Clean Water Services

SENSITIVE AREA CERTIFICATION FORM

Clean Water Services File Number 21-003135

1. Property Information (example 1S234AB01400)

Tax lot ID(s): 1700 (portion)

Site Address: 5900 SW Scholls Ferry Rd.

City, State, Zip: Portland, OR 97225

Nearest cross street:

2. Owner Information

Name: Lonnie Lister

Company: Portland Golf Club

Address: 5900 SW Scholls Ferry Rd.

City, State, Zip: Portland, OR 97225

Phone/Fax: 503-292-2651 (Lonnie Lister, Gen. Mngr.)

E-Mail: llister@portlandgolfclub.com

3. Development Activity (check **all** that apply)

- ☐ Addition to single family residence (rooms, deck, garage)
- ☐ Lot line adjustment
- ☐ Minor land partition
- ☐ Residential condominium
- ☐ Commercial condominium
- ☐ Residential subdivision
- ☐ Commercial subdivision
- ☐ Single lot commercial
- ☐ Multi lot commercial

Other Irrigation pond dredging/sediment placement

4. Applicant Information

Name: Same as above.

Company:

Address:

City, State, Zip:

Phone/Fax:

E-Mail:

5. Check any of the following that apply to this project

- ☒ Adds less than 500 square feet of impervious surface
- ☐ Does not encroach closer to the Sensitive Area than existing development on the property
- ☐ Is not located on a slope greater than 25%

6. Applicant Information

Name:

Company:

Address:

City, State, Zip:

Phone/Fax:

E-Mail:

7. Will the project involve any off-site work? ☐ Yes ☐ No ☐ Unknown (check appropriate box)

If yes, location and description of off-site work:

The sediment removal/placement project involves dredging of accumulated sediment from the irrigation pond and placement of sediment within geofabric bags in the southernmost portion of PGC property. Such sediments have also decreased water quality in the pond due to shallower water depth (hence warmer temperatures). The water storage capacity of the pond has decreased as sediments have accumulated in the pond. The sediment originated from the upgradient segments of Woods Creek, rather than adjacent Fanno Creek. Irrigation water is drawn from the pond in spring, summer and fall months to irrigate golf course tee boxes, fairways, greens, and landscaping. Sediment placement would fill wetland, so owner has submitted Joint Permit Application to Corps of Engineers and Oregon Dept. of State Lands.

8. Additional comments or information that may be needed to understand your project:

See attached report and graphics.

9. An on-site, water quality sensitive area reconnaissance was completed on:

Date Multiple visits in 2021 and 2022 By P.Scoles, J.Clinch

Title Wetland Scientist, Biologist Company Terra Science, Inc.

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10. Existence of Water Quality Sensitive Areas (check all appropriate boxes)

As defined in the District's Design and Construction Standards:

A. Water Quality Sensitive Areas ☒ Do ☐ Do not exist on the tax lot

B. Water Quality Sensitive Areas ☒ Do ☐ Do not exist within 200' on adjacent properties, or
☐ Unable to evaluate adjacent property

C. Vegetated corridors ☒ Do (See report Square Feet) ☐ Do not exist on the tax lot

D. Vegetated corridors ☒ Do ☐ Do not exist within 200' on adjacent properties, or ☐ Unable to evaluate adjacent property

E. Impacts to sensitive areas and/or vegetated corridors will occur ☒ On-site ☐ Off-site ☐ None proposed at this time

F. If impacts, mitigation is ☒ On-site ☐ Off-site ☐ Other See report

11. Simplified Site Assessment containing the following information: (check only items submitted)

Please refer to Design and Construction Standards 19-5, as amended by Resolution and Order 19-22, Sections 3.02.2 & 3.13.2, for application requirements.

☐ Complete Certification Form (2 pages)

☐ Written description of the site and proposed activity

☐ Wetland and Vegetated Corridor data sheets and sample points as applicable

☐ Site plan of the entire property

☐ Photographs of the site labeled and keyed to the site plan

12. Standard Site Assessment containing the following information: (check only items submitted)

Please refer to Design and Construction Standards 19-5, as amended by Resolution and Order 19-22, Sections 3.02.2 & 3.13.3, for application requirements.

☒ Complete Certification Form (2 pages)

☒ Written description per Design and Construction Standards 19-5, as amended by Resolution and Order 19-22, Section 3.13.3 b. 1

☒ Wetland Data sheets

☒ Vegetated Corridor Data sheets

☒ Existing Site Condition Figures

☒ Proposed Development Figures

☐ Additional Submittal Requirements as applicable

By signing this form the Owner, or Owner's authorized agent or representative, acknowledges and agrees that employees of Clean Water Services have authority to enter the project site at all reasonable times for the purpose of inspecting project site conditions and gathering information related to the project site.

I certify that I am familiar with the information contained in this document, and to the best of my knowledge and belief, this information is true, complete, and accurate.

Applicant:

Print/type name Phil Scoles (on behalf of Lonnie Lister) Print/type title Wetland Consultant

Signature Electronic Submittal Date Jan. 23, 2023

WETLAND DELINEATION REPORT FOR PORTION OF TAX LOT 1700 T. 1S R. 1W Sec. 24 WASHINGTON COUNTY, OREGON

Prepared for

PORTLAND GOLF CLUB
5900 Southwest Scholls Ferry Road
Portland, Oregon 97225

Prepared by

TERRA SCIENCE, INC.
4710 Southwest Kelly Avenue, Suite 100
Portland, Oregon 97239

TSI Project No. 2017-0916

November 2021

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List of Appendices

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Wetland Delineation Report for Portion of Tax Lot 1700, T. 1S R. 1W Sec. 24
Washington County, Oregon

Section A. Landscape Setting and Land Use

On behalf of the Portland Golf Club (PGC), Terra Science, Inc. (TSI) prepared the following report to document site conditions and delineate wetlands for a proposed irrigation pond maintenance project. The study area includes an undeveloped parcel adjacent the golf course (herein, the Pinger Property), the immediate vicinity of the irrigation pond within the golf course, and a potential haul road corridor and staging locations between the pond and the Pinger Property. PGC is located within an unincorporated portion of Washington County, Oregon between Beaverton and Portland (Appendix A, Figure 1). More specifically, the ±17.43-acre study area consists of a portion of Tax lot 1700 on County Assessor Map Township 01 South, Range 01 West, Section 24, Willamette Meridian (Appendix A, Figure 2). Access to the study area is from Scholls Ferry Road (OR 210) approximately 0.9-miles south of Beaverton-Hillsdale Highway (OR 10). The centroid of the study area is approximately 45.471435° N and -122.760355° W.

Most of the immediate vicinity of the study area and golf club is composed of mixed residential neighborhoods and commercial properties. Several greenspaces and/or parks are nearby and the Oregon Episcopal School is just east of the golf club. Much of this area transitioned from rural farm and forestland to its current use in the mid-20th century but the golf club and course was established more than a century ago.

Situated within the Fanno Creek watershed, the study area encompasses undeveloped sloping alluvial terrace lands around a gentle knoll on the Pinger Property and the flatter developed terrace lands around the irrigation pond that make up the golf course proper. Fanno Creek flows through the golf course from northeast to southwest. Specific to the study area, the creek is aligned just west of the irrigation pond and just offsite. An adjustable diversion gate in Fanno Creek allows water to enter the irrigation pond from the north as needed. Woods Creeks enters the irrigation pond directly from the east in its southeast corner. In the southwest corner of the pond, another adjustable gate in the outlet channel of the pond allows for retention of irrigation water within the pond. Just downstream of this gate and offsite, the outlet channel of the pond joins Fanno Creek and flows westerly through the west part of the golf course. Fanno Creek is a tributary to the Tualatin River, itself a tributary to the Willamette River and eventually the Columbia River.

The Pinger Property is mostly undeveloped conifer woodland and deciduous shrubland with a central grassy wetland meadow and is bound by residential lands to the south and east and a wastewater treatment plant to the west. The 15th Fairway of the golf course parallels an old berm that runs along the north edge of the Pinger Property. A portion of the Fanno Creek multi-use path the property to the west, south, and east.

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Watershed Sciences, Inc. (WSI) topographic LiDAR contours indicate elevations range from 263 feet above mean sea level (msl) atop the knoll in the southeastern part of the study area to 205 feet msl in the bottom of the outlet ditch from the irrigation pond. Three wetland features occupy portions of the study area (Appendix A, Figure 6) as well as the irrigation pond and a portion of Woods Creek. These are described in detail in Section E. Description of All Wetlands and Other Non-Wetland Waters, below.

Section B. Site Alterations

The majority of the Pinger Property study area has never been developed nor had significant land alterations outside of vegetation clearing for farming when this area was first settled. Historic aerials indicate it was maintained for farming through the 1950's and perhaps beyond. However, by 1995, the property appears to have been left mostly fallow and unused except for some mowing and clearing of understory brush and tall grass. The most recent clearing appears to have occurred circa spring/summer of 2012 but woody vegetation has grown back significantly since then. Prior to this, portions of the perimeter of the property were cleared circa 2000 for construction of the Fanno Creek trail around the east, south, and west perimeter.

As for historic site alterations that may have altered soils and hydrology within the Pinger Property and the adjacent portion of the golf course, a remnant of an old Oregon Electric Railway line that ran from Portland to Hillsboro in the early 1900's occupies the north boundary of the Pinger Property. All that remains of this feature is the raised berm/bed that the tracks ran on top of which was built up several feet above the surrounding alluvial terrace lands. Most of the top and north side of this berm is vegetated with large trees and occasional shrubs but it is regularly mowed as part of maintenance of the golf course. Along the south side of this berm, a narrow, excavated ditch runs east to west which appears to have built at the same time as the rail line berm. The south slope of the berm and the ditch are nearly obscured by thick vegetation and brush. The size and age of trees growing in the ditch and on the berm slopes indicate that these areas have not been managed for decades.

More contemporarily, construction of the (offsite) Fanno Creek trail may have had some effect on the hydrology of the Pinger Property by severing some of the upgradient runoff to the site while at the same time focusing said runoff to other areas. A shallow ditch along the south edge of the trail intercepts some of the upgradient runoff from residential lands and streets further south and east. A portion of this runoff discharges to the site at the head of the wetland (Wetland A, Appendix A, Figure 6A) via a small, 12-inch culvert under the trail from the ditch. Furthermore, an offsite ditch along the west edge of the Pinger Property may have a slight draining effect in that vicinity.

More specific to the golf course portion of the study area, historic alterations began more than a century ago when the first nine holes of the golf club were first constructed (circa 1914). These

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alterations included clearing out much of the understory vegetation to establish the fairways, tees, and greens. Expansion of the back nine holes began with dredging out of the irrigation pond (circa 1922) and relocating Fanno Creek (circa 1925) to its current location. It was around this time that the banks of the creek and pond edge were also armored with rock that was hand-cemented in. Subsequent repairs to the banks and retaining walls have been made since on an as-needed basis. Maintenance dredging and/or excavation of accumulated sediments in the pond have occurred infrequently on an as-needed basis with the most recent attempt occurring in 2017 with the use of suction hoses and pumps. However, that most recent attempt was abandoned shortly after implementation as it was too inefficient and systematically problematic.

Areas of the golf course that are specific to tee boxes, fairways, and greens as well as much of the perimeter of the irrigation pond have been altered quite significantly from their pre-settlement state. Much of these areas were scraped/excavated down to subsoil and then built back up (filled) with sandy material to improve drainage. Much of the course around the vicinity of the irrigation pond has also had drain tiling installed historically. Natural vegetation is maintained as turf and/or landscaped with bark mulch and shrub plantings. Areas outside of the fairways (roughs) have not been altered as significantly as it relates to soil disturbance but are mowed regularly. Only those areas along Woods Creek have been left in a more natural state with vegetation mowing/maintenance occurring much less frequently than the remainder of the course.

For wetland delineation purposes, the entirety of the study area was considered to have normal conditions in regards to hydrology, soils, and vegetation since no significant changes have occurred in the last five years (vegetation maintenance is ongoing and continuous) and significant ground-disturbing activities (excavation/fill) have not occurred in decades. For additional discussion in regards to methodology and normal conditions, see Section D. Methods, below.

Section C. Precipitation Data and Analysis

Precipitation data for the closest weather station in Beaverton, Oregon was utilized for this delineation. According to the WETS Table, the growing season for the area is typically March 05 to November 25 in most years (265 days). Five percent of the growing season equates to 13.25 days.

During the April 20, 2018 delineation site visit of the Pinger Property, observations of native plants in bloom, budding, and/or leafing out made during the site visit indicated that growing season had arrived for this location. For this delineation site visit, Table 1 (below) compares the observed monthly precipitation for the 2017/2018 water year to that of a normal water year while Table 2 (below) summarizes precipitation for the one-day, one-week, and two-week

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interval preceding the delineation site visit and the water year-to-date. Direct hydrology observations (inundation, saturation, and/or water tables) were made at sample plot transects T1 through T3 and sample plots SP-A through C on April 20, 2018.

TABLE 1. Monthly rainfall summary for October 01, 2017, through April 19, 2018, for Beaverton, OR (from the Natural Resource Conservation Service).

	Oct. 2017	Nov. 2017	Dec. 2017	Jan. 2018	Feb. 2018	Mar. 2018	Apr. 2018	Water Year°
Observed Precip. (in.)	3.95	6.94	3.64	5.98	1.86	2.97	4.24*	29.58
Normal Precip. (in.)	2.88	5.87	6.56	5.84	4.67	3.83	2.17*	31.82
Percent of Normal	137%	118%	55%	102%	40%	78%	195%	93%
Normal Range (in.)	1.58-3.52	4.09-6.98	4.58-7.79	3.50-7.08	3.06-5.61	2.89-4.46	1.88-3.33	21.58-38.78

*Pro-rated for the first 19 days of April, 2018.
°Based on the water year from Oct. 1, 2017 through April 19, 2018.

TABLE 2. Rainfall summary for the one-day, one-week, and two-weeks preceding the field visit for Beaverton, OR (from the Natural Resource Conservation Service).

Field Study Date	One Day Prior Obs. Precip.	One Week Prior Obs. Precip.	One Week Prior Norm. Precip.	% Normal	Two Weeks Prior Obs. Precip.	Two Weeks Prior Norm. Precip.	% Normal	Observed Water Year	Normal Water Year	% Normal
April 20, 2018	0.00 in.	1.23 in.	0.79 in.	156%	4.09 in.	1.66 in.	246%	29.58 in.	31.82in.	93%

*Based on the water year from Oct. 1, 2014 through day prior to field study date.

For the water year leading up to the April 20, 2018 delineation site visit, cumulative precipitation was just below normal but certainly in the normal range of variation. While a couple of months (December and February and to a lesser extent March) were well below normal, the remaining months were generally at or above normal. As for the period immediately preceding the field visits, the one-week interval was well above normal with the two-week interval being significantly above normal. As such, for the April 20, 2018 site visit, the presence of saturation and/or a water table near the surface (upper 12 inches) was considered sufficient evidence for meeting the wetland hydrology parameter. Saturation and/or water tables observed below 12 inches were considered insufficient in meeting the wetland hydrology parameter but other primary and/or secondary indicators could still qualify areas as wetland.

During the November 3, 2021 delineation site visit of the golf course portion of the study area, the latter part of the growing season had arrived for this location but cold weather had not settled in. For this delineation site visit, Table 3 (below) compares the observed monthly precipitation for the 2021/2022 water year to that of a normal water year while Table 4 (below) summarizes precipitation for the one-day, one-week, and two-week interval preceding the delineation site visit and the water year-to-date. Direct hydrology observations (inundation,

saturation, and/or water tables) were made at sample plot transects T4 through T8 on November 3, 2021.

TABLE 3. Monthly rainfall summary for October 01, 2021, through November 3, 2021, for Beaverton, OR.

	Oct. 2017	Nov. 2017	Water Year°
Observed Precip. (in.)	4.23	0.16	4.39
Normal Precip. (in.)	3.69	0.33	4.02
Percent of Normal	115%	48%	109%
Normal Range (in.)	1.58-3.52	0.27-0.47	1.80-3.99

*Pro-rated for the first 2 days of November, 2021.
°Based on the water year from Oct. 1, 2021 through November 2, 2021.

TABLE 4. Rainfall summary for the one-day, one-week, and two-weeks preceding the field visit for Beaverton, OR.

Field Study Date	One Day Prior Obs. Precip.	One Week Prior Obs. Precip.	One Week Prior Norm. Precip.	% Normal	Two Weeks Prior Obs. Precip.	Two Weeks Prior Norm. Precip.	% Normal	Observed Water Year*	Normal Water Year*	% Normal*
November 3, 2021	0.15 in.	0.72 in.	1.06 in.	68%	3.55 in.	2.05 in.	173%	4.39 in.	4.02 in.	109%

*Based on the water year from Oct. 1, 2021 through November 2, 2021.

