Species | X | 1 = 0 | _ |
| | | | | | UPL Species | x | 5 = 0 | _ |
| | | | | | Column Totals | 0 (A) | 0 | (B) |
| | | | | | | D.(4 | #DD //O1 | |
| | | | | | Prevalence Index | =B/A = | #DIV/0! | _ |
| | | | | | Hydrophytic Veget | ation Indicators: | | |
| | | | | | Tryurophytic Veget | 1- Rapid Test for H | lvdrophytic Vegeta | tion |
| | | | | | X | 2- Dominance Tes | | |
| | | 0 | = Total Cover | | - | 3-Prevalence Inde | $x \text{ is } \le 3.0^{1}$ | |
| | | | | | | 4-Morphological A | daptations ¹ (provid | e supporting |
| ody Vine Stratum (plot size | | _) | | | | data in Remarks o | • | eet) |
| | | | | | | 5- Wetland Non-Va | | (5. 1.) |
| | | | T | | 1 Indicates - El | Problematic Hydro | | |
| | | 0 | = Total Cover | | ¹ Indicators of hydric soil disturbed or problemation | • | gy must be preser | ιι, uniess |
| | | | | | Hydrophytic | | | |
| | 4 | 00 | | | Vegetation | Yes 2 | (| lo |
| Bare Ground in Herb Stratum | 1 | 00 | | | Present? | | | |

| SOIL | | | PHS# | 7298 | | | | | ampling Point: | 10 |
|---|--|---|---------------------------|---|---|--|---|----------------------------|---|--|
| | iption: (Describe to t | the depth | needed to docume | | | firm the abso | ence of indicators.) | | | |
| Depth | Matrix | 0/ | 0.1 | Redox Fe | - 1 | Loc ² | | | | |
| (Inches) | Color (moist) | <u>%</u> | Color (moist) | % | Type' | LOC | Texture | | Remarks | 3 |
| 0-8 | 10YR 2/2 | 100 | | | | | Silty Clay Loam | | | |
| 8-12 | 10YR 3/2 | 99 | 10YR 3/4 | | С | M | Silty Clay Loam | Fine | | |
| 12-17 | 10YR 3/1 | 99 | 10YR 3/3 | | С | M | Clay Loam | Fine | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Type: C=Con | centration, D=Depletion | on RM=Re | aduced Matrix CS= | Covered or Co | ated San | d Grains | | ² I ocation: P | PL=Pore Lining, M | =Matrix |
| | Indicators: (Appli | | | | | | Indica | | roblematic Hyd | |
| • | Histosol (A1) | | | Sar | ndy Redox | x (S5) | | | 2 cm Muck (A10 | |
| | Histic Epipedon (A2) | | | | pped Mat | | | | Red Parent Mate | |
| | Black Histic (A3) | | | | | |) (except MLRA 1) | | Very Shallow Da | |
| | Hydrogen Sulfide (A4 | l) | | | | ed Matrix (F2) | • | - | Other (explain in | • |
| | Depleted Below Dark | • | \11) | | oleted Ma | | | - | | |
| | Thick Dark Surface (A | • | 311) | | | Surface (F6) | | | | |
| | | | | | | ` , | 7\ | ³ Indicators of | of hydrophytic vege | etation and wetlar |
| | Sandy Mucky Mineral | , , | | | | rk Surface (F7 | () | hydrology i | must be present, u | |
| | Sandy Gleyed Matrix | (S4) | | Red | dox Depre | essions (F8) | | | problematic | - |
| | s): | | | | | | Hydric Soil Pres | ent? Yes | | No X |
| Depth (inches | | | | | | | Hydric Soil Pres | ent? Yes | | No X |
| Remarks: HYDROLO Wetland Hy | OGY drology Indicator | | | | | | Hydric Soil Pres | | | |
| Remarks: HYDROLO Wetland Hy Primary India | OGY drology Indicator cators (minimum o | | uired; check all th | , | to stain | d Lagues (DO | | | ry Indicators (2 d | or more require |
| HYDROLO Wetland Hy Primary India | OGY drology Indicator cators (minimum o Surface Water (A1) | of one req | uired; check all th | Wa | | - | Hydric Soil Pres | | ry Indicators (2 o Water stained Le | or more require eaves (B9) |
| HYDROLO Wetland Hy Primary India | OGY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2) | of one req | uired; check all th | Wa | 2, 4A, and | I 4B) | | | ry Indicators (2 o Water stained Lo (MLRA1, 2, 4A, | or more require eaves (B9) and 4B) |
| HYDROLO Vetland Hy Primary Indi | ody drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) | of one req | uired; check all th | Wa 1, 2 | 2, 4A, and t Crust (B | 1 4B) 11) |) (Except MLRA | | ry Indicators (2 o Water stained Lo (MLRA1, 2, 4A, Drainage Pattern | or more require eaves (B9) and 4B) ns (B10) |
| HYDROLO Wetland Hy Primary India | OGY rdrology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | of one req | uired; check all th | Wa 1, 2 Salt | 2, 4A, and t Crust (B uatic Inver | 1 4B) 11) rtebrates (B13 |) (Except MLRA | | ry Indicators (2 o Water stained Lo (MLRA1, 2, 4A, Drainage Pattern Dry-Season Wat | or more require eaves (B9) and 4B) as (B10) der Table (C2) |
| HYDROLO Wetland Hy Primary India | ody cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (E | of one req | uired; check all th | Wa 1, 2 Salt Aqu Hyc | 2, 4A, and t Crust (B uatic Inver drogen Su | 14B) 11) rtebrates (B13 ilfide Odor (C |) (Except MLRA | | ry Indicators (2 o Water stained Le (MLRA1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visibl | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image |
| HYDROLO Wetland Hy Primary India | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) | of one req 2) 32) | uired; check all th | Wa 1, 2 Sall Aqu Hyc | 2, 4A, and t Crust (B uatic Inver drogen Su dized Rhi | 1 4B) 11) rtebrates (B13 ilfide Odor (C zospheres ald |) (Except MLRA 3) 1) 2) 2) 3) 2) 3) 3) 4) 3) 3) 4) 3) 4) 5) 6) 6) 6) 6) 7) 6) 7) 7) 8) 8) 7) 8) 8) 7) 8) 8) 8) 1) 8) 8) 1) 8) 8) 1) 8) 8) 8) 1) 8) 8) 1) 8) 8) 1) 8) 8) 1) 8) 1) 8) 1) 8) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) | | ry Indicators (2 of Water stained Le (MLRA1, 2, 4A, Drainage Pattern Dry-Season Water Saturation Visible Geomorphic Pos | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image |
| HYDROLO Wetland Hy Primary India | cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) | of one req 2) 32) | uired; check all th | Wa 1, 2 Salt Aqu Hyc | 2, 4A, and t Crust (B uatic Inver drogen Su dized Rhi | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron |) (Except MLRA 3) 11) ong Living Roots (C3) (C4) | Secondar | ry Indicators (2 of Water stained Le (MLRA1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visibl Geomorphic Pos Shallow Aquitaro | or more require eaves (B9) and 4B) as (B10) ter Table (C2) e on Aerial Image sition (D2) |
| HYDROLO Wetland Hy Primary India | 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) | of one req 2) 32) 4) | uired; check all th | Wa 1, 2 Sall Aqu Hyc Oxi Pre | 2, 4A, and t Crust (B uatic Inver drogen Su dized Rhi esence of | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron Reduction in F | B) (Except MLRA B) (1) ong Living Roots (C3) (C4) Plowed Soils (C6) | | ry Indicators (2 of Water stained Le (MLRA1, 2, 4A, Drainage Pattern Dry-Season Water Saturation Visibl Geomorphic Possible Shallow Aquitard Fac-Neutral Tes | or more require eaves (B9) and 4B) as (B10) der Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) |
| HYDROLO Wetland Hy Primary India | 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 (| of one req (2) (32) (4) (86) | | Wa 1, 2 Salti Aqu Hyc Oxic Pre Rec | 2, 4A, and t Crust (B uatic Inver drogen Su dized Rhi esence of l cent Iron F nted or Si | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron Reduction in F | (C4) Plowed Soils (C6) s (D1) (LRR A) | Secondar | ry Indicators (2 of Water stained Let (MLRA1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visibl Geomorphic Pos Shallow Aquitard Fac-Neutral Tes Raised Ant Mour | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) nds (D6) (LRR A) |
| HYDROLO Wetland Hy Primary India | 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) | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) | Wa 1, 2 Salti Aqu Hyc Oxic Pre Rec | 2, 4A, and t Crust (B uatic Inver drogen Su dized Rhi esence of l cent Iron F nted or Si | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron Reduction in F | (C4) Plowed Soils (C6) s (D1) (LRR A) | Secondar | ry Indicators (2 of Water stained Le (MLRA1, 2, 4A, Drainage Pattern Dry-Season Water Saturation Visibl Geomorphic Possible Shallow Aquitard Fac-Neutral Tes | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) nds (D6) (LRR A) |
| HYDROLO Wetland Hy Primary India | 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 (Inundation Visible on Sparsely Vegetated C | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) | Wa 1, 2 Salti Aqu Hyc Oxic Pre Rec | 2, 4A, and t Crust (B uatic Inver drogen Su dized Rhi esence of l cent Iron F nted or Si | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron Reduction in F | (C4) Plowed Soils (C6) s (D1) (LRR A) | Secondar | ry Indicators (2 of Water stained Let (MLRA1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visibl Geomorphic Pos Shallow Aquitard Fac-Neutral Tes Raised Ant Mour | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) nds (D6) (LRR A) |
| HYDROLO Wetland Hy Primary India | 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 (Inundation Visible on Sparsely Vegetated Corvations: | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) | Wa 1, 2 Sall Aqu Hyc Oxi Pre Rec Stu | 2, 4A, and t Crust (B uatic Inver drogen Su dized Rhi. seence of cent Iron F inted or Si eer (Explain | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron Reduction in F | (C4) Plowed Soils (C6) s (D1) (LRR A) | Secondar | ry Indicators (2 of Water stained Let (MLRA1, 2, 4A, Drainage Pattern Dry-Season Wat Saturation Visibl Geomorphic Pos Shallow Aquitard Fac-Neutral Tes Raised Ant Mour | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) nds (D6) (LRR A) |
| HYDROLO Wetland Hy Primary India | 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 (Inundation Visible on Sparsely Vegetated Covations: | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) urface (B8) | Wa 1, 2 Salt Aqu Hyc Oxi Pre Rec Stu Oth | t Crust (Buatic Inverted rogen Sudized Rhiesence of Interest (Explainment): | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron Reduction in F | (C4) Plowed Soils (C6) s (D1) (LRR A) | Secondar | ry Indicators (2 of Water stained Le (MLRA1, 2, 4A, Drainage Pattern Dry-Season Water Saturation Visibl Geomorphic Postallow Aquitard Fac-Neutral Tes Raised Ant Moule Frost-Heave Hur | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) nds (D6) (LRR A) |
| HYDROLO Wetland Hy Primary India | 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 (Inundation Visible on Sparsely Vegetated Covations: The Present? Yes | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) urface (B8) | Wa 1, 2 Sall Aqu Hyc Oxi Pre Rec Stu | t Crust (B uatic Inverdence Sudice Rhi. Issence of Interest (Explainment): ches): ches): | 14B) 11) rtebrates (B13 rtebrates (B13 rtebrates (CC) respheres ald Reduced Iron Reduction in F rtessed Plants in in Remarks | (C4) Plowed Soils (C6) s (D1) (LRR A) | Secondar | ry Indicators (2 of Water stained Let (MLRA1, 2, 4A, Drainage Pattern Dry-Season Water Saturation Visible Geomorphic Posting Shallow Aquitard Fac-Neutral Test Raised Ant Mour Frost-Heave Hursten Residen Post-Heave Hurst | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) nds (D6) (LRR A) |
| HYDROLO Netland Hy Primary India Field Obser Surface Water Water Table P Saturation Pre includes capillar | 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 (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | of one req (2) (32) (4) (86) Aerial Ima Concave Su | gery (B7) urface (B8) No | Wa 1, 2 Sall Aqu Hyc Oxi Pre Rec Stu Oth Depth (inc Depth (inc | c, 4A, and t Crust (B uatic Invertional dized Rhi esence of the cent Iron F inted or St arer (Explain thes): thes): | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron Reduction in R tressed Plants in in Remarks | (C4) Plowed Soils (C6) s (D1) (LRR A) Wetland Hydi | Secondal X | ry Indicators (2 of Water stained Let (MLRA1, 2, 4A, Drainage Pattern Dry-Season Water Saturation Visible Geomorphic Posting Shallow Aquitard Fac-Neutral Test Raised Ant Mour Frost-Heave Hursten Residen Post-Heave Hurst | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) nds (D6) (LRR A) |
| HYDROLO Netland Hy Primary India Field Obser Surface Water Water Table P Saturation Pre includes capillar | 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 (Inundation Visible on Sparsely Vegetated Covations: The Present? Yes | of one req 2) 32) 4) (B6) Aerial Ima Concave Su | gery (B7) urface (B8) No | Wa 1, 2 Sall Aqu Hyc Oxi Pre Rec Stu Oth Depth (inc Depth (inc | c, 4A, and t Crust (B uatic Invertional dized Rhi esence of the cent Iron F inted or St arer (Explain thes): thes): | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron Reduction in R tressed Plants in in Remarks | (C4) Plowed Soils (C6) s (D1) (LRR A) Wetland Hydi | Secondal X | ry Indicators (2 of Water stained Let (MLRA1, 2, 4A, Drainage Pattern Dry-Season Water Saturation Visible Geomorphic Posting Shallow Aquitard Fac-Neutral Test Raised Ant Mour Frost-Heave Hursten Residen Post-Heave Hurst | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) nds (D6) (LRR A) |
| HYDROLO Netland Hy Primary India Field Obser Surface Water Water Table P Saturation Pre includes capillar | 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 (Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes | of one req 2) 32) 4) (B6) Aerial Ima Concave Su | gery (B7) urface (B8) No | Wa 1, 2 Sall Aqu Hyc Oxi Pre Rec Stu Oth Depth (inc Depth (inc | c, 4A, and t Crust (B uatic Invertional dized Rhi esence of the cent Iron F inted or St arer (Explain thes): thes): | 14B) 11) rtebrates (B13 ilfide Odor (C zospheres ald Reduced Iron Reduction in R tressed Plants in in Remarks | (C4) Plowed Soils (C6) s (D1) (LRR A) Wetland Hydi | Secondal X | ry Indicators (2 of Water stained Let (MLRA1, 2, 4A, Drainage Pattern Dry-Season Water Saturation Visible Geomorphic Posting Shallow Aquitard Fac-Neutral Test Raised Ant Mour Frost-Heave Hursten Residen Post-Heave Hurst | or more require eaves (B9) and 4B) ns (B10) ter Table (C2) e on Aerial Image sition (D2) d (D3) t (D5) nds (D6) (LRR A) |

7298

| pject/Site: Rivianna Beach Devel | opment | City/County: | West I | Linn/Clackamas | Sampling Date: | 1/29 | /2024 |
|---|---------------------|--------------------|---------------------------|--|--|--|-----------|
| olicant/Owner: Forward Vision De | velopment | | | State: | OR | Sampling Point: | 11 |
| estigator(s): CM | | Section, To | wnship, Range: | | S 2, T 3S, R 1 | E | |
| ndform (hillslope, terrace, etc.:) | Bank | | Local relief (co | ncave, convex, none): | Convex | Slope (%): | 25 |
| bregion (LRR): | ı | Lat: | 45.34 | 31 Long: | -122.6409 | Datum: | WGS8 |
| Map Unit Name: | Newberg fir | ne sandy loan | n | <u> </u> | ssification: | R2UBH | |
| climatic/hydrologic conditions on the site t | pical for this time | e of year? | Yes | X No | (if no, exp | lain in Remarks) | |
| | | significantly dist | urbed? | Are "Normal Circumstand | ces" present? (Y/N) | Υ | |
| vegetation Soil or Hy | | • | | | . , , | | |
| | | | | , | ···-··, | | |
| MMARY OF FINDINGS – Attac | h site map s | showing san | npling point | locations, transects | , important feat | ures, etc. | |
| rophytic Vegetation Present? Yes | No | Х | | | | | |
| ric Soil Present? Yes | No | X | Is Sampled Ar a Wetlar | V | | No X | |
| land Hydrology Present? Yes | No | X | | · | | | |
| earks: | | | | | | | |
| | | | | | | | |
| GETATION - Use scientific nar | nes of plant | s. | | | | | |
| | absolute % cover | Dominant Species? | Indicator Status | Dominance Test wor | ksheet: | | |
| e Stratum (plot size: 30) | | <u> </u> | | Number of Dominant Spe | cies | | |
| Populus balsamifera | 70 | X | FAC | That are OBL, FACW, or | FAC: | 3 | (A) |
| Pseudotsuga menziesii | 30 | Х | FACU | | | | |
| | | | | Total Number of Dominan | t | | |
| | | | | Species Across All Strata | · | 7 | (B) |
| | 100 | = Total Cover | | | | | |
| ling/Shrub Stratum (plot size: 15 |) | | | Percent of Dominant Spec | cies | | |
| Symphoricarpos albus | ′ 25 | X | FACU | That are OBL, FACW, or | | 43% | (A/B) |
| Rubus armeniacus | 20 | X | FAC | | | | ` , |
| Populus balsamifera | 20 | X | FAC | Prevalence Index Wo | orksheet: | | |
| Cornus alba | 15 | | FACW | Total % Cover of | Multiply by | <i>/</i> : | |
| Prunus avium | 10 | | FACU | OBL Species | x 1 = | 0 | |
| _ | 100 | = Total Cover | | FACW species | x 2 = | 0 | |
| | | | | FAC Species | x 3 = | 0 | |
| o Stratum (plot size: 5) | | | | FACU Species | x 4 = | 0 | |
| Pteridium aquilinum | 40 | X | FACU | UPL Species | x 5 = | 0 | |
| | | | | Column Totals | 0 (A) | 0 | (B) |
| | | | | Decision 1.1 | 2/4 - | +DIV//01 | |
| | | | | Prevalence Index = | DIM = # | #DIV/0! | |
| | | | | Hydrophytic Vegetati | on Indicators: | | |
| | | | | , , , | 1- Rapid Test for Hydi | ophytic Vegetation | า |
| | | | | | 2- Dominance Test is | | • |
| | | | | | 3-Prevalence Index is | _ | |
| | 40 | = Total Cover | | | | | upporting |
| | 40 | = Total Cover | | | 4-Morphological Adap | tations (provide s | |
| ody Vine Stratum (plot size: 30 | 40 | = Total Cover | | | 4-Morphological Adap data in Remarks or or | |) |
| | 40) 80 | = Total Cover | FACU | | | a separate sheet |) |
| |) | | FACU | | data in Remarks or or | n a separate sheet ular Plants ¹ | • |
| ody Vine Stratum (plot size: 30 Hedera helix |) | | FACU | | data in Remarks or or 5- Wetland Non-Vasc Problematic Hydrophy | n a separate sheet ular Plants ¹ rtic Vegetation ¹ (E: | xplain) |
| | 80 | x | FACU | ¹ Indicators of hydric soil a | data in Remarks or or 5- Wetland Non-Vasc Problematic Hydrophy | n a separate sheet ular Plants ¹ rtic Vegetation ¹ (E: must be present, u | xplain) |

