WETLAND DELINEATION REPORT

Bristol Glen
King County, Washington

October 3, 2025

RAEDEKE ASSOCIATES, INC.

Raedeke Associates, Inc.

Wetland & Aquatic Sciences
Wildlife Ecology
Landscape Architecture

Report To:	TC Colleran Murray Franklyn Homes LLC 14410 Bel-Red Road, Suite 200 Bellevue, WA. 98007
Title:	Wetland Delineation Report for the Bristol Glen Project, King County Washington
Project Number:	2024-050-004
Prepared by:	Kolten T. Kosters Raedeke Associates, Inc. 2111 N. Northgate Way Ste. 219 Seattle, Washington, 98133 (206) 525-8122
Date:	October 3, 2025

Raedeke Associates, Inc.

Wetland & Aquatic Sciences
Wildlife Ecology
Landscape Architecture

Project Manager:	Kolten T. Kosters, M.S., SPWS Wetland Scientist
Project Personnel:	Christopher W. Wright, B.S. President, Wetland and Soil Scientist
	Spencer Seeberger, PLA Landscape Architect & Planner
	Samantha Pohlman, B.S. Wildlife Biologist

Submitted by:

Kolten T. Kosters

Signature

Kolten T. Kosters
Printed Name

October 3, 2025
Date

2111 N. Northgate Way Ste. 219 Seattle, WA 98133 206-525-8122 raedeke.com

TABLE OF CONTENTS

Page

LIST OF FIGURES IV

1.0 INTRODUCTION 1

1.1 Purpose 1
1.2 Project Location 1

2.0 METHODS 1

2.1 Definitions and Methodologies 1
2.2 Background Research 3
2.3 Field Sampling Procedures 3

3.0 EXISTING CONDITIONS 4

3.1 Results of Background Investigation 4
3.2 Results of Field Investigations 4

4.0 REGULATORY CONSIDERATIONS 12

4.1 Federal Clean Water Act (U.S. Army Corps of Engineers) 12
4.2 Washington State 12
4.3 King County 13

5.0 PROPSED PROJECT 14

6.0 LIMITATIONS 17

7.0 LITERATURE CITED 18

FIGURES 21

APPENDIX A: Field Survey Data A-1

APPENDIX B: WDOE 2014 Wetland Ratings B-1

APPENDIX C: English Hills Estates Plat Maps C-1

APPENDIX D: Wyndham Knoll Plat Maps D-1

APPENDIX E: King County Critical Area Designations E-1

APPENDIX F: Eastside Environmental Pros Report F-1

LIST OF FIGURES

Figure **Page**

1. Regional & Vicinity Map....22
2. NRCS Web Soil Survey....23
3. National Wetland Inventory....24
4. King County iMap....25
5. WDFW Priority Habitat & Species Map....26
6. Existing Conditions....27
7. Bristol Glen Site Plan....28

1.0 INTRODUCTION

1.1 PURPOSE

Raedeke Associates, Inc. was retained by Murray Franklyn Homes LLC to identify and delineate wetlands in the vicinity of the Bristol Glen project site. The project site is an assemblage of parcels in the 17000 block of NE 125th Street of unincorporated King County, Washington (Figure 1). During our site visit, we identified one on-site wetland (Wetland 1) located in the eastern portion of the assemblage and an off-site wetland (Wetland 2) located to the north of the northwest corner of the project area (Figure 6). As part of our site investigations, we collected information on vegetation, soils, and hydrology sufficient to characterize the existing site conditions. We rated the wetlands using the Washington Department of Ecology 2014 Wetland Rating System for Western Washington (Hruby and Yahnke 2023).

This report follows the King County (2025a) Critical Area Code.

As part of the project planning process, the applicant requested that King County review wetlands identified in the vicinity of the project site to confirm the accuracy of their delineation and their characterization under the WDOE 2014 wetland rating methodology. King County issued critical area designations CADS25-0080 for King County Parcel No. 2526059003 on May 26, 2025 (King County 2025b), CADS25-0081 for King County Parcel No. 2526059161 (King County 2025c) on May 26, 2025, and CADS25-0134, For King County Parcel No. 2526059163 on July 12, 2025 (King County 2025d) confirming that the wetlands were accurately delineated, rated, and that the appropriate critical area buffers were identified. The King County Critical Area Designations also confirm that the existing landscape and stormwater amenities were correctly identified and described for the assemblage.

1.2 PROJECT LOCATION

The Bristol Glen project site is an assemblage of parcels totaling approximately 14.58 acres located along NE 125th Street in unincorporated King County, Washington (Figure 1). The properties are identified as King County Tax Parcel Nos. 2526059003, , 2526059115, 2526059161, 2526059159, 2526059075, 2526059162, 2526059163. This places the project area in a portion of Section 25, Township 26 North, Range 5, East, W.M. Parcel maps retrieved online from King County depict the property boundaries. The project site is bordered to the north, south, and west by single-family homes, and to the east by an undeveloped landscape. The project site is accessed from NE 125th Street.

2.0 METHODS

2.1 DEFINITIONS AND METHODOLOGIES

Wetlands and streams are protected by federal law as well as by state and local regulations. Federal law (Section 404 of the Clean Water Act) prohibits the discharge of

dredged or fill material into "Waters of the United States", including certain wetlands, without a permit from the U.S. Army Corps of Engineers (USACE 2021, 2022). The USACE makes the final determination as to whether an area meets the definition of a wetland and whether the wetland is under their jurisdiction.

The USACE wetland definition was used to determine if any portions of the project area could be classified as wetland. A wetland is defined as an area "inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Federal Register 1986:41251).

We based our investigation upon the guidelines of the U. S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and subsequent amendments and clarifications provided by the USACE (1991a, 1991b, 1992, 1994), as updated for this area by the regional supplement to the USACE wetland delineation manual for the Western Mountains, Valleys, and Coast Region (USACE 2010). The USACE wetlands manual is required by state law (WAC 173-22-035, as revised) for all local jurisdictions.

Hydrophytic vegetation is defined as "macrophytic plant life growing in water, soil or substrate that is at least periodically deficient in oxygen as a result of excessive water content" (Environmental Laboratory 1987). The U.S. Army Corps of Engineers National Wetland Plant List wetland indicator status (WIS) ratings were used to make this determination (USACE 2020). The WIS ratings "reflect the range of estimated probabilities (expressed as a frequency of occurrence) of a species occurring in wetland versus non-wetland across the entire distribution of the species" (Reed 1988:8). Plants are rated, from highest to lowest probability of occurrence in wetlands, as obligate (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), and upland (UPL), respectively. In general, hydrophytic vegetation is present when the majority of the dominant species are rated OBL, FACW, and FAC.

A hydric soil is defined as "a soil that is formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (Federal Register 1995: 35681). The morphological characteristics of the soils in the study area were examined to determine whether any could be classified as hydric.

According to the 1987 methodology, wetland hydrology could be present if the soils were saturated (sufficient to produce anaerobic conditions) within the majority of the rooting zone (usually the upper 12 inches) for at least 5% of the growing season, which in this area is usually at least 2 weeks (USACE 1991a). It should be noted, however, that areas having saturation to the surface between 5% and 12% of the growing season may or may not be wetland (USACE 1991b). Depending on soil type and drainage characteristics, saturation to the surface would occur if water tables were shallower than about 12 inches

below the soil surface during this time period. Positive indicators of wetland hydrology include direct observation of inundation or soil saturation, as well as indirect evidence such as drift lines, watermarks, surface encrustations, and drainage patterns (Environmental Laboratory 1987). Hydrology was further investigated by noting drainage patterns and surface water connections between wetlands and streams within and adjacent to the project area.

2.2 BACKGROUND RESEARCH

We reviewed existing background maps and information for the project site available from the U.S.D.A. Natural Resource Conservation Service (NRCS 2025) Web Soil Survey, the U.S. Fish and Wildlife (USFWS 2025) National Wetland Inventory (NWI), and the King County (2025e) iMap. We also reviewed the Washington Department of Fish and Wildlife (WDFW 2025) Priority Habitat and Species to identify any endangered, threatened, or priority species or their habitat in the project vicinity before our site visit. In addition, we examined current and historical aerial photographs (Google Earth 2025) to assist in the definition of existing plant communities, drainage patterns, and land use.

2.3 FIELD SAMPLING PROCEDURES

We conducted site visits on May 30, 2024, February 13, 2025, March 6, 2025, March 14, 2025, and June 5, 2025 to search for wetlands, streams, or fish and wildlife habitats that may be present on the project site or in the immediate vicinity. In addition, we also collected sufficient information to describe the general landscape conditions of the site.