For the water year leading up to the November 3, 2021 delineation site visit, cumulative precipitation was above normal and above the normal range of variation. As for the period immediately preceding the field visits, the one-week interval was below normal but well above normal for the two-week interval. Even though it is outside of the typical water year, it is worth noting that the precipitation amount for September 2021 was at 260% (4.00 inches total) which is well above what is normally received for that month (1.54 inches total). As such, for the November 3, 2021 site visit, the presence of saturation and/or a water table near the surface (upper 12 inches) was considered sufficient evidence for meeting the wetland hydrology parameter as it would appear water tables had sufficiently recharged after the dry season. Saturation and/or water tables observed below 12 inches were considered insufficient in meeting the wetland hydrology parameter but other primary and/or secondary indicators could still qualify areas as wetland.

Section D. Methods

The study area was delineated using the methodology outlined within 1987 *Corps of Engineers Wetland Delineation Manual*, the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Version 2.0), and pertinent agency guidance from the Oregon Department of State Lands (DSL), U.S. Army Corps of Engineers (USACE), and U.S. Environmental Protection Agency. Background research leading up to the

field study involved review and analysis of recent and historical aerial photographs, National and Local Wetland Inventory maps, Soil Conservation Service/Natural Resource Conservation Service soils maps, and existing topographical conditions. Site history was gathered from historical aerial photographs, available online information regarding the history of the area, and institutional knowledge provided by PGC.

The *Western Mountains, Valleys, and Coast Region* supplement is appropriate for this region based on the general temperate coastal climate conditions; warm, dry summers and cool, wet winters. Although more humid than conditions further inland, this area often has at least three to four months from June through September with drier conditions and little precipitation. Like much of the West Coast, the area is trending toward drier and warmer rather than cooler and wetter.

Initial field data (sample plots, photos, and wetland boundaries) for the Pinger Property was collected during a site visit on April 20, 2018 by TSI staff. Field data for the remainder of the study area within the golf course was collected on November 3, 2021. Prior to the latter site visit, TSI staff also revisited the Pinger Property to verify that site conditions had not changed since the 2018 field study. Staff revisited sample plot locations and wetland boundaries on the Pinger Property noting conditions had not changed.

During the delineation field study visits, staff evaluated the geomorphic settings, vegetation communities, and existing soils and hydrology conditions within study area. The field study focused on the lowest geomorphic positions and areas most likely to contain wetlands or waters within the study area. Sample plot locations were selected by the field team to best represent existing conditions within the study area and confirm the placement of the jurisdictional boundaries (wetlands and/or waters). Hydrology conditions were evaluated for the water year prior to the study period and field study dates ((see Section C. Precipitation Data and Analysis, above). Most trees, shrubs, and herbaceous vegetation species were identifiable, growing, and considered sufficient in identifying hydrophytic or non-hydrophytic vegetation presence.

Seven paired-plot transects and three solitary sample plots were established to document the wetlands and/or waters from upland conditions within the study area (Appendix A, Figures 6A-C). These transects (T1 through T7) document site conditions for determining the wetland boundaries, which are defined visually by landform (geomorphic/topographic position) and/or vegetation community differences. The remaining solitary plots were placed within mostly suspect areas in the study area that were generally lower in elevation or exhibited some difference in vegetation community or landform. All solitary sample plots document existing upland conditions within the vicinity of their locations.

Vegetation sampling at each sample plot utilized the routine intermediate-level (level 2) delineation methodology to visually estimate percent cover for herbaceous and woody species. The aerial extent of each plot utilized a typical five-foot radius for herbaceous species and a

modified radius or polygon for trees and shrubs (if present). These modified vegetation sampling plots were positioned to avoid overlap with the adjacent, contrasting sample plots and to document the different vegetation communities. Indicator statuses outlined in *State of Oregon 2018 Wetland Plant List* were utilized to evaluate vegetation using the 50 / 20 rule for hydrophytic dominance determinations. It should be noted that much of the golf course portion of the study area is managed primarily as turf using bluegrass (*Poa sp.*) and ryegrass (*Lolium sp.*) which are tolerant of both wet and dry conditions once established (FAC) and which do not give a strong correlation alone as to the location of the wetland boundary. Sub-dominant species typically provided a better measure as to the location of the wetland/upland boundary.

Soils were evaluated at each sample location using a tape measure and a tile spade to examine the upper portion of the soil profile (generally 16- to 22-inches). All soils sampled were moistened if not already moist prior to color analysis using a Munsell soil-color chart for determining soil colors. Soil profiles were evaluated for hydric soil characteristics utilizing the NRCS *Field Indicators of Hydric Soils in the United States* (Version 8.2) and results noted on the data sheets. Of note, much of the golf course portion of the study area has highly disturbed soils as a result of past course construction. Much of the vicinity of the irrigation pond including the adjacent tee boxes, fairways, and greens was historically excavated and backfilled with sandy material to improve drainage. Under these circumstances, irrigation during the normally dry time of year (late spring through late summer) has led to induced hydric soil characteristics where they typically would not occur. As a result, the presence or absence of hydrology indicators is often the most reliable indicator for determining the presence or absence of wetland at any location.

All field observations were recorded on the appropriate regional data sheets (Appendix C). Upon assessment of field data, the field team mapped sample plot locations and jurisdictional feature boundaries using a Juniper Systems Geode Global Navigation Satellite System (GNSS) receiver and Mesa^3 tablet running ESRI's ArcPad (v10.2). Specific mapping approaches for the onsite features are provided in Section E. Description of All Wetlands and Other Non-Wetland Waters (below).

Section E. Description of All Wetlands and Other Non-Wetland Waters

Overall, the sum of wetlands within the study area amounts to 2.19-acres (Wetlands A, B, and C) whereas, the sum of non-wetland waters amounts to 1.90-acres (Irrigation Pond and Woods Creek). These features are described in more detail below:

Wetland A – South Swale and Rail Line Ditch (0.72-acre Wetland): Within the central part of the Pinger Property, a gently sloping wetland swale drains northwesterly to an overgrown wetland ditch that occurs along a portion of an old rail line berm that

separates the 15th Fairway from the Pinger Property. The swale originates in the south-central part of the property and hugs the west toe of a gentle knoll located in the east part of the study area. The ditch extends to the east further along the old rail line berm but only the lower (west) portion qualifies as wetland. A small amount of very old side-cast material from the ditch is evident along its length. Whereas the wetland swale appears to be naturally occurring feature, the ditch was likely excavated at the time the old rail line was constructed in the early 1900's.

Dominant vegetation within the wetland swale includes meadow foxtail (*Alopecurus pratensis*, FACW), colonial bentgrass (*Agrostis capillaris*, FAC), and blackberry (*Rubus armeniacus*, FAC) with lesser amounts of soft rush (*Juncus effusus*, FACW) whereas the ditch is dominated by blackberry and willow (*Salix* sp. FACW). Vegetation outside the wetland boundary was dominated by sword fern (*Polystichum munitum*, FACU), sweet vernal grass (*Anthoxanthum odoratum*, FACU), bracken fern (*Pteridium aquilinum*, FACU), English hawthorn (*Crataegus monogyna*, FAC), blackberry, sweet cherry (*Prunus avium*, FACU), Douglas fir (*Pseudotsuga menziesii*, FACU), and Atlantic ivy (*Hedera hibernica*, UPL).

Soils within the vicinity of the wetland are mapped as non-hydric Aloha silt loam (mapping unit 1, Appendix A, Figure 5). However, soil pit investigation identified the upper part of the solum as a very dark grayish brown to dark grayish brown (10YR 3/2 to 10YR 4/2) silt loam to silty clay loam with distinct to prominent redoximorphic features. Hydric soil indicators observed include redox dark surface (F6) and depleted below dark surface (A11).

The wetland swale and ditch had primary hydrology indicators of saturation (A3) and high-water table (A2) at the time of the field study. Flowing surface water (A1) was evident in the ditch and just below the culvert outlet at the southeast end of the wetland swale. The duration of flow in these features appears to be seasonal in nature and influenced primarily by precipitation and upgradient runoff. A swale geomorphic landform (D2) and vegetation pattern on past aerial photographs suggests that wetland hydrology is likely present in most years during the early part of the growing season.

The boundaries of the wetland are generally defined by a slightly higher topographic position that corresponds with a lack of hydric soil indicators and an increased dominance/prevalence of non-hydrophytic vegetation. This wetland has a palustrine, emergent (PEM) Cowardin-classification and slope (S) HGM-classification.

Wetland B – Woods Creek Swale (1.34-acre Wetland): Within the northeast part of the study area, a gently sloping wetland swale parallels both sides of Woods Creek which drains northwesterly toward the Irrigation Pond. The swale and creek originate offsite to the

east draining the suburban lands that lie further east. The primary hydrology source is upgradient runoff and some overland flow from Woods Creek during flood events. While occasionally mowed, this part of the golf course is much less intensively managed than the tee boxes, fairways, and greens are.

Dominant vegetation within the wetland swale includes creeping buttercup (*Ranunculus repens*, FAC), creeping bentgrass (*Agrostis stolonifera*, FAC), common reed (*Phragmites australis*, FACW), and bluegrass (*Poa* sp., FAC estimated) with Oregon ash (*Fraxinus latifolia*, FACW) as the dominant overstory species. Pockets of blackberry (*Rubus bifrons*, FAC) also dominate some pockets within the wetland. Vegetation outside the wetland boundary was dominated by turf grasses including bluegrass (*Poa* sp., FAC estimated) and ryegrass (*Lolium* sp., FAC estimated) with occasional subdominants of English daisy (*Bellis perennis*, UPL) and self-heal (*Prunella vulgaris*, FACU) in less intensively-managed areas.

Soils within the vicinity of the wetland are mapped as hydric Huberly silt loam (mapping unit 2225A, Appendix A, Figure 5). Soil pit investigation confirmed the presence of hydric soil and identified the upper part of the solum as a very dark grayish brown to dark gray (10YR 3/2 to 10YR 4/1) silt loam to silty clay loam with distinct to prominent redoximorphic features. Hydric soil indicators observed included depleted matrix (F3), redox dark surface (F6), and depleted below dark surface (A11).

The wetland swale had primary hydrology indicators of saturation (A3) and high-water table (A2) at the time of the field study. Some surface water (A1) was present in a few pockets of the swale. The duration of hydrology in these features appears to be seasonal in nature and influenced primarily by precipitation and upgradient runoff. A swale geomorphic landform (D2) and positive FAC-Neutral Test (D5) were observed as secondary indicators.

The boundaries of the wetland are generally defined by a slightly higher topographic position that corresponds with a lack of hydric soil indicators and lack of hydrology indicators. This wetland has a palustrine, emergent/forested (PEM/FO) Cowardin-classification and slope (S) HGM-classification.

Wetland C – Irrigation Pond Fringe (0.13-acre Wetland): Surrounding the Irrigation Pond in the north part of the study area, a narrow fringe of wetland occupies the lowest part of the landscape behind the retaining wall that bounds the pond. This wetland is intensively managed as part of the golf course landscape with no vegetation outside of turf grass or shrubby landscaping present.

Dominant vegetation along the northwest and east edges of the pond is entirely turf grass including bluegrass (*Poa* sp., FAC estimated) and ryegrass (*Lolium* sp., FAC) whereas the south edge of the pond is bark mulched with only rhododendron plantings (*Rhododendron macrophyllum*, FACU) as vegetation. Vegetation outside the wetland boundary was essentially the same as within.

Soils within the vicinity of the wetland are mapped as hydric Huberly silt loam (mapping unit 2225A, Appendix A, Figure 5). Soil pit investigation identified that much of this area had been historically excavated down to clayey subsoil and partially backfilled with sandy material to improve drainage. As such, the upper part of the solum has a very dark grayish brown to dark gray (10YR 3/2 to 10YR 4/1) loamy sandy to sandy loam with distinct to prominent redoximorphic features. Hydric soil indicators observed included sandy redox (S5) and redox dark surface (F6).

The wetland had primary hydrology indicators of saturation (A3) and high-water table (A2) at the time of the field study likely influenced by the hyporheic zone of the pond during high water and the impounding effect the retaining wall around the pond has on upgradient runoff. The duration of hydrology in these features appears to be seasonal in nature and influenced primarily by precipitation and upgradient runoff. A toeslope geomorphic landform (D2) was observed as a secondary indicator.

The boundaries of the wetland are generally defined by a slightly higher topographic position that corresponds with a lack of hydrology indicators. This wetland has a palustrine, emergent (PEM) Cowardin-classification and slope (S) HGM-classification.

Irrigation Pond (1.77-acre Non-Wetland Waters): The dominant hydrologic feature in the north part of the study area is the Irrigation Pond that occupies the low area between the confluence of Woods Creek with Fanno Creek. This open-water, perennial feature receives much of its hydrology directly from Woods Creek but a diversion gate on Fanno Creek contributes water to the pond as needed to maintain sufficient volume for irrigation withdrawal. Another gate at the outlet in the southwest corner of the pond controls the surface water elevation. The pond is mostly unvegetated save for some submerged and floating aquatic species with a substrate of silt and muck. The perimeter of the pond has a vertical rock and concrete retaining wall that extends approximately one-foot above the typical pond surface elevation yet is higher near the inlets and outlets to the pond. The depth of the pond is approximately 7-feet below the surface but is variable and dependent on the amount of sediment accumulation within the pond.

Woods Creek (0.13-acre Non-Wetland Waters): Woods Creek runs through Wetland B in the northeast part of the study area. The perennial creek is slightly incised one- to two-feet into the adjacent swale bottom, is unvegetated, and with vertical banks of silt clay loam.

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It is approximately four- to eight-feet wide with a depth of two- to three-feet. Hydrology comes from upgradient runoff from the surrounding watershed and likely sustained by some groundwater discharge. The extent of impervious surfaces in the watershed likely contribute to a flashier hydrologic regime than that which was historically present which has contributed to its slightly incised nature. Woods Creek is the major hydrologic contributor to the Irrigation Pond located just downstream and prior to the confluence with Fanno Creek and likely provides some overland flow to the adjacent wetlands (Wetland B) during high water events.

Section F. Deviation from LWI or NWI

The National Wetland Inventory (NWI) map obtained for this project did not identify any wetland features within the Pinger Property portion of the study area or the golf course (Figure 3A) but did identify Woods Creek and the Irrigation Pond. The Local Wetland Inventory (LWI) map identified a small wetland polygon through the central part of the Pinger Property (Figure 3B) that roughly corresponds with the wetland delineated by TSI during the April 20, 2018 field visit as well as the Irrigation Pond, Woods Creek, and their adjacent wetlands (Wetlands B and C).

Table 2 summarizes the Cowardin classification, hydrogeomorphic classification, anticipated jurisdictional determination, and acreages for all wetlands and non-wetland waters delineated within the study area.

Section G. Mapping Method

The wetland boundaries and sample plot locations were mapped by TSI using a Juniper Systems Geode Global Navigation Satellite System (GNSS) receiver running ArcPad (v10.2) software. Real-time processed shape files were then exported as AutoCAD compatible files using ArcMap 10.2. Based on the manufacturer's specifications for the real-time accuracy of the unit, the horizontal data is sub-meter accuracy for these features. Field data points at any location were not collected unless and until the GNSS unit was achieving sub-meter accuracy.

TSI inserted the processed delineation files along with 1-foot LiDAR-generated topographic contours acquired from the Oregon LiDAR Consortium 2014 survey flights of the Portland Metro Area, and georeferenced tax lot boundaries from Washington County into AutoCAD LT drafting software for analysis and acreage calculations. All files are presented in the NAD 1983 / 2011 State Plane Oregon North basis of bearings. As depicted on Appendix A, Figures 6A-C, wetland boundaries and sample plot locations are accurate to within one-meter horizontal accuracy.

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Section H. Additional Information

For the purposes of Oregon's Removal-Fill Law (ORS 196.795-990), all wetland and non-wetland waters features delineated within the study area would appear to be jurisdictional by the State of Oregon. While some portion of Wetland A appears to be artificially created in nature (excavated ditch), it appears to have been at least partially created from a naturally occurring jurisdictional feature. Wetland B and associated Woods Creek are entirely naturally occurring and thus jurisdictional. Wetland C, while highly manipulated historically, appears to be part of what was once a much larger wetland, much of which was converted into what is now the non-wetland Irrigation Pond. The pond is thus also jurisdictional on this basis.

As for federal jurisdiction, it would appear that all of the wetlands and non-wetland waters would be jurisdictional by the U. S. Army Corps of Engineers for the purposes of Section 404 of the Clean Water Act (33 U.S.C. §1251 et seq. (1972)). All have a clear and open connection to and/or are immediately adjacent to jurisdictional waters (Woods Creek and Fanno Creek).

Section I. Results and Conclusions

Utilizing routine intermediate-level (level 2) delineation methodology outlined in the 1987 *Corps of Engineers Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Version 2.0), the field team identified three wetlands and two non-wetland waters within the limits of the study area. These features exhibit seasonally elevated water tables which support hydrophytic dominated plant communities and hydric soil characteristics. Adjacent areas, in contrast, consist of upland that generally lacks one or more indicators of hydrophytic vegetation, hydric soils, and/or wetland hydrology. Table 3 provides a summary of the delineated features within the study area.