| SOIL | | | PHS# | 7298 | | | | Sampling | | 11 |
|--|--|--|---|--|--|--|---|--|---|---|
| | iption: (Describe to | the depth r | needed to docume | | | m the abse | ence of indicators.) | | | |
| Depth | Matrix | | | Redox Fea | - | . 2 | _ | | | |
| (Inches) | Color (moist) | % | Color (moist) | % | Type' | Loc ² | Texture | | Remarks | |
| 0-2 | 10YR 2/2 | 100 | | | | | Silty Clay Loam | | | |
| 2-6 | 10YR 3/2 | 100 | | | | | Silty Clay Loam | | | |
| 6-16 | 10YR 3/2 | 98 | 10YR 5/6 | 2 | С | M | Silty Clay Loam | Coarse | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | <u> </u> | | | |
| Type: C=Con | centration, D=Depleti | on, RM=Re | educed Matrix, CS= | Covered or Coa | ated Sand G | Grains. | - | ² Location: PL=Pore L | ining, M=Matrix. | |
| lydric Soil | Indicators: (Appli | icable to | all LRRs, unles | s otherwise | noted.) | | Indica | ators for Problema | itic Hydric Soi | ls³: |
| | Histosol (A1) | | | San | ıdy Redox (S | S5) | | 2 cm M | uck (A10) | |
| | Histic Epipedon (A2) | | | Strip | pped Matrix | (S6) | | Red Pa | rent Material (TF | 2) |
| | Black Histic (A3) | | | Loar | my Mucky M | /lineral (F1) | (except MLRA 1) | Very SI | nallow Dark Surfa | ce (TF12) |
| | Hydrogen Sulfide (A4 | 1) | | Loar | my Gleyed N | Matrix (F2) | | Other (| explain in Remark | (s) |
| | Depleted Below Dark | | (11) | | leted Matrix | | | | | , |
| | Thick Dark Surface (| • | , | | lox Dark Sur | | | | | |
| | Sandy Mucky Mineral | | | | oleted Dark S | . , | ^ | ³ Indicators of hydroph | nytic vegetation a | nd wetland |
| | , , | ` , | | | | |) | hydrology must be p | | turbed or |
| | Sandy Gleyed Matrix | (54) | | Red | lox Depressi | ions (F8) | | pro | blematic. | |
| | s): | | | | | | Hydric Soil Pres | ent? Yes | No | Х |
| Remarks: | | | | | | | Hydric Soil Pres | ent? Yes | No | X |
| Remarks: | | rs: | | | | | Hydric Soil Pres | ent? Yes | No | X |
| Remarks: HYDROLO Wetland Hy | OGY | | uired; check all tl | hat apply) | | | Hydric Soil Pres | Secondary Indica | | |
| Remarks: HYDROLO Wetland Hy Primary Indi | OGY drology Indicator | | uired; check all tl | Wat | | | Hydric Soil Pres | Secondary Indica | tors (2 or more | required) |
| HYDROLO Wetland Hy Primary Indi | OGY drology Indicator cators (minimum c | of one requ | uired; check all tl | Wat | ter stained L , 4A, and 4E | | | Secondary Indica | tors (2 or more | required) |
| HYDROLO Wetland Hy Primary Indi | OGY drology Indicator cators (minimum c Surface Water (A1) | of one requ | uired; check all tl | Wat | | 3) | | Secondary Indica Water s | tors (2 or more | required) |
| HYDROLO Vetland Hy Primary Indi | OGY Orology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) | of one requ | uired; check all tl | Wat 1, 2, | , 4A, and 4E | 3) | (Except MLRA | Secondary Indica Waters (MLRA | tors (2 or more stained Leaves (B 11, 2, 4A, and 4B | required) 9) |
| HYDROLO Vetland Hy Primary Indi | ody drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) | of one requ | uired; check all tl | Wat 1, 2, Salt | , 4A, and 4E : Crust (B11) | B)) orates (B13 | (Except MLRA | Secondary Indica Water s (MLRA Drainag Dry-Se | tors (2 or more stained Leaves (B \1, 2, 4A, and 4B ge Patterns (B10) | required) 9)) |
| HYDROLO Wetland Hy Primary Indi | OGY rdrology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) | of one requ | uired; check all tl | Wat 1, 2, Salt Aqu | , 4A , and 4E Crust (B11) atic Inverteb | B) prates (B13 de Odor (C2 | (Except MLRA | Secondary Indica Waters (MLRA Drainag Dry-Se | tors (2 or more stained Leaves (B 11, 2, 4A, and 4B ge Patterns (B10) ason Water Table | required) 9) (C2) ial Imagery (|
| HYDROLO Wetland Hy Primary Indi | ody cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B | of one requipers of one | uired; check all tl | Wat 1, 2, Salt Aqu Hydi | , 4A , and 4E Crust (B11) atic Inverteb | B) prates (B13 de Odor (C2 spheres alc | (Except MLRA) ing Living Roots (C3) | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo | tors (2 or more stained Leaves (B 11, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aer | required) 9)) (C2) ial Imagery (|
| Primary Indi | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) | of one requipers of one | uired; check all tl | Wat 1, 2, Salt Aqu Hydi Oxic | , 4A, and 4E Crust (B11) actic Inverteb trogen Sulfid dized Rhizos sence of Rec | B) prates (B13 de Odor (C2 spheres ald duced Iron | (Except MLRA) ing Living Roots (C3) | Secondary Indica Water s (MLRA Drainag Dry-Se: Saturat Geomo | tors (2 or more stained Leaves (8 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aerphic Position (D2 | required) 9)) (C2) ial Imagery (|
| HYDROLO Wetland Hy Primary Indi | cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- | of one required (2) (32) (32) (4) | uired; check all tl | Wat 1, 2, Salt Aqu Hydi Oxic Pres | , 4A, and 4E Crust (B11) natic Inverteb largen Sulfid dized Rhizos sence of Rec | B) prates (B13 de Odor (C´ spheres alc duced Iron duction in F | (Except MLRA) I) Ing Living Roots (C3) (C4) | Secondary Indica Water s (MLRA Drainag Dry-Sea Saturat Geomo Shallow Fac-Ne | tors (2 or more stained Leaves (B 11, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aerphic Position (D2 Aquitard (D3) | required) 9)) (C2) ial Imagery (|
| HYDROLO Wetland Hy Primary Indi | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) | of one requipment of one requirement of one requiremen | | Wat 1, 2, Salt Aqu Hydr Oxic Pres Rec Stur | , 4A, and 4E Crust (B11) latic Inverteb largen Sulfid dized Rhizos sence of Red cent Iron Rec | brates (B13 de Odor (C spheres alc duced Iron duction in F ssed Plants | (Except MLRA) Ing Living Roots (C3) (C4) Plowed Soils (C6) (D1) (LRR A) | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo Shallov Fac-Ne Raised | tors (2 or more stained Leaves (B 11, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Ael rphic Position (D2 Aquitard (D3) utral Test (D5) | required) 9) (C2) ial Imagery (|
| HYDROLO Wetland Hy Primary Indi | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (| of one required (2) (32) (4) (B6) Aerial Imag | gery (B7) | Wat 1, 2, Salt Aqu Hydr Oxic Pres Rec Stur | , 4A, and 4E Crust (B11) latic Inverteb lrogen Sulfid dized Rhizos sence of Rec cent Iron Rec inted or Stres | brates (B13 de Odor (C spheres alc duced Iron duction in F ssed Plants | (Except MLRA) Ing Living Roots (C3) (C4) Plowed Soils (C6) (D1) (LRR A) | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo Shallov Fac-Ne Raised | tors (2 or more stained Leaves (B 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aerophic Position (D2 Aquitard (D3) utral Test (D5) | required) 9)) c (C2) ital Imagery (|
| HYDROLO Wetland Hy Primary Indi | cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundator) | of one required (2) (32) (4) (B6) Aerial Imag | gery (B7) | Wat 1, 2, Salt Aqu Hydr Oxic Pres Rec Stur | , 4A, and 4E Crust (B11) latic Inverteb lrogen Sulfid dized Rhizos sence of Rec cent Iron Rec inted or Stres | brates (B13 de Odor (C spheres alc duced Iron duction in F ssed Plants | (Except MLRA) Ing Living Roots (C3) (C4) Plowed Soils (C6) (D1) (LRR A) | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo Shallov Fac-Ne Raised | tors (2 or more stained Leaves (B 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aerophic Position (D2 Aquitard (D3) utral Test (D5) | required) 9) (C2) ial Imagery (|
| HYDROLO Wetland Hy Primary Indi | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorial Controls) | of one required (2) (32) (4) (B6) Aerial Imag | gery (B7) | Wat 1, 2, Salt Aqu Hydr Oxic Pres Rec Stur | , 4A, and 4E Crust (B11) latic Inverteb lrogen Sulfid dized Rhizos sence of Rec ent Iron Rec inted or Stres er (Explain in | brates (B13 de Odor (C spheres alc duced Iron duction in F ssed Plants | (Except MLRA) Ing Living Roots (C3) (C4) Plowed Soils (C6) (D1) (LRR A) | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo Shallov Fac-Ne Raised | tors (2 or more stained Leaves (B 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aerophic Position (D2 Aquitard (D3) utral Test (D5) | required) 9) (C2) ial Imagery (|
| HYDROLO Wetland Hy Primary Indi | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Crvations: | of one required (2) (32) (4) (B6) Aerial Imag | gery (B7) urface (B8) | Wat 1, 2, Salt Aqu Hydi Oxic Pres Rec Stur Othe | , 4A, and 4E Crust (B11) latic Inverteberogen Sulfiddized Rhizosence of Recent Iron Recented or Stresser (Explain in | brates (B13 de Odor (C spheres alc duced Iron duction in F ssed Plants | (Except MLRA) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A) | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo Shallov Fac-Ne Raised | tors (2 or more stained Leaves (B 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aerophic Position (D2 Aquitard (D3) utral Test (D5) | required) 9) (C2) ial Imagery (|
| HYDROLO Wetland Hy Primary Indi | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorians: The Present? Yes Present? Yes Present? Yes Present? Yes Present? Yes Present? Yes | of one required (2) (32) (4) (B6) Aerial Imag | gery (B7) ırface (B8) No <u>X</u> | Wat 1, 2, Salt Aqu Hydi Oxic Pres Rec Stur Othe | , 4A, and 4E Crust (B11) latic Inverteberogen Sulfid dized Rhizos sence of Recent Iron Recented or Stresser (Explain in thes): hes): | b) prates (B13 de Odor (C ² spheres alc duced Iron duction in F ssed Plants n Remarks | (Except MLRA) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A) | Secondary Indica Water s (MLRA Drainag Dry-Second Saturat Geomo Shallov Fac-Necond Raised Frost-H | tors (2 or more stained Leaves (B 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aerophic Position (D2 Aquitard (D3) utral Test (D5) | required) 9)) c (C2) ital Imagery (|
| HYDROLO Wetland Hy Primary Indi Field Obser Surface Water Vater Table P Saturation Pre Includes capilla | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorial Control of Present? Yes Present? Y | of one required (2) 32) 4) (B6) Aerial Image Concave Su | gery (B7) urface (B8) No | Wat 1, 2, Salt Aqu Hydi Oxic Pres Rec Stur Othe Depth (inch | , 4A, and 4E Crust (B11) latic Inverteb latic Inverteb latic Rhizos sence of Recent Iron Recent Iron Recent Iron Recent Iron Recent Iron Stress er (Explain in Iron Recent Iro | porates (B13) de Odor (C'spheres alcoduced Iron duction in Fassed Plants in Remarks >16 >16 >16 | (Except MLRA) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A)) Wetland Hydi | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo Shallov Fac-Ne Raised Frost-H | tors (2 or more stained Leaves (B 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aer rphic Position (D2 Aquitard (D3) utral Test (D5) Ant Mounds (D6) eave Hummocks | required) 9) 1 (C2) ial Imagery (2) (LRR A) (D7) |
| HYDROLO Wetland Hy Primary Indi Field Obser Surface Water Vater Table P Saturation Pre Includes capilla | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorians: The Present? Yes Present? Yes Present? Yes Present? Yes Present? Yes Present? Yes | of one required (2) 32) 4) (B6) Aerial Image Concave Su | gery (B7) urface (B8) No | Wat 1, 2, Salt Aqu Hydi Oxic Pres Rec Stur Othe Depth (inch | , 4A, and 4E Crust (B11) latic Inverteb latic Inverteb latic Rhizos sence of Recent Iron Recent Iron Recent Iron Recent Iron Recent Iron Stress er (Explain in Iron Recent Iro | porates (B13) de Odor (C' spheres alco duced Iron duction in F ssed Plants n Remarks >16 >16 >16 | (Except MLRA) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A)) Wetland Hydi | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo Shallov Fac-Ne Raised Frost-H | tors (2 or more stained Leaves (B 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aer rphic Position (D2 Aquitard (D3) utral Test (D5) Ant Mounds (D6) eave Hummocks | required) 9) 1 (C2) ial Imagery (2) (LRR A) (D7) |
| HYDROLO Wetland Hy Primary Indi Field Obser Surface Water Vater Table P Saturation Pre Includes capilla | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorial Control of Present? Yes Present? Y | of one required (2) 32) 4) (B6) Aerial Image Concave Su | gery (B7) urface (B8) No | Wat 1, 2, Salt Aqu Hydi Oxic Pres Rec Stur Othe Depth (inch | , 4A, and 4E Crust (B11) latic Inverteb latic Inverteb latic Rhizos sence of Recent Iron Recent Iron Recent Iron Recent Iron Recent Iron Stress er (Explain in Iron Recent Iro | porates (B13) de Odor (C' spheres alco duced Iron duction in F ssed Plants n Remarks >16 >16 >16 | (Except MLRA) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A)) Wetland Hydi | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo Shallov Fac-Ne Raised Frost-H | tors (2 or more stained Leaves (B 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aer rphic Position (D2 Aquitard (D3) utral Test (D5) Ant Mounds (D6) eave Hummocks | required) 9) 1 (C2) ial Imagery (2) (LRR A) (D7) |
| HYDROLO Wetland Hy Primary Indi Field Obser Surface Water Vater Table P Saturation Pre Includes capilla | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Catorial Control of Present? Yes Present? Y | of one required (2) 32) 4) (B6) Aerial Image Concave Su | gery (B7) urface (B8) No | Wat 1, 2, Salt Aqu Hydi Oxic Pres Rec Stur Othe Depth (inch | , 4A, and 4E Crust (B11) latic Inverteb latic Inverteb latic Rhizos sence of Recent Iron Recent Iron Recent Iron Recent Iron Recent Iron Stress er (Explain in Iron Recent Iro | porates (B13) de Odor (C' spheres alco duced Iron duction in F ssed Plants n Remarks >16 >16 >16 | (Except MLRA) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A)) Wetland Hydi | Secondary Indica Water s (MLRA Drainag Dry-Se Saturat Geomo Shallov Fac-Ne Raised Frost-H | tors (2 or more stained Leaves (B 1, 2, 4A, and 4B ge Patterns (B10) ason Water Table ion Visible on Aer rphic Position (D2 Aquitard (D3) utral Test (D5) Ant Mounds (D6) eave Hummocks | required) 9) 1 (C2) ial Imagery (2) (LRR A) (D7) |

7298

| roject/Site: R | ivianna Bea | ch Devel | lopment | City/County: | West | Linn/Clackamas | Samp | pling Date: | 1/29 | /2024 |
|--------------------------------|----------------------|---------------|----------------|--------------------|------------------|--|--------------|------------------|-----------------------------|-----------|
| oplicant/Owner: | Forward \ | /ision De | evelopmen | ıt | | State | OR | Sa | ampling Point: | 12 |
| · /estigator(s): | | СМ | | Section, To | ownship, Range: | | S 2, | - T 3S, R 1E | | |
| andform (hillslope, | terrace, etc.:) | | Swa | | | oncave, convex, none): | | ncave | Slope (%): | 3 |
| ubregion (LRR): | , , | LRRA | | Lat: | 45.34 | · | | 2.6444 | Datum: | |
| oil Map Unit Name: | | | | to silty clay loam | | | assification | | N/A | |
| e climatic/hydrolog | | on the site 1 | | | Yes | | | (if no, explain | | |
| | - | | | - | | | | - ` . | | |
| e vegetation | _ | _ | - | significantly dist | | Are "Normal Circumsta | • | 11? (Y/N) | Y | |
| e vegetation | | or Hy | ydrology _ | naturally proble | matic? If needed | d, explain any answers in R | emarks.) | | | |
| UMMARY OF | FINDINGS | – Attac | ch site m | ap showing sar | npling point | locations, transect | s, impor | tant featur | es, etc. | |
| drophytic Vegetati | | Yes | Х | No | | | - | | | |
| dric Soil Present? | | Yes | X | No | Is Sampled A | \/ | X | No | , | |
| etland Hydrology F | | Yes | X | No | a vveiiai | iiu: | | - | | |
| | | | | | | | | | | |
| marks: | | | | | | | | | | |
| | | | | | | | | | | |
| EGETATION - | Lleo ecior | ntific na | mos of ni | lante | | | | | | |
| LGLIATION | · Ose sciel | Ittilic Ital | absolut | | Indicator | Dominance Test wo | rksheet: | | | |
| | | | % cove | | Status | | | | | |
| ee Stratum (plo | t size: | 30) |) | | | Number of Dominant Sp | ecies | | | |
| Fraxinus latif | olia | | 10 | X | FACW | That are OBL, FACW, o | r FAC: | | 6 | (A) |
| | | | | | | | | | | |
| | | | | | | Total Number of Domina | int | | | |
| | | | | | | Species Across All Strat | a: | | 6 | (B) |
| | | | 10 | = Total Cover | | | | | | |
| pling/Shrub Stratu | <u>um</u> (plot size | e: 15 | _) | | | Percent of Dominant Sp | ecies | | | |
| Rubus armen | niacus | | 30 | X | FAC | That are OBL, FACW, o | or FAC: | 10 | 0% | (A/B) |
| Fraxinus latif | olia | | 20 | Х | FACW | | | | | |
| Populus bals | amifera | | 10 | | FAC | Prevalence Index W | orksheet | : | | |
| | | | | | | Total % Cover of | _ | Multiply by: | _ | |
| | | | | | | OBL Species | | x 1 = | 0 | |
| | | | 60 | = Total Cover | | FACW species | i. | x 2 = | 0 | |
| ut Otustuus (plo | t oizo: | 5) | ` | | | FAC Species | - | x 3 = | | |
| rb Stratum (plo Schedonorus | t size: | |) 40 | X | FAC | FACU Species | | _ x 4 = | 0 | |
| Phalaris arun | | eus | 30 | _ <u> </u> | FACW | UPL Species Column Totals | 0 | x 5 = (A) | | (B) |
| Unidentified | | | 20 | x | (FAC) | · Column Totals | | _ (A) | | (6) |
| Cirsium arve | | | 10 | | FAC | Prevalence Index | =B/A = | #DI | V/0! | |
| | | | | | | ' | 2,, , | | | |
| | | | | | | Hydrophytic Vegeta | tion Indic | ators: | | |
| | | | | | | | | | nytic Vegetatior | า |
| | | | | | | x | 2- Domina | nce Test is >50 |)% | |
| | | | 100 | = Total Cover | | | 3-Prevaler | nce Index is ≤ 3 | .0 ¹ | |
| | | | | _ | | | 4-Morpholo | ogical Adaptati | ons ¹ (provide s | upporting |
| oody Vine Stratum | n (plot size: | | _) | | | | | | separate sheet) |) |
| | | | | | | . | - | d Non-Vascular | | |
| | | | | | | | | | Vegetation ¹ (Ex | |
| | | | | | | • | and wetland | i hydrology mu | st be present, ι | ınless |
| | | | 0 | = Total Cover | | ¹ Indicators of hydric soil | | | | |
| | | | 0 | = Total Cover | | disturbed or problemation | | | | |
| Bare Ground in H | erb Stratum | | 0 | = Total Cover | | 1 | | . X | No | |

| | | | PHS# | 7298 | | | | Sampling Point: 12 | |
|--|--|---|--|---|--|---|--|--|--------|
| | iption: (Describe to t | the depth | needed to docume | | | firm the abse | nce of indicators.) | | |
| Depth | Matrix | | | Redox F | - 1 | . 2 | <u>=</u> | | |
| (Inches) | Color (moist) | <u>%</u> | Color (moist) | <u>%</u> | Type' | Loc ² | Texture | Remarks | |
| 0-5 | 10YR 3/2 | 99 | 10YR 3/4 | | С | M | Silty Clay Loam | Fine | |
| 5-15 | 10YR 3/2 | 95 | 10YR 3/4 | 5 | С | M | Silty Clay Loam | Fine | |
| | | | | | | | | | |
| _ | | | _ | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | - | | 2 | |
| • | centration, D=Depletion | | | | | | | ² Location: PL=Pore Lining, M=Matrix. | |
| Hydric Soil | Indicators: (Appli | icable to | all LRRs, unles | s otherwise | e noted.) | | Indica | ators for Problematic Hydric Soils ³ : | |
| | Histosol (A1) | | | Sa | andy Redo | x (S5) | | 2 cm Muck (A10) | |
| ! | Histic Epipedon (A2) | | | St | ripped Mat | trix (S6) | | Red Parent Material (TF2) | |
| | Black Histic (A3) | | | Lo | amy Muck | xy Mineral (F1) | (except MLRA 1) | Very Shallow Dark Surface (TF | 12) |
| | Hydrogen Sulfide (A4 | -) | | Lo | amy Gleye | ed Matrix (F2) | | Other (explain in Remarks) | |
| ſ | Depleted Below Dark | Surface (A | A11) | De | epleted Ma | atrix (F3) | | | |
| | Thick Dark Surface (A | A12) | | X Re | edox Dark | Surface (F6) | | | |
| | Sandy Mucky Mineral | I (S1) | | De | epleted Da | ırk Surface (F7 |) | ³ Indicators of hydrophytic vegetation and wetla | |
| | Sandy Gleyed Matrix | (S4) | | Re | edox Depre | | hydrology must be present, unless disturbed problematic. | Or | |
| | Layer (if present): | | | | | | 1 | · | |
| Depth (inches | | which h | as disturbed so | ils, decade | s old. C | onditions a | Hydric Soil Pres | | |
| Depth (inches | | which h | as disturbed so | ils, decade | s old. C | onditions a | | | |
| Depth (inches Remarks: Soils are ad | ljacent to a berm, | | as disturbed so | ils, decade | s old. C | onditions a | | | |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd | ljacent to a berm, DGY drology Indicator | s: | | | s old. C | onditions a | | mal. | |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd | ljacent to a berm, OGY drology Indicator cators (minimum o | s: | | nat apply) | | | re considered nor | mal. Secondary Indicators (2 or more requi | red) |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd | Ijacent to a berm, OGY drology Indicator cators (minimum o Surface Water (A1) | s: f one req | | nat apply) W | ater staine | ed Leaves (B9) | | Secondary Indicators (2 or more required Water stained Leaves (B9) | red) |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India | Ijacent to a berm, OGY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2) | s: f one req | | nat apply) W 1, | ater staine 2, 4A, and | ed Leaves (B9) i 4B) | re considered nor | Secondary Indicators (2 or more requii Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) | red) |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X | dijacent to a berm, DGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) | s: f one req | | nat apply) W 1, | ater staine 2, 4A, and alt Crust (B | ed Leaves (B9) d 4B) B11) | re considered nor | Secondary Indicators (2 or more requirements) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) | red) |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) | s: f one req 2) | | nat apply) W 1,Sa | ater staine 2, 4A, and alt Crust (B | ed Leaves (B9) d 4B) 311) rtebrates (B13 | re considered nor | Secondary Indicators (2 or more requirements) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) | - |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X | Ijacent to a berm, OGY Idrology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (E | s: f one req 2) | | nat apply) W 1, Sa Ac | ater staine 2, 4A, and alt Crust (B quatic Inver | ed Leaves (B9) i 4B) 811) rtebrates (B13 | re considered norm | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Ima | - |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X | dijacent to a berm, DGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) | s: of one req | | nat apply) W 1, Sa Ac Hy | ater staine 2, 4A, and alt Crust (B quatic Inver drogen Su kidized Rhi | ed Leaves (B9) 1 4B) 311) rtebrates (B13 ulfide Odor (C1 izospheres alo | (Except MLRA))) ng Living Roots (C3) | Secondary Indicators (2 or more requirements) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imate Geomorphic Position (D2) | - |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- | s: of one req | | nat apply) W 1, Sa Ac Hy On | ater staine 2, 4A, and alt Crust (B quatic Inver drogen Su kidized Rhi esence of | ed Leaves (B9) d 4B) B11) rtebrates (B13 ulfide Odor (C1 izospheres alo Reduced Iron | re considered norm (Except MLRA)) ng Living Roots (C3) (C4) | Secondary Indicators (2 or more requirements) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Iman Geomorphic Position (D2) Shallow Aquitard (D3) | - |
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X | 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) | s: of one req 2) 32) | | nat apply) W 1, Sa Ac Hy On Pr | ater staine 2, 4A, and alt Crust (B quatic Invertigation Substitution Substitution Substitution Invertigation Inv | ed Leaves (B9) d 4B) state states (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) | Secondary Indicators (2 or more requii Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) | gery (|
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hy Primary India X X | Ijacent to a berm, OGY Idrology Indicator Cators (minimum of Surface Water (A1)) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B-1) Iron Deposits (B5) Surface Soil Cracks (| s: If one req 2) 32) 4) | uired; check all th | nat apply) W 1, Sa Ac Hy Or Pr Re | ater staine 2, 4A, and alt Crust (B quatic Invertigation drogen Su kidized Rhi resence of ecent Iron I unted or S | ed Leaves (B9) d 4B) 311) rtebrates (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Mal. Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imane Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A | gery (|
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X | dijacent to a berm, DGY 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 (Inundation Visible on | s: of one req 2) 32) 4) B6) Aerial Ima | uired; check all th | nat apply) W 1, Sa Ac Hy Or Pr Re | ater staine 2, 4A, and alt Crust (B quatic Invertigation drogen Su kidized Rhi resence of ecent Iron I unted or S | ed Leaves (B9) d 4B) state states (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more requii Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) | gery (|
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X | 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 (Inundation Visible on Sparsely Vegetated C | s: of one req 2) 32) 4) B6) Aerial Ima | uired; check all th | nat apply) W 1, Sa Ac Hy Or Pr Re | ater staine 2, 4A, and alt Crust (B quatic Invertigation drogen Su kidized Rhi resence of ecent Iron I unted or S | ed Leaves (B9) d 4B) 311) rtebrates (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Mal. Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imane Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A | gery (|
| HYDROLO Wetland Hy Primary India X X | 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 (Inundation Visible on Sparsely Vegetated C | s: of one req 2) 32) 4) B6) Aerial Ima | uired; check all th | nat apply) W 1, Sa Ac Hy Or Pr Re | ater staine 2, 4A, and alt Crust (B quatic Invertigation drogen Su kidized Rhi resence of ecent Iron I unted or S | ed Leaves (B9) d 4B) 311) rtebrates (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Mal. Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imane Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A | gery (|
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X | dijacent to a berm, OGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B-1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations: | s: of one req 2) 32) 4) B6) Aerial Ima | uired; check all th | nat apply) W 1, Sa Ac Hy Or Pr Re | ater staine 2, 4A, and alt Crust (B quatic Inver drogen Su kidized Rhi esence of ecent Iron I unted or S ther (Expla | ed Leaves (B9) d 4B) 311) rtebrates (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Mal. Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imane Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A | gery (|
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X | 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 (Inundation Visible on Sparsely Vegetated Covations: | s: of one req 2) 32) 4) B6) Aerial Ima | uired; check all th | nat apply) W 1, Sa Ac Hy On Pr Re St Ot | ater staine 2, 4A, and alt Crust (B quatic Inver /drogen Su kidized Rhi resence of recent Iron I unted or S ther (Expla | ed Leaves (B9) d 4B) 311) rtebrates (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Mal. Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imane Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A | gery (|
| Depth (inches Remarks: Soils are ad HYDROLO Wetland Hyd Primary India X X Field Obser Surface Water | Ijacent to a berm, OGY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated C vations: Present? Yes Present? Yes Present? Yes Present? Yes | s: If one req 2) 32) 4) B6) Aerial Ima Concave Si | uired; check all the gery (B7) urface (B8) | nat apply) W 1, Sa Ac Hy O) Pr Re St Ot | ater staine 2, 4A, and alt Crust (B quatic Inver /drogen Su /droge | ed Leaves (B9) d 4B) state (B13) ulfide Odor (C1) izospheres alo Reduced Iron Reduction in P tressed Plants in in Remarks | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more requii Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Ima Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A | gery (|
| Primary India X X Field Obser Surface Water Water Table P Saturation Presincludes capillar | Ijacent to a berm, OGY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated C vations: Present? Yes Present? Yes Present? Yes Present? Yes | s: of one req 2) 32) 4) B6) Aerial Ima Concave St X X | gery (B7) urface (B8) No X No No No | nat apply) W 1, Sa Ac Hy On Pr Re St Ot Depth (in Depth (in | ater staine 2, 4A, and alt Crust (B quatic Inver drogen Su kidized Rhi esence of ecent Iron I unted or S ther (Expla | ed Leaves (B9) d 4B) state) states (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P tressed Plants in in Remarks | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) . Wetland Hydi | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imane Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR American Frost-Heave Hummocks (D7) | gery (|
| Primary India X X Field Obser Surface Water Water Table P Saturation Presincludes capillar | 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 (Inundation Visible on Sparsely Vegetated Convations: Present? Yes | s: of one req 2) 32) 4) B6) Aerial Ima Concave St X X | gery (B7) urface (B8) No X No No No | nat apply) W 1, Sa Ac Hy On Pr Re St Ot Depth (in Depth (in | ater staine 2, 4A, and alt Crust (B quatic Inver drogen Su kidized Rhi esence of ecent Iron I unted or S ther (Expla | ed Leaves (B9) d 4B) state) states (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P tressed Plants in in Remarks | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) . Wetland Hydi | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imane Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR American Frost-Heave Hummocks (D7) | gery (|
| Primary India X X Field Obser Surface Water Water Table P Saturation Presincludes capillar | 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 (Inundation Visible on Sparsely Vegetated Convations: Present? Yes | s: of one req 2) 32) 4) B6) Aerial Ima Concave St X X | gery (B7) urface (B8) No X No No No | nat apply) W 1, Sa Ac Hy On Pr Re St Ot Depth (in Depth (in | ater staine 2, 4A, and alt Crust (B quatic Inver drogen Su kidized Rhi esence of ecent Iron I unted or S ther (Expla | ed Leaves (B9) d 4B) state) states (B13 ulfide Odor (C1 izospheres alo Reduced Iron Reduction in P tressed Plants in in Remarks | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) . Wetland Hydi | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imane Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR American Frost-Heave Hummocks (D7) | gery (|