Vegetation, soil, and hydrology were examined in representative portions of the study area according to the procedures described in the Regional Supplement (USACE 2010). Plant communities were inventoried, classified, and described during our field investigations. We estimated the percentage coverage of each species. Plant identifications were made according to standard taxonomic procedures described in Hitchcock and Cronquist (2018) with nomenclature as updated by the U.S. Army Corps of Engineers National Wetland Plant List (USACE 2020). Wetland classification follows the USFWS wetland classification system (Cowardin et al. 1992). We determined the presence of a hydrophytic vegetation community using the procedure described in the Regional Supplement (USACE 2010), which requires the use of the dominance test, unless positive indicators of hydric soils and wetland hydrology are also present, in which case the prevalence index or the use of other indicators of a hydrophytic vegetation community as described in the Regional Supplement (USACE 2010) may also be required.

We excavated pits to a depth of at least 18 inches below the soil surface, where possible, to describe the soil and hydrologic conditions throughout the study area. We sampled soil at locations that corresponded with vegetation sampling areas and potential

wetland areas. Soil colors were determined using the Munsell Soil Color Chart (Munsell Color 2009). We used the indicators described in the Regional Supplement (USACE 2010) to determine the presence of hydric soils and wetland hydrology. During our site visit, we identified and delineated one Wetland (Wetland 1) located in the eastern portion of the project site. We flagged the wetland boundary with pink and black striped plastic flagging tape.

3.0 EXISTING CONDITIONS

3.1 RESULTS OF BACKGROUND INVESTIGATION

The USDA NRCS (2025) Web Soil Survey (Figure 2) identifies Alderwood gravelly sandy loam soil throughout the project site. Alderwood series soils are derived from glacial drift or outwash and are not listed as hydric soil (U.S.D.A. Soil Conservation Service 1991, Federal Register 1995). Alderwood soils may contain minor components of Mckenna, Norma, or Shalcar listed hydric soils. Soil series boundaries or mapping units are mapped from aerial photographs with limited field verification. Thus, the location and extent of boundaries between mapping units may not be accurate for a given parcel of land within the survey area.

The USFWS (2025) NWI (Figure 3) depicts a freshwater pond in the east portion of the project site and another pond located approximately 90 feet off-site south of the southeast corner of the project site. In addition, the NWI also shows a palustrine, emergent (PEM) wetland located southeast of the project site.

The King County (2025e) iMap (Figure 4) also shows the freshwater pond in the east portion of the site and the off-site pond located south of the southeast corner of the property. In addition, the iMap also shows a small wetland southeast of the project site in a similar location as depicted on the NWI. The King County (2025b) iMap also shows stormwater collection infrastructure along NE 125th Street being directed toward the west and south property lines of the Bristol Glen project site.

The Washington Department of Fish and Wildlife (2025) Priority Habitat and Species map does not depict any threatened, endangered, or priority species or their habitats on the Bristol Glen site (Figure 5). The PHS map identifies Bear Creek wetlands located approximately 330 feet south of the site in a residential development.

3.2 RESULTS OF FIELD INVESTIGATIONS

3.2.1 Existing Site Conditions

We visited the project site on May 30, 2024, February 13, 2025, March 6, 2025, March 14, 2025, and June 5, 2025 to document the existing site conditions and identify any wetlands, streams, or fish and wildlife habitat that are in the vicinity of the project site. The project consists of seven parcels located along NE 125th Street (Figure 6). Each of

the parcels in the assemblage contain existing single-family homes, paved driveways, outbuildings, and landscaped yards with lawn and gardens.

Undeveloped portions of the assemblage contain an overstory of western arborvitae (*Thuja plicata*, FAC), balsam poplar (*Populus balsamifera*, FAC) trees with an understory dominated by red elderberry (*Sambucus racemosa*, FACU), salmonberry (*Rubus spectabilis*, FAC), salal (*Gaultheria shallon*, FACU), California rhododendron (*Rhododendron macrophyllum*, FACU), Himalayan blackberry (*Rubus armeniacus*, FAC), vine maple (*Acer circinatum*, FAC), yellow archangel (*Lamiastrum galeobdolon*, FAC), cutleaf blackberry (*Rubus laciniatus*, FACU), English holly (*Ilex aquifolium*, FACU), creeping buttercup (*Ranunculus repens*, FAC), Robert geranium (*Geranium robertianum*, FACU), western swordfern (*Polystichum munitum*, FACU), Kentucky bluegrass (*Poa pratensis*, FAC), and tall fescue (*Festuca arundinacea*, FAC) (Sample Plots 1, 2, 3, 4, 16, 17, 18, and 20).

Soils across the project site are not hydric and generally consist of between 2 to 8 inches of black (10YR 2/1) to brown (10YR 3/2) to very dark grayish brown (10YR 3/2) sandy loam soils over brown (10YR 5/3) to dark yellowish brown (10YR 4/3 and 10YR 4/4) gravely sandy loams without the presence of redoximorphic concentrations in the soil matrix or pore linings to a depth of greater than 16 inches. We did not observe any primary indicators of wetland hydrology, such as saturation or a water table in the upper 12 inches of the soil profile. In addition, we did not observe any secondary indicators of wetland hydrology (e.g., drift deposits, water-stained leaves, algal mats, etc.) during our site investigation (Sample Plots 1, 2, 3, 4, 16, 17, 18, and 20).

3.2.2 Wetlands

Wetland 1

During our March 6, 2025 site investigation, we delineated the on-site portion of one wetland (Wetland 1). Wetland 1 is located along the east edge of the Bristol Glen project site on a portion of King County Tax Parcel Nos. 2526059003 and 2526059163 (Figure 6). The wetland extends onto the site from the north and continues off-site to the southeast. The wetland is part of a large depressional wetland complex that extends east of the project site and was previously identified as part of the English Hills Estates Division No.1 site developed circa 1994. The English Hills site plan shows the extent of the off-site portion of the wetland east of the project site as it was delineated in the 1990s (see Appendix C). The onsite portion of Wetland 1 contains a hydrophytic vegetation community consisting of an overstory of balsam poplar trees, with an understory of salmon raspberry, Himalayan blackberry, redosier dogwood (*Cornus alba*, FACW), Douglas' meadowsweet (*Spiraea douglasii*, FACW), and creeping buttercup (Sample Plots 5, 7, and 19). Based on our observations from the project site, the off-site portion of the wetland appears to be dominated primarily by reed canarygrass (*Phalaris arundinacea*, FACW).

Soils in the wetland are hydric and consist of up to 8 inches of very dark brown (10YR 2/2) to very dark grayish brown (10YR 3/2) sandy loam soils over dark gray (2.5Y 4/1) to gray (2.5Y 5/1) sandy loam soils with up to 20 percent dark yellowish brown (10YR 4/6) redoximorphic concentrations in the soil matrix. We found that soils within the wetland met hydric soil indicators A11 (depleted below dark surface) and F3 (depleted matrix). During our site visit, we observed a water table starting at a depth of between 2 to 8 inches and soil saturation at the soil surface. We found the shallow water table and soil saturation within the upper 12 inches of the soil profile were sufficient indicators of wetland hydrology per the wetland delineation manual (Environmental Laboratories 1987) and the regional supplement (USACE 2010).

Adjacent Upland Areas

Upland areas adjacent to Wetland 1 consist of a vegetation community dominated by balsam poplar trees, while the understory consists of salmon raspberry, Douglas' meadowsweet, vine maple, cut-leaf blackberry, Himalayan blackberry, beaked hazelnut (*Corylus cornuta*, FACU), pineland swordfern, Robert's geranium, and Dewey's sedge (*Carex deweyana*, FAC) (Sample Plots 6, 8, 9, 10, and 20).

The soils in the upland areas adjacent to Wetland 1 are not hydric and consist of up to 10 inches very dark brown (10YR 2/2) to dark brown (10YR 3/3) sandy loam soils over dark grayish brown (10YR 3/2) to dark yellowish brown (10YR 4/4) sandy loam soils (Sample Plots 6, 8, and 9). Soils in the small depression in the northeast portion of the site were not hydric and consisted of up to 10 inches of black (10YR 2/1) sandy loam soils over light olive brown (2.5Y 5/3) sandy loam soils to a depth of greater than 16 inches (Sample Plot 10). During our March 6, 2025, site visit, we observed a water table at a depth of approximately 13 inches within portions of the upland areas adjacent to Wetland 1. This was likely due to a recent snowmelt that occurred at the end of February 2025 and was not fully infiltrated at that time. Regardless, the water table was too deep to meet the criteria for wetland hydrology. In addition, we did not observe any secondary indicators of wetland hydrology (e.g., drift deposits, algal mats, water-stained leaves, FAC neutral test, etc.) during our site investigation.

Classification and Determination

Positive indicators for each of the three wetland parameters were present within Wetland 1 during our site investigation. Therefore, the delineated area meets the necessary criteria for designation as a wetland according to the guidelines of the USACE wetland delineation manual (Environmental Laboratory 1987) and the Regional Supplement (USACE 2010).