TABLE 5. Wetlands and Other Non-Wetland Waters Summary

Feature	Cowardin Classification	HGM Classification	DSL Jurisdiction	USACE Jurisdiction	Acreage
Wetland A	PEM	S	Yes	Yes	0.72-acre
Wetland B	PEM/FO	S	Yes	Yes	1.34-acre
Wetland C	PEM	S	Yes	Yes	0.13-acre
Woods Creek (Waters)	R3UB	RFT	Yes	Yes	0.13-acre
Irrigation Pond (Waters)	PUB/AB	DO	Yes	Yes	1.77-acre
Total Jurisdictional Wetland of the State of Oregon and U.S.:					**2.19-acres**
Total Jurisdictional Non-Wetland Waters of the State of Oregon and U.S.:					**1.90-acres**

Cowardin Modifiers:

PEM: Palustrine, Emergent PEM/FO: Palustrine, Emergent/Forested
R3UB: Riverine, Upper Perennial, Unconsolidated Bottom
PUB/AB: Palustrine, Unconsolidated Bottom/Aquatic Bed

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HGM Modifiers:

S: Slope RFT: Riverine Flow-Through DO: Depressional Outflow

Section J. Required Disclaimer

As required by the Oregon Department of State Lands, the following statement must be included as part of this document:

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

LIMITATIONS OF THIS REPORT

This report does not define conditions beyond the identified study area portion of Tax Lot 1700 as depicted on Washington County Assessor's Map Township 1 South, Range 1 West, Section 24 (BC), (Willamette Meridian) located in unincorporated Washington County, Oregon. This report makes no claim or conclusions about those conditions beyond the specified delineation footprint.

The data presented in this report were collected, analyzed and interpreted using standards of skill, care, and diligence ordinarily provided by the qualified professionals of Terra Science, Inc. using the 1987 *Army Corps of Engineers Wetlands Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Version 2.0). The report findings are based on incidental information from the property owner, the observations of the project team, and the limitations of the wetland delineation methodology. The report findings and their significance should not be extrapolated beyond the immediate area of the study area. Terra Science, Inc. shall not be liable beyond the fees paid for its services for errors and omissions.

This report was generated for the express use of Portland Golf Club and their designates. These parties shall not interpret the report findings or conclusions any differently than stated without prior discussion with or consent from Terra Science, Inc.

Respectfully submitted,

Jason Clinch
Senior Wetland Biologist / Project Manager

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APPENDIX A

DELINEATION FIGURES

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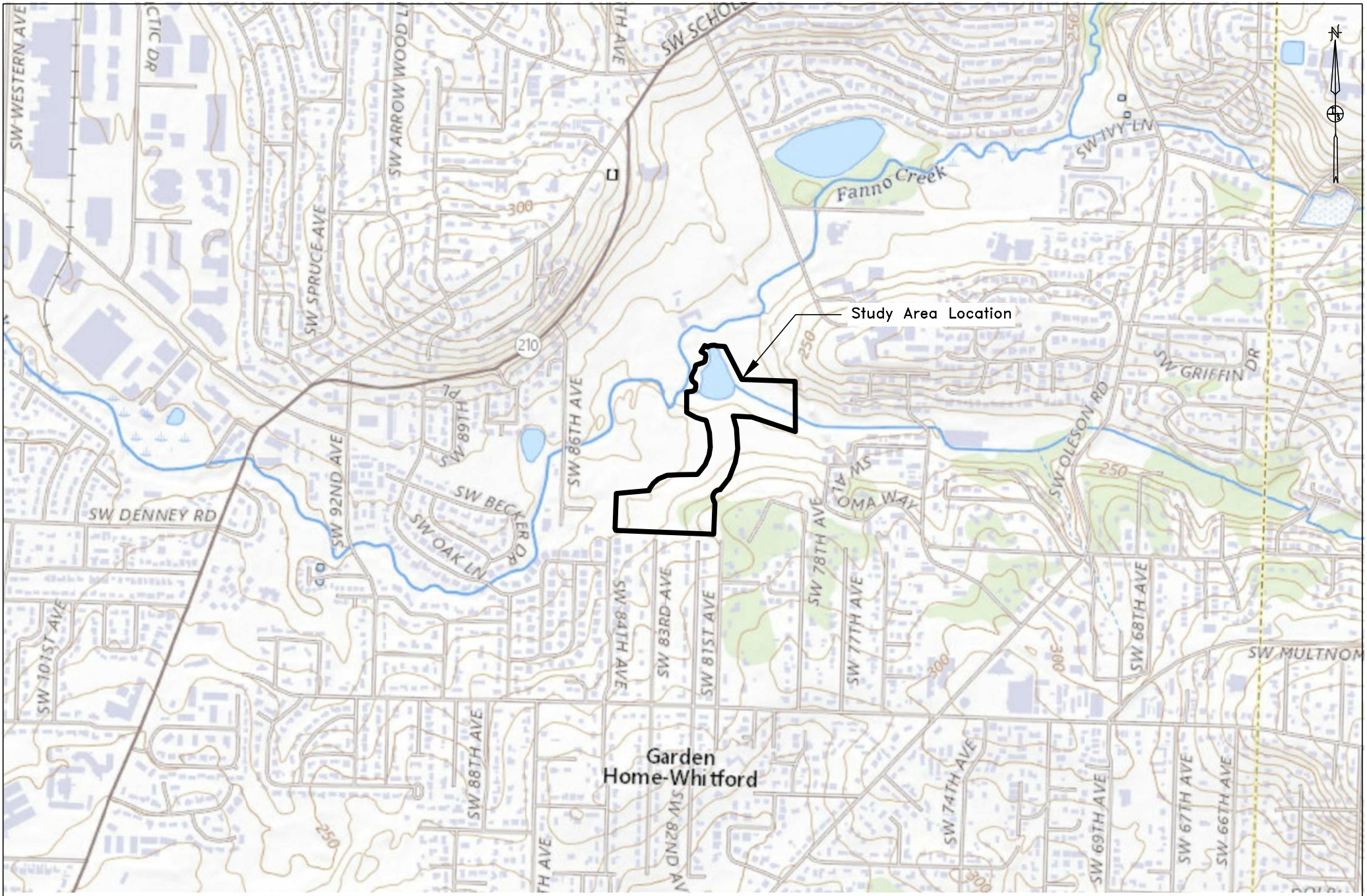


SOURCE: U.S. Department of the Interior, U.S. Geological Survey, The National Map Viewer, 2021. Available at: <https://apps.nationalmap.gov/viewer/>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

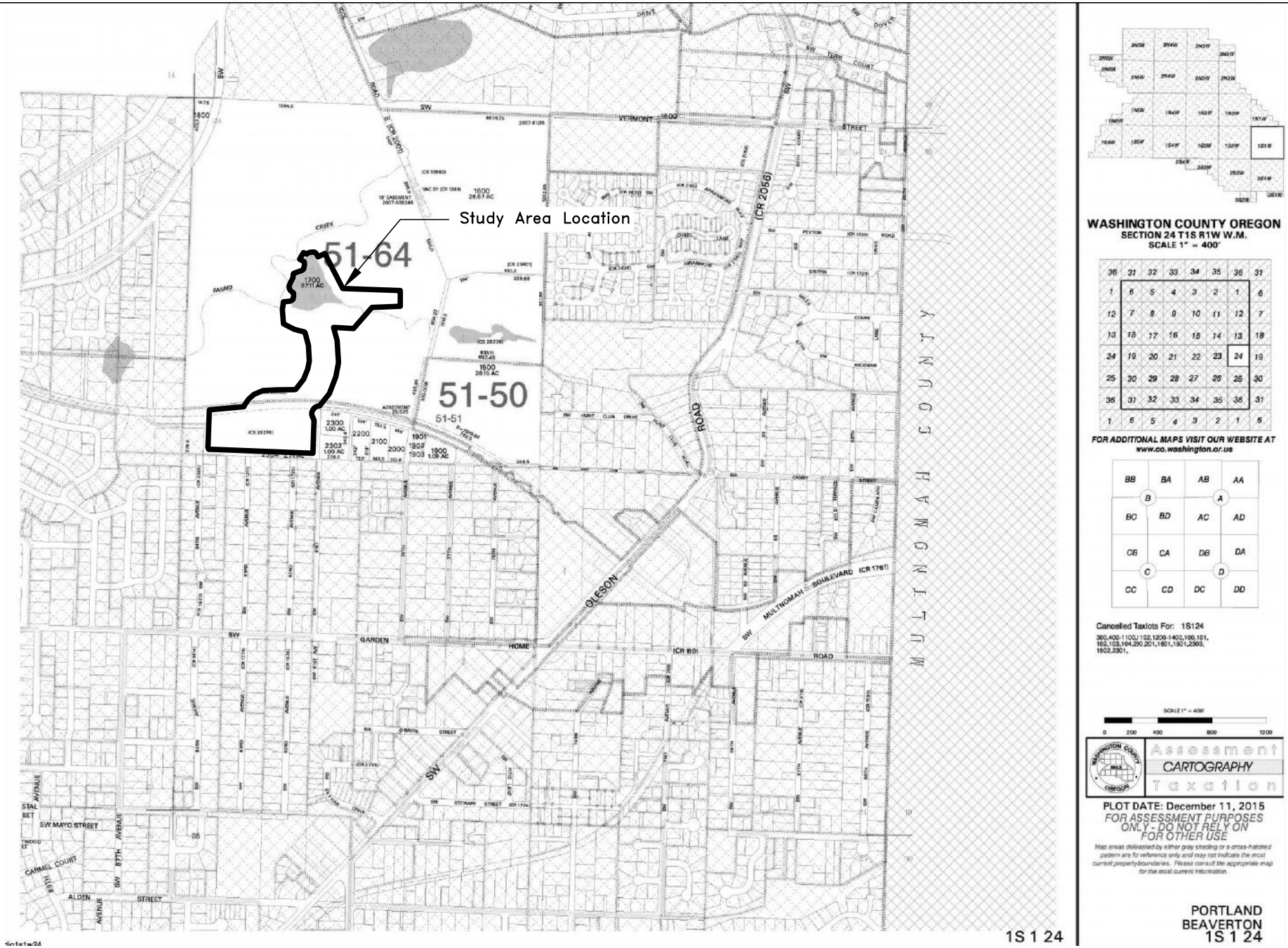
GRAPHIC SCALE
500' 0' 500' 1000' 2000'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

VICINITY MAP

FIGURE 1



WASHINGTON COUNTY OREGON
SECTION 24 T1S R1W W.M.
SCALE 1" = 400'

36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6
12	7	8	9	10	11	12	7
13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6

FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT
www.co.washington.or.us

BB	BA	AB	AA
	B	A	
BC	BD	AC	AD
CB	CA	DB	DA
	C	D	
CC	CD	DC	DD

Cancelled Taxlots For: 1S124
300,400-1100,1102,1200-1400,100,101, 102,103,104,200,201,1601,1501,2303, 1502,2301,

SCALE 1" = 400'
0 200 400 800 1200

Assessment
CARTOGRAPHY
Taxation

PLOT DATE: December 11, 2015
FOR ASSESSMENT PURPOSES ONLY - DO NOT RELY ON FOR OTHER USE

Map areas delineated by either gray shading or a cross-hatched pattern are for reference only and may not indicate the most current property boundaries. Please consult the appropriate map for the most current information.

PORTLAND
BEAVERTON
1S 1 24

SOURCE: ORMAP website, Washington County Assessor's Map 1S 1 24, 2021. Available at: <https://ormap.net/gis/index.html>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
500' 0' 500' 1000' 2000'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

TAX LOT MAP
1S 1 24

FIGURE 2

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

SOURCE: U.S. Fish & Wildlife Service, National Wetlands Inventory, Wetlands Mapper application, 2021. Available at: <https://www.fws.gov/wetlands/Data/Mapper.html>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

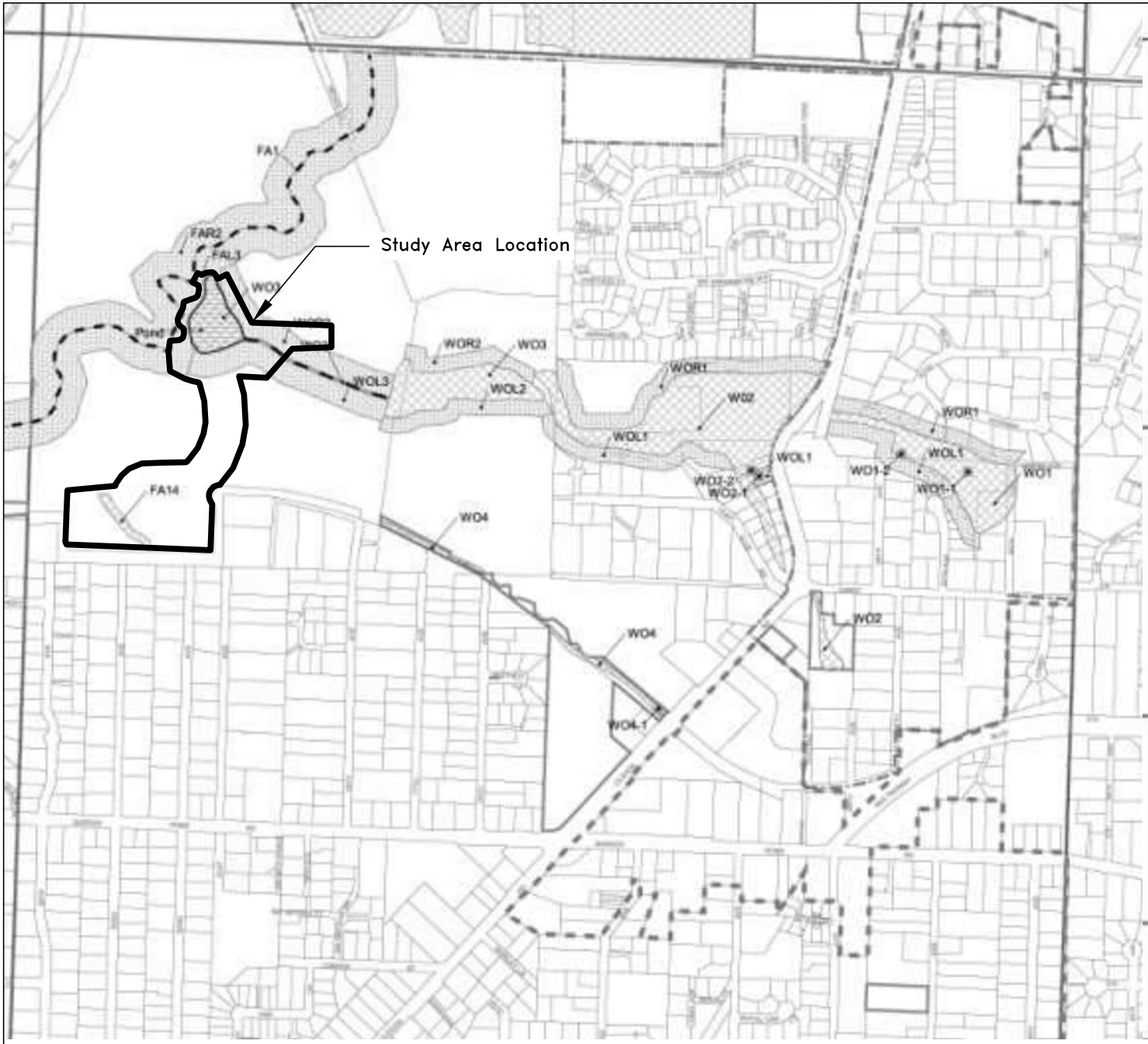
GRAPHIC SCALE
400' 0' 400' 800' 1600'

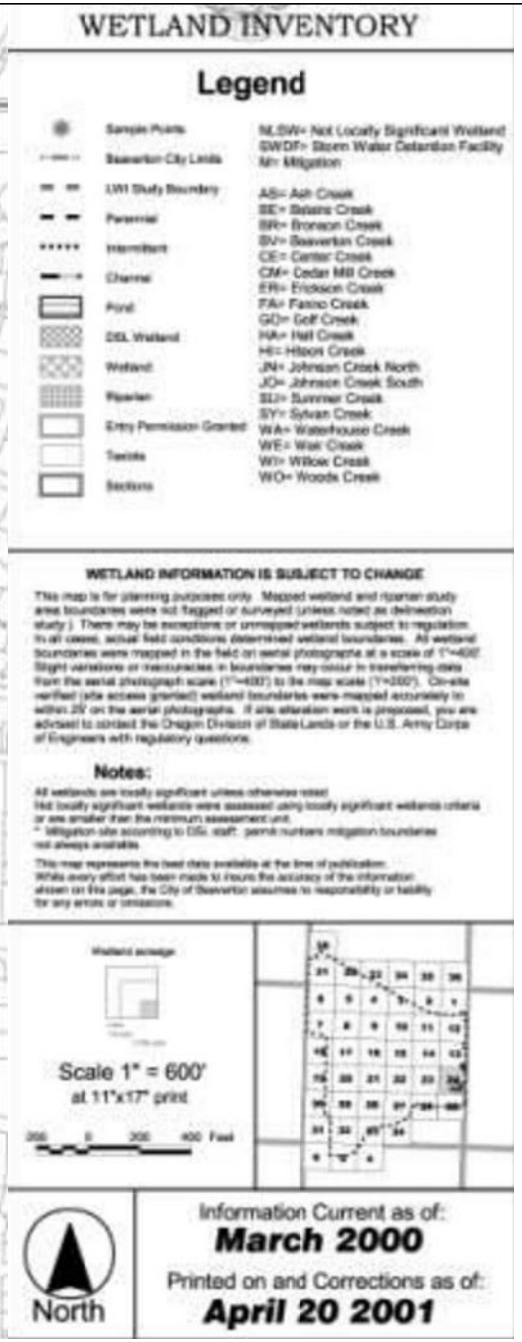
WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