7298

| oject/Site: Rivianna Beach Deve | opment | City/County: | West I | Linn/Clackamas | Samp | ling Date: | 1/29 | /2024 |
|--|---------------------|----------------------|---------------------|--|----------------|-----------------------------------|-----------------------------|-----------|
| plicant/Owner: Forward Vision De | velopment | | | State | OR | S | ampling Point: | 13 |
| estigator(s): CM | | Section, To | wnship, Range: | | S 2, | T 3S, R 1E | • | |
| ndform (hillslope, terrace, etc.:) | Slope/Bei | - rm | Local relief (co | ncave, convex, none): | Co | nvex | Slope (%): | 25 |
| oregion (LRR): | | Lat: | 45.34 | 30 Long | -12 | 2.6443 | Datum: | |
| Map Unit Name: | | = silty clay loam | | | lassification: | | N/A | |
| climatic/hydrologic conditions on the site | | | Yes | | | | in Remarks) | |
| vegetation Soil or H | • | • | | | | • ` | Y | |
| | | _ | | | | it: (1/1 1) | <u> </u> | |
| vegetation Soil or H | ydrology | naturally problem | mauc? ii needed | i, explain any answers in R | emarks.) | | | |
| MMARY OF FINDINGS - Attac | ch site map | showing san | npling point | locations, transect | s, impor | tant featur | es, etc. | |
| rophytic Vegetation Present? Yes | X No | | | | | | | |
| ric Soil Present? Yes | No | x | Is Sampled Ar | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | ; | No | X | |
| tland Hydrology Present? Yes | No | | a Wellal | iu: | | | | |
| narks: | | | | | | | | |
| GETATION - Use scientific na | absolute % cover | Dominant Species? | Indicator Status | Dominance Test wo | | | | |
| Populus balsamifera | 40 | X | FAC | That are OBL, FACW, o | | | 3 | (A) |
| ropulus baisailillera | 40 | | FAC | That are OBL, FACW, 0 | I FAG. | | <u> </u> | (^) |
| | | | | Total Number of Domina | ant | | | |
| | | | | Species Across All Strat | | | 3 | (B) |
| | 40 | = Total Cover | | opeoles / toross / till off at | a. | | | (5) |
| in a /Oh and Ohankara | | Total Covol | | | | | | |
| ing/Shrub Stratum (plot size: 15 | - ′ | v | FAC | Percent of Dominant Sp | | 40 | 00/ | (A /D) |
| Rubus armeniacus | <u>75</u> 20 | <u> </u> | FAC | That are OBL, FACW, o | or FAC: | 10 | 0% | (A/B) |
| Corylus cornuta Populus balsamifera | 20 | | FACU FAC | Prevalence Index W | lorkshoot: | | | |
| Crataegus monogyna | 10 | | FAC | Total % Cover of | orksneet. | Multiply by: | | |
| Fraxinus latifolia | 5 | | FACW | OBL Species | _ | x 1 = | - 0 | |
| | 135 | = Total Cover | | FACW species | | x 2 = | 0 | |
| | | | | FAC Species | | x 3 = | 0 | |
| Stratum (plot size: 5 |) | | | FACU Species | | x 4 = | 0 | |
| Schedonorus arundinaceus | 70 | X | FAC | UPL Species | | x 5 = | 0 | |
| Phalaris arundinacea | 10 | | FACW | Column Totals | 0 | (A) | 0 | (B) |
| Unidentified grass | 10 | | (FAC) | | | | | |
| Cirsium arvense | 10 | | FAC | Prevalence Index | =B/A = | #D | IV/0! | |
| | | | | Healman be 41: 37 - 4 | 41 1 11 | -4 | | |
| | | | | Hydrophytic Vegeta | | | hudia \ | _ |
| | | | | x | _ | est for Hydrop nce Test is >5 | hytic Vegetatioı ∩% | 1 |
| | 100 | = Total Cover | | | _ | nce Test is >5 ce Index is ≤ 3 | | |
| | 100 | - TOTAL COVE | | | _ | | ons ¹ (provide s | upporting |
| ody Vine Stratum (plot size: |) | | | | _ | | separate sheet | |
| | | | | | 5- Wetland | Non-Vascula | r Plants ¹ | |
| | | | | | Problemati | c Hydrophytic | Vegetation ¹ (E | xplain) |
| | 0 | = Total Cover | | ¹ Indicators of hydric soil | | hydrology mu | st be present, u | unless |
| | | | | disturbed or problemation Hydrophytic | | | | |

| Profile Description | | | | | | Sampling Point: 13 |
|---|--|--|--|--|--|--|
| | on: (Describe to the | ne depth n | eeded to docun | nent the indicator or co | onfirm the absence of indicators.) | |
| Depth | Matrix | | | Redox Features | <u> </u> | |
| (Inches) | Color (moist) | % | Color (moist) | % Type ¹ | Loc ² Texture | Remarks |
| 0-16 | 10YR 3/2 | 40 | | | Sandy Clay Loam | Mixed Matrix |
| | 10YR 3/3 | 60 | | | Sandy Clay Loam | n Mixed Matrix |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | - | | | | | |
| | | | | | | |
| | | | | | · · · · · · · · · · · · · · · · · · · | |
| - | | | | | | |
| | | | | S=Covered or Coated Sa | | ² Location: PL=Pore Lining, M=Matrix. |
| Hydric Soil Ind | dicators: (Appli | cable to a | all LRRs, unle | ess otherwise noted | l.) Indica | ators for Problematic Hydric Soils ³ : |
| | tosol (A1) | | | Sandy Red | lox (S5) | 2 cm Muck (A10) |
| His | tic Epipedon (A2) | | | Stripped M | | Red Parent Material (TF2) |
| Bla | ck Histic (A3) | | | Loamy Mu | cky Mineral (F1) (except MLRA 1) | Very Shallow Dark Surface (TF12) |
| Нус | drogen Sulfide (A4) | ı | | Loamy Gle | yed Matrix (F2) | Other (explain in Remarks) |
| Dep | pleted Below Dark | Surface (A | 11) | Depleted N | Matrix (F3) | |
| Thi | ck Dark Surface (A | .12) | | Redox Dar | k Surface (F6) | |
| Sar | ndy Mucky Mineral | (S1) | | Depleted D | Park Surface (F7) | ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or |
| Sar | ndy Gleyed Matrix (| (S4) | | Redox Dep | pressions (F8) | problematic. |
| HYDROLOGY | Y ology Indicators | | | | | |
| _ | | | | | | |
| | face Water (A1) | one requ | irod: chock all | that apply) | | Secondary Indicators (2 or more required) |
| | ` ′ | one requ | ired; check all | , | ned Leaves (BQ) (Eycant MLRA | Secondary Indicators (2 or more required) |
| Hia | ih Water Lable (A2 | | ired; check all | , | ned Leaves (B9) (Except MLRA nd 4B) | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| | th Water Table (A2) | | ired; check all | Water stair | nd 4B) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| Sat | turation (A3) | | ired; check all | Water stain 1, 2, 4A, an Salt Crust | nd 4B) (B11) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) |
| Sat Wa | turation (A3) ater Marks (B1) |) | ired; check all | Water stain 1, 2, 4A, ai Salt Crust Aquatic Inv | nd 4B) (B11) vertebrates (B13) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| Sat Wa Sec | turation (A3) |) | ired; check all | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (|
| Sat Wa Sec Drif | turation (A3) ater Marks (B1) diment Deposits (B3) | 2) | ired; check all | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen Oxidized R | nd 4B) (B11) vertebrates (B13) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| Sat Wa Sec Drif | turation (A3) ater Marks (B1) diment Deposits (B | 2) | ired; check all | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along Living Roots (C3) | 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) |
| Sat Wa Sec Drif Alg | turation (A3) Inter Marks (B1) Idiment Deposits (B3) Inter Mat or Crust (B4) | 2) | ired; check all | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of | (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along Living Roots (C3) of Reduced Iron (C4) | 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) |
| Sat Wa Sec Drif Alg Iror | turation (A3) Inter Marks (B1) Idiment Deposits (B3) Inter Marks (B3) Inter Marks (B4) Inter Deposits (B5) | 2) | | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) chizospheres along Living Roots (C3) of Reduced Iron (C4) in Reduction in Plowed Soils (C6) | 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) |
| Sat Wa Sec Drif Alg Iron Sur | turation (A3) ater Marks (B1) diment Deposits (B3) al Mat or Crust (B4) n Deposits (B5) fface Soil Cracks (E | 2) 2) 36) Aerial Imag | ery (B7) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) chizospheres along Living Roots (C3) of Reduced Iron (C4) in Reduction in Plowed Soils (C6) Stressed Plants (D1) (LRR A) | 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) |
| Sat Wa Sec Drif Alg Iror Sur Inui | turation (A3) ater Marks (B1) diment Deposits (B3) al Mat or Crust (B4) Deposits (B5) rface Soil Cracks (E ndation Visible on A arsely Vegetated C | 2) 2) 36) Aerial Imag | ery (B7) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) chizospheres along Living Roots (C3) of Reduced Iron (C4) in Reduction in Plowed Soils (C6) Stressed Plants (D1) (LRR A) | 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) |
| Sat Wa Sec Drif Alg Iron Sur Inui | turation (A3) Inter Marks (B1) Idiment Deposits (B3) Inter Marks (B3) Inter Marks (B3) Inter Marks (B5) Inter Marks (B1) Inter Mark | 2) 2) 36) Aerial Imag | ery (B7) rface (B8) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) chizospheres along Living Roots (C3) of Reduced Iron (C4) in Reduction in Plowed Soils (C6) Stressed Plants (D1) (LRR A) | 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) |
| Sat Wa Sec Drif Alg Iror Sur Inui Spa Field Observat Surface Water Pre | turation (A3) ater Marks (B1) diment Deposits (B3) fit Deposits (B3) all Mat or Crust (B4 in Deposits (B5) rface Soil Cracks (E indation Visible on a rarsely Vegetated C tions: esent? Yes | 2) 2) 36) Aerial Imag | ery (B7) face (B8) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along Living Roots (C3) of Reduced Iron (C4) in Reduction in Plowed Soils (C6) Stressed Plants (D1) (LRR A) Ilain in Remarks) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caracteristics) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Sat Wa Sec Drif Alg Iror Sur Inui Spa Field Observat Surface Water Pres | turation (A3) ater Marks (B1) diment Deposits (B3) al Mat or Crust (B4) a Deposits (B5) rface Soil Cracks (E andation Visible on A arsely Vegetated C tions: esent? Yes | 2) 36) Aerial Imag oncave Sur | ery (B7) rface (B8) No | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches): | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) chizospheres along Living Roots (C3) of Reduced Iron (C4) in Reduction in Plowed Soils (C6) Stressed Plants (D1) (LRR A) lain in Remarks) > 16 | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Sat Wa Sec Drif Alg Iror Sur Inur Spa Field Observat Surface Water Pre Water Table Presen | turation (A3) ter Marks (B1) diment Deposits (B3) tal Mat or Crust (B4) to Deposits (B5) rface Soil Cracks (E5) trace Soil Cracks (E5) tracely Vegetated C tions: tesent? Yes tent? Yes | 2) 2) 36) Aerial Imag | ery (B7) face (B8) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp | nd 4B) (B11) vertebrates (B13) Sulfide Odor (C1) thizospheres along Living Roots (C3) of Reduced Iron (C4) in Reduction in Plowed Soils (C6) Stressed Plants (D1) (LRR A) Ilain in Remarks) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Caracteristics) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Sat Wa Sec Drif Alg Iror Sur Inui Spa Field Observat Surface Water Pre Water Table Pres Saturation Presen (includes capillary fri | turation (A3) ter Marks (B1) diment Deposits (B3) tal Mat or Crust (B4 to Deposits (B5) reace Soil Cracks (E indation Visible on A tarsely Vegetated C tions: tesent? Yes tent? Yes to Yes to Yes tinge) | 2) 36) Aerial Imag oncave Sui | ery (B7) rface (B8) No | Water stain 1, 2, 4A, and Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches): Depth (inches): | rend 4B) (B11) (B1 | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Sat Wa Sec Drif Alg Iror Sur Inui Spa Field Observat Surface Water Pre Water Table Pres Saturation Presen (includes capillary fri | turation (A3) ter Marks (B1) diment Deposits (B3) tal Mat or Crust (B4 to Deposits (B5) reace Soil Cracks (E indation Visible on A tarsely Vegetated C tions: tesent? Yes tent? Yes to Yes to Yes tinge) | 2) 36) Aerial Imag oncave Sui | ery (B7) rface (B8) No | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches): | rend 4B) (B11) (B1 | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Sat Wa Sec Drif Alg Iror Sur Inui Spa Field Observat Surface Water Pre Water Table Pres Saturation Presen (includes capillary fri | turation (A3) ter Marks (B1) diment Deposits (B3) tal Mat or Crust (B4 to Deposits (B5) reace Soil Cracks (E indation Visible on A tarsely Vegetated C tions: tesent? Yes tent? Yes to Yes to Yes tinge) | 2) 36) Aerial Imag oncave Sui | ery (B7) rface (B8) No | Water stain 1, 2, 4A, and Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches): Depth (inches): | rend 4B) (B11) (B1 | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Sat Wa Sec Drif Alg Iror Sur Inu Spa Field Observat Surface Water Pre Water Table Pres Saturation Presen (includes capillary fri Describe Recorde | turation (A3) ter Marks (B1) diment Deposits (B3) tal Mat or Crust (B4 to Deposits (B5) reace Soil Cracks (E indation Visible on A tarsely Vegetated C tions: tesent? Yes tent? Yes to Yes to Yes tinge) | 2) 36) Aerial Imag oncave Sui | ery (B7) rface (B8) No | Water stain 1, 2, 4A, and Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches): Depth (inches): | rend 4B) (B11) (B1 | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Sat Wa Sec Drif Alg Iror Sur Inui Spa Field Observat Surface Water Pre Water Table Pres Saturation Presen (includes capillary fri Describe Recorde | turation (A3) ter Marks (B1) diment Deposits (B3) tal Mat or Crust (B4 to Deposits (B5) reace Soil Cracks (E indation Visible on A tarsely Vegetated C tions: tesent? Yes tent? Yes tot? Yes tinge) | 2) 2) 36) Aerial Imag oncave Sur | ery (B7) face (B8) No X No X No oring well, aerial | Water stain 1, 2, 4A, and Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches): Depth (inches): | rend 4B) (B11) (B1 | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |

7298

| oject/Site: Rivianna Bea | ch Developm | ent | City/County: | West | Linn/Clackamas | Sampling | Date: | 1/29/ | /2024 |
|------------------------------------|---------------------|--------------------|--------------------|------------------|--|----------------------------|----------------|-----------------|-----------|
| plicant/Owner: Forward | /ision Develo | pment | | | State | : OR | Sar | mpling Point: | 14 |
| estigator(s): | CM/AS | | Section, To | wnship, Range: | | S 2, T 3 | S, R 1E | | |
| ndform (hillslope, terrace, etc.:) | | Slope | | Local relief (co | ncave, convex, none): | Non | <u>e</u> | Slope (%): | 10 |
| | LRRA | | Lat: | 45.34 | 47 Long | : -122.6 | 445 | Datum: | WGS84 |
| il Map Unit Name: | V | Napato s | ilty clay loam | | NWI C | Classification: | | N/A | |
| e climatic/hydrologic conditions | on the site typical | for this tim | e of year? | Yes | XN | o(if | no, explain i | in Remarks) | |
| e vegetation Soil | or Hydrolo | gy | significantly dist | urbed? | Are "Normal Circumsta | inces" present? | (Y/N) | Υ | |
| vegetation Soil | or Hydrolo | gy | naturally proble | matic? If needed | I, explain any answers in F | Remarks.) | | | |
| | | | | | | | | | |
| IMMARY OF FINDINGS | | - | | npling point | locations, transec | ts, importar | t reature | s, etc. | |
| drophytic Vegetation Present? | Yes X | | | Is Sampled Ar | rea within | | | v | |
| ric Soil Present? | Yes | No | <u>X</u> | a Wetlai | nd? Ye | s | No_ | <u> </u> | |
| tland Hydrology Present? | Yes | No | X | | | | | | |
| narks: | | | | | | | | | |
| | | | | | | | | | |
| CETATION Line soio | atific names | of plant | | | | | | | |
| GETATION - Use scie | | or plant solute | S. Dominant | Indicator | Dominance Test we | orksheet: | | | |
| | | cover | Species? | Status | | | | | |
| e Stratum (plot size: |) | _ _ | <u>-</u> | | Number of Dominant Sp | oecies | | | |
| | | | | | That are OBL, FACW, o | or FAC: | 2 | ! | (A) |
| | | | | | | | | | |
| | | | | | Total Number of Domin | | | | |
| | | | | | Species Across All Stra | ta: | 2 | | (B) |
| | | 0 | = Total Cover | | | | | | |
| ling/Shrub Stratum (plot siz | e: 15) | | | | Percent of Dominant Sp | pecies | | | |
| Rubus armeniacus | | 100 | X | FAC | That are OBL, FACW, | or FAC: | 100 |)% | (A/B) |
| | | | | | | | | | |
| | | | | | Prevalence Index V | Vorksheet: | | | |
| | | | | | Total % Cover of | Mu | ıltiply by: | • | |
| | | 100 | - Total Cavar | | OBL Species | | x 1 = | 0 | |
| | | 100 | = Total Cover | | FACW species FAC Species | | x 2 = x 3 = | 0 | |
| b Stratum (plot size: | 5) | | | | FACU Species | | x 4 = | 0 | |
| Unidentified grass | | 5 | X | (FAC) | UPL Species | | x 5 = | 0 | |
| | | | | | Column Totals | 0 (A | - | 0 | (B) |
| | | | | | | | - | | |
| | | | | | Prevalence Index | =B/A = | #DIV | //0! | |
| | | | | | | | | | |
| | | | | | Hydrophytic Vegeta | | | | |
| | | | | | | 1- Rapid Test | | | 1 |
| | | | | | X | 2- Dominance | | | |
| | | 5 | = Total Cover | | <u> </u> | 3-Prevalence 4-Morphologic | | | upportina |
| ody Vine Stratum (plot size: |) | | | | | data in Remar | | | |
| | | | | | | 5- Wetland No | | | |
| | | | | | | Problematic H | ydrophytic V | ∕egetation¹ (Eኦ | cplain) |
| | | 0 | = Total Cover | | ¹ Indicators of hydric soil | and wetland hy | drology mus | t be present, ບ | ınless |
| | | | | | disturbed or problemation | С. | | | |
| | | | | | | | | | |
| Bare Ground in Herb Stratum | 95 | | | | Hydrophytic Vegetation | Yes | X | No | |

| Profile Descri Depth (Inches) | | | PHS# | 7298 | = | | Sampling Point: | 14 |
|---|--|---|------------------------------------|--|--|---|--|---|
| • | iption: (Describe to t | he depth i | needed to docume | | onfirm the abser | ce of indicators.) | | |
| (Inches) | Matrix | | | Redox Features | . 2 | _ | | |
| | Color (moist) | % | Color (moist) | % Type ¹ | Loc ² | Texture | Remarks | |
| 1-12 | 10YR 3/3 | 100 | | | | Silty Clay Loam | | |
| 12-17 | 10YR 3/4 | 100 | | | | Silty Clay Loam | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | · | | | | | |
| | | | , | | | | | |
| | · | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | centration, D=Depletion | | | | | | ² Location: PL=Pore Lining, M=Ma | _ |
| • | Indicators: (Appli | cable to | all LRRs, unless | s otherwise noted | .) | Indica | ators for Problematic Hydric | Soils": |
| | Histosol (A1) | | | Sandy Rec | ox (S5) | | 2 cm Muck (A10) | |
| | Histic Epipedon (A2) | | | Stripped M | atrix (S6) | | Red Parent Material | (TF2) |
| | Black Histic (A3) | | | Loamy Mu | cky Mineral (F1) (| except MLRA 1) | Very Shallow Dark S | Surface (TF12) |
| | Hydrogen Sulfide (A4 |) | | Loamy Gle | yed Matrix (F2) | | Other (explain in Re | marks) |
| | Depleted Below Dark | Surface (A | A11) | Depleted N | latrix (F3) | | | |
| | Thick Dark Surface (A | · \12) | • | | k Surface (F6) | | | |
| | · Sandy Mucky Mineral | • | | | ark Surface (F7) | | ³ Indicators of hydrophytic vegetation | |
| | Sandy Gleyed Matrix | . , | | | ressions (F8) | | hydrology must be present, unles problematic. | s disturbed or |
| | Sandy Gleyed Matrix | (34) | | Nedox Dep | ilessions (i o) | | ргометнанс. | |
| | | | | | | | | |
| HYDROLO | OGY | | | | | | | |
| Motland Hy | | 61 | | | | | | |
| - | drology Indicators | | uiradi abaak all th | oot apply) | | | Connection Indicators (2 or m | ooro roquirod) |
| Primary Indi | drology Indicators | | uired; check all th | | ned Leaves (R0) | Except MI PA | Secondary Indicators (2 or m | |
| Primary Indi | drology Indicators icators (minimum o Surface Water (A1) | f one req | uired; check all th | Water stair | ned Leaves (B9) | Except MLRA | Water stained Leave | es (B9) |
| Primary Indi | vdrology Indicators icators (minimum o Surface Water (A1) High Water Table (A2 | f one req | uired; check all th | Water stair | nd 4B) | Except MLRA | Water stained Leave | es (B9) d 4B) |
| Primary Indi | rdrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) | f one req | uired; check all th | Water stain 1, 2, 4A, an Salt Crust | nd 4B) (B11) | Except MLRA | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E | es (B9) d 4B) 310) |
| Primary Indi | rdrology Indicators icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | f one req | uired; check all th | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv | nd 4B) (B11) ertebrates (B13) | | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E | es (B9) d 4B) 310) able (C2) |
| Primary Indi | rdrology Indicators icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B | f one req | uired; check all th | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv | nd 4B) (B11) rertebrates (B13) Sulfide Odor (C1) | | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or | es (B9) d 4B) 310) able (C2) n Aerial Imagery (|
| Primary Indi | rdrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) | f one req | uired; check all th | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R | nd 4B) (B11) Pertebrates (B13) Sulfide Odor (C1) hizospheres alon | g Living Roots (C3) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Position | es (B9) d 4B) 310) able (C2) n Aerial Imagery (n (D2) |
| Primary Indi | rdrology Indicators icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 | f one req | uired; check all th | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (| g Living Roots (C3) C4) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Position Shallow Aquitard (D: | es (B9) d 4B) 310) Table (C2) n Aerial Imagery (n (D2) 3) |
| Primary Indi | rdrology Indicators icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) | f one req 2) 32) 4) | uired; check all th | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (in Reduction in Plan | g Living Roots (C3) C4) owed Soils (C6) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Position Shallow Aquitard (D: Fac-Neutral Test (D: | es (B9) d 4B) 310) fable (C2) n Aerial Imagery (n (D2) 3) |
| Primary Indi | rdrology Indicators icators (minimum o 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 | f one req 2) 32) 4) B6) | | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alor of Reduced Iron (in n Reduction in Pla Stressed Plants | g Living Roots (C3) C4) owed Soils (C6) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Positior Shallow Aquitard (D: Fac-Neutral Test (D: Raised Ant Mounds | es (B9) d 4B) 310) Table (C2) A Aerial Imagery (D2) 3) (D6) (LRR A) |
| Primary Indi | rdrology Indicators icators (minimum or 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 | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (in Reduction in Plan | g Living Roots (C3) C4) owed Soils (C6) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Position Shallow Aquitard (D: Fac-Neutral Test (D: | es (B9) d 4B) 310) Table (C2) A Aerial Imagery (D2) 3) (D6) (LRR A) |
| Primary Indi | rdrology Indicators icators (minimum o 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 | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alor of Reduced Iron (in n Reduction in Pla Stressed Plants | g Living Roots (C3) C4) owed Soils (C6) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Positior Shallow Aquitard (D: Fac-Neutral Test (D: Raised Ant Mounds | es (B9) d 4B) 310) Table (C2) A Aerial Imagery (D2) 3) (D6) (LRR A) |
| Primary Indi | rdrology Indicators icators (minimum o 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 | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alor of Reduced Iron (in n Reduction in Pla Stressed Plants | g Living Roots (C3) C4) owed Soils (C6) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Positior Shallow Aquitard (D: Fac-Neutral Test (D: Raised Ant Mounds | es (B9) d 4B) 310) Table (C2) A Aerial Imagery (D2) 3) (D6) (LRR A) |
| Primary Indi | rdrology Indicators icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alor of Reduced Iron (in n Reduction in Pla Stressed Plants | g Living Roots (C3) C4) owed Soils (C6) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Positior Shallow Aquitard (D: Fac-Neutral Test (D: Raised Ant Mounds | es (B9) d 4B) 310) Table (C2) A Aerial Imagery (D2) 3) (D6) (LRR A) |
| Field Obser | rdrology Indicators icators (minimum o 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 Corvations: r Present? Yes | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence of Recent Iron Stunted or Other (Exp | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alor of Reduced Iron (in n Reduction in Pla Stressed Plants | g Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Positior Shallow Aquitard (D: Fac-Neutral Test (D: Raised Ant Mounds | es (B9) d 4B) 310) Table (C2) A Aerial Imagery (D2) 3) (D6) (LRR A) |
| Field Obser Surface Water Water Table P Saturation Pre | rdrology Indicators icators (minimum o 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 rvations: r Present? Yes esent? Yes | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (in n Reduction in Ple Stressed Plants lain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Position Shallow Aquitard (D: Fac-Neutral Test (D: Raised Ant Mounds Frost-Heave Hummo | es (B9) d 4B) 310) Table (C2) n Aerial Imagery (n (D2) 33) (D6) (LRR A) pocks (D7) |
| Field Obser Surface Water Water Table P Saturation Pre (includes capilla) | rdrology Indicators icators (minimum o 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 rvations: r Present? Yes esent? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) NoX NoX NoX | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen : Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches): Depth (inches): | nd 4B) (B11) | g Living Roots (C3) C4) bwed Soils (C6) (D1) (LRR A) Wetland Hyd | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Positior Shallow Aquitard (D: Fac-Neutral Test (D: Raised Ant Mounds Frost-Heave Hummo | es (B9) d 4B) al 10) able (C2) a Aerial Imagery (a (D2) 3) (D6) (LRR A) bocks (D7) |
| Field Obser Surface Water Water Table P Saturation Pre | rdrology Indicators icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) NoX NoX NoX | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen : Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches): Depth (inches): | nd 4B) (B11) | g Living Roots (C3) C4) bwed Soils (C6) (D1) (LRR A) Wetland Hyd | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Positior Shallow Aquitard (D: Fac-Neutral Test (D: Raised Ant Mounds Frost-Heave Hummo | es (B9) d 4B) al 10) able (C2) a Aerial Imagery (a (D2) 3) (D6) (LRR A) bocks (D7) |
| Field Obser Surface Water Water Table P Saturation Pre includes capillar | rdrology Indicators icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) NoX NoX NoX | Water stain 1, 2, 4A, an Salt Crust Aquatic Inv Hydrogen : Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches): Depth (inches): | nd 4B) (B11) | g Living Roots (C3) C4) bwed Soils (C6) (D1) (LRR A) Wetland Hyd | Water stained Leave (MLRA1, 2, 4A, and Drainage Patterns (E Dry-Season Water T Saturation Visible or Geomorphic Positior Shallow Aquitard (D: Fac-Neutral Test (D: Raised Ant Mounds Frost-Heave Hummo | es (B9) d 4B) 310) Table (C2) n Aerial Imagery (n (D2) 33) (D6) (LRR A) pocks (D7) |