Wetland 1 consists of palustrine, emergent (PEM), and palustrine, forested (PFO) vegetation classes according to the USFWS wetland classification system (Cowardin et al. 1992).

King County provided critical area designations for Wetland 1, confirming the accuracy of the wetland delineation and rating for the onsite portion of Wetland 1 located on King County Tax Parcels 2526059003 and 2526059163 (see Appendix E).

Wetland Rating

We rated Wetland 1 using the 2014 WDOE Wetland Rating System for Western Washington (Hruby and Yahnke 2023), as required by King County (2025a) code for the determination of wetland buffer widths and mitigation ratios (see the attached completed wetland rating form).

Wetland 1 consists of a depressional hydrogeomorphic (HGM) class. Based on our analysis, Wetland 1 meets Category II criteria with a total score of 20 points (5 points for habitat function) on the attached rating form. King County (2025a) code requires a 100-foot-wide buffer for Category II wetlands that provide less than 6 points for habitat function in high-impact intensity sites. The wetland rating was confirmed by King County in their critical area designation process (CADS25-0080 King County 2025b) and CADS25-0134 King County 2025d) (see Appendix E).

Off-Site Wetlands

During our site investigations, we observed one off-site wetland (Wetlands 2) (Figure 6). We did not have permission to access the parcel where the off-site wetland is located; therefore, we based our assessment on our observations from the project site or publicly accessible areas.

Off-Site Wetland 2 is located north of the northwest corner of the project site (Figure 6). The wetland was previously identified on Lots 2 and 3 of the Wyndham Knoll development permitted by King County circa 1989 (see Appendix D). As part of the Wyndham Knoll development, Wetland 2 and its buffer were placed into a Native Growth Protection Easement. The wetland is in a forested depression that appears to have had some restoration or enhancement work in the buffer, based on observation during our site visits of newly installed plantings. We rated Wetland 2 using the 2014 WDOE Wetland Rating System for Western Washington (Hruby and Yahnke 2023), as required by the King County (2025a) code. Wetland 2 meets the criteria of a Category IV wetland because it scored a total of 15 points for all functions on the WDOE wetland rating form. The King County (2025a) code requires a 50-foot-wide buffer for Category IV wetlands for high-impact intensity sites. King County confirmed that off-site Wetland 2 meets the criteria of a Category IV wetland and would require a 50-foot-wide standard buffer (King County 2025c) (see Appendix E).

3.2.3 Onsite Drainage Ditch

A stormwater conveyance ditch is in the southeast corner of the project site on King County Tax Parcel No. 2526059003. The ditch appears to convey stormwater from the north side of NE 125th Street. The King County (2025b) iMap depicts a grass-lined ditch

that flows into a 12-inch piped conveyance along the north side of NE 125th Street along King County Parcel Nos. 2526059115, 2526059161, and 2526059003 (Figure 4). The stormwater is shown to flow to the east to the end of the cul-de-sac. During our site visits, we observed a catch basin located east of the cul-de-sac on King County Parcel No. 2526059003. The catch basin is part of a tight-lined stormwater conveyance that receives water from along the north side of NE 125th Street and carries it to an open ditch in the southeast corner of the project site. The open ditch continues approximately 30 to 40 feet to the east before discharging into Wetland 1. The ditch appears to be regularly maintained and cleared of vegetation to allow for stormwater conveyance. Based on the definition provided in King County (2025a) code section 21A.06.1391, the ditch should not be regulated as a critical area because it was excavated from the surrounding upland for the conveyance of stormwater.

Stormwater in the west portion of the site is also depicted on the King County (2025b) iMap and is identified as being conveyed west along the south side of NE 125th Street in the proximity of King County Parcel No. 2526059159. King County reviewed and confirmed that the ditch would not be regulated as a critical area as part of their critical area determination for King County parcel #2526059003 (see Appendix E).

3.2.4 Landscape Ponds

We investigated a landscape pond located on the east half of the project site on King County Parcel No. 2526059003. The pond was excavated sometime in the late 1980s as part of a landscape design that includes a rock waterfall, aerator pumps within the pond, and a visible rubber pond liner and rockery around the edge of the pond. A visible topographic berm is located between the pond and the lawn downslope to the east. According to the current owner, water is supplied to the pond via the onsite well, and if water is not pumped from the well to the pond the water level will lower significantly during the summer months.

During our February 13, 2025, site investigation, we excavated several sample plots around the downslope perimeter of the pond to verify that the pond was not previously excavated from a wetland. The areas adjacent to the pond are currently landscaped and contain a mixture of grasses and herbaceous cover consisting of Kentucky bluegrass (*Poa pratensis*, FAC), tall fescue (*Festuca arundinacea*, FAC), creeping buttercup, velvet grass (*Holcus lanatus*, FAC), and English plantain (*Plantago lanceolata*, FACU) (Sample Plots 9, 10, and 11). Soils adjacent to the pond are not hydric and consist of up to 8 inches of very dark grayish brown (10YR 3/2) to dark grayish brown (10YR 4/2) sandy loam soils, without the presence of redoximorphic concentrations in the soil matrix or pore linings. The soil profile transitions to very dark gray (10YR 3/1) to brown (10YR 4/3) sandy loam soils at depths greater than 8 inches with the occurrence of dark yellowish brown (10YR 4/6) redoximorphic concentrations observed in the brown (10YR 4/3) soil profile. During our site investigations, we did not observe any primary or

secondary indicators of wetland hydrology in the sample plots excavated adjacent to the landscape pond (Sample Plots 11, 12, and 13).

Before our investigation, the property owner lowered the pond level by approximately 3 feet to allow us to investigate if a pond liner was installed in the bottom of the pond. We excavated two sample plots within the pond, one at the bottom of the drained pond in the east and another approximately 3 feet below the typical pond elevation in the southwest quadrant of the inundated area. We did not observe any vegetation rooted within the bottom of the pond, but rather all plant matter was rooted along the typical waters edge of the pond. The vegetation community is hydrophytic and consists of girdle bulrush (*Scirpus atrocinctus*, OBL), pale-yellow iris (*Iris pseudacorus*, OBL), broadleaf cattail (*Typha latifolia*, OBL), and swamp smartweed (*Polygonum hydropiperoides*, OBL) (Sample Plots 14 and 15). Soils in the pond consisted of a small accumulation of dark brown (10YR 3/3) muck over a gley (10Y 3/1) sandy clay loam bentonite liner to a depth of greater than 25 inches. The bentonite liner is uniform in terms of stratification and texture, suggesting that it was installed rather than a naturally occurring soil profile. The bentonite liner was typically used in the late 1980s, 1990s, and early 2000s for landscape ponds to create a restrictive (aquitard) layer to retain water and discourage infiltration.

Based on our observations and data collected adjacent to and within the pond, it appears that the pond was fully excavated from upland areas rather than from historic wetland. The presence of a topographic berm around the pond along with the artificial rock waterfall, rockery around the perimeter of the pond, water pumps and aerators, and the rubber and bentonite pond liners indicate that the pond is an artificial landscape amenity and not a regulated feature. King County (2025a) critical area code section 21A.06.1391 does not regulate farm ponds or landscape amenities as wetlands. Therefore, the pond would not be subject to regulation under the King County (2025a) critical area code.

We observed a second small landscape pond in the central portion of the site on King County Tax Parcel No. 2526059161. The pond is oval-shaped and relatively small, with an approximate circumference of 12 feet. The pond is lined with rounded river gravel and possibly a concrete liner as we could not excavate a sample plot within the feature due to refusal of implements at a depth of approximately 5 inches. The edge of the pond contains yellow-flagged iris and swamp smartweed. A concrete drainage conveyance is located upslope of the pond and appears to be the source of water to the pond. In addition, we noted a pump system that provides aeration/filtration to the pond when activated. This feature also appears to have been excavated/constructed sometime in the late 1990s as a landscape amenity and therefore would not be subject to regulation as a critical area per King County (2025a) code section 21A.06.1391.

Another series of artificial ponds was observed on King County Parcel No. 2526059163. These ponds were documented in the Eastside Environmental Pros, Inc. (2024) report, which identifies several non-regulated aquatic features on the site, including a series of landscape ponds and ditches. These features were designed as landscape features to

capture and convey stormwater from NE 125th Street to function as stormwater detention and landscape amenities. The features are located on either side of the access driveway and extend to a larger pond located east of the house. The report identifies that the features were part of a landscape plan approved by King County and completed in 1983 (see Eastside Environmental Pros, Inc. (2024) pg. 9) (see Appendix F).

During our site investigation, we reviewed the ponds and ditches located on the site plans and agreed that they appear to be artificially created features that were excavated from non-wetland areas for the purpose of conveyance and stormwater and to provide aesthetic landscape amenities. We noted that the ponds and ditches are lined with large rip-rap material or concrete, with a plastic liner visible at several locations.