NWI MAP

FIGURE 3A





SOURCE: Oregon Department of State Lands website, 2021. Available at: <https://www.oregon.gov/dsl/WW/Pages/Inventories.aspx>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

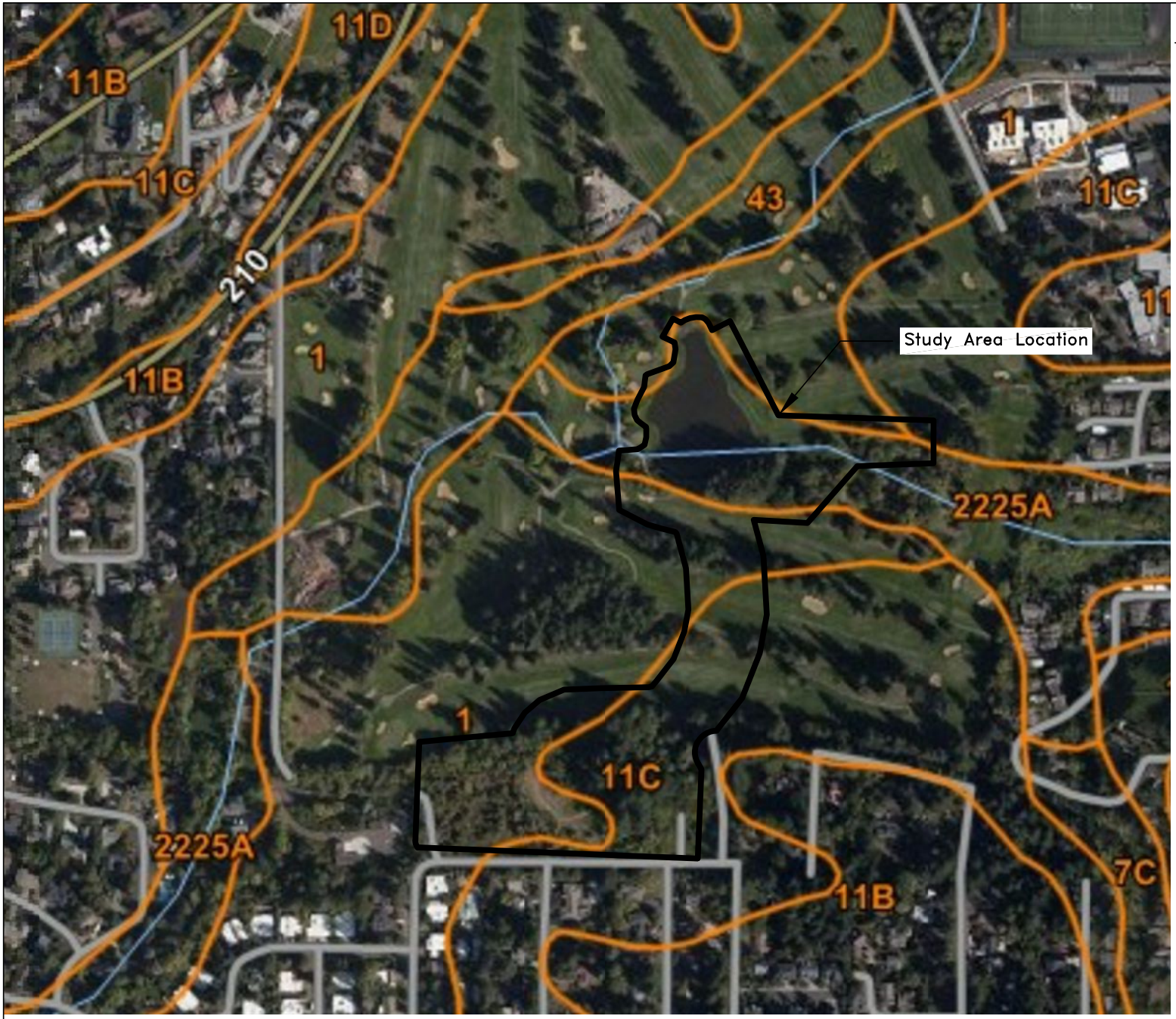
GRAPHIC SCALE
400' 0' 400' 800' 1600'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

LWI MAP

FIGURE 3B



Map Unit Symbol	Map Unit Name	Hydric Status
1	Aloha silt loam	No
7B	Cascade silt loam, 3–7% slopes	No
7C	Cascade silt loam, 7–12% slopes	No
11B	Cornelius & Kinton silt loams, 2–7% slopes	No
11C	Cornelius & Kinton silt loams, 7–12% slopes	No
11D	Cornelius & Kinton silt loams, 12–20% slopes	No
16C	Delena silt loam, 3–12% slopes	Yes
43	Wapato silty clay loam	Yes
2225A	Huberly silt loam, 0–3% slopes	Yes

SOURCE: U.S. Department of Agriculture, Natural Resource Conservation Service, Web Soil Survey Application, 2021. Available at: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
200' 0' 200' 400' 800'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

COUNTY SOIL SURVEY MAP

FIGURE 4

SOURCE: U.S. Army Corps of Engineers

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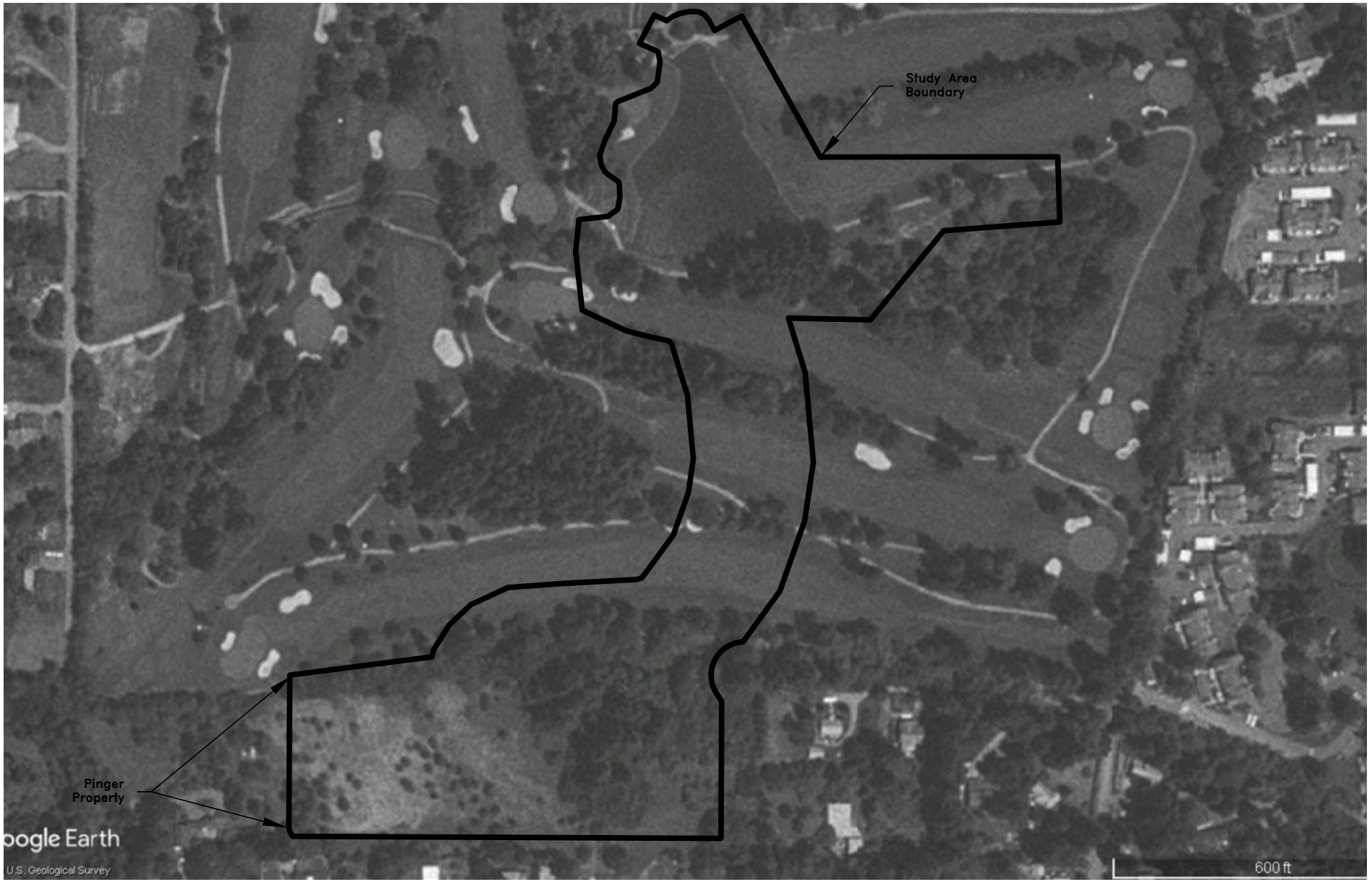
GRAPHIC SCALE
500' 0' 500' 1000' 2000'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

1936 AERIAL PHOTO

FIGURE 5A



SOURCE: Google Earth, 2021. Available at: <https://earth.google.com>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

JUNE 8, 1995
AERIAL IMAGE

FIGURE 5B

SOURCE: Google Earth, 2021. Available at: <https://earth.google.com>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

APRIL 30, 2002
AERIAL IMAGE

FIGURE 5C

SOURCE: Google Earth, 2021. Available at: <https://earth.google.com>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

JULY 11, 2007
AERIAL IMAGE

FIGURE 5D

SOURCE: Google Earth, 2021. Available at: <https://earth.google.com>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

JULY 23, 2012
AERIAL IMAGE

FIGURE 5E

SOURCE: Google Earth, 2021. Available at: <https://earth.google.com>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

MAY 22, 2017
AERIAL IMAGE

FIGURE 5F

SOURCE: Google Earth, 2021. Available at: <https://earth.google.com>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

JULY 16, 2018
AERIAL IMAGE

FIGURE 5G

SOURCE: Google Earth, 2021. Available at: <https://earth.google.com>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

MAY 8, 2019
AERIAL IMAGE

FIGURE 5H

SOURCE: Google Earth, 2021. Available at: <https://earth.google.com>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

AUGUST 13, 2020
AERIAL IMAGE

FIGURE 5I

SOURCE: Google Earth, 2021. Available at: <https://earth.google.com>

Terra Science, Inc.
Soil, Water, & Wetland Consultants

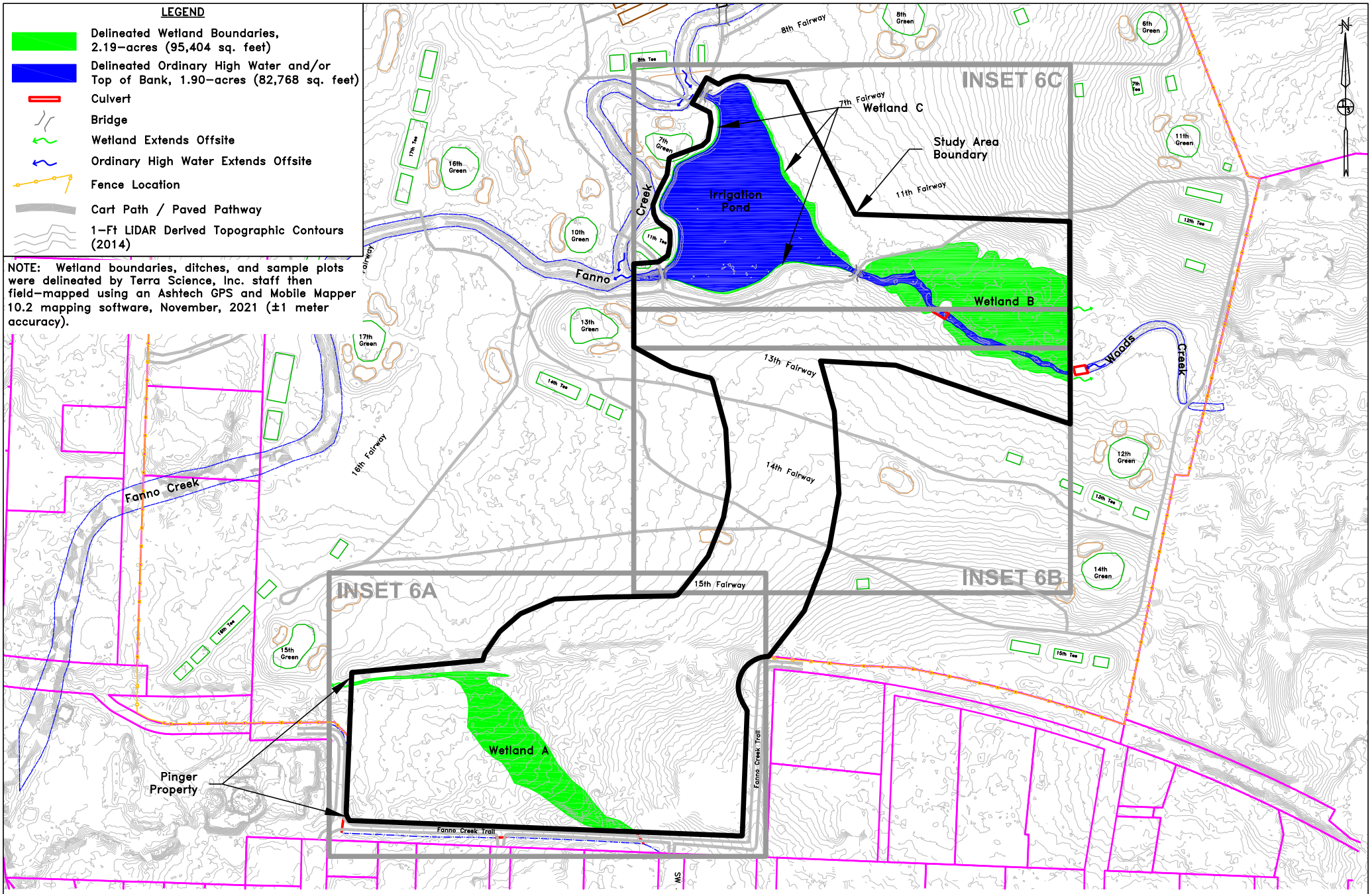
GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

JUNE 21, 2021
AERIAL IMAGE

FIGURE 5J



SOURCES: LiDAR: Dept. of Geology and Mineral Industries. OLC Metro 2014: Final Delivery. Watershed Sciences, Inc.
Tax Lot Boundaries: Washington County GIS, 2021.

Terra Science, Inc.
Soil, Water, & Wetland Consultants

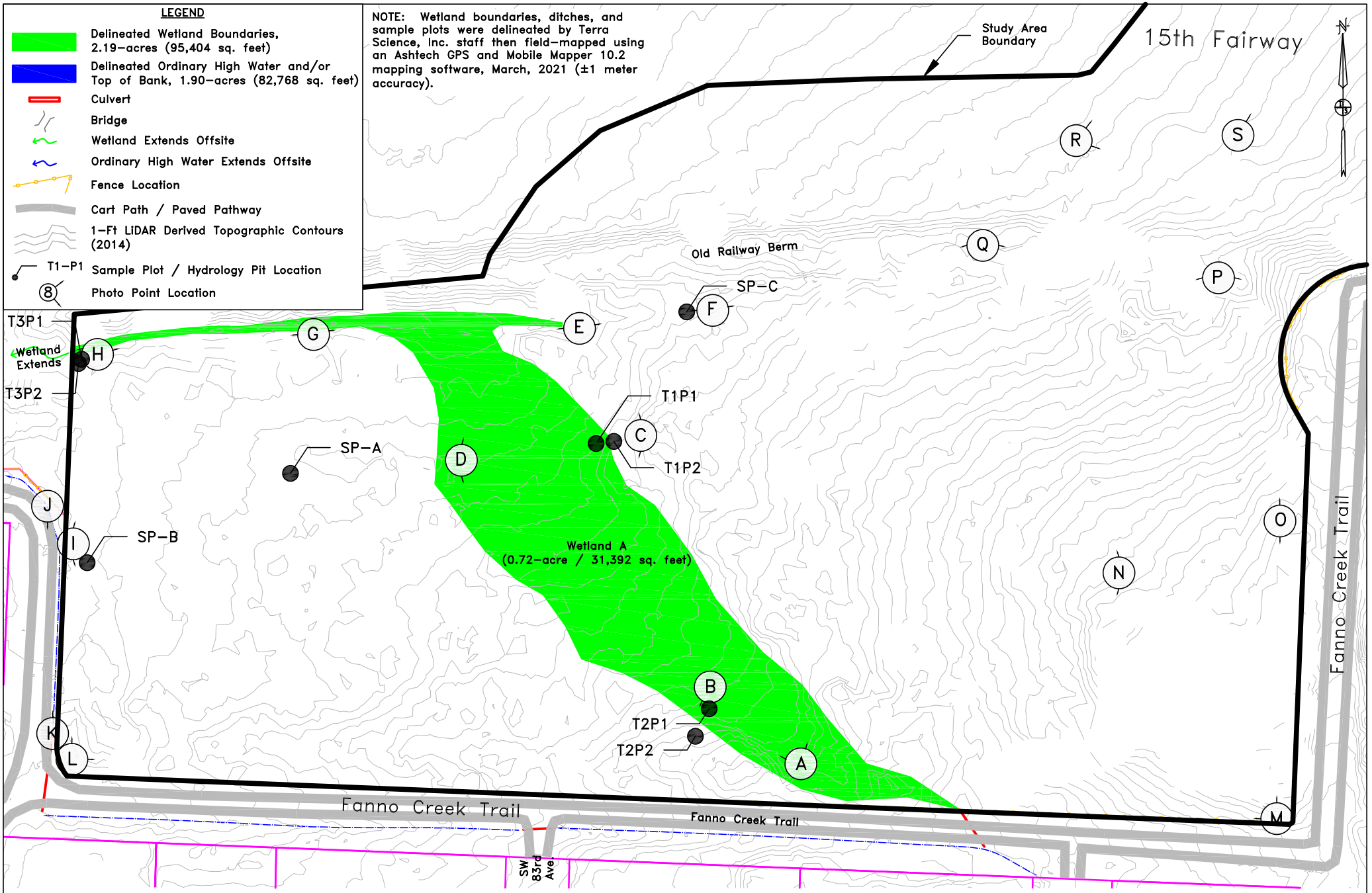
GRAPHIC SCALE
125' 0' 125' 250' 500'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

WETLAND DELINEATION INDEX MAP

FIGURE 6



SOURCES: LiDAR: Dept. of Geology and Mineral Industries. OLC Metro 2014: Final Delivery. Watershed Sciences, Inc.
Tax Lot Boundaries: Washington County GIS, 2021.