7298

| Project/Site: | Rivianna Bea | ach Devel | opment | City/County: | West | Linn/Clackam | as | Sampli | ng Date: | | 1/29/ | 2024 |
|--------------------------------|--------------------|------------|--------------|---------------------|------------------|-------------------|------------------|--------------------------|-------------|-------------|----------|------------|
| Applicant/Owner: | Forward \ | Vision De | velopment | | | | State: | OR | | Sampling | Point: | 15 |
| Investigator(s): | | CM/AS | | Section, To | wnship, Range: | | | S 2, T | 3S, R 1 | E | | |
| Landform (hillslope | e, terrace, etc.:) | | Slope | _ | Local relief (co | ncave, convex, n | ione): | Con | cave | Slop | e (%): | 5 |
| Subregion (LRR): | | LRRA | 1 | Lat: | 45.34 | 47 | Long: | -122 | .6445 | <u> </u> | atum: | WGS84 |
| Soil Map Unit Nam | | | Wapato s | ilty clay loam | | | _ | sification: | | N | /A | |
| Are climatic/hydrol | | | | | Yes | X | | - | | ain in Rem | arks) | |
| Are vegetation | _ | | • | significantly dist | urbed? | Are "Normal (| _ | | | Υ | | |
| Are vegetation | | | | naturally proble | | | | • | . (.,,,, | | | |
| The vegetation | | | | - naturally problem | mano: il necaca | i, explain any an | SWCIS III I (CII | idiko.j | | | | |
| SUMMARY O | F FINDINGS | S – Attac | h site map | showing san | npling point | locations, t | ransects, | importa | ant feat | ures, et | c. | |
| Hydrophytic Veget | tation Present? | Yes | X No | | la Oamania d A. | | | | | | | |
| Hydric Soil Presen | nt? | Yes | X No | | Is Sampled Ar | | Yes | X | | No | | |
| Wetland Hydrolog | y Present? | Yes | X No | | | | _ | | | | | |
| Remarks: | | _ | | | | | | | | | | |
| rtomanto. | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| VEGETATION | N - Use scie | ntific nar | nes of plant | ts. | | | | | | | | |
| | | | absolute | Dominant | Indicator | Dominance | Test work | sheet: | | | | |
| Troo Stratum /- | olot cizo: | 30) | % cover | Species? | Status | Number CD | main a t C | iaa | | | | |
| Tree Stratum (p | |) | 20 | v | FAC | Number of Do | • | | | 6 | , | ۸۱ |
| 1 Alnus rubra 2 Fraxinus la | | | 10 | <u> </u> | FACW | That are OBL, | FACVV, OF F | AC: _ | | 6 | (| A) |
| 3 | tiiona | | | | IACV | Total Number | of Dominant | | | | | |
| 4 | | | | | | Species Acros | | | | 6 | (| В) |
| | | | 30 | = Total Cover | | Openies / toros | o 7 in Otrata. | - | | | —_' | <i>D</i>) |
| C | | 4- | | rotal Gover | | | | | | | | |
| Sapling/Shrub Stra | | ze: 15 | - ' | V | FAC | Percent of Dor | • | | | 4000/ | , | A /D) |
| 1 Rubus armo | eniacus | | 20 | <u> </u> | <u>FAC</u> | That are OBL, | FACW, or I | -AC: | | 100% | (| A/B) |
| 3 | | | | | | Prevalence | Index Wo | rkehoot: | | | | |
| 4 | | | | | | Total % Cover | | | Multiply by | | | |
| 5 | | | | | | OBL Spe | | = | x 1 = | <u> </u> |) | |
| | | | 20 | = Total Cover | | FACW sp | - | | x 2 = | |) | |
| | | | | | | FAC Spe | _ | | x 3 = | - |) | |
| Herb Stratum (p | olot size: | 5) | | | | FACU Sp | ecies | | x 4 = | 0 | | |
| 1 Ranunculus | s repens | | 30 | Х | FAC | UPL Spe | ecies | | x 5 = | |) | |
| 2 Phalaris ar | undinacea | | 30 | X | FACW | Column 1 | Γotals | 0 | (A) | | (| В) |
| 3 Unidentified | | | 30 | X | (FAC) | | | | | | | |
| 4 Scirpus mid | | | 20 | | OBL | Prevaler | nce Index =B | /A = _ | # | DIV/0! | | |
| 5 Juncus effu | | | 10 | | FACW | | | | | | | |
| 6 Cirsium arv | /ense | | 5 | | FAC | Hydrophytic | • | | | | | |
| 7 | | | | | | | | - Rapid Te | | | getation | |
| 8 | | | 125 | = Total Cover | | | | - Dominand -Prevalenc | | | | |
| | | | 120 | - Total Cover | | _ | | -Morpholog | | | ovide su | pporting |
| Woody Vine Stratu | um (plot size: | |) | | | | | ata in Rem | | | | - |
| 1 | | | | | | | | - Wetland I | | | | |
| 2 | | | | | | | P | roblematic | Hydrophyl | tic Vegetat | ion¹ (Ex | plain) |
| | | | 0 | = Total Cover | | 1Indicators of h | | d wetland h | nydrology r | must be pre | esent, u | nless |
| | | | | | | disturbed or pr | | | | | | |
| % Bare Ground in | Herh Stratum | | 0 | | | | C | Vac | Y | | No | |
| Date Glound III | rioid Gilatuiii | | - | | | | | 163 | | | 110_ | |
| % Bare Ground in Remarks: | Herb Stratum | | 0 | = Total Cover | | | roblematic. | d wetland h | x | must be pre | No_ | nles |

| SOIL | | | PHS # _ | 7298 | | _ | | Sampling Point: 15 |
|--|--|--|---|---|---|--|---|---|
| | ription: (Describe to the | he depth | needed to docume | | | firm the abse | nce of indicators.) | |
| Depth | Matrix | 0/ | 0.1 (: :) | Redox F | - 1 | Loc ² | | D |
| (Inches) | Color (moist) | % | Color (moist) | % | Type' | | Texture | Remarks |
| 0-12 | 10YR 3/2 | 95 | 10YR 3/4 | | С | M | Silty Clay Loam | Fine |
| | | | 2.5Y 4/1 | 3 | D | M | Silty Clay Loam | Medium |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | <u> </u> | | | | | | | |
| ype: C=Cor | ncentration, D=Depletio | n, RM=Re | educed Matrix, CS=0 | Covered or C | oated San | d Grains. | | ² Location: PL=Pore Lining, M=Matrix. |
| ydric Soil | Indicators: (Applie | cable to | all LRRs, unless | s otherwise | e noted.) |) | Indica | ators for Problematic Hydric Soils ³ : |
| | Histosol (A1) | | | Sa | andy Redo | x (S5) | | 2 cm Muck (A10) |
| | Histic Epipedon (A2) | | | St | ripped Mat | trix (S6) | | Red Parent Material (TF2) |
| | Black Histic (A3) | | | Lo | amy Muck | xy Mineral (F1) | (except MLRA 1) | Very Shallow Dark Surface (TF12) |
| Х | Hydrogen Sulfide (A4) |) | | Lo | amy Gleye | ed Matrix (F2) | | Other (explain in Remarks) |
| | Depleted Below Dark | | A11) | | epleted Ma | | | |
| | - ' Thick Dark Surface (A | • | , | | • | Surface (F6) | | |
| | Sandy Mucky Mineral | | | | | rk Surface (F7 |) | ³ Indicators of hydrophytic vegetation and wetland |
| | Sandy Gleyed Matrix (| | | | • | essions (F8) | , | hydrology must be present, unless disturbed or problematic. |
| /pe: | | | | | | | | |
| epth (inche | es): | | | | | | Hydric Soil Pres | ent? Yes X No No |
| epth (inche | es): | | | | | | Hydric Soil Pres | ent? Yes <u>X</u> No |
| epth (inche | | | | | | | Hydric Soil Pres | ent? Yes <u>X</u> No |
| epth (inche | DGY | s: | | | | | Hydric Soil Pres | ent? Yes <u>X</u> No |
| epth (inche | DGY ydrology Indicators | | | | | | Hydric Soil Pres | |
| epth (inche emarks: YDROLO | OGY ydrology Indicators icators (minimum of | | uired; check all th | , | ator staine | ad Leaves (RQ) | | Secondary Indicators (2 or more required |
| epth (inche emarks: YDROLO etland Hy | DGY ydrology Indicators icators (minimum of Surface Water (A1) | fone req | uired; check all th | W | | | Hydric Soil Pres | Secondary Indicators (2 or more required Water stained Leaves (B9) |
| YDROLO Setland Hyrimary Ind | OGY ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 | fone req | uired; check all th | W | 2, 4A, and | d 4B) | | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| epth (inche emarks: YDROLO etland Hy | ogy ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) | fone req | uired; check all th | W 1, | 2, 4A, and alt Crust (B | d 4B) 311) | (Except MLRA | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) |
| YDROLO Setland Hyrimary Ind | DGY ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | f one req | uired; check all th | W 1, SaAd | 2, 4A, and alt Crust (B) quatic Inve | d 4B) B11) rtebrates (B13) | (Except MLRA | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| YDROLO Vetland Hyrimary Ind | OGY ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B | f one req | uired; check all th | W 1, Sa Ac X Hy | 2, 4A, and alt Crust (B quatic Inverydrogen Su | d 4B) B11) rtebrates (B13) ulfide Odor (C1 | (Except MLRA | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager |
| YDROLO Vetland Hyrimary Ind | pogy ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) | f one req) 2) | uired; check all th | W 1, Sa Acc X Hy | 2, 4A, and alt Crust (B quatic Inverydrogen Suxidized Rhi | d 4B) 311) rtebrates (B13) ulfide Odor (C1) izospheres alor | (Except MLRA) ng Living Roots (C3) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) |
| YDROLO Setland Hyrimary Ind | pdy ydrology Indicators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 | f one req) 2) | uired; check all th | W 1, Sa Ac X Hy Or | 2, 4A, and alt Crust (B quatic Inve ydrogen Su xidized Rhi resence of | at 4B) B11) Intebrates (B13) Intebrates (C13) Interpretation (C13) Inter | (Except MLRA) ng Living Roots (C3) (C4) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) |
| YDROLO Vetland Hyrimary Ind | icators (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) | f one req | uired; check all th | W 1, | 2, 4A, and alt Crust (B quatic Inve ydrogen Su xidized Rhi resence of ecent Iron | d 4B) state (B13) ulfide Odor (C1 izospheres alor Reduced Iron (Reduction in P | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) |
| epth (inche emarks: YDROLO /etland Hy rimary Ind | JOGY ydrology Indicators icators (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 (E | f one req) 2) 36) | | W 1, Se Ac X Hy O) Pr Re St | 2, 4A, and alt Crust (B quatic Inve- ydrogen Su xidized Rhi resence of ecent Iron I | d 4B) rtebrates (B13) ulfide Odor (C1) izospheres alor Reduced Iron Reduction in P tressed Plants | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| epth (inche emarks: YDROLO /etland Hy rimary Ind | icators (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) | f one req) 2) 36) Aerial Ima | gery (B7) | W 1, Se Ac X Hy O) Pr Re St | 2, 4A, and alt Crust (B quatic Inve- ydrogen Su xidized Rhi resence of ecent Iron I | d 4B) state (B13) ulfide Odor (C1 izospheres alor Reduced Iron (Reduction in P | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) |
| epth (inche emarks: YDROLO /etland Hy rimary Ind X X | DGY ydrology Indicators icators (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 (E Inundation Visible on A | f one req) 2) 36) Aerial Ima | gery (B7) | W 1, Se Ac X Hy O) Pr Re St | 2, 4A, and alt Crust (B quatic Inve- ydrogen Su xidized Rhi resence of ecent Iron I | d 4B) rtebrates (B13) ulfide Odor (C1) izospheres alor Reduced Iron Reduction in P tressed Plants | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| YDROLO Vetland Hy rimary Ind X X | pogy ydrology Indicators icators (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 (E Inundation Visible on A Sparsely Vegetated C rvations: | f one req) 2) 36) Aerial Ima | gery (B7) urface (B8) | W 1, | 2, 4A, and alt Crust (B quatic Inve ydrogen Su xidized Rhi resence of ecent Iron I tunted or S ther (Expla | d 4B) rtebrates (B13) ulfide Odor (C1) izospheres alor Reduced Iron Reduction in P tressed Plants | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| epth (inche emarks: YDROLO /etland Hy rimary Ind X X | icators (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 (E1) Inundation Visible on A Sparsely Vegetated Corvations: | f one req) 2) 4) Aerial Ima oncave Si | gery (B7) urface (B8) No <u>X</u> | W 1, Se Ac X Hy O) Pr Re St Ot | 2, 4A, and alt Crust (B quatic Inversed of the cent Iron I tunted or S ther (Explanation): | d 4B) rtebrates (B13) ulfide Odor (C1 izospheres aloi Reduced Iron Reduction in P tressed Plants in in Remarks) | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| ield Obse | DGY ydrology Indicators icators (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 (E Inundation Visible on A Sparsely Vegetated C rvations: ar Present? Yes Present? Yes | f one req) 2) 36) Aerial Ima oncave St | gery (B7) urface (B8) No <u>X</u> No | W 1, Sa Ac X Hy O) Pr Re St Ot | 2, 4A, and all Crust (B quatic Inverse ydrogen Statistical Rhiresence of ecent Iron I dunted or Statistical Rhiresence of their (Explainments): | t 4B) rtebrates (B13) ulfide Odor (C1 izospheres alor Reduced Iron Reduction in P tressed Plants ain in Remarks) | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| Primary Ind X X X ield Obse urface Water /ater Table I aturation Pro | icators (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 (E) Inundation Visible on A Sparsely Vegetated C rvations: er Present? Yes Present? Yes esent? Yes | f one req) 2) 4) Aerial Ima oncave Si | gery (B7) urface (B8) No <u>X</u> | W 1, Se Ac X Hy O) Pr Re St Ot | 2, 4A, and all Crust (B quatic Inverse ydrogen Statistical Rhiresence of ecent Iron I dunted or Statistical Rhiresence of their (Explainments): | d 4B) rtebrates (B13) ulfide Odor (C1 izospheres aloi Reduced Iron Reduction in P tressed Plants in in Remarks) | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| AYDROLO Vetland Hy Vetland Hy X X X Field Obse Surface Water Vater Table Is saturation Proncludes capilla | icators (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 (E) Inundation Visible on A Sparsely Vegetated C rvations: er Present? Yes Present? Yes esent? Yes | f one req () (2) (36) Aerial Ima oncave St X X | gery (B7) urface (B8) No No No | W 1, Se Ac X Hy Or Pr Re St Or Depth (in Depth (in | 2, 4A, and alt Crust (B quatic Inversed of the cent Iron I tunted or S ther (Explanates): anches): anches): anches): | at 4B) states (B13) ulfide Odor (C1 izospheres alor Reduced Iron Reduction in P stressed Plants ain in Remarks) 7 Surface | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hydi | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| HYDROLO Vetland Hy Vetland Hy X X Viield Obse urface Water Vater Table I aturation Procludes capilla | pogy ydrology Indicators icators (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 (E Inundation Visible on A Sparsely Vegetated C rvations: ar Present? Yes Present? Yes esent? Yes ary fringe) | f one req () (2) (36) Aerial Ima oncave St X X | gery (B7) urface (B8) No No No | W 1, Se Ac X Hy Or Pr Re St Or Depth (in Depth (in | 2, 4A, and alt Crust (B quatic Inversed of the cent Iron I tunted or S ther (Explanates): anches): anches): anches): | at 4B) states (B13) ulfide Odor (C1 izospheres alor Reduced Iron Reduction in P stressed Plants ain in Remarks) 7 Surface | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hydi | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| ield Obse urface Water Table I aturation Proceedings of the control of the contro | pogy ydrology Indicators icators (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 (E Inundation Visible on A Sparsely Vegetated C rvations: ar Present? Yes Present? Yes esent? Yes ary fringe) | f one req () (2) (36) Aerial Ima oncave St X X | gery (B7) urface (B8) No No No | W 1, Se Ac X Hy Or Pr Re St Or Depth (in Depth (in | 2, 4A, and alt Crust (B quatic Inversed of the cent Iron I tunted or S ther (Explanates): anches): anches): anches): | at 4B) states (B13) ulfide Odor (C1 izospheres alor Reduced Iron Reduction in P stressed Plants ain in Remarks) 7 Surface | (Except MLRA) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hydi | Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |

7298

| oject/Site: Rivianna Bea | ch Develo | pment | City/County: | West | Linn/Clackamas | Sampling Date | 1/29 | /2024 |
|---|--------------------------------|-------------------|--------------------|------------------|-----------------------------|---|----------------------|------------|
| plicant/Owner: Forward \ | /ision Dev | elopment | | | State | e: OR | Sampling Point: | 16 |
| vestigator(s): | СМ | | Section, To | wnship, Range: | | S 401, T 3S, | 1 E | |
| ndform (hillslope, terrace, etc.:) | | Depressi | on | Local relief (co | oncave, convex, none): | Concave | Slope (%): | 3 |
| bregion (LRR): | LRRA | | Lat: | 45.34 | Long | g: -122.6436 | Datum: | WGS84 |
| il Map Unit Name: | | Newberg | fine sandy loan | n | NWI | Classification: | N/A | |
| e climatic/hydrologic conditions o | on the site ty | pical for this ti | me of year? | Yes | X N | o (if no, ex | plain in Remarks) | |
| e vegetation Soil | or Hyd | drology | significantly dist | turbed? | Are "Normal Circumsta | ances" present? (Y/N) | Y | |
| vegetation Soil | or Hyd | drology | naturally proble | matic? If needed | d, explain any answers in l | Remarks.) | | |
| IMMARY OF FINDINGS | ^ ^ + + + + + + + + + + | h aita man | ahawing aan | nnlina naint | locations transce | ta important for | | |
| JMMARY OF FINDINGS | Yes | | | npiing point | l locations, transec | is, important lea | itures, etc. | |
| drophytic Vegetation Present? dric Soil Present? | Yes | X No | | Is Sampled A | | • | No X | |
| | _ | | | a Wetla | ınd? | s | No X | |
| tland Hydrology Present? | Yes | N | X | | | | | |
| marks: | | | | | | | | |
| | | | | | | | | |
| GETATION - Use scier | ntific nan | nes of plan | ıts | | | | | |
| | | absolute | Dominant | Indicator | Dominance Test w | orksheet: | | |
| | | % cover | Species? | Status | . | | | |
| e Stratum (plot size: | 30) | | | | Number of Dominant S | | | / . |
| Rubus armeniacus | | 100 | X | FAC | That are OBL, FACW, | or FAC: | 2 | (A) |
| Populus balsamifera | | 20 | | FAC | | | | |
| | | | | | Total Number of Domin | | 3 | (B) |
| | | 120 | = Total Cover | | Species Across All Sila | | | (D) |
| alina/Charle Stratum | 45 | | 10101 00101 | | | | | |
| oling/Shrub Stratum (plot size Rubus armeniacus | e: 15 | _) 1 00 | X | FAC | Percent of Dominant Sp | | 67% | (A/D) |
| Populus balsamifera | | 100 | | FAC | That are OBL, FACW, | or FAC: | 67 % | (A/B) |
| r opulus balsanmera | | | | 170 | Prevalence Index V | Vorksheet: | | |
| | | | | | Total % Cover of | Multiply I | DV: | |
| | | | | | OBL Species | x 1 = | | |
| | | 110 | = Total Cover | | FACW species | x 2 = | 0 | |
| | | | | | FAC Species | x 3 = | | |
| b Stratum (plot size: |) | | | | FACU Species | x 4 = | | |
| | | | | | UPL Species | x 5 = | | (B) |
| | | | | | Column Totals | 0 (A) | 0 | (B) |
| | | | | | Prevalence Index | =R/Δ = | #DIV/0! | |
| | | | | | · | | | |
| | | | | | Hydrophytic Veget | ation Indicators: | | |
| | | | | | | 1- Rapid Test for Hy | drophytic Vegetation | 1 |
| | | | | | Х | 2- Dominance Test is | s >50% | |
| | | 0 | = Total Cover | | | 3-Prevalence Index i | | |
| adulling Ctt (nlat sie | 30 | 1 | | | | 4-Morphological Ada | | |
| ody Vine Stratum (plot size: Hedera helix | | _) 30 | X | FACU | | data in Remarks or of 5- Wetland Non-Vas | | 1 |
| | | | | FACU | · ——— | Problematic Hydroph | | (plain) |
| Tredera frenz | | | | | Indicators of hydric soi | and wetland hydrology | | |
| Tredera trenx | | 30 | = Total Cover | | | ., | ,, | |
| Tredeta fielix | | 30 | = Total Cover | | disturbed or problemati | C. | | |
| Bare Ground in Herb Stratum | | 30 | = Total Cover | | | c. Yes X | Na | |