Consistent with the review of the site investigation performed by Eastside Environmental Pros, Inc. (2024), we excavated a sample plot in the northwest corner of the site adjacent to the pond to document that the feature was not excavated from an area that was previously a wetland. Our sample plot was in the area identified on the King County (2025b) iMap and USFWS (2025) NWI map as a palustrine wetland. Vegetation adjacent to the pond consists of a landscaped yard with two Douglas-fir (*Pseudotsuga menziesii*, FACU) trees and grass and herbaceous layer consist of Kentucky bluegrass (*Poa pratensis*, FAC), common dandelion (*Taraxacum officinale*, FACU), hairy cat's ear (*Hypochaeris radicata*, FACU), and creeping bentgrass (*Agrostis stolonifera*, FAC) (Sample Plot 21).

Soils adjacent to the landscape features in the northwest corner of the property are not hydric and consist of up to 8 inches of dark brown sandy loam soils over dark yellowish brown (10YR 3/4) gravely sandy loam soils without the presence of redoximorphic concentrations in the soil matrix or pore linings. During our site investigation, we did not observe any primary indicators of wetland hydrology such as a shallow water table or saturation within the upper 12 inches of the soil profile. We also did not observe any secondary indicators of wetland hydrology (e.g., algal mats, water-stained leaves, drift deposits, etc.) during our site visit. We found that this area did not meet wetland criteria because it lacked a hydrophytic vegetation community, hydric soils, and wetland hydrology.

King County reviewed and confirmed that the on-site landscape amenities would not be regulated as critical areas as part of the critical area determination that was provided for the property (King County 2025d) (see Appendix E).

3.2.5 Wildlife

During our site investigation, we reviewed the potential wildlife use within the vicinity of the project site. All the parcels in the assemblage contain existing single-family homes and are situated in a rural-urban environment. We noted that a variety of bird species are likely to inhabit the vicinity at different times of the year. Many of these are spring and

summer residents who migrate out of the area for the fall and winter, as well as year-round residents. We did not observe any raptors (eagles, hawks, falcons, or owls) during our site investigation and no raptor nests were found on any of the trees within the site. Most of the larger trees on the site had intact tops and lacked appropriate branching structures to support large raptor nests such as bald eagles.

During our site investigation, we observed relatively few snags on the project site with few signs foraging by woodpeckers. We did not observe any pileated woodpecker excavations or cavities on any trees suitable for nesting on the project site. None of the onsite excavations appeared to be fresh and are in the forested portion of the site.

The site may support habitat for small and medium-sized mammals. On-site trees may provide potential cover and breeding locations for small to medium-sized mammals such as rats, mice, raccoons, coyotes, and squirrels. The presence of domestic dogs and cats in the area may limit the suitability of the forest on site, as they can act as highly effective predators on native wildlife species in urban and suburban areas, particularly those that nest or inhabit the ground (Penland 1984, Maestas et al. 2003, Odell and Knight 2001, Leu et al. 2008).

We did not observe any reptiles, amphibians, or signs of their presence during our site investigations.

We did not observe any species listed as endangered, threatened, or sensitive within the project site or immediate vicinity. As noted above, we observed some signs of woodpeckers foraging scattered on trees throughout the east portion of the project site. We did not observe any eagles or osprey nests in forested portions of the project site.

4.0 REGULATORY CONSIDERATIONS

Wetlands are protected by Section 404 of the Federal Clean Water Act and other state and local policies and ordinances including the King County(2025a) code. Regulatory considerations pertinent to wetlands identified within the study area are discussed below; however, this discussion should not be considered comprehensive. Additional information may be obtained from agencies with jurisdictional responsibility for, or interest in, the site. A brief review of the U.S. Army Corps of Engineers regulations and King County policy, relative to wetlands, is presented below.

4.1 FEDERAL CLEAN WATER ACT (U.S. ARMY CORPS OF ENGINEERS)

Federal law (Section 404 of the Clean Water Act) discourages the discharge of dredged or fill material into the nation's waters, including most wetlands and streams, without a permit from the U.S. Army Corps of Engineers (USACE). The USACE makes the final determination as to whether an area meets the definition of "Waters of the U.S." as defined by the federal government (Federal Register 1986:41251), and thus, if it is under their jurisdiction.

We should caution that the placement of fill within wetlands or other "Waters of the U.S." without authorization from the USACE is not advised, as the USACE makes the final determination regarding whether any permits would be required for any proposed alteration (USACE 2021, 2022). Because the USACE makes the final determination regarding permitting under their jurisdiction, a jurisdictional determination from the USACE is generally recommended before any construction activities, if any modification of wetlands is proposed. A jurisdictional determination would also provide evaluation and confirmation of the wetland delineations by the USACE.

4.2 WASHINGTON STATE

4.2.1 Federal Clean Water Act Section 401 Certification

Under Section 401 of the Clean Water Act, an activity involving a discharge in waters of the U.S. and authorized by the USACE must also receive certification that the federally permitted activity complies with the federal Clean Water Act, state water quality laws, and any other appropriate state laws (such as the Water Resources Act and Hydraulic Code). In Washington State, the certifying agency is usually the Washington Department of Ecology (WDOE). In addition, if the USACE-authorized permit is for actions within the 15 coastal counties, including King County, then the WDOE must confirm that the proposed action complies with the Washington Coastal Zone Management Program.

4.2.2 Non-Federal Jurisdictional Wetlands

The WDOE also regulates activities within isolated wetlands under the state Water Pollution Control Act (90.48 RCW) in instances where a wetland is determined to be non-jurisdictional under the federal Clean Water Act by the USACE. The standards of review for issuance of a permit by the WDOE for activities within non-USACE-jurisdictional wetlands are the same as those for Section 401 certifications.

4.2.3 Washington State Hydraulic Code

Prior to construction or other work that will use, divert, obstruct, or change the natural flow or bed of any state waters, approval by the Washington Department of Fish and Wildlife (WDFW), through provisions of the State Hydraulic Code (RCW 75.20.100-140), is required. The WDFW-administered Hydraulic Project Approval (HPA) is intended to protect fish life from damage by construction and other activities in all marine and fresh waters of the state. A maximum of 45 calendar days is specified in the agency rules for a decision by WDFW to grant or deny approval of a complete application.

4.3 KING COUNTY

King County (2025a) code regulates wetlands and streams as critical areas. Alterations of wetlands and their buffers are generally prohibited, except as allowed under certain conditions. All direct wetland and buffer impacts must be mitigated through creation, restoration, or enhancement. King County has the final authority to determine ratings, buffers, and allowed uses of wetlands, their buffers, and other sensitive areas that are under their jurisdiction.

5.0 PROPSED PROJECT

The proposed project will redevelop the existing single-family homes into 63 new single-family homes, along with new access driveways, stormwater infrastructure, and open space tracts (Figure 7). The project will not result in any direct impacts to onsite Wetland 1 or off-site Wetland 2.

The project proposes implementing the minimization measures outlined in the King County (2025a) code to allow for a buffer reduction for both Wetlands 1 and 2. The minimization measures outlined in KCC 21A.24.325.C.6.b allow the project to implement the wetland buffers identified in the moderate-intensity land use buffer requirements rather than the buffers required for high-intensity land uses for each of the wetlands. This would allow the 100-foot-wide standard buffer for Wetland 1 to be reduced to 75 feet wide and the 50-foot-wide buffer for Wetland 2 to be reduced to 40 feet wide. The following minimization measures are required to utilize this buffer reduction mechanism:

Disturbance	**Measures to minimize impacts**
Lights	Direct lights away from wetland.
Noise	Locate activity that generates noise away from wetland. If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source. For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional ten-foot heavily vegetated buffer strip immediately adjacent to the outer wetland buffer.
Toxic runoff	Route all new untreated runoff away from wetland while ensuring wetland is not dewatered. Establish covenants limiting use of pesticides within 150 feet of wetland. Apply integrated pest management.
Stormwater runoff	Retrofit stormwater detention and treatment for roads and existing adjacent development. Prevent channelized flow from lawns that directly enters the buffer. Use low impact intensity development techniques identified in the King County Surface Water Design Manual.
Change in water regime	Infiltrate or treat, detain and disperse into buffer new runoff from impervious surfaces and new lawns.
Pets and human disturbance	Use privacy fencing or plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion. Place wetland and its buffer in a separate tract or protect with a conservation easement.
Dust	Use best management practices to control dust.

Specifically, the project will meet the requirements outlined above by incorporating the following strategies.

Lights – The project will be designed not to direct any new lighting toward Wetlands 1 and 2. All lights will be directed away from the wetlands and their buffers.