Terra Science, Inc.
Soil, Water, & Wetland Consultants

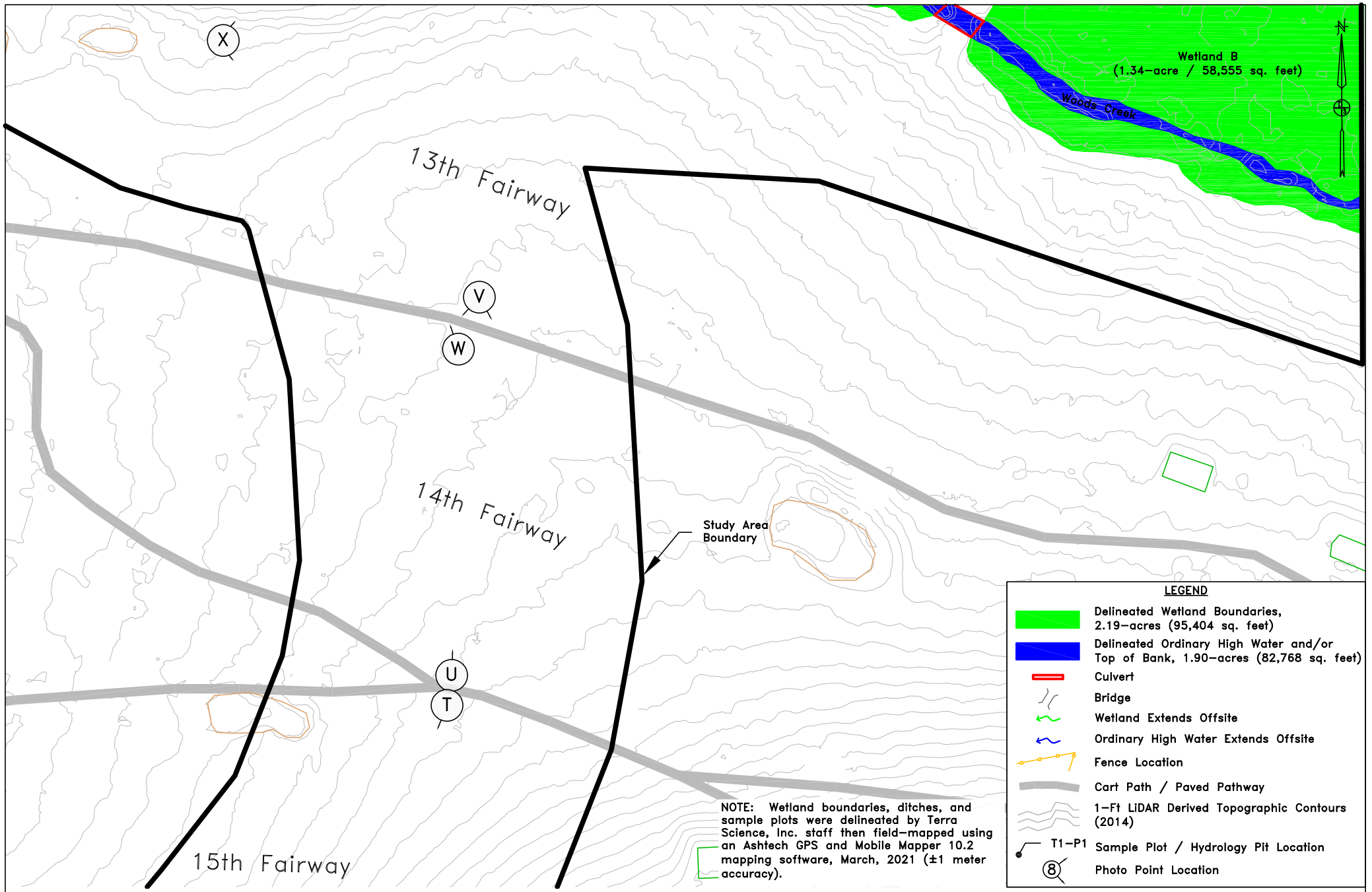
GRAPHIC SCALE
40' 0' 40' 80' 160'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

WETLAND DELINEATION MAP
(PINGER PROPERTY)

INSET 6A



SOURCES: LiDAR: Dept. of Geology and Mineral Industries. OLC Metro 2014: Final Delivery. Watershed Sciences, Inc.
Tax Lot Boundaries: Washington County GIS, 2021.

Terra Science, Inc.
Soil, Water, & Wetland Consultants

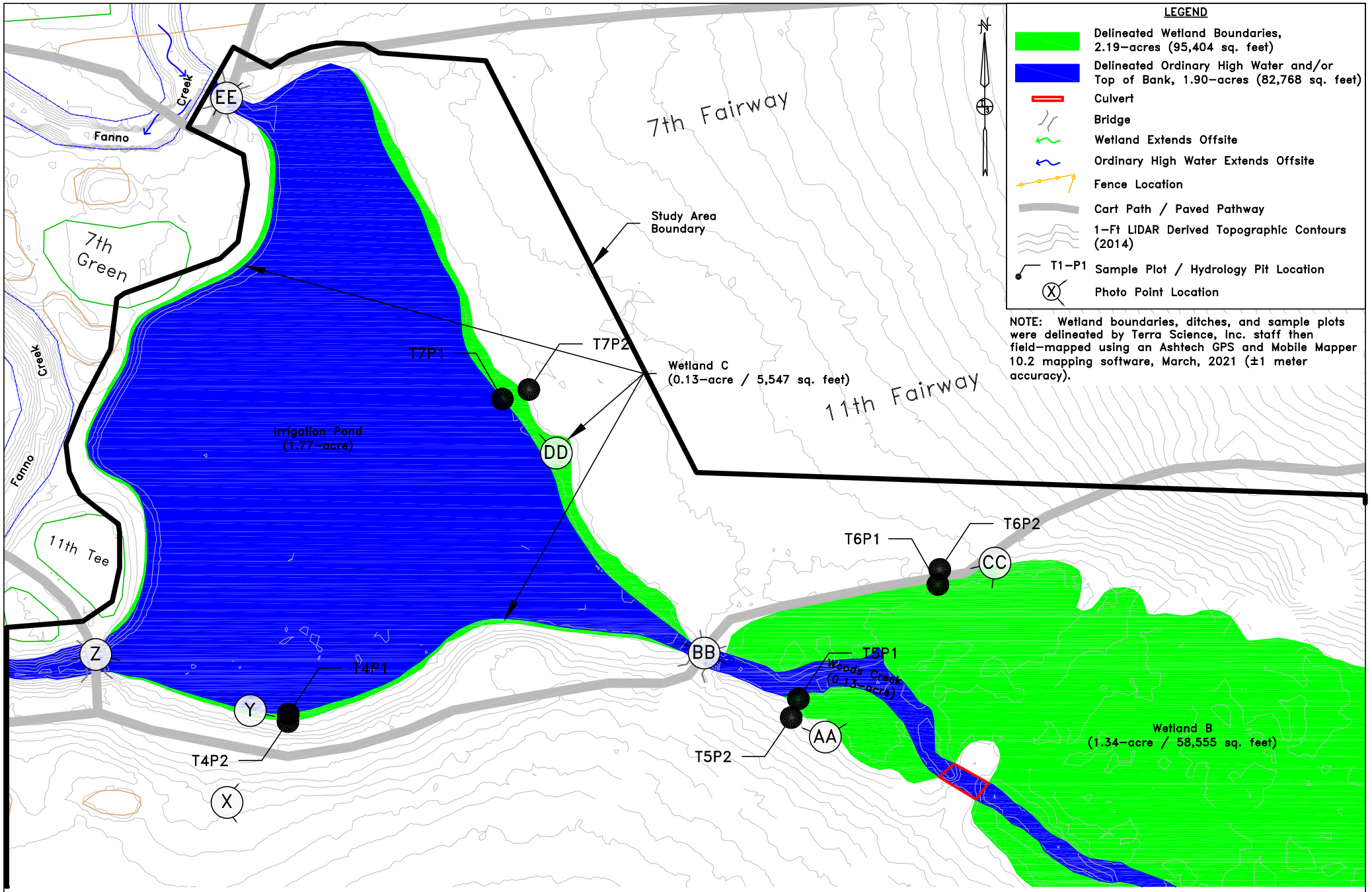
GRAPHIC SCALE
40' 0' 40' 80' 160'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

WETLAND DELINEATION MAP

INSET 6B



SOURCES: LiDAR: Dept. of Geology and Mineral Industries. OLC Metro 2014: Final Delivery. Watershed Sciences, Inc.
Tax Lot Boundaries: Washington County GIS, 2021.

Terra Science, Inc.
Soil, Water, & Wetland Consultants

GRAPHIC SCALE
40' 0' 40' 80' 160'

WETLAND DELINEATION REPORT FOR
PORTION OF TAX LOT 1700
(T.1S R. 1W SEC. 24)
Washington County, Oregon

November 2021

WETLAND DELINEATION MAP

INSET 6C

APPENDIX B

WETLAND DELINEATION DATA SHEETS

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **04/20/2018**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **SP-A**

Investigator(s): **P. SCOLES / D. MONNIN** Section, Township, Range: **T. 1S, R. 1W, SEC. 24 (BC)**

Landform: **ALLUVIAL TERRACE** Local Relief: **SL. SLOPING W-NW** Slope (%): **<1%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.470000°N** Long: **-122.762100°W** Datum: **NAD 83**

Soil Map Unit Name: **1: ALOHA SILT LOAM** NWI Classification: **NONE**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☐ Yes	☑ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED ON ALLUVIAL TERRACE LAND APPROXIMATELY 140 FEET EAST OF WEST FENCE LINE AND 110 FEET SOUTH OF OLD TROLLEY LINE BERM.**

PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **NONE**			
2.			
3.			
4.			
Total Cover:	**0**		
Sapling / Shrub Stratum (Plot size: **30' RADIUS**)			
1. **CRATAEGUS MONOGYNA**	**20**	**YES**	**FAC**
2. **RUBUS ARMENIACUS**	**5**	**YES**	**FAC**
3.			
4.			
5.			
6.			
Total Cover:	**25**		
Herb Stratum (Plot size: **5' RADIUS**)			
1. **ANTHOXANTHUM ODORATUM**	**80**	**YES**	**FACU**
2. **SCHEDONORUS ARUNDINACEUS**	**5**	**NO**	**FAC**
3. **VICIA SATIVA**	**5**	**NO**	**UPL**
4. **CIRSIUM ARVENSE**	**5**	**NO**	**FAC**
5.			
6.			
7.			
8. **THATCH/LEAF LITTER**	**5**		
9.			
Total Cover:	**95**		
Woody Vine Stratum (**30' RADIUS**)			
1. **NONE**			
2.			
Total Cover:	**0**		

% Bare Ground in Herb Stratum **0** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **67%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
√ 2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☑ Yes ☐ No

Remarks:

SOIL

Sampling Point: **SP-A**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12.5	**10YR 3/2**	**100**	**-**				**SILT LOAM**	**MOIST**
12.5-18	**10YR 3/3**	**100**	**-**				**SILT LOAM**	**MOIST**

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☐ Yes ☑ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☐ Yes	☑ No	Depth:	**>18 IN.**
Saturation Present?	☐ Yes	☑ No	Depth:	**>18 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **04/20/2018**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **SP-B**

Investigator(s): **P. SCOLES / D. MONNIN** Section, Township, Range: **T. 1S, R. 1W, SEC. 24 (BC)**

Landform: **ALLUVIAL TERRACE** Local Relief: **SL. SLOPING W** Slope (%): **<1%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.470000°N** Long: **-122.762100°W** Datum: **NAD 83**

Soil Map Unit Name: **1: ALOHA SILT LOAM** NWI Classification: **NONE**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☐ Yes	☑ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED ON ALLUVIAL TERRACE LAND APPROXIMATELY 15 FEET EAST OF WEST FENCE LINE AND 130 FEET NORTH OF SOUTH FENCE LINE.**

PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **30' RADIUS**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **POPULUS BALSAMIFERA**	**2**	**NO**	**FAC**
2.			
3.			
4.			
Total Cover:	**2**		
Sapling / Shrub Stratum (Plot size: **30' RADIUS**)			
1. **CRATAEGUS MONOGYNA**	**35**	**YES**	**FAC**
2. **RUBUS ARMENIACUS**	**15**	**YES**	**FAC**
3. **CORYLUS CORNUTA**	**3**	**NO**	**FACU**
4.			
5.			
6.			
Total Cover:	**53**		
Herb Stratum (Plot size: **5' RADIUS**)			
1. **ANTHOXANTHUM ODORATUM**	**45**	**YES**	**FACU**
2. **SCHEDONORUS ARUNDINACEUS**	**15**	**YES**	**FAC**
3. **VICIA SATIVA**	**5**	**NO**	**UPL**
4. **DAUCUS CAROTA**	**5**	**NO**	**FACU**
5. **GERANIUM MOLLE**	**3**	**NO**	**UPL**
6. **RUMEX CRISPUS**	**2**	**NO**	**FAC**
7.			
8. **BRYOPHYTES**	**15**		
9.			
Total Cover:	**75**		
Woody Vine Stratum (**30' RADIUS**)			
1. **HEDERA HIBERNICA**	**5**	**YES**	**UPL**
2.			
Total Cover:	**5**		
% Bare Ground in Herb Stratum **10**	% Cover of Biotic Crust	**0**	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **5** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **60%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
√ 2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☑ Yes ☐ No

Remarks:

SOIL

Sampling Point: **SP-B**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	**7.5YR 2.5/2**	**100**	**-**				**SILT LOAM**	**MOIST**
5-17	**7.5YR 3/2**	**100**	**-**				**SILT LOAM**	**MOIST**

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☐ Yes ☑ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☐ Yes	☑ No	Depth:	**>17 IN.**
Saturation Present?	☐ Yes	☑ No	Depth:	**>17 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **04/20/2018**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **SP-C**

Investigator(s): **P. SCOLES / D. MONNIN** Section, Township, Range: **T. 1S, R. 1W, SEC. 24 (BC)**

Landform: **RELICT DITCH IN ALLUVIAL TERRACE** Local Relief: **SL. SLOPING W** Slope (%): **3%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.470000°N** Long: **-122.762100°W** Datum: **NAD 83**

Soil Map Unit Name: **11C: CORNELIUS & KINTON SILT LOAM, 7-12% SLOPES** NWI Classification: **NONE**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil √ or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☐ Yes	☑ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED IN BOTTOM OF RELICT DITCH ALONG SOUTH EDGE OF OLD TROLLEY BERM APPROXIMATELY 20 FEET SOUTH OF OLD TROLLEY LINE BERM AND 380 FEET WEST OF EAST FENCE LINE.**

PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: 5' x 20')	Absolute % Cover	Dominate Species?	Indicator Status
1. PRUNUS AVIUM	2	NO	FACU
2.			
3.			
4.			
Total Cover:	2		
Sapling / Shrub Stratum (Plot size: 5' x 20')			
1. RUBUS ARMENIACUS	10	YES	FAC
2.			
3.			
4.			
5.			
6.			
Total Cover:	10		
Herb Stratum (Plot size: 5' RADIUS)			
1. HYDROPHYLLUM TENUIPES	5	YES	FAC
2. PTERIDIUM AQUILINUM	5	YES	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	10		
Woody Vine Stratum (5' x 20')			
1. HEDERA HIBERNICA	90	YES	UPL
2.			
Total Cover:	90		
% Bare Ground in Herb Stratum 90	% Cover of Biotic Crust 0		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **4** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL Species:	0	x1=	0
FACW Species:	0	x2=	0
FAC Species:	15	x3=	45
FACU Species:	7	x4=	28
UPL Species:	90	x5=	450
Column Totals:	112 (A)		523 (B)