| SOIL | | | PHS# | 7298 | | | | Sampling Point: 16 | |
|--|--|--|---------------------------------------|---|--|---|--|--|----------|
| | iption: (Describe to t | the depth | needed to docume | | | firm the absen | ce of indicators.) | | |
| Depth | Matrix | | | Redox F | - 1 | . 2 | _ | | |
| (Inches) | Color (moist) | % | Color (moist) | | Type' | Loc ² | Texture | Remarks | |
| 0-10 | 10YR 3/3 | 99 | 10YR 3/4 | | С | M | Loam | Organic; Fine | |
| 10-17 | 10YR 3/3 | 97 | 10YR 3/4 | 3 | С | M | Loam | Organic; Fine | |
| | | | | | | | | | |
| | | | | | | | | _ | |
| | | | | | | | | | |
| | | | | | | | | | |
| • • | centration, D=Depletion | | | | | | | ² Location: PL=Pore Lining, M=Matrix. | |
| • | Indicators: (Appli | cable to | all LRRs, unless | | , | | Indi | cators for Problematic Hydric Soils ³ : | |
| | Histosol (A1) | | | | ndy Redox | ` , | | 2 cm Muck (A10) | |
| | Histic Epipedon (A2) | | | Str | ripped Mati | rix (S6) | | Red Parent Material (TF2) | |
| | Black Histic (A3) | | | Lo | amy Muck | y Mineral (F1) (e | except MLRA 1) | Very Shallow Dark Surface (TF | 12) |
| | Hydrogen Sulfide (A4 | -) | | Lo | amy Gleye | ed Matrix (F2) | | Other (explain in Remarks) | |
| | Depleted Below Dark | Surface (A | A11) | De | pleted Ma | trix (F3) | | | |
| | Thick Dark Surface (A | A12) | • | Re | dox Dark | Surface (F6) | | | |
| | Sandy Mucky Mineral | - | | | | rk Surface (F7) | | ³ Indicators of hydrophytic vegetation and wetl | |
| | Sandy Gleyed Matrix | , , | | | - | essions (F8) | | hydrology must be present, unless disturbed problematic. | or |
| | Saridy Gleyed Matrix | (34) | | | dox Depie | ssions (i o) | | problematic. | |
| | s): | | | | | | Hydric Soil Pro | esent? Yes NoX | |
| Remarks: | | | | | | | Hydric Soil Pr | esent? Yes NoX | |
| Depth (inchest Remarks: HYDROLO Wetland Hy | ogy | s: | | | | | Hydric Soil Pr | esent? Yes NoX | |
| Remarks: HYDROLC Wetland Hy | | | uired; check all tl | nat apply) | | | Hydric Soil Pr | Secondary Indicators (2 or more requi | red) |
| Remarks: HYDROLO Wetland Hy Primary Indi | IGY drology Indicator | | uired; check all th | W | | d Leaves (B9) (I | | Secondary Indicators (2 or more requi | red) |
| Remarks: HYDROLO Wetland Hy Primary Indi | OGY drology Indicator cators (minimum o | f one req | uired; check all th | W | ater staine 2, 4A, and | d Leaves (B9) (I | | Secondary Indicators (2 or more requi | red) |
| HYDROLO Wetland Hy Primary Indi | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) | f one req | uired; check all th | | 2, 4A, and alt Crust (B | d Leaves (B9) (I I 4B) 11) | | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) | red) |
| HYDROLO Wetland Hy Primary Indi | OGY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 | f one req | uired; check all th | Wa 1,Sa Aq | 2, 4A, and Ilt Crust (B | d Leaves (B9) (I I 4B) 11) tebrates (B13) | | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) | rred) |
| HYDROLC Wetland Hy | oGY cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (E | of one req | uired; check all th | Wa 1,Sa Aq | 2, 4A, and Ilt Crust (B | d Leaves (B9) (I I 4B) 11) | | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima | <u>.</u> |
| HYDROLC Wetland Hy | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | of one req | uired; check all th | Wang Sa | 2, 4A, and Ilt Crust (B uatic Inver drogen Su | d Leaves (B9) (I 4B) 11) tebrates (B13) | | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima | <u>.</u> |
| HYDROLO Wetland Hy Primary Indi | oGY cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (E | of one required on | uired; check all th | | 2, 4A, and alt Crust (B quatic Inver rdrogen Su kidized Rhi | d Leaves (B9) (I 4B) 11) tebrates (B13) | Except MLRA g Living Roots (C3 | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima | |
| HYDROLO Wetland Hy Primary Indi | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) | of one required on | uired; check all th | Wa 1, Sa Aq Hy Ox | 2, 4A, and It Crust (B juatic Inver rdrogen Su idized Rhiz esence of I | d Leaves (B9) (I 4B) 11) 1tebrates (B13) Ilfide Odor (C1) zospheres along | Except MLRA g Living Roots (C3 | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image X Geomorphic Position (D2) | • |
| HYDROLO Wetland Hy Primary Indi | drology Indicator cators (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 | of one req 2) 32) 4) | uired; check all th | W; 1, Sa Aq Hy Ox Pro | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhizesence of I | d Leaves (B9) (I 14B) 11) rtebrates (B13) lifide Odor (C1) zospheres along Reduced Iron (C | Except MLRA g Living Roots (C3 C4) wed Soils (C6) | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) | gery (|
| HYDROLO Wetland Hy Primary Indi | 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 Iron Deposits (B5) | of one req 2) 32) 4) B6) | | Wii 1, Sa Aq Hy Ox Prr Re | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhi esence of I ecent Iron F | d Leaves (B9) (I I 4B) 11) tebrates (B13) lifide Odor (C1) zospheres along Reduced Iron (C | Except MLRA g Living Roots (C3 C4) wed Soils (C6) | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) | gery (|
| HYDROLO Wetland Hy Primary Indi | 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 (| of one req 2) 32) 4) B6) Aerial Ima | igery (B7) | Wii 1, Sa Aq Hy Ox Prr Re | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhi esence of I ecent Iron F | d Leaves (B9) (I I 4B) 11) rtebrates (B13) Ilfide Odor (C1) zospheres along Reduced Iron (C Reduction in Plo tressed Plants (I | Except MLRA g Living Roots (C3 C4) wed Soils (C6) | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR | gery (|
| HYDROLC Wetland Hy Primary Indi | 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 (Inundation Visible on Sparsely Vegetated C | of one req 2) 32) 4) B6) Aerial Ima | igery (B7) | Wii 1, Sa Aq Hy Ox Prr Re | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhi esence of I ecent Iron F | d Leaves (B9) (I I 4B) 11) rtebrates (B13) Ilfide Odor (C1) zospheres along Reduced Iron (C Reduction in Plo tressed Plants (I | Except MLRA g Living Roots (C3 C4) wed Soils (C6) | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR | gery (|
| HYDROLO Wetland Hy Primary Indi | 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 (Inundation Visible on Sparsely Vegetated Corvations: | of one req 2) 32) 4) B6) Aerial Ima | igery (B7) urface (B8) | W: 1, Sa Aq Hy Ox Pro Re Sto | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhiz esence of I ecent Iron F unted or St her (Explai | d Leaves (B9) (I I 4B) 11) rtebrates (B13) Ilfide Odor (C1) zospheres along Reduced Iron (C Reduction in Plo tressed Plants (I | Except MLRA g Living Roots (C3 C4) wed Soils (C6) | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR | gery (|
| HYDROLC Wetland Hy Primary Indi | 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 (Inundation Visible on Sparsely Vegetated Covations: | of one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) | W: 1, Sa Aq Hy Ox Prr Re Sti Ott | 2, 4A, and alt Crust (B quatic Inver redrogen Su didized Rhi: esence of I ecent Iron F unted or St her (Explai | d Leaves (B9) (I I 4B) 11) tebrates (B13) lifide Odor (C1) zospheres along Reduced Iron (C Reduction in Plo tressed Plants (I in in Remarks) | g Living Roots (C3 34) wed Soils (C6) D1) (LRR A) | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7) | gery (|
| HYDROLC Wetland Hy Primary Indi Field Obser Surface Water Water Table F Saturation Pre | 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 Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations: Present? Yes Present? Yes Present? Yes Present? Yes | of one req 2) 32) 4) B6) Aerial Ima | igery (B7) urface (B8) | W: 1, Sa Aq Hy Ox Pro Re Sto | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhizesence of I ecent Iron F unted or St her (Explai | d Leaves (B9) (I I 4B) 11) rtebrates (B13) Ilfide Odor (C1) zospheres along Reduced Iron (C Reduction in Plo tressed Plants (I | g Living Roots (C3 34) wed Soils (C6) D1) (LRR A) | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR | gery (|
| HYDROLO Wetland Hy Primary Indi Field Obser Surface Water Water Table F Saturation Pre includes capilla | 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 (Inundation Visible on Sparsely Vegetated Covations: Present? Yes | of one request. 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) No X No X No X | W: 1, Sa Aq Hy Ox Pro Re Sto Ott Depth (in Depth (in | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhizesence of I ecent Iron F unted or St her (Explain ches): ches): | d Leaves (B9) (I I 4B) 11) Itebrates (B13) Ilfide Odor (C1) zospheres along Reduced Iron (C Reduction in Plo tressed Plants (I in in Remarks) >17 0-2; >17 | Except MLRA g Living Roots (C3 24) wed Soils (C6) D1) (LRR A) Wetland Hy | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7) | gery (|
| HYDROLO Wetland Hy Primary Indi Field Obser Surface Water Water Table F Saturation Pre includes capilla | 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 Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations: Present? Yes Present? Yes Present? Yes Present? Yes | of one request. 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) No X No X No X | W: 1, Sa Aq Hy Ox Pro Re Sto Ott Depth (in Depth (in | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhizesence of I ecent Iron F unted or St her (Explain ches): ches): | d Leaves (B9) (I I 4B) 11) Itebrates (B13) Ilfide Odor (C1) zospheres along Reduced Iron (C Reduction in Plo tressed Plants (I in in Remarks) >17 0-2; >17 | Except MLRA g Living Roots (C3 24) wed Soils (C6) D1) (LRR A) Wetland Hy | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7) | gery (|
| HYDROLO Wetland Hy Primary Indi Field Obser Surface Water Water Table F Saturation Pre includes capilla | 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 (Inundation Visible on Sparsely Vegetated Covations: Present? Yes | of one request. 2) 32) 4) B6) Aerial Ima Concave St | gery (B7) urface (B8) No X No X No X | W: 1, Sa Aq Hy Ox Pro Re Sto Ott Depth (in Depth (in | 2, 4A, and alt Crust (B quatic Inver drogen Su didized Rhizesence of I ecent Iron F unted or St her (Explain ches): ches): | d Leaves (B9) (I I 4B) 11) Itebrates (B13) Ilfide Odor (C1) zospheres along Reduced Iron (C Reduction in Plo tressed Plants (I in in Remarks) >17 0-2; >17 | Except MLRA g Living Roots (C3 24) wed Soils (C6) D1) (LRR A) Wetland Hy | Secondary Indicators (2 or more requi Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Ima X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Frost-Heave Hummocks (D7) | gery (|

7298

| Project/Site: Rivia | nna Beac | ch Develo | pment | _ | City/County: | West | Linn/Clackamas | Samp | oling Date: | 1/29 | 9/2024 |
|------------------------------------|---------------|--------------|------------|--------|----------------|------------------|------------------------------|---------------|--------------------------------|---|---------------|
| pplicant/Owner: Fo | orward V | ision Dev | /elopme | nt | | | State: | OR | | Sampling Point: | 17 |
| nvestigator(s): | | CM | | | Section, To | ownship, Range: | | S 2, | T 3S, R 1E | | |
| andform (hillslope, terra | ace, etc.:) | | Sv | vale | | Local relief (co | oncave, convex, none): | Co | ncave | Slope (%): | 3 |
| Subregion (LRR): | | LRRA | | | Lat: | 45.34 | 48 Long: | -122 | 2.6394 | Datum: | WGS84 |
| Soil Map Unit Name: | | | Wap | ato si | ilty clay loam | <u> </u> | NWI CI | assification: | | N/A | |
| are climatic/hydrologic co | | | | | | Yes | X No | | (if no, explai | in in Remarks) | |
| re vegetation | | | | | | urbed? | Are "Normal Circumstan | ıces" presen | it? (Y/N) | Υ | |
| | | | | | _ | | d, explain any answers in Re | | • | | |
| | | - ' | 0, | | , , | | ·,q , | , | | | |
| UMMARY OF FIN | 1DINGS | - Attacl | h site n | nap s | showing san | npling point | locations, transect | s, import | ant featu | res, etc. | |
| ydrophytic Vegetation F | resent? | Yes | Χ | No | | Is Sampled Ar | within | | | | |
| ydric Soil Present? | | Yes | Χ | No | | a Wetlar | | X | N | lo | |
| etland Hydrology Prese | ent? | Yes | Х | No | | | | | | · <u></u> | |
| emarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| EGETATION - Us | se scien | tific nam | nes of p | olant: | .s | | | | | | |
| | · | | absolu | | Dominant | Indicator | Dominance Test wo | rksheet: | | | · |
| ree Stratum (plot size | | , | % cove | er | Species? | Status | Number of Dominant Co. | | | | |
| | e: | | | | | | Number of Dominant Spe | | | 2 | /A) |
| 1 | | | | | | | That are OBL, FACW, or | · FAC: | | 3 | (A) |
| ² 3 | | | | | | | . Total Number of Domina | nt | | | |
| ² 4 | | | | | | | Species Across All Strata | | | 4 | (B) |
| * | | | | | = Total Cover | | Species Adioss All Otrace | 1. | | | (D) |
| | | | | | - Total Gove | | | | | | |
| apling/Shrub Stratum | | e: 15 | - ′ | | ., | | Percent of Dominant Spe | | _ | | |
| 1 Rubus armeniac | us | | 5 | | X | FAC | That are OBL, FACW, o | r FAC: | | 75% | (A/B) |
| 2 | | | | | | | Durantan an Implant NA | | | | |
| 3 | | | | | | | Prevalence Index W | orksneet. | | | |
| 4 5 | | | | | | | Total % Cover of OBL Species | - | Multiply by: x 1 = | _ 0 | |
| <i></i> | | | | | = Total Cover | | FACW species | | x 1 = x 2 = | 0 | |
| | | | | | - TOTAL COVE | | FACW species FAC Species | | x 2 = | 0 | |
| lerb Stratum (plot size | .e: | 5) | | | | | FACU Species | | x 4 = | 0 | |
| Schedonorus art | undinace | eus | 50 | | X | FAC | UPL Species | | x 5 = | 0 | |
| Dactylis glomera | ata | | 20 | | Х | FACU | Column Totals | 0 | (A) | 0 | (B) |
| 3 Unidentified gras | ss | | 20 | | X | (FAC) | | | | | |
| 4 Cirsium arvense | , | | 10 | | | FAC | Prevalence Index = | =B/A = | #0 | OIV/0! | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | Hydrophytic Vegeta | tion Indica | ators: | | |
| 7 | | | | | | | . | - | | phytic Vegetatior | n |
| 8 | | | | | | | X | - | nce Test is >5 | | |
| | | | 100 | | = Total Cover | | | | ce Index is ≤ | | ····nartina |
| /dulling Stratum (| (plot size: | | ١ | | | | | - | | ations ¹ (provide s | |
| / <u>oody Vine Stratum</u> (i 1 | pior size. | | _' | | | | | | marks or on a Non-Vascula | a separate sheet) ar Plants ¹ |) |
| <u> </u> | | | | | | | | - | | ar Flants c Vegetation ¹ (E) | vnlain) |
| | | | | | = Total Cover | | Indicators of hydric soil | - | | | |
| | | | | — | = Total Cover | | disturbed or problematic. | | Hydrology in | ust be present, t | IIIICOO |
| | | | | | | | Hydrophytic | | | | |
| 6 Bare Ground in Herb S | Stratum | | 0 | _ | | | Vegetation | Yes | X | No | |
| % Bare Ground in Herb (| | | | | | | Present? | | | | |

| | | PHS# | 7298 | _ | | Sampling Point: | 17 |
|--|---|---|--|--|---|---|------------------------|
| Profile Description: (Describe | to the depth | needed to docume | nt the indicator or | confirm the absen | ce of indicators.) | | |
| Depth Ma | | | Redox Features | | _ | | |
| (Inches) Color (mois | <u> </u> | Color (moist) | % Type | Loc ² | Texture | Remarks | |
| 0-5 10YR 3/3 | 100 | | | | Loam | | |
| 5-7 10YR 3/2 | 50 | | | | Loam | | |
| 5-7 10YR 3/3 | 50 | | | | Loam | | |
| 7-15 10YR 3/2 | 60 | 10YR5/6 | 3C | M | Loam | Medium | |
| 7-15 10YR 3/3 | 35 | 10YR5/6 | 2 C | М | Loam | Medium | |
| | | | | | | | |
| | | | | | | | |
| Type: C=Concentration, D=De | | | | | ladi | ² Location: PL=Pore Lining, M=Matrix. | |
| ydric Soil Indicators: (A | ppiicable to | all LRRS, unles | | • | inai | cators for Problematic Hydric Soils ³ : | : |
| Histosol (A1) | | | Sandy Re | | | 2 cm Muck (A10) | |
| Histic Epipedon | (A2) | | Stripped I | Matrix (S6) | | Red Parent Material (TF2) | |
| Black Histic (A3) | | | Loamy M | ucky Mineral (F1) (| except MLRA 1) | Very Shallow Dark Surface (| (TF12) |
| Hydrogen Sulfide | e (A4) | | Loamy G | leyed Matrix (F2) | | Other (explain in Remarks) | |
| Depleted Below | Dark Surface (/ | A11) | Depleted | Matrix (F3) | | | |
| Thick Dark Surfa | ce (A12) | | X Redox Da | ark Surface (F6) | | | |
| Sandy Mucky Mi | | | | Dark Surface (F7) | | ³ Indicators of hydrophytic vegetation and v | |
| Sandy Gleyed M | , , | | | epressions (F8) | | hydrology must be present, unless disturt problematic. | bed or |
| | ed soils, no | rmal conditions | present. | | Hydric Soil Pre | esent? Yes X No | |
| lixed matrix, old disturb | | rmal conditions | present. | | Injunic 3011 Fre | | |
| lixed matrix, old disturb IYDROLOGY Vetland Hydrology Indic | ators: | | | | Injunic 3011 Fre | | quired) |
| IYDROLOGY /etland Hydrology Indic | ators: m of one req | | nat apply) | ined Leaves (B9) (| | Secondary Indicators (2 or more rec | quired) |
| IYDROLOGY Vetland Hydrology Indic | ators: m of one req | | nat apply) | nined Leaves (B9) (and 4B) | | | quired) |
| IXPDROLOGY /etland Hydrology Indic rimary Indicators (minimu Surface Water (A | ators: m of one req | | nat apply) Water sta | and 4B) | | Secondary Indicators (2 or more rec Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) | quired) |
| YDROLOGY /etland Hydrology Indic rimary Indicators (minimu Surface Water (A High Water Tabl X Saturation (A3) | ators: m of one req A1) e (A2) | | nat apply) Water sta 1, 2, 4A, | and 4B) t (B11) | | Secondary Indicators (2 or more recomplete Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) | |
| IYDROLOGY /etland Hydrology Indic rimary Indicators (minimu Surface Water (A X High Water Tabl X Saturation (A3) Water Marks (B | m of one req | | nat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir | and 4B) t (B11) nvertebrates (B13) | Except MLRA | Secondary Indicators (2 or more ree Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. | 2) |
| IYDROLOGY Vetland Hydrology Indic Irimary Indicators (minimu Surface Water (A X High Water Tabl X Saturation (A3) Water Marks (B4 Sediment Depos | m of one requal) e (A2) its (B2) | | nat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger | and 4B) t (B11) nvertebrates (B13) s Sulfide Odor (C1) | Except MLRA | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial | 2) |
| IYDROLOGY Vetland Hydrology Indic Verimary Indicators (minimus Surface Water (A X High Water Tabl X Saturation (A3) Water Marks (B Sediment Deposits (B | m of one requal) e (A2)) its (B2) | | mat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized | and 4B) t (B11) nvertebrates (B13) s Sulfide Odor (C1) Rhizospheres alon | Except MLRA g Living Roots (C3) | Secondary Indicators (2 or more reconstruction Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial X Geomorphic Position (D2) | 2) |
| Netland Hydrology Indicators (minimumary Indi | m of one requal) e (A2)) its (B2) 3) et (B4) | | mat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence | and 4B) t (B11) nvertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (6) | Except MLRA g Living Roots (C3) | Secondary Indicators (2 or more reconstruction Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C.) X Saturation Visible on Aerial (C.) X Geomorphic Position (D2) Shallow Aquitard (D3) | 2) |
| HYDROLOGY Vetland Hydrology Indicators (minimus Surface Water (A High Water Table X Saturation (A3) Water Marks (B4 Sediment Deposits (B4 Algal Mat or Cruster Iron Deposits (B4 Iron Deposits | ators: m of one req (A1) e (A2)) its (B2) (3) st (B4) | | mat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Iri | and 4B) t (B11) evertebrates (B13) s Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (C) on Reduction in Pla | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial (C.) X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) | 2) Imagery |
| HYDROLOGY Vetland Hydrology Indic Verimary Indicators (minimus Surface Water (A X High Water Tabl X Saturation (A3) Water Marks (B Sediment Deposits (B Algal Mat or Cruliron Deposits (B Surface Soil Cra | ators: m of one req (A1) e (A2)) its (B2) (B4) (b) cks (B6) | juired; check all th | mat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted o | and 4B) t (B11) evertebrates (B13) s Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (con Reduction in Plants (con Stressed Pl | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LF | 2) Imagery RR A) |
| HYDROLOGY Vetland Hydrology Indicators (minimus Surface Water (A High Water Table X Saturation (A3) Water Marks (B4 Sediment Deposits (B4 Algal Mat or Cruster Iron Deposits (B4 Iron Deposits | m of one requal) (A1) (A2) (A2) (A3) (A3) (A4) (A4) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6 | juired; check all th | mat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted o | and 4B) t (B11) evertebrates (B13) s Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (C) on Reduction in Pla | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial (C.) X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) | 2) Imagery RR A) |
| IYDROLOGY Vetland Hydrology Indic Primary Indicators (minimumature Water (Amarks (Bartana Marks | m of one requal) (A1) (A2) (A2) (A3) (A3) (A4) (A4) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6 | juired; check all th | mat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted o | and 4B) t (B11) evertebrates (B13) s Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (con Reduction in Plants (con Stressed Pl | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LF | 2) Imagery RR A) |
| HYDROLOGY Vetland Hydrology Indic Primary Indicators (minimumary Ind | m of one requal) (A1) (b) (c) (d) (d) (d) (d) (d) (e) (e) (e) (e) (e) (f) (f) (f) (f) (f) (f) (f) (f) (f) (f | quired; check all the | Mater sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent In Stunted c | and 4B) t (B11) evertebrates (B13) s Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (con Reduction in Plants (con Stressed Pl | Except MLRA g Living Roots (C3) C4) owed Soils (C6) | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LF | 2) Imagery RR A) |
| HYDROLOGY Vetland Hydrology Indic Primary Indicators (minimulations) Surface Water (A. Water Table X. Saturation (A3) Water Marks (B. Sediment Deposits (B. Algal Mat or Crularon Deposits (B. Surface Soil Cralarundation Visible Sparsely Vegetations: Sield Observations: | m of one requal) (A1) (B) (A2) (C) (B2) (B3) (B4) (B4) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C | quired; check all the agery (B7) urface (B8) | Mater sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex | and 4B) t (B11) nvertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (con Reduction in Place or Stressed Plants (con plain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial I X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LF X Frost-Heave Hummocks (D7) | 2) Imagery RR A) |
| X High Water Tabl X Saturation (A3) Water Marks (B' Sediment Deposits (B' Algal Mat or Cru- Iron Deposits (B' Surface Soil Cra Inundation Visibl Sparsely Vegeta Field Observations: Surface Water Present? Yes Saturation Present? Yes | ators: m of one req A1) e (A2)) its (B2) 3) st (B4) 5) cks (B6) e on Aerial Ima | quired; check all the | Mater sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent In Stunted c | and 4B) t (B11) evertebrates (B13) s Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (con Reduction in Plants (con Stressed Pl | g Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LF | 2) Imagery RR A) |
| HYDROLOGY Vetland Hydrology Indic Primary Indicators (minimus Surface Water (A X High Water Table X Saturation (A3) Water Marks (BA Sediment Deposits (BA Algal Mat or Cruler Deposits (BA Surface Soil Craler Deposits (BA Inundation Visible Sparsely Vegeta Field Observations: Surface Water Present? Yese Saturation Present? Yese Includes capillary fringe) | ators: m of one req (A1) e (A2)) its (B2) (B3) st (B4) (Cks (B6) e on Aerial Imaled Concave S X X | guired; check all the segrence (B7) urface (B8) No X No N | mat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent In Stunted c Other (Ex Depth (inches): Depth (inches): | and 4B) t (B11) nvertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Place or Stressed Plants (Con Remarks) Remarks) | g Living Roots (C3) C4) bwed Soils (C6) D1) (LRR A) Wetland Hy | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LECT) X Frost-Heave Hummocks (D7) drology Present? | 2) Imagery RR A) |
| Algal Mat or Crulor Drift Deposits (B. Surface Soil Cralon Deposit | ators: m of one req (A1) e (A2)) its (B2) (B3) st (B4) (Cks (B6) e on Aerial Imaled Concave S X X | guired; check all the segrence (B7) urface (B8) No X No N | mat apply) Water sta 1, 2, 4A, Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent In Stunted c Other (Ex Depth (inches): Depth (inches): | and 4B) t (B11) nvertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (Con Reduction in Place or Stressed Plants (Con Remarks) Remarks) | g Living Roots (C3) C4) bwed Soils (C6) D1) (LRR A) Wetland Hy | Secondary Indicators (2 or more red Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C. X Saturation Visible on Aerial X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LECT) X Frost-Heave Hummocks (D7) drology Present? | 2) Imagery RR A) |