Noise – The project will not result in an increase in noise generating activities. All new roadways and infrastructure have been designed to be as far away from Wetland 1 and 2 as possible. The new-single family homes will also be located on a portion of the lots as far away as possible from the wetland buffers. Temporary noise impacts may result during construction but are not anticipated to result in any long-term detrimental impacts to the wetlands or their buffers

Toxic Runoff – No runoff will be direct to the wetlands as part of the project. All runoff from the project will be directed to stormwater treatment facilities before being discharged to either the municipal stormwater system or to the wetland buffer.

Stormwater Runoff – As noted above, the project will provide new stormwater infrastructure that will be designed to the current King County stormwater management standards. All stormwater from the project will be directed to the stormwater tracts to be treated prior to discharge.

Change in Water Regime – The majority of the contributing basins for Wetlands 1 and 2 are located off-site and will not be impacted by the project. All runoff from the project site will be directed to new stormwater treatment facilities prior to being discharged to the wetland buffers. The project will not result in a decrease in hydrology to the wetlands or their buffers. In addition, no increase or routing of additional water to the wetlands is proposed from the project. As such, the water regimes for Wetlands 1 and 2 will be retained as part of this project.

Pets and Human Disturbances – The project will place Wetland 1 and its buffer and the on-site portion of the Wetland 2 buffer into critical easement tracts that will be retained in perpetuity. Split rail fencing and critical area signage will be installed at the edge of the wetland buffers to discourage humans and pets from entering the wetlands or their buffers.

Dust – The project will install BMPs during construction of the project site to discourage fugitive dust from entering critical areas or their buffers. All soils will be stabilized after completion of construction.

As noted above, no direct impacts to wetlands will occur as part of the proposed project. All development will be located outside of the reduced 75-foot-wide buffer for Wetland 1 and the reduced 40-foot-wide buffer of off-site Wetland 2. The wetlands and their buffers will be placed in a critical area tract that will be protected in perpetuity. As the

project will fully implement the minimization measures outlined in KCC 21A.24.325.C.6.b, no indirect impacts to the wetlands or their buffers are anticipated from this project.

6.0 LIMITATIONS

We have prepared this report for the exclusive use of Murray Franklyn Homes LLC and their consultants. No other person or agency may rely upon the information, analysis, or conclusions contained herein without permission from Murray Franklyn Homes LLC.

The determination of ecological system classifications, functions, values, and boundaries is an inexact science, and different individuals and agencies may reach different conclusions. With regard to wetlands, the final determination of their boundaries for regulatory purposes is the responsibility of the various agencies that regulate development activities in wetlands. We cannot guarantee the outcome of such determinations. Therefore, the conclusions of this report should be reviewed by the appropriate regulatory agencies.

We warrant that the work performed conforms to standards generally accepted in our field, and prepared substantially in accordance with then-current technical guidelines and criteria. The conclusions of this report represent the results of our analysis of the information provided by the project proponent and their consultants, together with information gathered in the course of the study. No other warranty, expressed or implied, is made.

7.0 LITERATURE CITED

Cowardin, L., F. Golet, V. Carter, and E. LaRoe. 1992. Classification of wetlands and deepwater habitats of the United States. U.S.D.I. Fish and Wildlife Service Publ. FWS/OBS-79/31. 103 pp.

Eastside Environmental Pros, Inc. 2024. Critical Areas Report and Restoration Plan. 17315 NE 125th Street. Tax Parcel (252605-9163), Redmond Washington 98052 (ENFR23-0425). Report to Robert & Martha Hsueh. Report Dated 15, April 2024.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, US Army Engineers Waterways Experiment Station, Vicksburg, Mississippi. 100 pp.

Federal Register. 1986. 40 CFR Parts 320 through 330: Regulatory programs of the Corps of Engineers; final rule. Vol. 51. No. 219. pp. 41206-41260, U.S. Government Printing Office, Washington, D.C.

Federal Register. 1995. U.S. Department of Agriculture, Soil Conservation Service: Changes in Hydric Soils of the United States. Volume 59, No 133, July 13, 1994. Revised September 15, 1995.

Google Earth. 2025. Image for 47.712362° -122.107935° in King County, WA. © 2025 Google. Accessed March 2025.

Hitchcock, C., and A. Cronquist. 2018. Flora of the Pacific Northwest. Second Edition. Univ. of Washington Press, Seattle, Washington. 926 pp.

Hruby, T. & Yahnke, A. (2023). Washington State Wetland Rating System for Western Washington: 2014 Update (Version 2). Publication #23-06-009. Washington Department of Ecology.

King County. 2024. PREA24-0175 Critical Areas Comments. To: Pre-application meeting. From: Camille Beasley, Environmental Scientist III – Ecologist. Dated August 19, 2024.

King County. 2025a. Chapter 21A Zoning. Updated January 30, 2025. Available at: https://kingcounty.gov/en/legacy/council/legislation/kc_code/24_30_title_21a

King County. 2025b. Critical Area Designation CADS25-0080, Parcel 2526059003. Status: Complete. Report to: TC Colleran, Murray Franklyn. Report from Chris Holcomb, MES, Environmental Scientist: Report date: May 26, 2025

King County. 2025c. Critical Area Designation CADS25-0081, Parcel 2526059161. Status: Complete. Report to: TC Colleran, Murray Franklyn. Report from Chris Holcomb, MES, Environmental Scientist: Report date: May 26, 2025

King County. 2025d. Critical Area Designation CADS25-0134, Parcel 2526059163. Status: Complete. Report to: TC Colleran, Murray Franklyn. Report from Chris Holcomb, MES, Environmental Scientist: Report date: July 12, 2025

King County. 2025e. iMap. Available at: https://gismaps.kingcounty.gov/iMap/. Last accessed March 2025.

Maestas, J.D., R.L. Knight, and W.C. Gilgert. 2003. Biodiversity across a rural land-use gradient. Conservation Biology 17:1425-1434.

Munsell Color. 2009. Munsell soil color charts. Munsell Color, Grand Rapids, MI.

Odell, E.A., and R.L. Knight. 2001. Songbird and medium-sized mammal communities associated with exurban development in Pitkin County, Colorado. Conservation Biology 15:1143-1150.

Penland, S. 1984. Avian response to a gradient of urbanization. PhD. Dissertation, University of Washington, Seattle, Washington. 407 pp.

Reed, P.B., Jr. 1988. National list of plant species that occur in wetlands: Northwest (Region 9). U.S.D.I. Fish and Wildlife Service. Biological Report 88 (26.9). 89 pp.

U.S. Army Corps of Engineers. 1991a. Special notice. Subject: Use of the 1987 wetland delineation manual. U.S. Army Corps of Engineers, Seattle District. August 30, 1991.

U.S. Army Corps of Engineers. 1991b. Memorandum. Subject: Questions and answers on the 1987 manual. U.S. Army Corps of Engineers, Washington D.C. October 7, 1991. 7 pp. including cover letter by John P. Studt, Chief, Regulatory Branch.

U.S. Army Corps of Engineers. 1992. Memorandum. Subject: Clarification and interpretation of the 1987 methodology. U.S. Army Corps of Engineers, Washington D.C., March 26, 1992. 4 pp. Arthur E. Williams, Major General, U.S.A. Directorate of Civil Works.

U.S. Army Corps of Engineers. 1994. Public Notice. Subject: Washington regional guidance on the 1987 wetland delineation manual. May 23, 1994, Seattle District. 8 pp.

U.S. Army Corps of Engineers. 2010. Regional supplement to the Corps of Engineers wetland delineation manual: western mountains, valleys, and coast region (Version 2.0). Wakeley, J.S., R.W. Lichvar, and C.V. Noble, eds. May 2010. ERDC/EL TR-10-3. U.S. Army Engineer Research and Development Center, Vicksburg, MS.

U.S. Army Corps of Engineers. 2020. National Wetland Plant List, version 3.5. U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH. Available at: https://cwbiapp.sec.usace.army.mil/nwpl_static/data/DOC/lists_2020/Regions/pdf/reg_WMVC_2020v1.pdf. Last accessed November 2024.

U.S. Army Corps of Engineers. 2021. Special Public Notice. Final Regional Conditions for Seattle District 2021 Nationwide Permits - Final 16 and Public Outreach Event Announcement. U.S. Army Corps of Engineers, Seattle District. March 5, 2021.

U.S. Army Corps of Engineers. 2022. Special Public Notice. Regional Conditions for Seattle District – 2022 Nationwide Permits Final 41. U.S. Army Corps of Engineers, Seattle District. February 14, 2022.

U.S.D.A. Natural Resources Conservation Service. 2025. On-line Web Soil Survey. http://websoilsurvey.nrcs.usda.gov. Accessed February 2025.