Prevalence Index = B/A = **4.67**

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☐ Yes ☑ No

Remarks: **SAMPLE PLOT MODIFIED TO DITCH BOTTOM.**

SOIL

Sampling Point: **SP-C**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 3/2**	**100**	**-**				**SILT LOAM**	**MOIST**
6-14	**10YR 3/3**	**100**	**-**				**SILT LOAM**	**MOIST**
14-16	**10YR 3/3**	**99**	**7.5YR 3/3**	**1**	**C**	**M**	**SILT LOAM**	**MOIST**

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☐ Yes ☑ No

Remarks: **WHILE THE DITCH IS CLEARLY EXCAVATED INTO SURROUNDING ALLUVIAL TERRACE, EXCAVATION OCCURRED SO LONG AGO (<50 YEARS) THAT TRUNCATED SOIL CHARACTERISTICS NO LONGER EVIDENT.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☐ Yes	☑ No	Depth:	**>16 IN.**
Saturation Present?	☐ Yes	☑ No	Depth:	**>16 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **04/20/2018**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T1-P1**

Investigator(s): **P. SCOLES / J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24 (BC)**

Landform: **SWALE EDGE / TOESLOPE** Local Relief: **SL. SLOPING NW** Slope (%): **3%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.470000°N** Long: **-122.762100°W** Datum: **NAD 83**

Soil Map Unit Name: **11C: CORNELIUS & KINTON SILT LOAM, 7-12% SLOPES** NWI Classification: **NONE**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☑ Yes	☐ No
Hydric Soil Present?	☑ Yes	☐ No
Wetland Hydrology Present?	☑ Yes	☐ No
Is the Sampled Area Within a Wetland?	☑ Yes	☐ No

Remarks: **SAMPLE PLOT LOCATED ALONG EAST EDGE OF SWALE APPROXIMATELY 110 FEET SOUTH OF OLD TROLLEY LINE BERM AND 330 FEET EAST OF WEST FENCE LINE.**

PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **20' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **NONE**			
2.			
3.			
4.			
Total Cover:	**0**		
Sapling / Shrub Stratum (Plot size: **20' x 40'**)			
1. **RUBUS ARMENIACUS**	**70**	**YES**	**FAC**
2. **ROSA SP.**	**10**	**NO**	**FAC***
3. **CRATAEGUS MONOGYNA**	**5**	**NO**	**FAC**
4.			
5.			
6.			
Total Cover:	**85**		
Herb Stratum (Plot size: **5' RADIUS**)			
1. **AGROSTIS CAPILLARIS**	**80**	**YES**	**FAC**
2. **JUNCUS EFFUSUS**	**10**	**NO**	**FACW**
3. **HOLCUS LANATUS**	**10**	**NO**	**FAC**
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	**100**		
Woody Vine Stratum (**20' x 40'**)			
1. **NONE**			
2.			
Total Cover:	**0**		

% Bare Ground in Herb Stratum **0** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **100%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
√ 2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☑ Yes ☐ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED EDGE OF SWALE COMMUNITY.**

SOIL

Sampling Point: **T1-P1**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	**10YR 3/2**	**100**	**-**				**SILT LOAM**	**MOIST**
5-13	**10YR 3/2**	**80**	**7.5YR 3/4**	**20**	**C**	**M**	**SILT LOAM**	**MOIST TO SATURATED**
13-17	**10YR 4/2**	**75**	**5YR 3/4**	**25**	**C**	**M**	**SILTY CLAY LOAM**	**SATURATED**

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- √ Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☑ Yes ☐ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- √ Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☑ Yes	☐ No	Depth:	**11.5 IN.**
Saturation Present?	☑ Yes	☐ No	Depth:	**10 IN.**

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **04/20/2018**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T1-P2**

Investigator(s): **P. SCOLES / J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24 (BC)**

Landform: **FOOTSLOPE OF GENTLE KNOLL** Local Relief: **SL. SLOPING W-SW** Slope (%): **6%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.470000°N** Long: **-122.762100°W** Datum: **NAD 83**

Soil Map Unit Name: **11C: CORNELIUS & KINTON SILT LOAM, 7-12% SLOPES** NWI Classification: **NONE**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☐ Yes	☑ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED APPROXIMATELY 10 FEET EAST OF SAMPLE PLOT T1-P1 AND 0.5-FEET HIGHER.**

PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **20' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **CRATAEGUS MONOGYNA**	**15**	**YES**	**FAC**
2. **FRANGULA PURSHIANA**	**3**	**NO**	**FAC**
3.			
4.			
Total Cover:	**18**		
Sapling / Shrub Stratum (Plot size: **20' x 40'**)			
1. **RUBUS ARMENIACUS**	**50**	**YES**	**FAC**
2. **CRATAEGUS MONOGYNA**	**10**	**NO**	**FAC**
3. **CORYLUS CORNUTA**	**10**	**NO**	**FACU**
4. **PRUNUS AVIUM**	**5**	**NO**	**FACU**
5. **ROSA SP.**	**5**	**NO**	**FAC***
6.			
Total Cover:	**80**		
Herb Stratum (Plot size: **5' RADIUS**)			
1. **POLYSTICHUM MUNITUM**	**50**	**YES**	**FACU**
2. **TOLMIEA MENZIESII**	**5**	**NO**	**FAC**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	**55**		
Woody Vine Stratum (**20' x 40'**)			
1. **NONE**			
2.			
Total Cover:	**0**		

% Bare Ground in Herb Stratum **45** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **2** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **67%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
√ 2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☑ Yes ☐ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED FOOTSLOPE COMMUNITY.**

SOIL

Sampling Point: **T1-P2**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	**10YR 3/2**	**100**	**-**				**SILT LOAM**	**MOIST**
9-17	**10YR 3/2**	**93**	**7.5YR 2.5/2**	**7**	**C**	**M**	**SILT LOAM**	**MOIST TO SATURATED**

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☐ Yes ☑ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☑ Yes	☐ No	Depth:	**14.5 IN.**
Saturation Present?	☑ Yes	☐ No	Depth:	**13 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **04/20/2018**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T2-P1**

Investigator(s): **P. SCOLES / J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24 (BC)**

Landform: **SWALE EDGE** Local Relief: **SL. SLOPING N** Slope (%): **2%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.470000°N** Long: **-122.762100°W** Datum: **NAD 83**

Soil Map Unit Name: **1: ALOHA SILT LOAM** NWI Classification: **NONE**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☑ Yes	☐ No
Hydric Soil Present?	☑ Yes	☐ No
Wetland Hydrology Present?	☑ Yes	☐ No

Is the Sampled Area Within a Wetland? ☑ Yes ☐ No

Remarks: **SAMPLE PLOT LOCATED ALONG SOUTHWEST EDGE OF SWALE APPROXIMATELY 60 FEET NORTH OF SOUTH FENCE LINE AND 410 FEET EAST OF WEST FENCE LINE.**

PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: 20' x 40')	Absolute % Cover	Dominate Species?	Indicator Status
1. MALUS SP. (ORNAMENTAL)	2	NO	FAC*
2.			
3.			
4.			
Total Cover:	2		
Sapling / Shrub Stratum (Plot size: 20' x 40')			
1. RUBUS ARMENIACUS	15	YES	FAC
2. PRUNUS AVIUM	2	NO	FACU
3.			
4.			
5.			
6.			
Total Cover:	17		
Herb Stratum (Plot size: 5' RADIUS)			
1. ALOPECURUS PRATENSIS	100	YES	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	100		
Woody Vine Stratum (20' x 40')			
1. NONE			
2.			
Total Cover:	0		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
√ 2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☑ Yes ☐ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED EDGE OF SWALE COMMUNITY.**

SOIL

Sampling Point: **T2-P1**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	**10YR 3/2**	**80**	**7.5YR 3/4**	**20**	**C**	**M**	**SILT LOAM**	**MOIST TO SATURATED**
9-17	**10YR 4/2**	**80**	**7.5YR 3/4**	**15**	**C**	**M**	**SILTY CLAY LOAM**	**SATURATED**
			10YR 3/3	**5**	**C**	**M**		

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- √ Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- √ Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☑ Yes ☐ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- √ Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☑ Yes	☐ No	Depth:	**4 IN.**
Saturation Present?	☑ Yes	☐ No	Depth:	**2 IN.**

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **04/20/2018**
Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T2-P2**
Investigator(s): **P. SCOLES / D. MONNIN** Section, Township, Range: **T. 1S, R. 1W, SEC. 24 (BC)**
Landform: **ALLUVIAL TERRACE** Local Relief: **SL. SLOPING NORTH** Slope (%): **2%**
Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.470000°N** Long: **-122.762100°W** Datum: **NAD 83**
Soil Map Unit Name: **1: ALOHA SILT LOAM** NWI Classification: **NONE**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☐ Yes	☑ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED APPROXIMATELY 18 FEET SOUTHWEST OF SAMPLE PLOT T2-P1 AND 1-FOOT HIGHER.**

PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **20' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **CRATAEGUS MONOGYNA**	**2**	**NO**	**FAC**
2.			
3.			
4.			
Total Cover:	**2**		
Sapling / Shrub Stratum (Plot size: **20' x 40'**)			
1. **RUBUS ARMENIACUS**	**93**	**YES**	**FAC**
2. **CORYLUS CORNUTA**	**5**	**NO**	**FACU**
3. **CRATAEGUS MONOGYNA**	**2**	**NO**	**FAC**
4.			
5.			
6.			
Total Cover:	**100**		
Herb Stratum (Plot size: **5' RADIUS**)			
1. **POLYSTICHUM MUNITUM**	**5**	**YES**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
8. **BRYOPHYTES**	**10**		
9.			
Total Cover:	**5**		
Woody Vine Stratum (**20' x 40'**)			
1. **NONE**			
2.			
Total Cover:	**0**		

% Bare Ground in Herb Stratum **85** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)
Total Number of Dominant Species Across All Strata: **2** (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: **50%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL Species:	**0**	x1=	**0**
FACW Species:	**0**	x2=	**0**
FAC Species:	**97**	x3=	**291**
FACU Species:	**10**	x4=	**40**
UPL Species:	**0**	x5=	**0**
Column Totals:	**107** (A)		**331** (B)

Prevalence Index = B/A = **3.09**

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☐ Yes ☑ No

Remarks: **SAMPLE PLOT MODIFIED TO LINEAR-SHAPED TERRACE COMMUNITY.**

SOIL

Sampling Point: **T2-P2**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	**10YR 3/2**	**100**	**-**				**SILT LOAM**	**MOIST**
8-13	**10YR 3/2**	**94**	**7.5YR 2.5/2**	**5**	**C**	**M**	**SILT LOAM**	**MOIST**
			2.5Y 3/2	**1**	**C**	**M**		
13-18	**10YR 3/2**	**80**	**7.5YR 3/3**	**10**	**C**	**M**	**SILT LOAM**	**MOIST TO SATURATED**
	2.5Y 3/2	**10**						

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☐ Yes ☑ No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☑ Yes	☐ No	Depth:	**16 IN.**
Saturation Present?	☑ Yes	☐ No	Depth:	**14 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **04/20/2018**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T3-P1**

Investigator(s): **P. SCOLES / D. MONNIN** Section, Township, Range: **T. 1S, R. 1W, SEC. 24 (BC)**

Landform: **DITCH WITHIN ALLUVIAL TERRACE** Local Relief: **SLOPING NORTH** Slope (%): **15%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.470000°N** Long: **-122.762100°W** Datum: **NAD 83**

Soil Map Unit Name: **1: ALOHA SILT LOAM** NWI Classification: **NONE**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil √ or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☑ Yes	☐ No
Hydric Soil Present?	☑ Yes	☐ No
Wetland Hydrology Present?	☑ Yes	☐ No
Is the Sampled Area Within a Wetland?	☑ Yes	☐ No

Remarks: **SAMPLE PLOT LOCATED ALONG SOUTH EDGE OF DITCH APPROXIMATELY 5 FEET EAST OF WEST FENCE LINE AND 25 FEET SOUTH OF OLD TROLLEY BERM. DITCH EXCAVATED > 50 YEARS AGO AT TIME OF TROLLEY BERM CONSTRUCTION.**

PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: 5' x 20')	Absolute % Cover	Dominate Species?	Indicator Status
1. SALIX SP.	5	YES	FACW*
2.			
3.			
4.			
Total Cover:	5		
Sapling / Shrub Stratum (Plot size: 5' x 20')			
1. SALIX SP.	5	YES	FACW*
2. RUBUS ARMENIACUS	2	YES	FAC
3.			
4.			
5.			
6.			
Total Cover:	7		
Herb Stratum (Plot size: 5' RADIUS)			
1. NONE			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	0		
Woody Vine Stratum (5' x 20')			
1. HEDERA HIBERNICA	2	NO	UPL
2.			
Total Cover:	2		

% Bare Ground in Herb Stratum **100** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species 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)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
√ 2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☑ Yes ☐ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED DITCH BOTTOM COMMUNITY.**

SOIL

Sampling Point: **T3-P1**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 3/2**	**100**					**SILT LOAM**	**SATURATED**
4-11	**10YR 3/2**	**95**	**7.5YR 3/3**	**5**	**C**	**M**	**SILTY CLAY LOAM**	**SATURATED**
11-17	**10YR 4/2**	**90**	**5YR 3/4**	**10**	**C**	**M**	**SILTY CLAY LOAM**	**SATURATED**

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- √ Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☑ Yes ☐ No

Remarks: **WHILE THE DITCH IS CLEARLY EXCAVATED INTO SURROUNDING ALLUVIAL TERRACE, EXCAVATION OCCURRED SO LONG AGO (>50 YEARS) THAT TRUNCATED SOIL CHARACTERISTICS NO LONGER EVIDENT.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- √ Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☑ Yes	☐ No	Depth:	**+3 IN.**
Water Table Present?	☑ Yes	☐ No	Depth:	**0 IN.**
Saturation Present?	☑ Yes	☐ No	Depth:	**0 IN.**

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **04/20/2018**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T3-P2**

Investigator(s): **P. SCOLES / D. MONNIN** Section, Township, Range: **T. 1S, R. 1W, SEC. 24 (BC)**

Landform: **ALLUVIAL TERRACE** Local Relief: **SL. SLOPING NORTH** Slope (%): **2%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.470000°N** Long: **-122.762100°W** Datum: **NAD 83**

Soil Map Unit Name: **1: ALOHA SILT LOAM** NWI Classification: **NONE**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil √ or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☐ Yes	☑ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED APPROXIMATELY 5 FEET SOUTHOF SAMPLE PLOT T3-P1 AND 1-FOOT HIGHER. SOME VERY OLD SIDECAST MATERIAL EVIDENT FROM EXCAVATION OF ADJACENT DITCH >50 YEARS AGO.**

PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **20' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **NONE**			
2.			
3.			
4.			
Total Cover:	**0**		
Sapling / Shrub Stratum (Plot size: **20' x 40'**)			
1. **CRATAEGUS MONOGYNA**	**50**	**YES**	**FAC**
2. **RUBUS ARMENIACUS**	**15**	**NO**	**FAC**
3. **SYMPHORICARPOS ALBUS**	**10**	**NO**	**FACU**
4. **MAHONIA AQUIFOLIUM**	**5**	**NO**	**FACU**
5.			
6.			
Total Cover:	**80**		
Herb Stratum (Plot size: **5' RADIUS**)			
1. **POLYSTICHUM MUNITUM**	**10**	**YES**	**FACU**
2.			
3.			
4.			
5.			
6.			
7.			
8. **BRYOPHYTES**	**20**		
9.			
Total Cover:	**5**		
Woody Vine Stratum (**20' x 40'**)			
1. **HEDERA HIBERNICA**	**30**	**YES**	**FACU**
2.			
Total Cover:	**0**		
% Bare Ground in Herb Stratum **70**	% Cover of Biotic Crust	**0**	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **33%** (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL Species:	**0**	x1=	**0**
FACW Species:	**0**	x2=	**0**
FAC Species:	**65**	x3=	**195**
FACU Species:	**55**	x4=	**220**
UPL Species:	**0**	x5=	**0**
Column Totals:	**120** (A)		**415** (B)

Prevalence Index = B/A = **3.46**

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☐ Yes ☑ No

Remarks: **SAMPLE PLOT MODIFIED TO LINEAR-SHAPED TERRACE COMMUNITY.**

SOIL

Sampling Point: **T3-P2**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	**10YR 3/2**	**90**	**7.5YR 3/4**	**<1**	**C**	**M**	**SILT LOAM**	**MOIST, FILL**
	10YR 3/3	**9**						
3-9	**10YR 3/2**	**100**					**SILT LOAM**	**MOIST, NATIVE**
9-16	**10YR 3/3**	**100**					**SILT LOAM**	**MOIST**