7298

| Project/Site: Rivianna | Beach Deve | elopment | City/County: | West | Linn/Clackamas | Sampling Date: | 1/29/ | 2024 |
|--------------------------------|-----------------|-------------------|---------------------|---------------------|--|-------------------------------------|---------------------------------|-----------|
| pplicant/Owner: Forwa | rd Vision D | Developmen | ıt | | State: | OR | Sampling Point: | 18 |
| nvestigator(s): | СМ | | Section, T | Township, Range: | | S 2, T 3S, R 1 | E | |
| andform (hillslope, terrace, e | ic.:) | Sw | rale | Local relief (co | oncave, convex, none): | Concave | Slope (%): | 3 |
| Subregion (LRR): | LRF | RA | Lat: | 45.34 | 48 Long: | -122.6394 | Datum: | WGS84 |
| Soil Map Unit Name: | | Wapa | ato silty clay loam | 1 | NWI CI | assification: | N/A | |
| re climatic/hydrologic conditi | ons on the site | e typical for th | is time of year? | Yes | X No | (if no, expl | ain in Remarks) | |
| are vegetation Soil _ | ori | Hydrology | significantly di | sturbed? | Are "Normal Circumstar | ices" present? (Y/N) | Y | |
| re vegetation Soil | or | Hydrology | naturally probl- | ematic? If needed | d, explain any answers in R | emarks.) | | |
| | | · | | | | | | |
| SUMMARY OF FINDIN | | | ap showing sa | mpling point | l locations, transect | s, important feat | ures, etc. | |
| ydrophytic Vegetation Prese | | X | No | Is Sampled A | rea within | | | |
| ydric Soil Present? | Yes | | No X | a Wetla | | | No X | |
| /etland Hydrology Present? | Yes | X | No | | | | | |
| emarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| EGETATION - Use s | cientific na | • | | 1 1: 1 | la · | | | |
| | | absolut % cove | | Indicator Status | Dominance Test wo | rksneet: | | |
| ree Stratum (plot size: | |) | | | Number of Dominant Spe | ecies | | |
| 1 | | - | | | That are OBL, FACW, or | FAC: | 2 (| (A) |
| 2 | | | | | | | | |
| 3 | | | | | Total Number of Domina | nt | | |
| 4 | | | | | Species Across All Strata | a: | 3 (| B) |
| | | 0 | = Total Cover | | | | | |
| apling/Shrub Stratum (plo | ot size: 15 | <u> </u> | | | Percent of Dominant Spe | ecies | | |
| 1 Rubus armeniacus | | ′ | х | FAC | That are OBL, FACW, o | | 67% (| A/B) |
| 2 | | - | _ | | • | | | , |
| 3 | | - | _ | | Prevalence Index W | orksheet: | | |
| 4 | | | | | Total % Cover of | Multiply by | : | |
| 5 | | | | | OBL Species | x 1 = | 0 | |
| | | 5 | = Total Cover | | FACW species | x 2 = | 0 | |
| | | | _ | | FAC Species | x 3 = | 0 | |
| erb Stratum (plot size: | 5 | _) | | | FACU Species | x 4 = | 0 | |
| Schedonorus arundi | naceus | 40 | X | FAC | UPL Species | x 5 = | 0 | |
| Dactylis glomerata | | 30 | X | FACU | Column Totals | 0 (A) | (| B) |
| Daucus carota | | 10 | | FACU | | | -n | |
| Unidentified grass | | _ 10 | | (FAC) | Prevalence Index = | =B/A = # | :DIV/0! | |
| Jacobaea vulgaris | | | | FACU | . I budua u bu dia Manada | tion Indicators. | | |
| Cirsium arvense | | 5 | | FAC | Hydrophytic Vegeta | | | |
| 7 3 | | | | | - <u> </u> | 1- Rapid Test for Hydronic Test is: | . , . | |
| | | 105 | = Total Cover | | <u> </u> | 3-Prevalence Index is | | |
| | | 103 | Total Cover | | | 4-Morphological Adapt | | upporting |
| oody Vine Stratum (plot s | ize: |) | | | | data in Remarks or on | | |
| 1 | | | | | | 5- Wetland Non-Vascu | ılar Plants ¹ | |
| 2 | | | | | - | Problematic Hydrophy | tic Vegetation ¹ (Ex | plain) |
| | | 0 | = Total Cover | | ¹ Indicators of hydric soil a | and wetland hydrology r | must be present, u | nless |
| | | - | _ | | disturbed or problematic. | | | |
| | | | | | Hydrophytic | | | |
| ն Bare Ground in Herb Stratu | | 0 | | | Vegetation | Yes X | No | |

| Surface Water (A1) High Water Table (A2) Naturation (A3) Salt Crust (B11) Water Marks (B1) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Stained Leaves (B9) (Except MLRA (MLRA1, 2, 4A, and 4B) (MLRA1, 2, 4A, and 4B) Oralinage Patterns (B10) Drainage Patterns (B10) Draina | | | | PHS# | 7298 | | | Sampling Point: 18 |
|--|---|---|---|---|--|--|--|---|
| Goder (model) St. Color (model) St. Color (model) St. Types Lors* Teature Remarks | • | • | the depth | needed to docume | | | ce of indicators.) | |
| 10-17 10YR 3/3 100 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 C M M Loam Fine 10-18 10 10YR 3/4 1 M Loam Fine 10-18 10 10YR 3/ | • | - | | | | 1 0 | _ | |
| 10-17 10YR 3/3 88 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-18 10 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-18 10 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-18 10 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-18 10 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-18 10 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-18 10 10YR 3/2 10 10YR 3/4 1 C M Loam Fine 10-18 10 10YR 3/4 1 C M Loam F | | | | Color (moist) | | e Loc | | Remarks |
| 10-17 10YR 3/2 10 10YR 3/4 1 C M Loam Fine | | | | | | | Loam | |
| Type: C=Concentration, D=Depletion, RM=Reduced Maints, C3=Cowered or Coated Sand Grains. Public Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoco (A1) Histoco (A2) Sandy Rodox (S5) Black Histo, (A3) Loarry Rodox (S5) Black Histo, (A3) Loarry Movey Marris (F2) Black Histo, (A3) Depletion Boundary (P2) Depletion Boundary (P3) Thick Dank Surface (A11) Depletion Maints, (F2) Thick Dank Surface (A12) Sandy Movey Mineral (S1) Sandy Rodox Dank Surface (A12) Rodox Dank Surface (F1) Thick Dank Surface (A12) Rodox Dank Surface (F1) Sandy Movey Mineral (S1) Sandy Clayed Maints (S4) Rodox Depressions (F8) Redox | 10-17 | 10YR 3/3 | 88 | | | | Loam | Fine |
| Histosol (A1) Sandy Rodox (S5) | 10-17 | 10YR 3/2 | 10 | 10YR 3/4 | 1C | <u> </u> | Loam | Fine |
| Hidicators: (Applicable to all LRRs, unless otherwise noted.) Hidiosoc (A1) Hidiosoc (A2) Biack Histic (A3) Learny Rucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Depleted Matrix (F2) Pepted Matrix (F2) Pepted Matrix (F2) Pepted Matrix (F2) Pepted Matrix (F2) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Pepted Matrix (F2) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Depressions (FB) Pepter (FF) Pepter (FF) Redox Depressions (FB) Hydric Soil Present? Yes No X No X ** ** ** ** ** ** ** ** ** | | | | | | | | |
| Hidrosol (A1) Sandy Rodox (S5) 2 cm Muck (A10) Hidrosol (A1) Sandy Rodox (S5) 2 cm Muck (A10) Hidrosol (A2) Surped Matrix (S6) Red Parent Material (TF2) Hidrogen Suffice (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Suffice (A4) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Suffice (A4) Loamy Gleyed Matrix (F2) Other (explain in Remarks) Depleted Below Dark Surface (A11) Pepted Matrix (F2) Sandy Mucky Mineral (S1) Depleted Matrix (F2) Sandy Mucky Mineral (S1) Depleted Matrix (F2) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Pepted Matrix (F2) Pepth (inches): Wetland Hydrology Indicators Wetland Hydrology Indicators Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water Table (A2) 1, 2, 4A, and 4B) Water stained Leaves (B0) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Sesson Water Table (C2) Sudment Deposits (B2) Hydrogen Sulfide Odor (C1) Saluration (Value) Cape (B3) October (B3) October (B4) Presence of Reduced Iron (C4) Saluration (Value) Cape (B3) Surface (B5) Surface (B5) Surface (B5) Surface (B5) Presence (B5) Surface (B6) Su | | | | | | | | <u> </u> |
| Histosol (A1) Sandy Redox (S5) | | | | | | | | <u> </u> |
| Histosol (A1) Sandy Redox (S5) | | | | | | | | |
| Histosol (A1) Histo Epipedon (A2) Histo Epipedon (A2) Black Histo (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Loamy Gleyed Matrix (F2) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Phick Dark Surface (A12) Back Histo (A3) Depleted Dark Surface (F7) Phick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (FB) Westrictive Layer (if present): White Dark Surface (F7) Westrictive Layer (if present): White Dark Surface (F7) Westrictive Layer (if present): Westrictive Layer (if present): White Dark Surface (F7) Westrictive Layer (if present): White Dark Surface (F7) Westrictive Layer (if present): Westrictive Laye | Гуре: C=Conce | entration, D=Depletion | on, RM=Re | educed Matrix, CS=0 | Covered or Coated | I Sand Grains. | | ² Location: PL=Pore Lining, M=Matrix. |
| Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (F12) Phytorogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Bucky Mineral (S1) Pepleted Dark Surface (F6) Sandy Gleyed Matrix (E4) Redox Dark Surface (F7) **No Extrictive Layer (if present): **PREDICTION OF The Surface (F7) **Present (| lydric Soil In | ndicators: (Appli | cable to | all LRRs, unless | s otherwise no | ted.) | Indi | cators for Problematic Hydric Soils ³ : |
| Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (TF12) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Problematic (| Hi | istosol (A1) | | | Sandy I | Redox (S5) | | 2 cm Muck (A10) |
| Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Other (explain in Remarks) Depleted Ballow Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Musky Mineral (S1) Depleted Dark Surface (F7) Pedicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Musky Mineral (S1) Pedicators (F8) Present? Yes No X Setrictive Layer (if present): | Hi | istic Epipedon (A2) | | | Strippe | d Matrix (S6) | | Red Parent Material (TF2) |
| Depleted Below Dark Surface (A12) Redox Dark Surface (F5) Sandy Mucky Mineral (R1) Depleted Dark Surface (F6) Sandy Mucky Mineral (R1) Pepeted Dark Surface (F7) Sandy Gleyed Matrix (R3) Redox Depressions (F8) Problematic Restrictive Layer (If present): Popeted Dark Surface (R7) Problematic | BI | lack Histic (A3) | | | Loamy | Mucky Mineral (F1) (| except MLRA 1) | Very Shallow Dark Surface (TF12) |
| Depleted Below Dark Surface (A12) Redox Dark Surface (F5) Sandy Mucky Mineral (R1) Depleted Dark Surface (F6) Sandy Mucky Mineral (R1) Pepeted Dark Surface (F7) Sandy Gleyed Matrix (R3) Redox Depressions (F8) Problematic Restrictive Layer (If present): Popeted Dark Surface (R7) Problematic | | • • | .) | | Loamy | Gleyed Matrix (F2) | | |
| Thick Dark Surface (A12) | | | • | \11) | | | | , |
| Sandy Mucky Mindral (S1) | Tr | · hick Dark Surface (<i>I</i> | A12) | , | | | | |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) problematic. Restrictive Layer (if present): ype: | Sa | andy Mucky Mineral | (S1) | | Deplete | ed Dark Surface (F7) | | , , , , |
| Hydric Soil Present? Yes No X | | | | | | | | |
| Pepth (inches): | | | | | | 1 (-7 | 1 | <u>'</u> |
| Secondary Indicators: Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required | | | | | | | | |
| Surface Water (A1) Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (Except MLRA (MLRA1, 2, 4A, and 4B) (MLRA1, 2, 4A, and 4B) X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (B7) Recent Iron Reduction in Plowed Soils (C6) Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Iteld Observations: urface Water Present? Yes No Depth (inches): 13 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No No Depth (inches): 14 Wetland Hydrology Present? Yes A No Depth (inches): 0-2; 10 Yes X No No Depth (inches): 15 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No No Depth (inches): 15 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No No Depth (inches): 15 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No No Depth (inches): 15 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No No Depth (inches): 15 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No No Depth (inches): 15 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No Depth (inches): 15 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No Depth (inches): 15 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No Depth (inches): 15 Wetland Hydrology Present? Yes X No Depth (inches): 0-2; 10 Yes X No Depth (| | | | | | | | |
| High Water Table (A2) X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Dry-Season Water Table (C2) Sediment Deposits (B2) Drift Deposits (B3) Dry-Season Water Table (C2) Sediment Deposits (B3) Dry-Season Water Table (C2) Sediment Deposits (B3) Dry-Season Water Table (C2) 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) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Selfeld Observations: Frost-Heave Hummocks (D7) Wetland Hydrology Present? Ves X No Depth (inches): Depth (inches): 13 Wetland Hydrology Present? Ves X No Depth (inches): 0-2; 10 Yes X No Prescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | _ | . c.ogya.ca.co. | s: | | | | | |
| X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) X Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: urface Water Present? Yes No X Depth (inches): 13 Wetland Hydrology Present? Ves X No Depth (inches): 0-2; 10 Yes X No No Depth (inches): 14 Yes X No No No Depth (inches): 15 Yes X No No Depth (inches): 16 Yes X No No Depth (inches): 17 Yes X No No Depth (inches): 18 Yes X No No Depth (inches): 19 Yes X | Sı | ators (minimum o | | uired; check all th | nat apply) | | | Secondary Indicators (2 or more required) |
| Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Furface Water Present? Yes | | ` | | uired; check all th | 11.77 | stained Leaves (B9) (| Except MLRA | |
| Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reductor in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: urface Water Present? Yes | | urface Water (A1) | f one req | uired; check all th | Waters | | Except MLRA | Water stained Leaves (B9) |
| Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Plowed Soils (C6) Fac-Neutral Test (D5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Ield Observations: urface Water Present? Yes No X Depth (inches): Vater Table Present? Yes X No Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Hi | urface Water (A1) ligh Water Table (A2 | f one req | uired; check all th | Water s | A, and 4B) | Except MLRA | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Ield Observations: Urface Water Present? Yes X No Depth (inches): Jater Table Present? Yes X No Depth (inches): Jaturation Present? Yes X No Depth (inches): Jaturation Present? Yes X No Depth (inches): Joseph (inches) | Hi X Sa | urface Water (A1) ligh Water Table (A2 aturation (A3) | f one req | uired; check all th | Water s 1, 2, 4A Salt Cru | A, and 4B) ust (B11) | Except MLRA | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) |
| Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes No X Depth (inches): //ater Table Present? Yes X No Depth (inches): 13 Wetland Hydrology Present? aturation Present? Yes X No Depth (inches): 0-2; 10 Yes X No | X Sa | urface Water (A1) ligh Water Table (A2 aturation (A3) Vater Marks (B1) | f one req | uired; check all th | Water s 1, 2, 4A Salt Cru Aquatic | ust (B11) Invertebrates (B13) | | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) |
| Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Frield Observations: Furface Water Present? Yes | X Sa W Se | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (E | f one req | uired; check all th | Water s 1, 2, 4A Salt Cru Aquatio | a, and 4B) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) | | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery |
| Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Furface Water Present? Yes | Hi X Sa W Se Dr | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) | f one req | uired; check all th | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize | a, and 4B) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon | g Living Roots (C3) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) |
| Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes | Hi X Sa W Se Dr Alp | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) lgal Mat or Crust (B4 on Deposits (B5) | f one req 2) 32) 4) | uired; check all th | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Presen | ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (0 | g Living Roots (C3) C4) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) |
| Field Observations: Surface Water Present? Yes | Hi X Sa W Se Dr Alp | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) lgal Mat or Crust (B4 on Deposits (B5) | f one req 2) 32) 4) | uired; check all th | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Present Recent | a, and 4B) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (C) Iron Reduction in Plo | g Living Roots (C3) C4) owed Soils (C6) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) |
| Surface Water Present? Yes | Hi X Sa W Se Dr All Irc Su | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) Igal Mat or Crust (B4 on Deposits (B5) urface Soil Cracks (aundation Visible on | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Present Recent Stunted | a, and 4B) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (C) Iron Reduction in Plot d or Stressed Plants (| g Living Roots (C3) C4) owed Soils (C6) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| Vater Table Present? Yes X No Depth (inches): 13 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): 0-2; 10 Yes X No Depth (inches): 0-2; 10 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Hi X Sa W Se Dr All Irc Su | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) Igal Mat or Crust (B4 on Deposits (B5) urface Soil Cracks (aundation Visible on | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Present Recent Stunted | a, and 4B) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (C) Iron Reduction in Plot d or Stressed Plants (| g Living Roots (C3) C4) owed Soils (C6) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| Saturation Present? Yes X No Depth (inches): 0-2; 10 Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Hi X Sa W Se Dr All Iro Su Int Sp | urface Water (A1) ligh Water Table (A2 aturation (A3) Vater Marks (B1) ediment Deposits (B3) lgal Mat or Crust (B4 on Deposits (B5) urface Soil Cracks (aundation Visible on parsely Vegetated C | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Present Recent Stunted | a, and 4B) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (C) Iron Reduction in Plot d or Stressed Plants (| g Living Roots (C3) C4) owed Soils (C6) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | Hi X Sa W Se Dr All Irc Su Int Sp | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) lgal Mat or Crust (B4 on Deposits (B5) urface Soil Cracks (nundation Visible on parsely Vegetated C | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) | Water s 1, 2, 4A Salt Cru Aquatio Hydrog Oxidize Present Recent Stuntec Other (I | a, and 4B) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (C1) Iron Reduction in Plot or Stressed Plants (Explain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| | Hi X Sa W Se Dr All Irc Su Int Sp Field Observa | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) lgal Mat or Crust (B2 on Deposits (B5) urface Soil Cracks (aundation Visible on parsely Vegetated C ations: Present? Yes | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) ırface (B8) | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Present Recent Stunted Other (I | a, and 4B) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (C Iron Reduction in Plo d or Stressed Plants (Explain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| | Hi X Sa W Sa Dr All Irc Su Int Sp Field Observa Surface Water P Water Table Pre Saturation Prese | urface Water (A1) ligh Water Table (A2 aturation (A3) Vater Marks (B1) ediment Deposits (B3) lgal Mat or Crust (B4 on Deposits (B5) urface Soil Cracks (aundation Visible on parsely Vegetated C ations: Present? Yes ent? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave Sc X | gery (B7) urface (B8) No <u>X</u> No | Water's 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Present Recent Stuntec Other (I | a, and 4B) ust (B11) Invertebrates (B13) en Sulfide Odor (C1) d Rhizospheres alon ce of Reduced Iron (C Iron Reduction in Plot d or Stressed Plants (Explain in Remarks)): 13 | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| emarks: | Hi X Sa W Se Dr Ala Irc Su Inn Sp Field Observa Surface Water P Water Table Pre Saturation Prese includes capillary to | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) lgal Mat or Crust (B4 on Deposits (B5) urface Soil Cracks (nundation Visible on parsely Vegetated Co ations: Present? Yes esent? Yes ent? Yes fringe) | f one req 2) 32) 4) B6) Aerial Ima Concave St X X | gery (B7) urface (B8) No No No | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Present Recent Stunted Other (I | ust (B11) Invertebrates (B13) Invertebrates (B | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hy | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| emarks: | Hi X Sa W Se Dr Ala Irc Su Inn Sp Field Observa Surface Water P Water Table Pre Saturation Prese includes capillary to | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) lgal Mat or Crust (B4 on Deposits (B5) urface Soil Cracks (nundation Visible on parsely Vegetated Co ations: Present? Yes esent? Yes ent? Yes fringe) | f one req 2) 32) 4) B6) Aerial Ima Concave St X X | gery (B7) urface (B8) No No No | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Present Recent Stunted Other (I | ust (B11) Invertebrates (B13) Invertebrates (B | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hy | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| THE PARTY OF THE P | Hi X Sa W Se Dr Ale Irc Su Int Sp Field Observa Surface Water P Water Table Pre Saturation Prese includes capillary f | urface Water (A1) igh Water Table (A2 aturation (A3) /ater Marks (B1) ediment Deposits (B3) lgal Mat or Crust (B4 on Deposits (B5) urface Soil Cracks (nundation Visible on parsely Vegetated Co ations: Present? Yes esent? Yes ent? Yes fringe) | f one req 2) 32) 4) B6) Aerial Ima Concave St X X | gery (B7) urface (B8) No No No | Water s 1, 2, 4A Salt Cru Aquatic Hydrog Oxidize Present Recent Stunted Other (I | ust (B11) Invertebrates (B13) Invertebrates (B | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hy | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |

7298

| oject/Site: Riv | vianna Bea | ch Develo | pment | City/County: | West | Linn/Clackamas | Samp | oling Date: | 1/29 | /2024 |
|---|---------------------|---------------|-------------------|---------------------|---------------------------|--|----------------|------------------|------------------|--------|
| plicant/Owner: | Forward V | /ision Dev | velopmer | nt | | State | · OR | Sa | mpling Point: | 19 |
| · /estigator(s): | | СМ | | Section, T | ownship, Range: | | S 36, | T 2S, R 1E | | |
| andform (hillslope, te | errace, etc.:) | | Slo | | • • | ncave, convex, none): | | lone | Slope (%): | 3 |
| ubregion (LRR): | , , | LRRA | | Lat: | 45.34 | · | | 2.6392 | Datum: | |
| oil Map Unit Name: | | | | ito silty clay loam | | | lassification: | | N/A | |
| re climatic/hydrologic | | n the site tv | | | Yes | | | (if no, explain | | |
| | | | | | | | | • • • • | | |
| re vegetation | | _ | - | significantly dis | | Are "Normal Circumsta | • | it? (Y/N) | Y | |
| e vegetation | Soii | or Hyu | drology _ | naturally proble | matic? if needed | d, explain any answers in R | Remarks.) | | | |
| UMMARY OF F | FINDINGS | - Attacl | h site m | ap showing sa | mpling point | locations, transect | ts, impor | ant feature | es, etc. | |
| ydrophytic Vegetatio | | Yes | Х | No | | | | | | |
| ydric Soil Present? | | Yes | | No X | Is Sampled Ar a Wetlar | \/ | S | No | X | |
| vetland Hydrology Pro | resent? | Yes | Х | No | u Wellan | nd: | | • | | |
| emarks: | | | | | | | | | | |
| Illains. | | | | | | | | | | |
| | | | | | | | | | | |
| ==== A TION | | -161 | | | | | | | | |
| EGETATION - I | Use scien | tific nam | | | 1114 | T | | | | |
| | | | absolut % cove | | Indicator Status | Dominance Test wo | orksneet: | | | |
| ree Stratum (plot s | size: | 30) | | | | Number of Dominant Sp | oecies | | | |
| Populus balsa | mifera | | 20 | X | FAC | That are OBL, FACW, o | or FAC: | | 5 | (A) |
| Saliix sp | | | 10 | X | (FAC) | | | | | |
| Fraxinus latifo | olia | | 5 | | FACW | Total Number of Domina | ant | | | |
| ļ <u></u> | | | | | | Species Across All Strat | ta: | 8 | 3 | (B) |
| | | | 35 | = Total Cover | | | | | | |
| apling/Shrub Stratum | <u>n</u> (plot size | e: 15 |) | _ | | Percent of Dominant Sp | necies | | | |
| 1 Salix sp | T (Piot Size | · | _' | x | (FAC) | That are OBL, FACW, of | | 63 | 3% | (A/B) |
| Corylus cornu | ıta | | 20 | $-\frac{x}{x}$ | FACU | mataro obe, | JI 17.0. | | 76 | (100) |
| Rosa sp | tu | | 15 | $-\frac{x}{x}$ | (FAC) | Prevalence Index W | Vorksheet: | | | |
| Rubus armenia | acus | | 10 | | FAC | Total % Cover of | 70111011111 | Multiply by: | | |
| 5 Populus balsa | | | 10 | | FAC | OBL Species | _ | x 1 = | 0 | |
| · • • • • • • • • • • • • • • • • • • • | | | 100 | = Total Cover | | FACW species | 1 | x 2 = | 0 | |
| | | | | _ | | FAC Species | | x 3 = | 0 | |
| lerb Stratum (plot s | size: | 5) | | | | FACU Species | | x 4 = | 0 | |
| Unidentified gr | rass | | 20 | X | (FAC) | UPL Species | | x 5 = | 0 | |
| Polystichum m | nunitum | | 10 | x | FACU | Column Totals | 0 | (A) | 0 | (B) |
| 3 | | | | | | | | | | |
| 4 | | | | | | Prevalence Index | =B/A = | #DI | V/0! | |
| 5 | | | | | | | | | | |
| 6 | | | | | | Hydrophytic Vegeta | ation Indica | ators: | | |
| 7 | | | | | | | 1- Rapid Te | est for Hydroph | ıytic Vegetatior | n |
| 3 | | | | | | X | 2- Dominar | nce Test is >50 | 1% | |
| | | | 30 | = Total Cover | | | _ | ce Index is ≤ 3 | | |
| | | | | | | | _ | gical Adaptation | | |
| loody Vine Stratum | (plot size: | 30 | _) | | | | | narks or on a s | |) |
| | | | 75 | X | FACU | | _ | Non-Vascular | | |
| | | | | | | | _ | c Hydrophytic \ | | |
| 1 Hedera helix | | | | | | ¹ Indicators of hydric soil | and wetland | hydrology mus | st be present, ι | ınless |
| 1 Hedera helix | | | 75 | = Total Cover | | 1 | | | | |
| 1 Hedera helix 2 | | | 75 | = Total Cover | | disturbed or problematic |) . | | | |
| Hedera helix | b Stratum | | 75 70 | = Total Cover | | 1 | c. Yes | x | No | |