U.S.D.A. Soil Conservation Service. 1991. Hydric soils of the United States: In cooperation with the National Technical Committee for Hydric Soils. U.S.D.A. Miscellaneous Publication Number 1491.

U.S. Fish and Wildlife Service. 2025. National Wetland Inventory, Wetlands Online Mapper. http://wetlandsfws.er.usgs.gov/wtlnds/launch.html. Accessed February 2025.

Washington Department of Fish and Wildlife. 2025. Priority Habitat and Species database. https://geodataservices.wdfw.wa.gov/hp/phs/. Accessed February 2025.

FIGURES

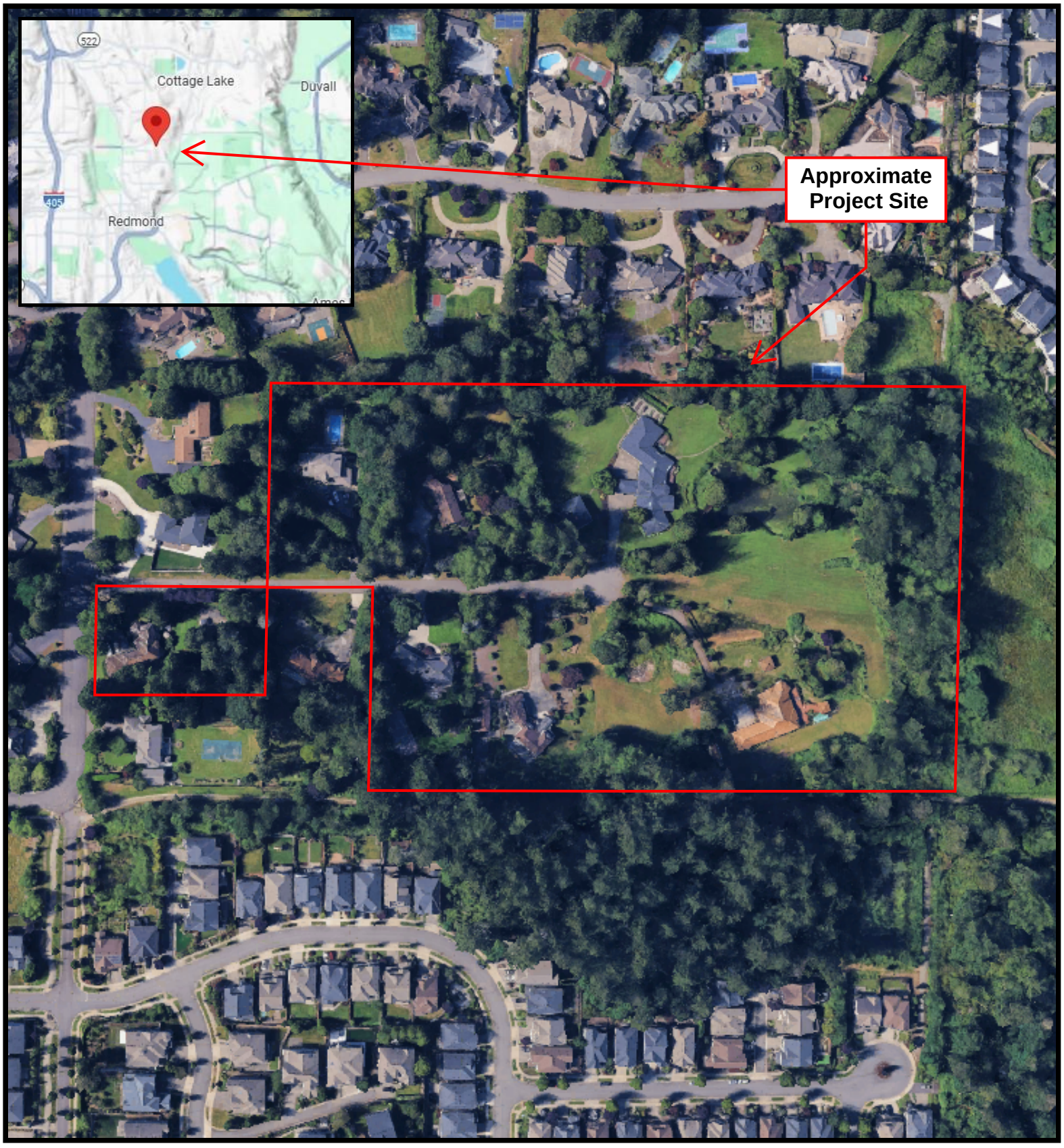


FIGURE 1 - Regional & Vicinity Map

English Hill, King County

17310 NE 125th Street Redmond, WA 98052

RAI PROJECT: 2024-050-002

PREPARED: 3/17/25

BY: EH

Source information: https://maps.google.com

Raedeke Associates, Inc.
2111 N. Northgate Way, Suite 219 Seattle, Washington 98133

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgC	Alderwood gravelly sandy loam, 8 to 15 percent slopes	24.2	100.0%

FIGURE 2 - NRCS Web Soil Survey

English Hill, King County

17310 NE 125th Street Redmond, WA 98052

RAI PROJECT: 2024-050-002

PREPARED: 3/17/25

BY: EH

Source information: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

Raedeke Associates, Inc.
2111 N. Northgate Way, Suite 219 Seattle, Washington 98133

FIGURE 3 - National Wetlands Inventory

English Hill, King County

17310 NE 125th Street Redmond, WA 98052

RAI PROJECT: 2024-050-002

PREPARED: 3/17/25

BY: EH

Source information: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

Raedeke Associates, Inc.
2111 N. Northgate Way, Suite 219 Seattle, Washington 98133

FIGURE 4 - King County iMap

English Hill, King County

17310 NE 125th Street in King County

RAI PROJECT: 2024-050-002

PREPARED: 2/18/25
BY: SP

Not to Scale

Source information: King County iMap: https://gismaps.kingcounty.gov/iMap/

Raedeke Associates, Inc.
2111 N. Northgate Way, Suite
219 Seattle, Washington 98133

Priority Habitats and Species on the Web

Occurence Name	Federal Status	State Status	Sensitive Location
Wetlands	N/A	N/A	No

Report Date: 02/19/2025

The Priority Habitats and Species (PHS) datasets do not contain information for your project area. This does not mean that species and habitats do not occur in your project area. PHS data, points, lines and polygons are mapped only when occurrences of these species or habitats have been observed in the field. Unfortunately, we have not been able to comprehensively survey all sections in the state and therefore, it is important to note that priority species and habitats may occur in areas not currently known to the Department.

FIGURE 5 - Priority Habitat & Species Map

Legend:

- Mapped Species or Habitat

English Hill, King County
17310 NE 125th Street in King County
RAI PROJECT: 2024-050-002
PREPARED: 2/18/25
BY: SP

SOURCE INFORMATION: WDFW Priority Habitat & Species Online Mapping tool - http://apps.wdfw.wa.gov/phsontheweb/

Raedeke Associates, Inc.
2111 N. Northgate Way, Suite 219 Seattle, Washington 98133

FIGURE 6
ENGLISH HILL
KING COUNTY, WA
EXISTING CONDITIONS

PROJECT SITE INFORMATION

ADDRESS	NE 125TH ST
CITY/COUNTY PARCEL NO.	KING COUNTY TAX PARCELS NOS. 2526059115, 2526059161, AND 2526059003
TOTAL AREA	10.83 ACRES (APPROX.)

LEGEND

EXISTING CONDITIONS LEGEND:

- PARCEL BOUNDARY
- EXISTING CONTOURS
- DELINEATED WETLANDS
- WL1–# WETLAND FLAGS
- WETLAND BUFFERS
- SP-# SAMPLE PLOTS

Raedeke Associates, Inc.
2111 N. Northgate Way, Ste 219
Seattle, WA 98133

NORTH

0 75' 150' 300'

SCALE: 1" = 150'

RAI PROJECT: 2024-050-002

DATE: 09/16/2025

DRAWN BY: SS | PM: KTK

BASE INFORMATION:
SITE SURVEY PROVIDED BY CORE DESIGN ON 9/10/2025

SCALE: 1" = 40'

0 20 40 80

SW1/4 OF THE NE1/4, SEC. 25, TWP. 26 N., RGE. 5 E., W.M.