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☐ Yes ☑ No

Remarks: **SOME VERY OLD SIDECAST MATERIAL EVIDENT FROM EXCAVATION OF ADJACENT DITCH >50 YEARS AGO.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☐ Yes	☑ No	Depth:	**>16 IN.**
Saturation Present?	☐ Yes	☑ No	Depth:	**>16 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 04/20/2018 WAS 156% AND 246% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 93% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **11/03/2021**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T4-P1**

Investigator(s): **J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24**

Landform: **TOESLOPE** Local Relief: **FLAT** Slope (%): **1%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.471435°N** Long: **-122.760355°W** Datum: **NAD 83**

Soil Map Unit Name: **2225A: HUBERLY SILT LOAM, 0-3% SLOPES** NWI Classification: **FRESHWATER POND**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation √ Soil √ or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☐ Yes	☐ No
Hydric Soil Present?	☑ Yes	☐ No
Wetland Hydrology Present?	☑ Yes	☐ No

Is the Sampled Area Within a Wetland? ☑ Yes ☐ No

Remarks: **SAMPLE PLOT LOCATED ALONG LANDSCAPED SOUTH EDGE OF IRRIGATION POND APPROXIMATELY 130 FEET EAST OF BRIDGE IN SOUTHWEST CORNER OF POND. VICINITY OF SAMPLE PLOT BARK-MULCHED WITH ONLY PLANTED SHRUBS PRESENT (VEGETATION PARAMETER NOT APPLICABLE). SOILS HISTORICALLY EXCAVATED AND BACKFILLED.**

PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: 3' x 40')	Absolute % Cover	Dominate Species?	Indicator Status
1. NONE			
2.			
3.			
4.			
Total Cover:	0		
Sapling / Shrub Stratum (Plot size: 3' x 40')			
1. RHODODENDRON MACROPHYLLUM	60	YES	FACU
2.			
3.			
4.			
5.			
6.			
Total Cover:	60		
Herb Stratum (Plot size: 1.5' RADIUS)			
1. POA SP.	1	NO	FAC*
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	1		
Woody Vine Stratum (3' x 40')			
1. NONE			
2.			
Total Cover:	0		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: N/A (A)

Total Number of Dominant Species Across All Strata: N/A (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: N/A (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☐ Yes ☐ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED EDGE OF POND COMMUNITY. ONLY LANDSCAPED SPECIES PRESENT, THEREFORE VEGETATION PARAMETER CONSIDERED NOT APPLICABLE.**

SOIL

Sampling Point: **T4-P1**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 3/1**	**51**	**7.5YR 3/4**	**7**	**C**	**M**	**SANDY LOAM**	**MOIST, FILL**
	10YR 4/1	**40**	**5YR 3/4**	**2**	**C**	**M**	**SILTY CLAY**	
4-16	**10YR 4/2**	**47**	**7.5YR 4/4**	**6**	**C**	**M**	**SAND**	**MOIST TO SATURATED, FILL**
	10YR 3/2	**47**						

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- √ Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☑ Yes ☐ No

Remarks: **2 INCHES OF BARK MULCH OVER FILL MATERIAL.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- √ Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☑ Yes	☐ No	Depth:	**9 IN.**
Saturation Present?	☑ Yes	☐ No	Depth:	**8 IN.**

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **11/03/2021**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T4-P2**

Investigator(s): **J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24**

Landform: **HILLSLOPE** Local Relief: **SLOPING NORTH** Slope (%): **30%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.471435°N** Long: **-122.760355°W** Datum: **NAD 83**

Soil Map Unit Name: **2225A: HUBERLY SILT LOAM, 0-3% SLOPES** NWI Classification: **NONE**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation √ Soil √ or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☐ Yes	☐ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☑ Yes	☐ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED ALONG LANDSCAPED SOUTH EDGE OF IRRIGATION POND APPROXIMATELY 6 FEET SOUTH AND 1.5 FEET HIGHER THAN SAMPLE PLOT T4-P1. VICINITY OF SAMPLE PLOT BARK-MULCHED WITH ONLY PLANTED SHRUBS PRESENT (VEGETATION PARAMETER NOT APPLICABLE). SOILS HISTORICALLY SCALPED AND BACKFILLED.**

PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **10' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **NONE**			
2.			
3.			
4.			
Total Cover:	**0**		

Sapling / Shrub Stratum (Plot size: **10' x 40'**)			
1. **RHODODENDRON MACROPHYLLUM**	**60**	**YES**	**FACU**
2.			
3.			
4.			
5.			
6.			
Total Cover:	**60**		

Herb Stratum (Plot size: **5' RADIUS**)			
1. **NONE**			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	**1**		

Woody Vine Stratum (**10' x 40'**)			
1. **NONE**			
2.			
Total Cover:	**0**		

% Bare Ground in Herb Stratum **0** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **N/A** (A)

Total Number of Dominant Species Across All Strata: **N/A** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **N/A** (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☐ Yes ☐ No

Remarks: **SAMPLE PLOT MODIFIED TO LINEAR-SHAPED SLOPE COMMUNITY. ONLY LANDSCAPED SPECIES PRESENT, THEREFORE VEGETATION PARAMETER CONSIDERED NOT APPLICABLE.**

SOIL

Sampling Point: **T4-P2**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3.5	**10YR 3/1**	**48**	**5YR 3/3**	**2**	**C**	**M**	**LOAM**	**MOIST, FILL**
	10YR 4/1	**48**	**7.5YR 3/3**	**2**	**C**	**M**	**SILTY CLAY**	
3.5-18	**2.5Y 4/1**	**89**	**7.5YR 3/3**	**10**	**C**	**M**	**SILTY CLAY**	**MOIST, NATIVE**
			5YR 4/4	**1**	**C**	**M**		

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11) √
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☑ Yes ☐ No

Remarks: **2 INCHES OF BARK MULCH OVER FILL MATERIAL. DEPLETED MATRIX OBSERVED IS LIKELY RELICT FROM TIME PRIOR TO EXCAVATION OF IRRIGATION POND.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☐ Yes	☑ No	Depth:	**>18 IN.**
Saturation Present?	☐ Yes	☑ No	Depth:	**>18 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **11/03/2021**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T5-P1**

Investigator(s): **J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24**

Landform: **SWALE EDGE** Local Relief: **CONCAVE, FLAT** Slope (%): **1%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.471435°N** Long: **-122.760355°W** Datum: **NAD 83**

Soil Map Unit Name: **2225A: HUBERLY SILT LOAM, 0-3% SLOPES** NWI Classification: **PEM**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☑ Yes	☐ No
Hydric Soil Present?	☑ Yes	☐ No
Wetland Hydrology Present?	☑ Yes	☐ No

Is the Sampled Area Within a Wetland? ☑ Yes ☐ No

Remarks: **SAMPLE PLOT LOCATED ALONG EDGE OF SWALE SOUTH OF WOODS CREEK AND APPROXIMATELY 65 FEET EAST OF BRIDGE IN SOUTHEAST CORNER OF POND. VEGETATION MOWED INFREQUENTLY BUT OTHERWISE NOT SIGNIFICANTLY DISTURBED.**

PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **10' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **FRAXINUS LATIFOLIA**	**20**	**YES**	**FACW**
2.			
3.			
4.			
Total Cover:	**20**		

Sapling / Shrub Stratum (Plot size: **10' x 40'**)			
1. **NONE**			
2.			
3.			
4.			
5.			
6.			
Total Cover:	**0**		

Herb Stratum (Plot size: **5' RADIUS**)			
1. **POA SP.**	**75**	**YES**	**FAC***
2. **AGROSTIS STOLONIFERA**	**20**	**YES**	**FAC**
3. **RANUNCULUS REPENS**	**5**	**NO**	**FAC**
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	**100**		

Woody Vine Stratum (**10' x 40'**)			
1. **NONE**			
2.			
Total Cover:	**0**		

% Bare Ground in Herb Stratum **0** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species 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)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
√ 2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☑ Yes ☐ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED SWALE COMMUNITY. VEGETATION IS MOWED INFREQUENTLY BUT OTHERWISE NOT SIGNIFICANTLY DISTURBED.**

SOIL

Sampling Point: **T5-P1**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	99	7.5YR 3/3	1	C	M	SILT LOAM	MOIST
2-11	10YR 4/1	88	5YR 4/4	12	C	M	SILT LOAM	MOIST
11-16	10YR 4/1	84	7.5YR 3/4	12	C	M	SILTY CLAY LOAM	MOIST TO SATURATED
			7.5YR 2.5/3	3	C	M		
			5YR 5/8	1	C	M		

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- √ Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☑ Yes ☐ No

Remarks: **NATIVE SOIL.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- √ Geomorphic Position (D2)
- Shallow Aquitard (D3)
- √ FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	N/A
Water Table Present?	☐ Yes	☑ No	Depth:	14 IN.
Saturation Present?	☑ Yes	☐ No	Depth:	12 IN.

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **11/03/2021**
Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T5-P2**
Investigator(s): **J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24**
Landform: **HILLSLOPE** Local Relief: **SLOPING NORTH** Slope (%): **12%**
Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.471435°N** Long: **-122.760355°W** Datum: **NAD 83**
Soil Map Unit Name: **2225A: HUBERLY SILT LOAM, 0-3% SLOPES** NWI Classification: **NONE**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☐ Yes	☑ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED SOUTH OF SWALE ALONG SOUTH EDGE OF WOODS CREEK, APPROXIMATELY 12 FEET SOUTH-SOUTHWEST OF AND 1.5 FEET HIGHER THAN SAMPLE PLOT T5-P1. VEGETATION MOWED INFREQUENTLY BUT OTHERWISE NOT SIGNIFICANTLY DISTURBED.**

PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **10' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **BETULA PENDULA**	**35**	**YES**	**FACU**
2.			
3.			
4.			
Total Cover:	**35**		

Sapling / Shrub Stratum (Plot size: **10' x 40'**)			
1. **NONE**			
2.			
3.			
4.			
5.			
6.			
Total Cover:	**0**		

Herb Stratum (Plot size: **5' RADIUS**)			
1. **POA SP.**	**65**	**YES**	**FAC***
2. **BELLIS PERENNIS**	**10**	**NO**	**UPL**
3. **PRUNELLA VULGARIS**	**5**	**NO**	**FACU**
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	**80**		

Woody Vine Stratum (**10' x 40'**)			
1. **HEDERA HIBERNICA**	**2**	**NO**	**UPL**
2.			
Total Cover:	**2**		

% Bare Ground in Herb Stratum **20** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **1** (A)
Total Number of Dominant Species Across All Strata: **2** (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: **50** (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☐ Yes ☑ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED SLOPE COMMUNITY. VEGETATION IS MOWED INFREQUENTLY BUT OTHERWISE NOT SIGNIFICANTLY DISTURBED.**

SOIL

Sampling Point: **T5-P2**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 3/2**	**100**	**-**				**SILT LOAM**	**MOIST**
6-11	**10YR 3/2**	**90**	**7.5YR 3/3**	**10**	**C**	**M**	**SILT LOAM**	**MOIST**
11-18	**10YR 3/3**	**60**	**10YR 4/4**	**15**	**C**	**M**	**SILT LOAM**	**MOIST**
	10YR 4/2	**25**						

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☐ Yes ☑ No

Remarks: **NATIVE SOIL.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☐ Yes	☑ No	Depth:	**>18 IN.**
Saturation Present?	☐ Yes	☑ No	Depth:	**>18 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **11/03/2021**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T6-P1**

Investigator(s): **J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24**

Landform: **SWALE EDGE** Local Relief: **SL. SLOPING SOUTH** Slope (%): **2%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.471435°N** Long: **-122.760355°W** Datum: **NAD 83**

Soil Map Unit Name: **2225A: HUBERLY SILT LOAM, 0-3% SLOPES** NWI Classification: **PEM**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☑ Yes	☐ No
Hydric Soil Present?	☑ Yes	☐ No
Wetland Hydrology Present?	☑ Yes	☐ No

Is the Sampled Area Within a Wetland? ☑ Yes ☐ No

Remarks: **SAMPLE PLOT LOCATED ALONG EDGE OF SWALE NORTH OF WOODS CREEK AND APPROXIMATELY 155 FEET EAST-NORTHEAST OF BRIDGE IN SOUTHEAST CORNER OF POND. VEGETATION MOWED INFREQUENTLY BUT OTHERWISE NOT SIGNIFICANTLY DISTURBED.**

PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **10' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **FRAXINUS LATIFOLIA**	**45**	**YES**	**FACW**
2.			
3.			
4.			
Total Cover:	**45**		

Sapling / Shrub Stratum (Plot size: **10' x 40'**)			
1. **NONE**			
2.			
3.			
4.			
5.			
6.			
Total Cover:	**0**		

Herb Stratum (Plot size: **5' RADIUS**)			
1. **RANUNCULUS REPENS**	**50**	**YES**	**FAC**
2. **AGROSTIS STOLONIFERA**	**50**	**YES**	**FAC**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	**100**		

Woody Vine Stratum (**10' x 40'**)			
1. **NONE**			
2.			
Total Cover:	**0**		

% Bare Ground in Herb Stratum **0** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species 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)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
√ 2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☑ Yes ☐ No

Remarks: **SAMPLE PLOT MODIFIED TO LINEAR-SHAPED SWALE COMMUNITY. VEGETATION IS MOWED INFREQUENTLY BUT OTHERWISE NOT SIGNIFICANTLY DISTURBED.**

SOIL

Sampling Point: **T6-P1**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	**10YR 3/2**	**>99**	**7.5YR 3/3**	**<1**	**C**	**M**	**SILTY CLAY LOAM**	**MOIST**
6-11	**10YR 3/2**	**86**	**7.5YR 3/4**	**12**	**C**	**M**	**SILTY CLAY LOAM**	**MOIST TO SATURATED**
			5YR 2.5/2	**2**	**C**	**M/PL**		
11-16	**10YR 4/2**	**84**	**7.5YR 3/4**	**7**	**C**	**M**	**SILTY CLAY**	**SATURATED**
			7.5YR 4/4	**7**	**C**	**M**		
			5YR 2.5/2	**2**	**C**	**M**		

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- √ Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- √ Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☑ Yes ☐ No

Remarks: **NATIVE SOIL.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- √ Geomorphic Position (D2)
- Shallow Aquitard (D3)
- √ FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☐ Yes	☑ No	Depth:	**12 IN.**
Saturation Present?	☑ Yes	☐ No	Depth:	**10.5 IN.**

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **11/03/2021**
Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T6-P2**
Investigator(s): **J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24**
Landform: **HILLSLOPE** Local Relief: **SLOPING SOUTH** Slope (%): **10%**
Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.471435°N** Long: **-122.760355°W** Datum: **NAD 83**
Soil Map Unit Name: **2225A: HUBERLY SILT LOAM, 0-3% SLOPES** NWI Classification: **NONE**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)
Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☐ Yes	☑ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED NORTH OF SWALE ALONG NORTH EDGE OF WOODS CREEK, APPROXIMATELY 10 FEET NORTH OF AND 1.5 FEET HIGHER THAN SAMPLE PLOT T6-P1. VEGETATION MOWED INFREQUENTLY BUT OTHERWISE NOT SIGNIFICANTLY DISTURBED.**

PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **10' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **NONE**			
2.			
3.			
4.			
Total Cover:	**0**		
Sapling / Shrub Stratum (Plot size: **10' x 40'**)			
1. **NONE**			
2.			
3.			
4.			
5.			
6.			
Total Cover:	**0**		
Herb Stratum (Plot size: **5' RADIUS**)			
1. **POA SP.**	**90**	**YES**	**FAC***
2. **RANUNCULUS REPENS**	**5**	**NO**	**FAC**
3. **AGROSTIS STOLONIFERA**	**5**	**NO**	**FAC**
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	**100**		
Woody Vine Stratum (**10' x 40'**)			
1. **NONE**			
2.			
Total Cover:	**0**		
% Bare Ground in Herb Stratum **0**	% Cover of Biotic Crust **0**		

Dominance Test Worksheet:

Number of Dominant Species 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)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
√ 2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☑ Yes ☐ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED SLOPE COMMUNITY. VEGETATION IS MOWED INFREQUENTLY BUT OTHERWISE NOT SIGNIFICANTLY DISTURBED.**

SOIL

Sampling Point: **T6-P2**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 4/3**	**97**	**10YR 3/4**	**3**	**C**	**M**	**SILT LOAM**	**MOIST**
4-16	**10YR 4/3**	**89**	**10YR 3/4**	**10**	**C**	**M**	**SILT LOAM**	**MOIST**
			7.5YR 3/4	**1**	**C**	**M**		

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☐ Yes ☑ No

Remarks: **NATIVE SOIL.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☐ Yes	☑ No	Depth:	**>16 IN.**
Saturation Present?	☐ Yes	☑ No	Depth:	**>16 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **11/03/2021**

Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T7-P1**

Investigator(s): **J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24**

Landform: **POND EDGE** Local Relief: **FLAT TO SL. SLOPING W** Slope (%): **2%**

Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.471435°N** Long: **-122.760355°W** Datum: **NAD 83**

Soil Map Unit Name: **2225A: HUBERLY SILT LOAM, 0-3% SLOPES** NWI Classification: **FRESHWATER POND**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)

Are Vegetation √ Soil √ or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No

Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☐ Yes	☐ No
Hydric Soil Present?	☑ Yes	☐ No
Wetland Hydrology Present?	☑ Yes	☐ No
Is the Sampled Area Within a Wetland?	☑ Yes	☐ No

Remarks: **SAMPLE PLOT LOCATED 3 FEET EAST OF EAST EDGE OF IRRIGATION POND APPROXIMATELY 200 FEET NORTHWEST OF BRIDGE IN SOUTHEAST CORNER OF POND. VICINITY OF SAMPLE PLOT IS MANAGED FAIRWAY TURF (VEGETATION PARAMETER NOT APPLICABLE). SOILS HISTORICALLY EXCAVATED AND BACKFILLED.**

PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **10' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **NONE**			
2.			
3.			
4.			
Total Cover:	**0**		

Sapling / Shrub Stratum (Plot size: **10' x 40'**)			
1. **NONE**			
2.			
3.			
4.			
5.			
6.			
Total Cover:	**0**		

Herb Stratum (Plot size: **5' RADIUS**)			
1. **POA SP.**	**99**	**YES**	**FAC***
2. **RUMEX CRISPUS**	**1**	**NO**	**FAC**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	**100**		

Woody Vine Stratum (**10' x 40'**)			
1. **NONE**			
2.			
Total Cover:	**0**		

% Bare Ground in Herb Stratum **0** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **N/A** (A)

Total Number of Dominant Species Across All Strata: **N/A** (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: **N/A** (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☐ Yes ☐ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED EDGE OF POND COMMUNITY. ONLY LANDSCAPED SPECIES PRESENT, THEREFORE VEGETATION PARAMETER CONSIDERED NOT APPLICABLE.**

SOIL

Sampling Point: **T7-P1**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	**10YR 3/2**	**87**	**10YR 3/4**	**10**	**C**	**M**	**LOAMY SAND**	**MOIST, FILL**
			7.5YR 3/4	**3**	**C**	**M**		
4-13	**10YR 3/2**	**85**	**10YR 3/4**	**15**	**C**	**M**	**SAND**	**MOIST TO SATURATED, FILL**

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

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- √ Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☑ Yes ☐ No

Remarks: **VICINITY HISTORICALLY EXCAVATED AND BACKFILLED.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

- Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visable on Aerial Imagery (C9)
- √ Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☑ Yes	☐ No	Depth:	**9 IN.**
Saturation Present?	☑ Yes	☐ No	Depth:	**8 IN.**

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

Remarks:

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

Project/Site **PORTLAND GOLF CLUB** City/County: **PORTLAND / WASHINGTON** Sampling Date: **11/03/2021**
Applicant/Owner **PORTLAND GOLF CLUB** State: **OREGON** Sampling Point: **T7-P2**
Investigator(s): **J. CLINCH** Section, Township, Range: **T. 1S, R. 1W, SEC. 24**
Landform: **HILLSLOPE** Local Relief: **SLOPING WEST** Slope (%): **3%**
Subregion (LRR): **LRR A: NW FORESTS & COASTS** Lat: **45.471435°N** Long: **-122.760355°W** Datum: **NAD 83**
Soil Map Unit Name: **2225A: HUBERLY SILT LOAM, 0-3% SLOPES** NWI Classification: **NONE**
Are climatic/hydrologic conditions on the site typical for this time of year? Yes √ No (If no, explain in Remarks.)
Are Vegetation √ Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes √ No
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	☐ Yes	☐ No	**Is the Sampled Area Within a Wetland?**	☐ Yes	☑ No
Hydric Soil Present?	☑ Yes	☐ No			
Wetland Hydrology Present?	☐ Yes	☑ No			

Remarks: **SAMPLE PLOT LOCATED ALONG SLOPE EAST OF EAST EDGE OF IRRIGATION POND APPROXIMATELY 16 FEET EAST AND 1 FOOT HIGHER THAN SAMPLE PLOT T7-P1. VICINITY OF SAMPLE PLOT IS MANAGED FAIRWAY TURF (VEGETATION PARAMETER NOT APPLICABLE).**

PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

VEGETATION

Tree Stratum (Plot size: **10' x 40'**)	Absolute % Cover	Dominate Species?	Indicator Status
1. **NONE**			
2.			
3.			
4.			
Total Cover:	**0**		
Sapling / Shrub Stratum (Plot size: **10' x 40'**)			
1. **NONE**			
2.			
3.			
4.			
5.			
6.			
Total Cover:	**0**		
Herb Stratum (Plot size:**5' RADIUS**)			
1. **POA SP.**	**97**	**YES**	**FAC***
2. **TRIFOLIUM REPENS**	**3**	**NO**	**FAC**
3.			
4.			
5.			
6.			
7.			
8.			
9.			
Total Cover:	**100**		
Woody Vine Stratum (**10' x 40'**)			
1. **NONE**			
2.			
Total Cover:	**0**		

% Bare Ground in Herb Stratum **0** % Cover of Biotic Crust **0**

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: **N/A** (A)
Total Number of Dominant Species Across All Strata: **N/A** (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: **N/A** (A/B)

Prevalence Index Worksheet:

Total % Cover of:	Multiply by:
OBL Species:	x1=
FACW Species:	x2=
FAC Species:	x3=
FACU Species:	x4=
UPL Species:	x5=
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

1. Rapid Test for Hydrophytic Vegetation
2. Dominance Test >50%
3. Prevalence Index is ≤3.0[1]
4. Morphological Adaptations[1] (Provide supporting data in Remarks)
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 Vegetation Present? ☐ Yes ☐ No

Remarks: ***ESTIMATED INDICATOR STATUS. SAMPLE PLOT MODIFIED TO LINEAR-SHAPED SLOPE COMMUNITY. ONLY LANDSCAPED SPECIES PRESENT, THEREFORE VEGETATION PARAMETER CONSIDERED NOT APPLICABLE.**

SOIL

Sampling Point: **T7-P2**

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

Depth (Inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2.5	**10YR 4/2**	**95**	**5YR 4/4**	**3**	**C**	**PL**	**SANDY LOAM**	**MOIST, FILL**
			7.5YR 4/3	**2**	**C**	**M**		
2.5-11.5	**10YR 3/2**	**85**	**5YR 3/3**	**12**	**C**	**M**	**SILT LOAM**	**MOIST, NATIVE**
			7.5YR 4/4	**3**	**C**	**M**		
			7.5YR 2.5/1 MN^{3+}	**2**	**C**	**M**		
11.5-18	**10YR 4/2**	**84**	**5YR 4/6**	**1**	**C**	**M**	**SILTY CLAY LOAM**	**MOIST, FEW MN^{3+}**
			10YR 4/2	**15**	**D**	**M**		**CONCRETIONS**

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

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

Histosol (A1)		Sandy Redox (S5)
Histic Epipedon (A2)		Stripped Matrix (S6)
Black Histic (A3)		Loamy Mucky Mineral (F1)
Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)
Depleted Below Dark Surface (A11)	√	Depleted Matrix (F3)
Thick Dark Surface (A12)	√	Redox Dark Surface (F6)
Sandy Mucky Mineral (S1)		Depleted Dark Surface (F7)
Sandy Gleyed Matrix (S4)		Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

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

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):
Type: **NONE**
Depth (inches): **N/A**

Hydric Soil Present? ☑ Yes ☐ No

Remarks: **2 INCHES OF FILL MATERIAL OVER NATIVE SOIL. REDOXIMORPHIC FEATURES OBSERVED ARE LIKELY RELICT FROM TIME PRIOR TO EXCAVATION OF IRRIGATION POND.**

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

Water Stained Leaves (B9) (*MLRA 1, 2, 4A, and 4B*)
Drainage Patterns (B10)
Dry-Season Water Table (C2)
Saturation Visable on Aerial Imagery (C9)
Geomorphic Position (D2)
Shallow Aquitard (D3)
FAC-Neutral Test (D5)
Raised Ant Mounds (D6)
Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	☐ Yes	☑ No	Depth:	**N/A**
Water Table Present?	☐ Yes	☑ No	Depth:	**>18 IN.**
Saturation Present?	☐ Yes	☑ No	Depth:	**>18 IN.**

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
PRECIPITATION PRECEDING THE SITE VISIT ON 11/3/2021 WAS 68% AND 173% FOR THE ONE- AND TWO- WEEKS PRECEDING THE SITE VISIT AND 109% NORMAL FOR THE WATER YEAR.

Remarks:

APPENDIX C

GROUND LEVEL COLOR PHOTOGRAPHS

Photo Point A (above, taken 4/20/2018): Northwest to northeast facing view of south part of Wetland A which is dominated by meadow foxtail in the wetter portions and Himalayan blackberry around the fringe.

Photo Point B (left, taken 4/20/2018): Southwest facing view of sample transect T2 (yellow flags).

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Photo Point C (above, taken 4/20/2018): Southwest to northwest facing view of Wetland A from vicinity of sample transect T1. Himalayan blackberry dominates the fringe of the wetland with meadow foxtail and spreading rush evident in the wetter areas (background).

Photo Point D (below, taken 4/20/2018): East to south facing view of the northwest part of Wetland A. The lower elevation portion of the wetland is dominated by spreading rush and meadow foxtail with willow, English hawthorn, and Himalayan blackberry along the fringe.

Photo Point E (left and right, taken 4/20/2018): West (left) and east (right) views of the remnant rail line ditch taken at the upper (east) extent of wetland within the ditch. Atlantic ivy is the dominant vegetation in much of the understory outside of the wetland both in and outside of the ditch.

Photo Point F (left and right, taken 4/20/2018): West (left) and east (right) views of the remnant rail line ditch taken from vicinity of sample plot SP-C. Atlantic ivy and Himalayan blackberry are the dominant vegetation in much of the understory.

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Photo Point G (left and right, taken 4/20/2018): West (left) and east (right) views of the remnant rail line ditch taken from northwest part of study area just downstream (west) of where the wetland swale discharges.

Photo Point H (left and right, taken 4/20/2018): West (left) and east (right) views of the remnant rail line ditch taken from vicinity of sample transect T2. The ditch is incised at this location.

Photo Point I (above, taken 4/20/2018): North to south facing view of west part of Pinger Property taken from vicinity of sample plot SP-B. This part of the study area is dominated by English hawthorn, Himalayan blackberry, Atlantic ivy, and sweet vernal grass with several black cottonwoods in the overstory.

Photo Point J (left, taken 4/20/2018): South facing view of offsite ditch and Fanno Creek trail along west edge of Pinger Property.

Photo Point K (right, taken 4/20/2018): North facing view of offsite ditch and Fanno Creek trail along west edge of Pinger Property.

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Photo Point L (above, taken 4/20/2018): North to east facing view of southwest corner of Pinger Property. Himalayan blackberry and English hawthorn are the dominant vegetation.

Photo Point M (below, taken 4/20/2018): West to north facing view of southeast corner of Pinger Property. Himalayan blackberry and sweet cherry are the dominant vegetation.

Photo Point N (above, taken 4/20/2018): Southwest to northwest facing view taken from central east part of Pinger Property showing typical vegetation on the gentle knoll in the east part of this part of the study area. Much of this area is dominated by Atlantic ivy, English hawthorn, and Douglas fir.

Photo Point O (below, taken 4/20/2018): Southwest to northeast facing view taken from along east edge of Pinger Property. Much of this area is dominated by Atlantic ivy, English hawthorn, and Douglas fir.

Photo Point P (above, taken 4/20/2018): South to west facing view taken from northeast corner of Pinger Property. The remnant rail line ditch can be seen in the right part of the photo. Much of this area is dominated by Atlantic ivy, English hawthorn, cherry laurel, and Douglas fir.

Photo Point Q (below, taken 4/20/2018): Southeast to southwest facing view of northeast part of Pinger Property taken from atop old rail line berm. Atlantic ivy and Himalayan blackberry dominate the vegetation.

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Photo Point R (above, taken 11/03/2021): Northeast to southeast facing view of south edge of the 15th Fairway along the old rail line berm (right part of the photo). Much of this area between the fairway and the old rail line berm is a mix of golf course grasses (annual bluegrass and perennial ryegrass) and non-native weeds (English daisy, oxeye daisy).

Photo Point S (left, taken 11/03/2021): North-northeast facing view across the 15th Fairway from golf cart in Photo Point R (above).

Photo Point T (right, taken 11/03/2021): South-southeast facing view across the 15th Fairway toward location of Photo Points R & S (left and above).

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Photo Point U (left, taken 11/03/2021): North-northwest facing view across the 14th Fairway toward location of Photo Points V & W (below).

Photo Point V (left, taken 11/03/2021): Southeast to southwest facing view across 14th Fairway toward location of Photo Points U and T (above).

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Photo Point W (left, taken 11/03/2021): Northwest facing view across 13th Fairway toward location of Photo Point X (below) and the Irrigation Pond (beyond line of trees).

Photo Point X (below, taken 11/03/2021): Northeast to southeast facing view along north edge of 13th Fairway showing the Irrigation Pond (at left beyond cart path). This location is approximately 10 feet higher in elevation than the pond elevation.

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Photo Point Y (left, taken 11/03/2021): East facing view of sample plot transect T4 along the south edge of Irrigation Pond. The slope beyond the pond edge rises sharply and is landscaped with bark mulch and rhododendron. The wetland fringe (Wetland C) of the Irrigation Pond (between the shovel and the stone retaining wall) is very narrow along this edge of the pond.

Photo Point Z (left, taken 11/03/2021): East facing view of south edge of Irrigation Pond taken from bridge over pond outlet in the southwest corner of the pond. The sloping 11th Fairway is in the background (at left) whereas the 13th Fairway is beyond the rhododendron and trees (at right).

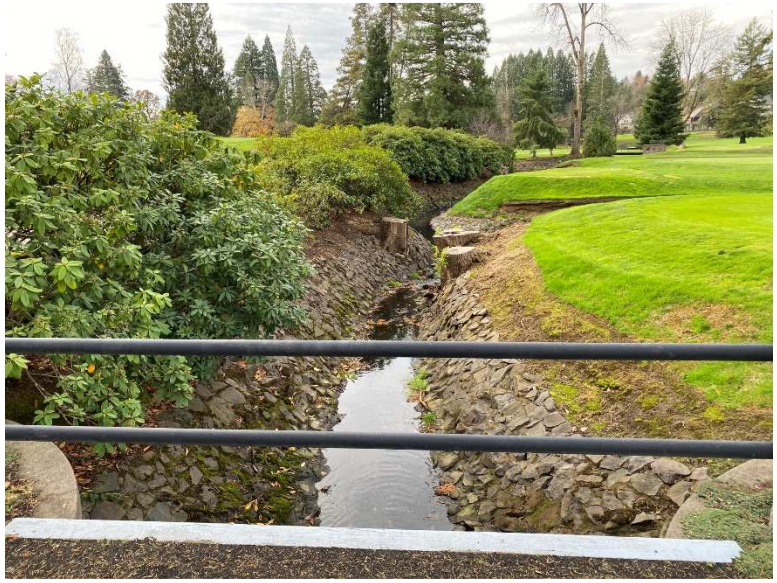

Photo Point Z (left, taken 11/03/2021): West facing view of Woods Creek below outfall from Irrigation Pond taken from bridge over pond outlet in the southwest corner of the pond. Fanno Creek joins Woods Creek from the north just downstream (west) of this photo location.

Photo Point AA (left, taken 11/03/2021): Northwest to north facing view of portion of Wetland B adjacent to Woods Creek at sample transect T5 (pink flags with shovel at approximate wetland boundary). Note the vegetation in this part of the wetland is managed for turf with annual bluegrass and creeping bentgrass as the dominant species in the herb stratum and Oregon ash as the dominant species in the tree stratum.

Photo Point BB (left, taken 11/03/2021): Southeast facing view of Woods Creek and adjacent portions of Wetland B taken from bridge over creek located just southwest of the Irrigation Pond. Sample transect T5 is located between the white barked birch tree (second tree from right) and the Oregon ash (center clump) with a noticeable difference in management practices on either side of the creek.

Photo Point BB (left, taken 11/03/2021): Northwest facing view of where Woods Creek enters the Irrigation Pond taken from bridge over creek located just southwest of the Irrigation Pond. The wetland fringe (Wetland C) of the Irrigation Pond is narrower on the steeper landscaped (left) edge of the pond than on the wider, flatter 11th Fairway (right) edge of the pond.

Photo Point CC (above, taken 11/03/2021): South to west facing view of Wetland B located south of 11th Fairway (at right) taken from just east of sample transect T6 (pink flags with shovel at approximate wetland boundary). Wetland B is several feet lower than the cart path and fairway and almost entirely unmanaged. Dominant vegetation includes creeping buttercup, creeping bentgrass, and common reed in the herb stratum and Oregon ash in the tree stratum.

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Photo Point DD (left, taken 11/03.2021): North northwest facing view of the wetland fringe (Wetland C) along the east edge of the Irrigation Pond and the 11th Fairway taken from just south of sample transect T7 (pink flags with shovel at approximate wetland boundary).

Photo Point EE (left, taken 11/03/2021): Southeast to southwest facing view of the Irrigation Pond taken from bridge over inlet from Fanno Creek (not pictured) in the north part of the pond. An irrigation gate allows water into the pond from Fanno Creek at this location.

APPENDIX D

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