| SOIL | | | PHS # | 7298 | | | | Sampling Point: 19 |
|--|--|---|---------------------------------|---|--|--|---|--|
| | iption: (Describe to t | the depth | needed to docume | | | firm the abse | nce of indicators.) | |
| Depth | Matrix | % | 0-1 (| Redox F | - 1 | Loc ² | Tt | Davida |
| (Inches) | Color (moist) | | Color (moist) | % | Type' | LOC | Texture | Remarks |
| 0-8 | 10YR 2/2 | 100 | | | | | Silty Clay Loam | |
| 8-16 | 10YR 2/2 | 98 | 10YR 2/3 | | С | M | Silty Clay Loam | Fine; minor sand |
| | | | | | | | · | |
| | | | | | | | · —— | |
| | | | | | | | | |
| | | | | | | | - | |
| | centration, D=Depleti | | | | | | - | ² Location: PL=Pore Lining, M=Matrix. |
| lydric Soil | Indicators: (Appli | icable to | all LRRs, unless | s otherwise | e noted.) | | Indica | ators for Problematic Hydric Soils ³ : |
| | Histosol (A1) | | | Sa | andy Redox | x (S5) | | 2 cm Muck (A10) |
| | Histic Epipedon (A2) | | | Str | ripped Mat | rix (S6) | | Red Parent Material (TF2) |
| | Black Histic (A3) | | | Lo | amy Muck | y Mineral (F1) | (except MLRA 1) | Very Shallow Dark Surface (TF12) |
| | Hydrogen Sulfide (A4 | !) | | Lo | amy Gleye | ed Matrix (F2) | | Other (explain in Remarks) |
| | Depleted Below Dark | Surface (A | A11) | De | epleted Ma | trix (F3) | | |
| | Thick Dark Surface (A | | | Re | edox Dark | Surface (F6) | | |
| | Sandy Mucky Mineral | I (S1) | | De | epleted Dai | rk Surface (F7 |) | ³ Indicators of hydrophytic vegetation and wetland |
| | Sandy Gleyed Matrix | (S4) | | | - | essions (F8) | • | hydrology must be present, unless disturbed or problematic. |
| | Layer (if present): | | | | | . , | T | · |
| | s): | | | | | | Hydric Soil Pres | eent? Yes NoX |
| emarks: | | | | | | | Hydric Soil Pres | ent? Yes NoX |
| emarks: | | s: | | | | | Hydric Soil Pres | eent? Yes NoX |
| emarks: IYDROLO Vetland Hy | ogy | | uired; check all th | nat apply) | | | Hydric Soil Pres | Secondary Indicators (2 or more required) |
| HYDROLO Vetland Hy Primary India | IGY drology Indicator | | uired; check all th | W | | | Hydric Soil Pres | Secondary Indicators (2 or more required) Water stained Leaves (B9) |
| IYDROLO Vetland Hy rimary India | OGY drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 | of one req | uired; check all th | Wa | 2, 4A, and | I 4B) | | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) |
| IYDROLO Vetland Hy Irimary India X X | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) | of one req | uired; check all th | | 2, 4A, and | 1 4B) 11) | (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) |
| HYDROLO Vetland Hy Primary India X X | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | of one req | uired; check all th | Wa 1,Sa Aq | 2, 4A, and alt Crust (B quatic Inver | 1 4B) 11) rtebrates (B13 | (Except MLRA | Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) |
| IYDROLO Vetland Hy rimary India | OGY Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (E | of one req | uired; check all th | Wang Sa | 2, 4A, and alt Crust (B quatic Inver drogen Su | 1 4B) 11) rtebrates (B13 ulfide Odor (C1 | (Except MLRA | 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 |
| HYDROLO Vetland Hy Primary India X X | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) | of one requiped (2) | uired; check all th | | 2, 4A, and alt Crust (B quatic Inverded of the control of the cont | 1 4B) 11) rtebrates (B13 ılfide Odor (C1 zospheres alo | (Except MLRA))) ng Living Roots (C3) | 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) |
| HYDROLO Vetland Hy Primary India X X | drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- | of one requiped (2) | uired; check all th | Wa 1, Sa Aq Hy Ox | 2, 4A, and alt Crust (B quatic Inververse Suddington Sudidized Rhi. | 14B) 11) rtebrates (B13 ilfide Odor (C1 zospheres alo Reduced Iron | (Except MLRA)) ng Living Roots (C3) (C4) | 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) |
| HYDROLO Vetland Hy Primary India X X | 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) | of one req 2) 32) 4) | uired; check all th | W; 1, Sa Aq Hy Ox Pro | 2, 4A, and alt Crust (B quatic Inver drogen Su kidized Rhi. esence of ecent Iron F | 14B) 11) rtebrates (B13 ulfide Odor (C1 zospheres alo Reduced Iron Reduction in P | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) | 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) |
| HYDROLO Vetland Hy Primary India X X | Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B-1) Iron Deposits (B5) Surface Soil Cracks (| of one req (2) (32) (4) (86) | | Wii 1, Sa Aq Hy Ox Prr Re | 2, 4A, and alt Crust (B quatic Inver vdrogen Su kidized Rhi esence of lecent Iron F unted or Si | 14B) 11) rtebrates (B13 ulfide Odor (C1 zospheres alo Reduced Iron Reduction in P tressed Plants | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | 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) |
| X X | 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 (Inundation Visible on | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) | Wii 1, Sa Aq Hy Ox Prr Re | 2, 4A, and alt Crust (B quatic Inver vdrogen Su kidized Rhi esence of lecent Iron F unted or Si | 14B) 11) rtebrates (B13 ulfide Odor (C1 zospheres alo Reduced Iron Reduction in P | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | 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) |
| HYDROLO Vetland Hy Primary India X X | 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 (Inundation Visible on Sparsely Vegetated C | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) | Wii 1, Sa Aq Hy Ox Prr Re | 2, 4A, and alt Crust (B quatic Inver vdrogen Su kidized Rhi esence of lecent Iron F unted or Si | 14B) 11) rtebrates (B13 ulfide Odor (C1 zospheres alo Reduced Iron Reduction in P tressed Plants | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | 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) |
| HYDROLO Vetland Hy Primary India X X | 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 (Inundation Visible on Sparsely Vegetated Corvations: | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) urface (B8) | W: 1, Sa Aq Hy Ox Pro Re Sto | 2, 4A, and alt Crust (B quatic Inver drogen Su kidized Rhi. esence of l ecent Iron F unted or St ther (Explain | 14B) 11) rtebrates (B13 ulfide Odor (C1 zospheres alo Reduced Iron Reduction in P tressed Plants | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | 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) |
| HYDROLO Vetland Hy Primary India X X | 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 (Inundation Visible on Sparsely Vegetated Covations: | of one req 2) 32) 4) (B6) Aerial Ima Concave Si | gery (B7) urface (B8) | W: 1, Sa Aq Hy Ox Prr Re Sti Ott | 2, 4A, and alt Crust (B quatic Inververse Sudized Rhiesence of lecent Iron Funted or Sither (Explainment): | 14B) 11) rtebrates (B13 ilfide Odor (C1 zospheres alo Reduced Iron Reduction in P tressed Plants in in Remarks | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | 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) |
| HYDROLO Vetland Hy Primary India X X X Gield Obser Fourface Water Vater Table P Fourface India Fourface Prior India | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations: Present? Yes Present? Yes Present? Yes | of one req 2) 32) 4) (B6) Aerial Ima | gery (B7) urface (B8) | W: 1, Sa Aq Hy Ox Pro Re Sto | 2, 4A, and alt Crust (B quatic Inververse Sudiced Rhiesence of lecent Iron Funted or Sither (Explainment): | 14B) 11) rtebrates (B13 ulfide Odor (C1 zospheres alo Reduced Iron Reduction in P tressed Plants | (Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) | 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) |
| HYDROLO Vetland Hy Primary India X X X Gield Obser Furface Water Vater Table Periodudes capillar | 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 (Inundation Visible on Sparsely Vegetated Covations: Present? Yes | 2) 32) 4) (B6) Aerial Ima Concave St | gery (B7) urface (B8) No No No | W: 1, Sa Aq Hy Ox Pro Re Sto Ott Depth (in Depth (in | 2, 4A, and alt Crust (B quatic Inverdogen Suddized Rhi. esence of lecent Iron Funted or State (Explain ther (Explain ther (Explain thes): | tebrates (B13 alfide Odor (C1 zospheres alo Reduced Iron Reduction in P tressed Plants in in Remarks | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hyd | 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) |
| HYDROLO Vetland Hy Primary India X X X Gield Obser Furface Water Vater Table Periodudes capillar | drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations: Present? Yes Present? Yes Present? Yes | 2) 32) 4) (B6) Aerial Ima Concave St | gery (B7) urface (B8) No No No | W: 1, Sa Aq Hy Ox Pro Re Sto Ott Depth (in Depth (in | 2, 4A, and alt Crust (B quatic Inverdogen Suddized Rhi. esence of lecent Iron Funted or State (Explain ther (Explain ther (Explain thes): | tebrates (B13 alfide Odor (C1 zospheres alo Reduced Iron Reduction in P tressed Plants in in Remarks | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hyd | 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) |
| HYDROLO Vetland Hy Primary India X X X Gield Obser Furface Water Vater Table Periodudes capillar | 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 (Inundation Visible on Sparsely Vegetated Covations: Present? Yes | 2) 32) 4) (B6) Aerial Ima Concave St | gery (B7) urface (B8) No No No | W: 1, Sa Aq Hy Ox Pro Re Sto Ott Depth (in Depth (in | 2, 4A, and alt Crust (B quatic Inverdogen Suddized Rhi. esence of lecent Iron Funted or State (Explain ther (Explain ther (Explain thes): | tebrates (B13 alfide Odor (C1 zospheres alo Reduced Iron Reduction in P tressed Plants in in Remarks | (Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hyd | 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) |

7298

| roject/Site: Rivia | anna Bea | ch Develo | pment | _ C | ity/County: | West L | _inn/Clacka | amas | Sam | pling Date: | | 1/29/2 | 2024 |
|-----------------------------|--|--------------|----------|-----------|-----------------|-------------------|----------------|------------------------------------|-----------------------|---------------|-------------|-----------|------------|
| pplicant/Owner: F | orward V | ision Dev | velopme | nt | | | | State: | OR | _ | Sampling | Point: | 20 |
| vestigator(s): | | СМ | | | Section, To | ownship, Range: | | | S 36 | 5, T 2S, R | 1E | | |
| andform (hillslope, terra | ace, etc.:) | | Slo | ope | | Local relief (cor | ncave, conve | x, none): | Co | oncave | Slop | e (%): | 3 |
| ubregion (LRR): | | LRRA | | | Lat: | 45.345 | 58 | Long: | -12 | 22.6392 | | atum: | WGS84 |
| oil Map Unit Name: | | | Wapa | ato silty | clay loam | | | NWI CI | assification | n: | N | /A | |
| e climatic/hydrologic c | | | | | | Yes | x | No | | (if no, exp | lain in Rem | arks) | |
| e vegetation | | | | | nificantly dist | turbed? | Are "Norma | al Circumstan | nces" prese | ent? (Y/N) | ١ | ′ | |
| e vegetation | | | drology | | - | matic? If needed | | | | (') | | | |
| | | _ | | | arany prozie | | , оприши ши | | | | | | |
| UMMARY OF FI | <u>NDINGS</u> | - Attac | h site m | nap sho | wing sar | npling point | locations | , transect | s, impo | rtant feat | ures, et | c. | |
| drophytic Vegetation | Present? | Yes | Х | No | | Is Sampled Ar | a a velikla im | | | | | | |
| dric Soil Present? | | Yes | X | No | | a Wetlar | | Yes | Х | _ | No | | |
| etland Hydrology Pres | sent? | Yes | Х | No | | | | | | _ | | | |
| marks: | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| GETATION - U | se scien | tific nan | nes of r | olants. | | | | | | | | | |
| | | | absolu | | ominant | Indicator | Dominan | ce Test wo | rksheet: | | | | |
| | | | % cove | er S | species? | Status | | | | | | | |
| <u>ee Stratum</u> (plot siz | ze: | 30) | | | | | Number of I | Dominant Spe | ecies | | | | |
| Salix sp | | | 25 | | X | (FAC) | That are OF | BL, FACW, or | FAC: | | 6 | (/ | A) |
| Fraxinus latifolia | <u>a </u> | | 10 | | Х | FACW | | | | | | | |
| | | | | — — | | | | er of Domina | | | _ | | |
| · | | | | | | | Species Ac | ross All Strata | a: | | 6 | (I | 3) |
| | | | 35 | = T | otal Cover | | | | | | | | |
| pling/Shrub Stratum | (plot size | e: 15 | _) | | | | Percent of [| Dominant Spe | ecies | | | | |
| Salix sp | | | 60 | | X | (FAC) | That are OF | BL, FACW, o | r FAC: | | 100% | (/ | 4/B) |
| Fraxinus latifolia | а | | 40 | | Х | FACW | | | | | | | |
| Rosa sp | | | 20 | | | (FAC) | Prevalence | ce Index W | orksheet | t: | | | |
| | | | | | | | Total % Co | | - | Multiply by | <u>/:</u> | | |
| · | | | | | | | | Species | | <u>x</u> 1 = | | | |
| | | | 120 | = T | otal Cover | | | species | | _ x 2 = | | | |
| erb Stratum (plot siz | 7e· | 5) | | | | | | Species Species | | x 3 = x 4 = | | | |
| Phalaris arundir | | | 75 | | X | FACW | | Species | | - x5= | | | |
| Unidentified gra | | | 20 | | <u>X</u> | (FAC) | | n Totals | 0 | (A) | | | 3) |
| <u>omaonimoa gra</u> | | | | | | (1710) | | | | _(' ') | | (- | -, |
| | | | | | | | Preva | alence Index = | =B/A = | # | #DIV/0! | | |
| | | | | | | | | | | | | | |
| | | | | | | | Hydrophy | ytic Vegeta | tion Indi | cators: | | | |
| | | | | | | | | | 1- Rapid ⁻ | Test for Hydi | ophytic Ve | getation | |
| | | | | | | | | Х | 2- Domina | ance Test is | >50% | | |
| | | | 95 | = T | otal Cover | | <u> </u> | | | nce Index is | | | |
| | | | | | | | _ | | - | logical Adap | | | pporting |
| • | (plot size: | | _) | | | | | | | emarks or or | | | |
| | | | | | | | _ | | - | d Non-Vasc | | | |
| | | | | | | | _ | | - | tic Hydrophy | | | |
| | | | 0 | = T | otal Cover | | | of hydric soil a r problematic. | | d hydrology | must be pre | esent, ur | less |
| | | | | | | | Hydrophy | • | • | | | | |
| | | | | | | | | | | | | | |
| Bare Ground in Herb | Stratum | | 5 | | | | Vegetatio | n | Ye | sX | | No | |

| Type: C-Currentiation, D-Depision, RNA-Reduced Matrix, S. 1998 Los Totalize Remarks | | | | PHS# | 7298 | | | Sampling Point: 20 |
|--|--|--|---|---------------------------------|--|---|---|--|
| Color Colo | | ription: (Describe to t | he depth | needed to docume | | | nce of indicators.) | |
| 0-5 10YR 3/2 100 10YR 3/2 85 10YR 3/4 5 C M Sitty Clay Loam Medium Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Coated Sand Graine. Figer C-Commentation, D-Depletion, RM-Reduced Matrix, CS-Covernd or Call Sand Matrix, CS | - | | | <u> </u> | | 1 2 | | |
| Secondary Indicators Surface (Art) Sandy Medium Sity Clay Loam Medium Sity Clay Loam Medium Sity Clay Loam | , | | | Color (moist) | % I yp | e Loc | | Remarks |
| Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Type (C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. Type (Sand) Reduced (S5) Histolic Epipedon (A2) Black Hastic (A3) Lourny Muyor Mineral (F1) (except MLRA1) Lyory Shaulds (A10) Depleted Ballow Cark Surface (A11) Depleted Matrix (F3) Depleted Ballow Dark Surface (A11) Depleted Ballow Dark Surface (A12) Sandy Mody Mineral (S1) Depleted Dark Surface (F6) Sandy Mody Mineral (S1) Sandy Mody Mineral (S1) Sandy Mody Mineral (S1) Sandy Mody Mineral (S1) Water standard (A2) Redoc Depressions (F8) Water (F present): "Indicators of hydrophytic repetation and wattland hydrology must be passed united disturbed or problematic. "Indicators (minimum or one required check all that apply) Secondary Indicators: "Indicators (minimum or one required check all that apply) Secondary Indicators (2 or more required) Water stained Leaves (B9) (Except MLRA X High Water Table (A2) X Santanton (A3) Surface Matrix (B1) Water Marks (B1) Water Marks (B1) Water Marks (B1) Sodiment Deposits (B2) Algal Mat or Clust (B4) Presence of Reduced Iron (C4) Surface Sol Crack (B5) Surface Sol Crack (B6) Surface Sol Crack (B6) Surface Sol Crack (B6) Surface Sol Cracks (B6) Surface Sol Cracks (B6) Surface Sol Cracks (B6) Surface Sol Cracks (B6) Surface Note (A1) Very Sandard Text (B5) Very X No Depth (Inches): Very Surface Note (A1) Very Sandard Hydrology Present? Ves X No Depth (Inches): Surface Note (A1) Very Sandard Hydrology Present? Ves X No No Note (A1) Very Sandard Hydrology Present? Ves X No Depth (Inches): Surface Note (A1) Very Sandard Hydrology Present? Ves X No No Note (A11) Note (A11) Note (A11) Note (A1 | 0-5 | 10YR 3/2 | 100 | | | | Silty Clay Loam | |
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| Thick Dark Surface (A12) | | - ' ' | - | | | | | Other (explain in Remarks) |
| Sandy Mucky Mineral (S1) | | Depleted Below Dark | Surface (A | A11) | Deplete | d Matrix (F3) | | |
| Sandy Mucky Mineral (S1) | | Thick Dark Surface (A | A12) | | X Redox | Dark Surface (F6) | | 3 |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) problematic. Page Pepth (inches): Pydric Soil Present? Yes | | Sandy Mucky Mineral | (S1) | | Deplete | d Dark Surface (F7 | ·) | , , , , |
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| PAROLOGY Fetland Hydrology Indicators: Finanzy Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) X High Water Table (A2) X Saturation (A3) Salt Crust (B11) Water Marks (B1) Porianage Patterns (B10) Water Marks (B1) Drainage Patterns (B10) Pory-Season Water Table (C2) Sediment Deposits (B2) Drift Deposits (B3) Odd Rational R | esuicuve | Layer (ii present). | • | | | | | |
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| Surface Water Present? Yes | X | icators (minimum or Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I | f one req 2) 32) 4) B6) | | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stunted | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| urface Water Present? Yes | X | icators (minimum or 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 | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stunted | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| Vater Table Present? Yes X No Depth (inches): 8 Wetland Hydrology Present? Saturation Present? Yes X No Depth (inches): Surface Yes X No Depth (inches): Obescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | X | icators (minimum or 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 | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stunted | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| Saturation Present? Yes X No Depth (inches): Surface Yes X No Depth (inches): Surface Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | X X | icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: | f one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) | Water s 1, 2, 4A Salt Crr Aquatic Hydrog Oxidize Presen Recent Stuntec Other (I | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P or Stressed Plants Explain in Remarks |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) Is (D1) (LRR A) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | X X X | icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: | f one req 2) 32) 4) B6) Aerial Ima Concave Si | gery (B7) urface (B8) | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stunted Other (i | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P I or Stressed Plants Explain in Remarks |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) I (D1) (LRR A)) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| | X X X Field Obse | icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave Si | gery (B7) urface (B8) No X No | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stuntec Other (I | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in F I or Stressed Plants Explain in Remarks): 8 |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) I (D1) (LRR A)) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| | X X X Field Obse Gurface Wate Water Table F Saturation Pre | icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes esent? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave Si | gery (B7) urface (B8) No X No | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stuntec Other (I | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in F I or Stressed Plants Explain in Remarks): 8 |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) I (D1) (LRR A)) | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| emarks: | X X X Field Obse Surface Water Water Table F Saturation Pre | icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: Per Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St X | gery (B7) urface (B8) No No No | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stuntec Other (i Depth (inches Depth (inches | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P or Stressed Plants Explain in Remarks): |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) I (D1) (LRR A)) Wetland Hyd | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| emarks: | X X X X Surface Water Table For Saturation Presincles capilla | icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: Per Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St X | gery (B7) urface (B8) No No No | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stuntec Other (i Depth (inches Depth (inches | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P or Stressed Plants Explain in Remarks): |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) I (D1) (LRR A)) Wetland Hyd | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| and no. | X X X X Surface Water Table Football President Control President C | icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: Per Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St X | gery (B7) urface (B8) No No No | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stuntec Other (i Depth (inches Depth (inches | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P or Stressed Plants Explain in Remarks): |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) I (D1) (LRR A)) Wetland Hyd | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| | X X X X Field Obse Surface Water Vater Table F Saturation Pre includes capilla Describe Rec | icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: Per Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St X | gery (B7) urface (B8) No No No | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stuntec Other (i Depth (inches Depth (inches | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P or Stressed Plants Explain in Remarks): |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) I (D1) (LRR A)) Wetland Hyd | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |
| | X X X X X Sield Obse Surface Water Vater Table F Saturation Pre ncludes capilla Describe Rec | icators (minimum or 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 (Inundation Visible on Sparsely Vegetated Corvations: Per Present? Yes | f one req 2) 32) 4) B6) Aerial Ima Concave St X | gery (B7) urface (B8) No No No | Water s 1, 2, 4A Salt Cri Aquatic Hydrog Oxidize Presen Recent Stuntec Other (i Depth (inches Depth (inches | ust (B11) Invertebrates (B13 en Sulfide Odor (C1 d Rhizospheres alo ce of Reduced Iron Iron Reduction in P or Stressed Plants Explain in Remarks): |) I) Ing Living Roots (C3) (C4) Plowed Soils (C6) I (D1) (LRR A)) Wetland Hyd | Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) |

7298

| oject/Site: Rivianna Beac | h Developr | nent | City/County: | West | Linn/Clackamas | Sampling [| Date: | 1/29/2024 | 4 |
|-------------------------------------|----------------|------------------------------|--------------------|------------------|--------------------------------------|---------------------------------|------------------|-----------------|-------|
| pplicant/Owner: Forward Vi | ision Devel | opment | | | Stat | e: OR | Samplir | ng Point: | 21 |
| vestigator(s): | СМ | | Section, To | wnship, Range: | | S 36, T 2 | S, R 1E | | |
| andform (hillslope, terrace, etc.:) | | Slope | <u> </u> | Local relief (co | ncave, convex, none): | None | Sle | ope (%): | 2 |
| bregion (LRR): | LRRA | | Lat: | 45.34 | 66 Lon | g: -122.63 | 87 | Datum: W | GS84 |
| il Map Unit Name: | | Wapato | silty clay loam | | NWI | Classification: | | N/A | |
| e climatic/hydrologic conditions or | the site typic | al for this ti | me of year? | Yes | <u> </u> | lo(if no | o, explain in Re | emarks) | |
| e vegetation Soil | or Hydrol | logy | significantly dist | urbed? | Are "Normal Circumst | ances" present? (\ | ′/N) | Υ | |
| vegetation Soil | or Hydrol | logy | naturally probler | matic? If needed | l, explain any answers in | Remarks.) | | | |
| | | | | | | | | | |
| JMMARY OF FINDINGS | | | | npling point | locations, transec | cts, important | features, e | etc. | |
| drophytic Vegetation Present? | | | ° | Is Sampled Ar | rea within | | | ., | |
| Iric Soil Present? | Yes | No | | a Wetlai | nd? | es | No | <u> </u> | |
| tland Hydrology Present? | Yes | No | o <u>X</u> | | | | | | |
| narks: | | | | | | | | | |
| | | | | | | | | | |
| OFTATION Has assure | ···· | 61 | -4- | | | | | | |
| GETATION - Use scient | | s of plar absolute | nts. Dominant | Indicator | Dominance Test w | orkshoot: | | | |
| | | % cover | Species? | Status | Dominance rest w | OIRSHEEL. | | | |
| e Stratum (plot size: | 30) | | | | Number of Dominant S | pecies | | | |
| Fraxinus latifolia | | 20 | Х | FACW | That are OBL, FACW, | or FAC: | 4 | (A) | |
| Rosa sp | | 5 | X | (FAC) | | | | | |
| | | | | | Total Number of Domi | nant | | | |
| | | | | | Species Across All Str | ata: | 4 | (B) | |
| | _ | 25 | = Total Cover | | | | | | |
| oling/Shrub Stratum (plot size: | :) | | | | Percent of Dominant S | pecies | | | |
| | | | | | That are OBL, FACW, | or FAC: | 100% | (A/B) |) |
| | | | | | | | | | |
| | | | · - <u></u> - | | Prevalence Index | Worksheet: | | | |
| | | | | | Total % Cover of | Mult | iply by: | | |
| | | | | | OBL Species | | x 1 = | 0 | |
| | _ | 0 | = Total Cover | | FACW species | | x 2 = | 0 | |
| b Stratum (plot size: | 5) | | | | FAC Species FACU Species | | x 3 = x 4 = | 0 | |
| Schedonorus arundinace | ′ | 50 | X | FAC | UPL Species | | x 5 = | 0 | |
| Unidentified grass | | 50 | <u> </u> | (FAC) | Column Totals | 0 (A) | | 0 (B) | |
| omaominiou graco | | | | (1710) | Column Totalo | (/,/ | | <u> </u> | |
| | | | | | Prevalence Index | c=B/A = | #DIV/0! | | |
| | | | | | | | | | |
| | | | | | Hydrophytic Veget | ation Indicators | s: | | |
| | | | | | | 1- Rapid Test fo | r Hydrophytic \ | /egetation | |
| | | | | | X | 2- Dominance T | est is >50% | | |
| | _ | 100 | = Total Cover | | | 3-Prevalence Inc | | | |
| ody Vine Stratum (plot size: | ` | | | | | 4-Morphological | | | rting |
| |) | | | | | data in Remarks 5- Wetland Non- | · · | · · | |
| ody vine Stratum (plot size. | | | | | - | Problematic Hyd | | | 1) |
| ody vine Stratum (piot size. | | | | | ¹ Indicators of hydric so | | | | |
| ody vine Stratum (piot size. | | | - Total C | | THURSHOLD OF HYOLIC SO | ıı anu wenanu nyur | Jogy must be | Present, uniess | • |
| ody vine Stratum (piot size. | | 0 | = Total Cover | | disturbed or problemat | ic. | | | |
| ouy vine stratum (piot size. | | 0 | = Total Cover | | | ic. | | | |