WETLAND 2 CAT IV (OFFSITE)

TRACT 998
CRITICAL AREA

40' WETLAND BUFFER (TYP)

15' BUFFER SETBACK (TYP)

38 4,202 SF
37 4,036 SF
36 4,037 SF
35 4,045 SF
34 6,182 SF
33 6,416 SF
32 6,251 SF
31 6,250 SF
30 6,250 SF
29 6,250 SF

TRACT 997
OPEN SPACE

28 5,001 SF
27 5,000 SF
26 5,000 SF
25 5,000 SF
24 5,000 SF
23 4,912 SF
22 8,419 SF
21 9,529 SF
20 7,739 SF
19 7,391 SF
18 7,939 SF

TRACT 987
PRIVATE ACCESS

ROAD D (PRIVATE)
S88°45'21"E 207.67'
S88°45'21"E 246.08'
N83°18'25"E 80.59'
S88°47'55"E 137.86'
Δ=7°56'14"
R=150.00
L=20.78
Δ=7°53'40"
R=150.00
L=20.67
18.58'

10' UTILITY EASEMENT (TYP)

Δ=89°11'51"
R=25.00
L=38.93

39 4,895 SF
40 4,845 SF
41 4,834 SF

TRACT 991

SEE BELOW

S 06°46'55" E 62.46'
R=250.00
L=34.64
Δ=7°56'22"
S 01°14'47" W 32.50'
Δ=24°43'10"
R=100.00
L=42.88'

42 6,135 SF
43 5,594 SF
44 5,671 SF
45 5,669 SF
46 6,138 SF

EX. POWER ESMT REC NO 8306030617
ACCESS & UTILITIES ESMT REC NO 8302280499

TRACT 992
STORM WATER MANAGEMENT

12 4,635 SF
13 4,719 SF
14 4,718 SF
15 4,717 SF
16 4,716 SF
17 4,581 SF

TRACT 993
STORM WATER MANAGEMENT

ROAD A (PRIVATE)
N01°09'03"E 137.82'

TRACT 996
(UTILITY, OPEN SPACE & GREEN SPACE)

EX. 60' POWER ESMT REC NO 8306030617

EX. POWER ESMT REC NO 8306030617

S 23°19'37" E 74.35'

58 5,341 SF
47 4,724 SF
57 4,777 SF
48 4,724 SF
56 4,725 SF
49 4,724 SF
55 4,710 SF
50 4,718 SF

EX. POWER ESMT REC NO 8306030617

11 6,900 SF
5 7,820 SF
10 6,906 SF
6 8,002 SF
9 6,894 SF

BUILDING SETBACK LINE (TYP)

TRACT 994
OPEN SPACE

Δ=26°47'46"
R=250.02
L=116.93

TRACT 988
LIFT STATION

4 7,252 SF
3 6,812 SF
2 7,064 SF
1 7,551 SF

TREE TO BE SAVED (TYP)

15' BUFFER SETBACK (TYP)

75' WETLAND BUFFER (TYP)

TRACT 999
(CRITICAL AREA)

WETLAND 1
CAT II

WETLAND FLAG LINE

TRACT 985

N 67°26'06" E 171.62'

Δ=24°28'25"
R=999.97
L=42.70

59 5,896 SF
60 5,558 SF

ROAD C (PRIVATE)

S 01°09'10" W 245.16'

ROAD B (PRIVATE)

S 01°09'56" W 544.89' (ACCESS)

N12°56'49"E 66.43'

N13°45'31"E 21.92'

Δ=14°41'18"
R=200.00
L=51.27

8 7,284 SF
7 6,825 SF

TRACT 995
OPEN SPACE

Δ=27°54'50"
R=100.00
L=135.96

NE 124TH ST (PUBLIC)
S88°50'29"E 942.68'

EX. 60' ACCESS & UTILITY ESMT PER SHORT PLAT REC NO 8301050533 & 8307140444

172ND AVE NE
S 02°10'57" W 1369.24'
URBAN NEIGHBORHOOD COLLECTOR

SEE ABOVE

TRACT 990
OPEN SPACE

TRACT 989
STORM WATER MANAGEMENT

63 5,019 SF
62 5,055 SF
61 5,597 SF

BUILDING SETBACK LINE (TYP)

TRACT 986
HALF STREET DEDICATION

10' UTILITY EASEMENT (TYP)

S 88°50'29" E 419.38'

EX. POWER ESMT REC NO 8306030617

EX. DRAINFIELD ESMT REC NO 8402230548

FIGURE 7
BRISTOL GLENSITE SITE PLAN

Raedeke Associates, Inc.

VERTICAL DATUM

NAVD88 PER GNSS OBSERVATIONS

PROJECT BENCHMARKS

SET NAIL AND WASHER MARKED "CORE CONTROL" NEAR THE SOUTHWEST CORNER OF THE SITE. ELEVATION = 273.08

HORIZONTAL DATUM

NAD83 WASHINGTON STATE PLANES, NORTH ZONE, US FOOT

BASIS OF BEARINGS

N02°10'57"E BETWEEN THE FOUND MONUMENTS AT THE INTERSECTIONS OF 172ND AVENUE NE AND NE 126TH PLACE AND 172ND AVENUE NE AND 124TH STREET PER REFERENCE 1.

EXISTING UNDERGROUND UTILITIES NOTE

CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

LOCATION OF EXISTING UTILITIES ARE APPROXIMATE BASED ON THE DATA AVAILABLE AT THE TIME OF DESIGN. THERE IS NO GUARANTEE THAT ALL EXISTING UTILITIES ARE ACCURATELY SHOWN, NOR THAT THE LOCATION, SIZE AND MATERIAL HAS BEEN VERIFIED. CONTRACTOR SHALL EXPOSE ALL INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES.

PRIZM

PRIZM LAND, INC
10940 NE 33RD PL, SUITE 110
BELLEVUE, WA 98004
WWW.PRIZMLAND.COM

REV #	DATE	BY	REVISIONS

PRELIMINARY PLAT PLAN

BRISTOL GLEN
PRELIMINARY PLAT

12414 172ND AVE NE
TPN 252605-9159, -9115,-9161,-9003,-9075,-9162,-9163
REDMOND, WA

PROJECT MANAGER:
AMc

PROJECT ENGINEER:
RD

DESIGNER:
JK

PLOT DATE:
10/1/2025

SCALE:
AS NOTED

PRELIMINARY

PROJECT NUMBER:
250008

SHEET NAME:
PP-01

SHEET 02 OF #?

APPENDIX A

Field Survey Data

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

Project/Site: English Hill City/County: King County Sampling Date: 5-30-24

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 1

Investigator(s): Kolten Kosters Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.712457° Long: -122.107844° Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 1 is located in the northwest corner of the assemblage

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Thuja plicata (western arborviate)	80	Yes	FAC
2.			
3.			
4.			
	80 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Sambucus racemosa (red elderberry)	20	Yes	FACU
2. Rubus armeniacus (Himalayan blackberry)	10	Yes	FAC
3.			
4.			
5.			
	30 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Ranunculus repens (creping buttercup)	40	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	40 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 60

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12+	10YR 3/2	100					Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill City/County: King County Sampling Date: 5-30-24

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 2

Investigator(s): Kolten Kosters Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 3-5

Subregion (LRR): LRR A Lat: 47.712528° Long: -122.107833° Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 2 is located in the north-central portion of the assemblage.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Thuja plicata (western arborvite)	80	Yes	FAC
2.			
3.			
4.			
	80 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Acer circinatum (vine maple)	20	Yes	FAC
2.			
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Geranium robertianum (lesser herbrobert)	10	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	10 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 90

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: 66 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 2

Profile Description: (Describe to the 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	100					Sandy Loam	
2-12	10YR 3/4	100					Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill City/County: King County Sampling Date: 2-13-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 3

Investigator(s): Kolten Kosters, Samantha Pohlman Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.712658 Long: -122.106107 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 3 is located in near the northeast corner of the assemblage near the well.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix babylonica (weeping willow)	30	Yes	FACW
2.			
3.			
4.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Yellow archangel (Lamiastrum galeobdolon)	30	Yes	FAC
2. Sambucus racemosa (red elderberry)	20	Yes	FACU
3. Rubus armeniacus (Himalayan blackberry)	20	Yes	FAC
4. Rubus spectabilis (salmaon raspberry)	20	Yes	FAC
5.			
	90 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Polystichum munitum (pineland sword fern)	30	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 70

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 3

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/3	100					Sandy Loam	
10-16+	10YR 4/4	100					Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill City/County: King County Sampling Date: 2-13-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 4

Investigator(s): Kolten Kosters, Samantha Pohlman Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.711999 Long: -122.105917 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 4 is located in the southeast corner of site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Poa pratensis (Kentucky blue grass)	60	Yes	FAC
2. Festuca arundinacea (tall fescue)	30	Yes	FAC
3. Ranunculus repens (creeping buttercup)	20	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	110 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 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 _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 4

Profile Description: (Describe to the 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
0-10	10YR 3/2	100					Sandy Loam	
10-16+	10YR 5/3	90	10YR 4/6	10	C	M	Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill City/County: King County Sampling Date: 3-6-2025

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 5

Investigator(s): Kolten Kosters Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.712086 Long: -122.105362 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 5 is in the northeast portion of Wetland 1.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus balsamifera (balsam poplar)	40	Yes	FAC
2.			
3.			
4.			
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 3m)			
1. Cornus alba (redosier dogwood)	30	Yes	FACW
2. Rubus spectabilis (salmon raspberry)	20	Yes	FAC
3. Rubus aremeniacus (Himalayan blackberry)	10	No	FAC
4.			
5.			
	60	= Total Cover	
Herb Stratum (Plot size: 1m)			
1. Ranunculus repens (creeping buttercup)	50	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
		= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 5

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					Sandy Loam	
10-12+	2.5Y 5/1	90	10YR4/6	20	C	M	Gr.S.L.	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

Water Table Present? Yes ☒ No ☐ Depth (inches): 4

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 0

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

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

Project/Site: English Hill City/County: King County Sampling Date: 3-6-2025

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 6

Investigator(s): Kolten Kosters Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.712154 Long: -122.105439 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 6 is located in the upland area west of the wetland near the northeast corner of the site

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Rubus spectabilis (salmon raspberry)	60	Yes	FAC
2. Rubus armeniacus (Himalayan blackberry)	40	Yes	FAC
3.			
4.			
5.			
	100 = Total Cover		
Herb Stratum (Plot size: 1m)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 100

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 _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 6

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/3	100					Sandy Loam	
10-16+	10YR 4/4	100					Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed.