| | | | PHS# | 7298 | - | | Sampling Point: | 21 | |
|---|--|---|-----------------------------------|---|--|---|--|---|--|
| Profile Desc | ription: (Describe to t | the depth | needed to docume | | onfirm the absen | ce of indicators.) | | | |
| Depth | Matrix | | | Redox Features | . 2 | | | | |
| (Inches) | Color (moist) | % | Color (moist) | % Type | Loc ² | Texture | Remark | S | |
| 0-16 | 10YR 3/2 | 100 | | | | | | | |
| | | | | | _ | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | <u> </u> | | |
| - | ncentration, D=Depletion | | | | | lmalia | ² Location: PL=Pore Lining, M | • | |
| iyaric Soi | I Indicators: (Appli | icable to | all LRRS, utiles | | | maic | cators for Problematic Hyd | | |
| | Histosol (A1) | | | Sandy Red | | | 2 cm Muck (A10 | | |
| | Histic Epipedon (A2) | | | Stripped M | atrix (S6) | | Red Parent Mat | erial (TF2) | |
| | Black Histic (A3) | | | Loamy Mud | cky Mineral (F1) (| except MLRA 1) | Very Shallow Da | ark Surface (TF12) | |
| | – Hydrogen Sulfide (A4 | .) | | Loamy Gle | yed Matrix (F2) | | Other (explain in | n Remarks) | |
| | Depleted Below Dark | • | 111) | Depleted M | | | | • | |
| | | | (11) | | k Surface (F6) | | | | |
| | Thick Dark Surface (A | • | | | ` ' | | ³ Indicators of hydrophytic vego | etation and wetland | |
| | Sandy Mucky Mineral | . , | | | ark Surface (F7) | | hydrology must be present, u | | |
| | Sandy Gleyed Matrix | (S4) | | Redox Dep | ressions (F8) | | problematic. | | |
| Restrictive | Layer (if present): | : | | | | | | | |
| Гуре: | | | | | | | | | |
| Depth (inche | | | | | | Uhadaia Cail Daa | | No. V | |
| Jehri (iliche | es). | | | | | Hydric Soil Pre | sent? res | No X | |
| | | | | | | | | | |
| | OGY ydrology Indicator | s: | | | | | | | |
| Wetland H | | | uired; check all tl | nat apply) | | | Secondary Indicators (2 | or more required) | |
| Wetland H | ydrology Indicator | | uired; check all tl | , | ned Leaves (B9) (| Except MLRA | Secondary Indicators (2 | | |
| Vetland H | ydrology Indicator dicators (minimum o | of one req | uired; check all tl | , | | Except MLRA | | eaves (B9) | |
| Vetland H | ydrology Indicator dicators (minimum o Surface Water (A1) | of one req | uired; check all tl | Water stair | nd 4B) | Except MLRA | Water stained L | eaves (B9) ,, and 4B) | |
| Wetland H | ydrology Indicator dicators (minimum o Surface Water (A1) High Water Table (A2 | of one req | uired; check all tl | Water stair 1, 2, 4A, ar Salt Crust (| nd 4B) | Except MLRA | Water stained L (MLRA1, 2, 4A | eaves (B9) , and 4B) rns (B10) | |
| Wetland H | ydrology Indicator dicators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | one req | uired; check all tl | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv | nd 4B) (B11) ertebrates (B13) | | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa | neaves (B9) , and 4B) rns (B10) tter Table (C2) | |
| Wetland H | ydrology Indicator dicators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (E | one req | uired; check all tl | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) | | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib | eaves (B9) , and 4B) rns (B10) ater Table (C2) lle on Aerial Imagery (| |
| Wetland H | ydrology Indicator dicators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) | of one requiper (2) | uired; check all tl | Water stair 1, 2, 4A, ar 1, 2, 4Ai Salt Crust (Aquatic Inv Hydrogen S Oxidized R | nd 4B) (B11) Pertebrates (B13) Sulfide Odor (C1) hizospheres alon | g Living Roots (C3) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po | neaves (B9) In and 4B) Ins (B10) Iter Table (C2) Ile on Aerial Imagery (Institute (D2) | |
| Wetland H | ydrology Indicator dicators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) | of one requiper (2) | uired; check all tl | Water stair 1, 2, 4A, ar 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (G | g Living Roots (C3) C4) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar | eaves (B9) , and 4B) rns (B10) ster Table (C2) ele on Aerial Imagery (sition (D2) d (D3) | |
| Wetland H | ydrology Indicator dicators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) | of one req 2) 32) 4) | uired; check all tl | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (G | g Living Roots (C3) C4) owed Soils (C6) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitan X Fac-Neutral Tes | eaves (B9) , and 4B) rns (B10) ster Table (C2) le on Aerial Imagery (sition (D2) d (D3) st (D5) | |
| Wetland H | ydrology Indicator dicators (minimum o 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 (| of one req 2) 32) 4) B6) | | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Plo Stressed Plants (| g Living Roots (C3) C4) owed Soils (C6) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou | eaves (B9) , and 4B) rns (B10) ater Table (C2) ale on Aerial Imagery (sition (D2) d (D3) st (D5) ands (D6) (LRR A) | |
| Wetland H | ydrology Indicator dicators (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 (Inundation Visible on | of one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (G | g Living Roots (C3) C4) owed Soils (C6) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitan X Fac-Neutral Tes | eaves (B9) , and 4B) rns (B10) ater Table (C2) ale on Aerial Imagery (sition (D2) d (D3) st (D5) ands (D6) (LRR A) | |
| Wetland H | ydrology Indicator dicators (minimum o 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 (| of one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Plo Stressed Plants (| g Living Roots (C3) C4) owed Soils (C6) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou | eaves (B9) , and 4B) rns (B10) ater Table (C2) ale on Aerial Imagery (sition (D2) d (D3) st (D5) ands (D6) (LRR A) | |
| Wetland H | ydrology Indicator dicators (minimum o 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 (Inundation Visible on Sparsely Vegetated C | of one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Plo Stressed Plants (| g Living Roots (C3) C4) owed Soils (C6) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou | eaves (B9) , and 4B) rns (B10) ater Table (C2) ele on Aerial Imagery (esition (D2) d (D3) st (D5) ands (D6) (LRR A) | |
| Wetland H | ydrology Indicator dicators (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 (Inundation Visible on Sparsely Vegetated Carvations: | of one req 2) 32) 4) B6) Aerial Ima | gery (B7) | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Expl | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (C) n Reduction in Plo Stressed Plants (| g Living Roots (C3) C4) owed Soils (C6) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou | eaves (B9) , and 4B) rns (B10) ater Table (C2) ale on Aerial Imagery (sition (D2) d (D3) st (D5) ands (D6) (LRR A) | |
| Primary Ind | ydrology Indicator dicators (minimum o 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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes | of one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (in n Reduction in Plo Stressed Plants (lain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou Frost-Heave Hu | eaves (B9) , and 4B) rns (B10) ater Table (C2) ele on Aerial Imagery (esition (D2) d (D3) st (D5) ands (D6) (LRR A) | |
| Primary Ind Primary Ind Field Obse Surface Water Table | ydrology Indicator dicators (minimum o 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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes | of one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) No X No X | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Expl | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (in n Reduction in Plo Stressed Plants (lain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou Frost-Heave Hu | eaves (B9) , and 4B) ris (B10) ater Table (C2) ale on Aerial Imagery (institution (D2) ater (D3) ater (D5) ands (D6) (LRR A) armocks (D7) | |
| Field Obse Surface Water Water Table Saturation Pr | ydrology Indicator dicators (minimum o 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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes | of one req 2) 32) 4) B6) Aerial Ima | gery (B7) urface (B8) | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp | nd 4B) (B11) ertebrates (B13) Sulfide Odor (C1) hizospheres alon of Reduced Iron (in n Reduction in Plo Stressed Plants (lain in Remarks) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou Frost-Heave Hu | eaves (B9) , and 4B) rns (B10) ater Table (C2) ele on Aerial Imagery (esition (D2) d (D3) st (D5) ands (D6) (LRR A) | |
| Field Obse Surface Water Water Table Saturation Pr (includes capill | ydrology Indicator dicators (minimum o 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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes | of one requestion (2) 32) 4) B6) Aerial Ima Concave Su | gery (B7) urface (B8) No | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Expl Depth (inches): Depth (inches): | nd 4B) (B11) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou Frost-Heave Hu | eaves (B9) , and 4B) ris (B10) ater Table (C2) ale on Aerial Imagery (institution (D2) ater (D3) ater (D5) ands (D6) (LRR A) armocks (D7) | |
| Field Obse Surface Water Table Saturation Pr | ydrology Indicator dicators (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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes Iresent? Yes | of one requestion (2) 32) 4) B6) Aerial Ima Concave Su | gery (B7) urface (B8) No | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Expl Depth (inches): Depth (inches): | nd 4B) (B11) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou Frost-Heave Hu | eaves (B9) , and 4B) rns (B10) ater Table (C2) ale on Aerial Imagery (sition (D2) d (D3) at (D5) ands (D6) (LRR A) ammocks (D7) | |
| Field Obse Surface Water Table Saturation Princludes capill | ydrology Indicator dicators (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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes Iresent? Yes | of one requestion (2) 32) 4) B6) Aerial Ima Concave Su | gery (B7) urface (B8) No | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Expl Depth (inches): Depth (inches): | nd 4B) (B11) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou Frost-Heave Hu | eaves (B9) , and 4B) rns (B10) ater Table (C2) ale on Aerial Imagery (sition (D2) d (D3) at (D5) ands (D6) (LRR A) ammocks (D7) | |
| Field Obse Surface Water Vater Table Saturation Princludes capilla | ydrology Indicator dicators (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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes Iresent? Yes | of one requestion (2) 32) 4) B6) Aerial Ima Concave Su | gery (B7) urface (B8) No | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Expl Depth (inches): Depth (inches): | nd 4B) (B11) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou Frost-Heave Hu | eaves (B9) , and 4B) rns (B10) ater Table (C2) ale on Aerial Imagery (sition (D2) d (D3) at (D5) ands (D6) (LRR A) ammocks (D7) | |
| Field Obse Surface Water Table Saturation Princludes capill | ydrology Indicator dicators (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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes Iresent? Yes | of one requestion (2) 32) 4) B6) Aerial Ima Concave Su | gery (B7) urface (B8) No | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Expl Depth (inches): Depth (inches): | nd 4B) (B11) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou Frost-Heave Hu | eaves (B9) , and 4B) ris (B10) Iter Table (C2) Ite on Aerial Imagery sition (D2) d (D3) st (D5) Inds (D6) (LRR A) Immocks (D7) | |
| Field Obse Surface Water Vater Table Saturation Princludes capilla | ydrology Indicator dicators (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 (Inundation Visible on Sparsely Vegetated Corvations: er Present? Yes Present? Yes Iresent? Yes | of one requestion (2) 32) 4) B6) Aerial Ima Concave Su | gery (B7) urface (B8) No | Water stair 1, 2, 4A, ar Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Expl Depth (inches): Depth (inches): | nd 4B) (B11) | g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A) Wetland Hyd | Water stained L (MLRA1, 2, 4A Drainage Patter Dry-Season Wa Saturation Visib Geomorphic Po Shallow Aquitar X Fac-Neutral Tes Raised Ant Mou Frost-Heave Hu | eaves (B9) , and 4B) ris (B10) ater Table (C2) ale on Aerial Imagery (sition (D2) d (D3) at (D5) ands (D6) (LRR A) ammocks (D7) | |

7298

| oject/Site: Rivianna Be | ach Devel | opment | City/County: | West | Linn/Clackamas | Sampling Date | e: 1/29 | /2024 |
|-----------------------------------|---------------|---------------|---------------------|--------------------|--|---|-----------------------------------|------------|
| pplicant/Owner: Forward | Vision De | velopmer | nt | | State | : <u>OR</u> | Sampling Point: | 22 |
| vestigator(s): | СМ | | Section, | Township, Range: | | S 36, T 2S, I | R 1E | |
| ndform (hillslope, terrace, etc.: | · | SIC | ope | Local relief (co | ncave, convex, none): | None | Slope (%): | 2 |
| | LRRA | | Lat: | | 66 Long | -122.6386 | Datum: | WGS84 |
| il Map Unit Name: | | Wapa | ito silty clay loar | n | NWI C | lassification: | N/A | |
| e climatic/hydrologic conditions | on the site t | ypical for th | is time of year? | Yes | XNo | (if no, e | xplain in Remarks) | |
| e vegetation Soil | or Hy | /drology | significantly d | listurbed? | Are "Normal Circumsta | nces" present? (Y/N) | <u> </u> | |
| e vegetation Soil | or Hy | drology | naturally prob | lematic? If needed | d, explain any answers in F | Remarks.) | | |
| | . | | | | 1 | 4 4 4 6. | | |
| JMMARY OF FINDING | | | | | locations, transec | ts, important re | atures, etc. | |
| drophytic Vegetation Present? | _ | X | No | is Sampled Al | | v | | |
| dric Soil Present? | Yes _ | X | No | _ a Wetlai | nd? Yes | s <u>X</u> | No | |
| tland Hydrology Present? | Yes _ | Х | No | - | | | | |
| marks: | | | | | | | | |
| | | | | | | | | |
| GETATION - Use scie | ntific nar | mos of n | lante | | | | | |
| OFIVIOR - 026 2016 | initio IIdl | absolut | | Indicator | Dominance Test we | orksheet: | | |
| | | % cove | | Status | | | | |
| ee Stratum (plot size: |) | | | _ | Number of Dominant Sp | pecies | | |
| | | | | | That are OBL, FACW, o | or FAC: | 4 | (A) |
| | | | | | | | | |
| | | | | _ | Total Number of Domina | | _ | |
| | | | | | Species Across All Stra | ta: | 4 | (B) |
| | | 0 | = Total Cover | ř | | | | |
| oling/Shrub Stratum (plot si | ze: 15 | _) | | | Percent of Dominant Sp | ecies | | |
| Fraxinus latifolia | | 40 | X | FACW | That are OBL, FACW, | or FAC: | 100% | (A/B) |
| Rosa sp | | 10 | X | (FAC) | | | | |
| | | | _ | | Prevalence Index V | | | |
| | | | | | Total % Cover of | Multiply | | |
| | | 50 | = Total Cover | <u> </u> | OBL Species FACW species | x 1 | | |
| | | | = Total Cover | | FAC Species | x3 | | |
| <u>b Stratum</u> (plot size: | 5) | | | | FACU Species | x 4 | | |
| Schedonorus arundina | ceus | 50 | X | FAC | UPL Species | x 5 | = 0 | |
| Unidentified grass | | 50 | X | (FAC) | Column Totals | 0 (A) | 0 | (B) |
| | | | | | | | | |
| | | | | | Prevalence Index | =B/A = | #DIV/0! | |
| | | | | _ | | | | |
| | | | _ | | Hydrophytic Vegeta | | | |
| | | | | | | _ | ydrophytic Vegetatio | n |
| | | 100 | = Total Cover | - | X | 2- Dominance Test 3-Prevalence Index | _ | |
| | | 100 | = Total Cover | | - | _ | aptations ¹ (provide s | supporting |
| ody Vine Stratum (plot size | <u></u> |) | | | | _ | on a separate sheet | |
| | | | | <u> </u> | | 5- Wetland Non-Va | scular Plants ¹ | |
| | | | | | | _Problematic Hydrop | hytic Vegetation ¹ (E | xplain) |
| | | 0 | = Total Cover | | ¹ Indicators of hydric soil | | gy must be present, | unless |
| | | | | | disturbed or problemation Hydrophytic | . | | |
| | | | | | IITVUI ODIIVUC | | | |
| Bare Ground in Herb Stratum | | 0 | | | Vegetation | Yes X | No | |

| | | | PHS# | 7298 | , | | | Sampling Point: | 22 |
|---|--|--|---------------------------------------|--|--|--|--|--|---|
| | iption: (Describe to t | the depth i | needed to docume | | | nfirm the abse | nce of indicators.) | | |
| Depth | Matrix | | | Redox F | - 1 | . 2 | _ | | |
| (Inches) | Color (moist) | % | Color (moist) | % | Type' | Loc ² | Texture | Remarks | |
| 0-14 | 10YR 3/2 | 95 | 10YR 4/4 | | С | M | Silty Clay Loam | Coarse | |
| | | | | | | | | | |
| | | | · | | | | | - | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | _ | | _ | | - | | _ |
| | | | | | | | | | |
| | | | | | | | | | |
| T 0.0 | | | | | 0 | | | 21 | |
| | centration, D=Depletion | | | | | | les all a | ² Location: PL=Pore Lining, M=Matr | _ |
| - | Indicators: (Appli | cable to | ali LKKS, unies | | | | indica | ators for Problematic Hydric S | oolis": |
| | Histosol (A1) | | | | indy Redo | | | 2 cm Muck (A10) | |
| | Histic Epipedon (A2) | | | | ripped Mat | | | Red Parent Material (| • |
| | Black Histic (A3) | | | Lo | amy Muck | (F1) (Ky Mineral | (except MLRA 1) | Very Shallow Dark Su | ırface (TF12) |
| | Hydrogen Sulfide (A4 | .) | | Lo | amy Gleye | ed Matrix (F2) | | Other (explain in Rem | narks) |
| | Depleted Below Dark | Surface (A | (11) | De | epleted Ma | atrix (F3) | | | |
| | Thick Dark Surface (A | A12) | | X Re | edox Dark | Surface (F6) | | _ | |
| | Sandy Mucky Mineral | (S1) | | De | epleted Da | ırk Surface (F7 |) | Indicators of hydrophytic vegetation hydrology must be present, unless | |
| | Sandy Gleyed Matrix | (S4) | | Re | edox Depre | essions (F8) | | problematic. | disturbed of |
| estrictive | Layer (if present): | | | | | | | | |
| | s): | | | | | | Hydric Soil Pres | sent? Yes <u>X</u> No | |
| | <u> </u> | | | | | | Hydric Soil Pres | sent? Yes <u>X</u> No | |
| Remarks: | OGY | e. | | | | | Hydric Soil Pres | sent? Yes <u>X</u> No | |
| emarks: HYDROLO Vetland Hy | DGY rdrology Indicator | | uired: check all th | nat anniv) | | | Hydric Soil Pres | | |
| HYDROLO Vetland Hy Primary Indi | OGY rdrology Indicator cators (minimum o | | uired; check all th | , | ater staine | ed Leaves (B9 | | Secondary Indicators (2 or mo | ore required) |
| emarks: IYDROLC Vetland Hy 'rimary Indi | OGY rdrology Indicator cators (minimum o Surface Water (A1) | f one req | uired; check all th | W | ater staine 2 , 4A, anc | | Hydric Soil Pres | | ore required) |
| emarks: IYDROLO Vetland Hy rimary Indi | OGY rdrology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 | f one req | uired; check all th | W. | 2, 4A, and | d 4B) | | Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and | ore required) s (B9) 4B) |
| emarks: HYDROLO Vetland Hy Primary Indi | ody drology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) | f one req | uired; check all th | | 2, 4A, and | d 4B) 311) | (Except MLRA | Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B | ore required) (6 (B9) 4B) |
| HYDROLO Vetland Hy Primary Indi | ogy rdrology Indicator cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) | f one req | uired; check all th | W 1, Ac | 2, 4A, and alt Crust (B quatic Inve | d 4B) 311) rtebrates (B13 | (Except MLRA | Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B: | ore required) (a) (b) (b) (10) (b) (c) (c) |
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| HYDROLC Vetland Hy Primary Indi | cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) | f one req 2) 32) | uired; check all th | W. 1, Sa Acc | 2, 4A, and alt Crust (B quatic Inve rdrogen Su kidized Rhi | d 4B) 311) ritebrates (B13 ulfide Odor (C ² izospheres alc | (Except MLRA)) ng Living Roots (C3) | Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B Dry-Season Water Ta X Saturation Visible on Geomorphic Position | ore required) (a) (b) (b) (c) (d) (d) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e |
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Appendix C

Study Area Photos (ground level)





Photo A:

Looking southeast towards Sample Points 14 & 15 along Wetland A's northwest boundary. The Blue Heron Lagoon is in the background.

Photo B:

Looking southeast towards Sample Points 3 and 4 along the Wetland A's boundary. The Blue Heron Lagoon is in the background.



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Photo C:

Looking southwest along the northern berm of the onsite settling pond (Blue Heron Lagoon). Wetland A is on right side of photo.

Photo D:

Facing northwest towards the beaver dam west of 4th Street.



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Photo E:

Looking southeast in the downstream direction of Stream 1, east of 4th Street.

Photo F:

Looking east at Sample Points 19 & 20 on Wetland B's northern boundary.



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Photo G:

Looking north at Sample Points 21 & 22 at northeast end of Wetland B.

Photo H:

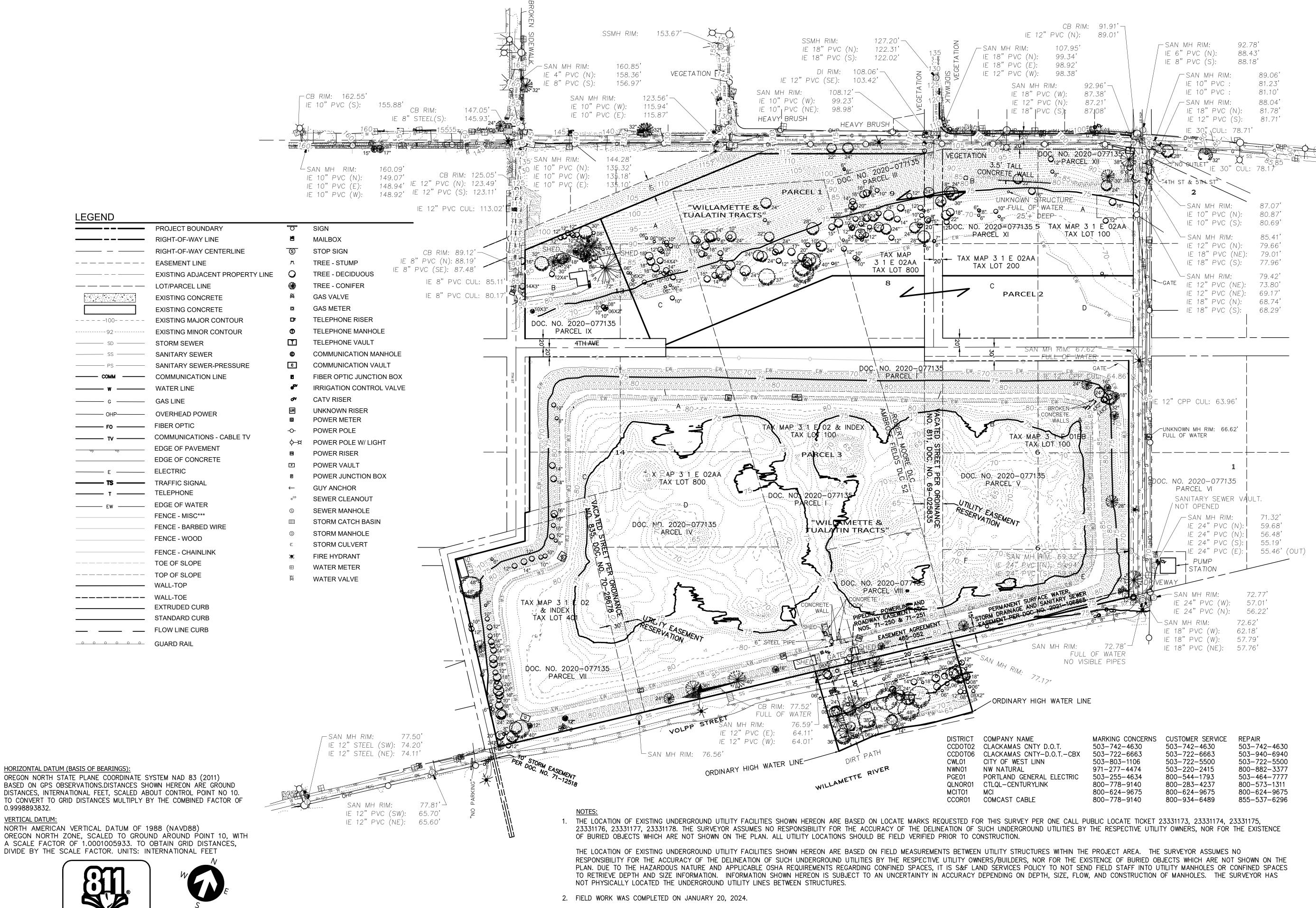
Looking south towards the Willamette River and Sample Point 11.



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4. NO WETLAND MARKINGS WERE PRESENT AT THE TIME OF THIS SURVEY.

3. BATHYMETRIC DATA FOR THE SETTLING POND WAS PROVIDED TO S&F LAND SERVICES BY OTHERS AND COMBINED WITH THE TOPOGRAPHIC DATA SHOWN HEREON.

0.9998893832.

SCALE: 1" = 100'

FT

Know what's **below**.

Call before you dig.

PUBLISH DATE 03-19-2024 SSUED FOR

MINOR PARTITION REVISIONS

PROJECT INFORMATION 3J PROJECT # | 23909

TAX LOT(S) | ### LAND USE # | TBD DESIGNED BY | SRC CHECKED BY | JJS

SHEET NUMBER