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

Project/Site: English Hill City/County: King County Sampling Date: 3-6-2025

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 7

Investigator(s): Kolten Kosters, Samantha Pohlman Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.712579 Long: -122.105710 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 7 in southeast portion of Wetland 1.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus balsamifera (balsam poplar)	20	Yes	FAC
2.			
3.			
4.			
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Cornus alba (redosier dogwood)	30	Yes	FACW
2. Spiraea douglasii (hardhack)	30	Yes	FACW
3.			
4.			
5.			
	60 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Juncus effusus (lamp rush)	50	Yes	FACW
2. Ranunculus repens (creeping buttercup)	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 7

Profile Description: (Describe to the 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 2/1	100					Sandy Loam	
8-16+	2.5Y 4/1	90	10YR 4/6	10	C	M	Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

Water Table Present? Yes ☒ No ☐ Depth (inches): 2

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 0

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Ponding in wetland 1 to 2 inches in vicinity of sample plot

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

Project/Site: English Hill City/County: King County Sampling Date: 3-6-2025

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 8

Investigator(s): Kolten Kosters Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.712481 Long: -122.105692 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 8 in the southeast corner of the project site in the upland adjacent to Wetland 1

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus balsamifera (balsam poplar)	60	Yes	FAC
2.			
3.			
4.			
	60 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Spiraea douglasii (hardhack)	20	Yes	FACW
2. Rubus laciniatus (cut-leaf blackberry)	20	Yes	FACU
3. Acer circinatum (vine maple)	20	Yes	FAC
4.			
5.			
	60 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Geranium robertianum (herb robert)	5	Yes	FACU
2. Carex deweyana (dewey's sedge)	5	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	10 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 90

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 8

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/2	100					SL	
8-16+	10YR 3/2	95					SL	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

Water Table Present? Yes ☒ No ☐ Depth (inches): 13

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 12

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

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

Project/Site: English Hill City/County: King County Sampling Date: 3-6-2025

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 9

Investigator(s): Kolten Kosters Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.712481 Long: -122.105692 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 9 is in the northeast portion of the site

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Rubus laciniatus (cut-leaf blackberry)	40	Yes	FACU
2. Oemleria cerasiformis (Oso-berry)	30	Yes	FACU
3. Rubus armeniacus (Himalayan blackberry)	20	Yes	FAC
4.			
5.			
	90 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Polystichum munitum (sword fern)	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	45 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 55

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 9

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	10YR2/2	100					SL	
8-12	10YR 3/3	100					SL	
12-16+	10YR 3/3	90	10YR 4/4	10	C	M	SL	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

Water Table Present? Yes ☐ No ☒ Depth (inches): 14

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): 13

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: Water table and saturation too deep to meet wetland hydrology indicators.

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

Project/Site: English Hill City/County: King County Sampling Date: 3-6-2025

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 10

Investigator(s): Kolten Kosters Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.712481 Long: -122.105692 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 10 is in a small depression approximately 6 by 6 foot in size in northeast portion of site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus balsamifera (balsam poplar)	20	Yes	FAC
2.			
3.			
4.			
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Rubus armeniacus (Himalayan blackberry)	20	Yes	FAC
2. Rubus laciniatus (cut-leaf blackberry)	20	Yes	FACU
3. Rubus spectabilis (salmon raspberry	10	Yes	FAC
4. Corylus cornuta (beaked hazelnut	10	Yes	FACU
5.			
	60 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Carex deweyana (dewey's sedge)	30	Yes	FAC
2. Polystichum munitum (sword fern)	10	Yes	FACU
3. Geranium robertianum (herb robert)	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	45 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 55

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 10

Profile Description: (Describe to the 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
0-10	10YR2/1	100					SL	
10-16+	2.5Y 5/3	90	10YR 3/4	10	C	M	SL	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed. Soil matrix too bright to meet F3 Depeleted Matrix

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

Water Table Present? Yes ☒ No ☐ Depth (inches): 8

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 0

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

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

Project/Site: English Hill City/County: King County Sampling Date: 2-13-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 11

Investigator(s): Kolten Kosters, Samantha Pohlman Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Concave Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.712305 Long: -122.105857 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 11 is located north of outfall of the landscape pond in the east portion of the assemblag

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Poa pratensis (Kentucky blue grass)	50	Yes	FAC
2. Festuca arundinacea (tall fescue)	20	No	FAC
3. Ranunculus repens (creeping buttercup)	20	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____

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 _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ☒ No ☐**

Remarks: Musli species (moss) throughout herbaceous stratum

SOIL

Sampling Point: SP 11

Profile Description: (Describe to the 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
0-15	10YR 3/2	100					Sandy Loam	
15-18	10YR 3/1	90	10YR3/6	10	C	M	Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed. Depleted layer is too deep to meet F6 Redox Dark Surface.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill City/County: King County Sampling Date: 2-13-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 12

Investigator(s): Kolten Kosters, Samantha Pohlman Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 5-7

Subregion (LRR): LRR A Lat: 47.712154 Long: -122.105874 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 12 is located in yard area on berm of pond located south of pond outlet

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Poa pratensis (Kentucky bluegrass)	80	Yes	FAC
2. Festuca arundinacea (tall fescue)	20	No	FAC
3. Plantago laceolata (English plantain)	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	105 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____

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 _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 12

Profile Description: (Describe to the 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	10YR 3/2	100					Sandy Loam	
12-18+	10YR 3/1	100					Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill City/County: King County Sampling Date: 2-13-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 13

Investigator(s): Kolten Kosters, Samantha Pohlman Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Convex Slope (%): 3-5

Subregion (LRR): LRR A Lat: 47.712447 Long: -122.106172 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 on pond berm in soutwest of pond.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Poa pratensis (Kentucky bluegrass)	80	Yes	FAC
2. Plantago lanceolata (English plantain)	10	No	FACU
3. Holcus lanatus (common velvetgrass)	10	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 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	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 13

Profile Description: (Describe to the 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 4/2	100					Sandy Loam	
6-10+	10YR 4/3	80	10YR 4/6	20	C	M	Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: compacted hard

Depth (inches): 10

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill City/County: King County Sampling Date: 2-13-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 14

Investigator(s): Kolten Kosters, Samantha Pohlman Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 3-5

Subregion (LRR): LRR A Lat: 47.712303 Long: -122.106770 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 14 is in the bottom of the landscape pond in the east half of the project site. The sample plot is at the west end of pond, in the bottom of the pond. It meets the tehcial requirements for a wetland, but has an artificial bentonite clay liner.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 1m)			
1. Scirpus atrocinctus (girdle bulrush)	10	Yes	OBL
2. Iris pseudacorus (pale-yellow iris)	10	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	20 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum _____

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 _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ☒ No ☐**

Remarks: Vegetation rooted only along bank not along the bed of the pond

SOIL

Sampling Point: SP 14

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/3	100					Muck	
4-20+	10Y 3/1	100					Gley liner	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: An accumulation of muck material is located over the bentonite clay liner. The bentonite liner was greater than 20 inches thick at this location.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

Water Table Present? Yes ☒ No ☐ Depth (inches): 15

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 0

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

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

Project/Site: English Hill City/County: King County Sampling Date: 2-13-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 15

Investigator(s): Kolten Kosters, Samantha Pohlman Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Concave Slope (%): 3-5

Subregion (LRR): LRR A Lat: 47.712240 Long: -122.106365 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 in pond in the east portion of the project site. The sample plot is southeast portion of pond, in a portion of the pond that was drained approximately 3 feet to access the pond liner.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Scirpus atrocinctus (girdle bulrush)	10	Yes	OBL
2. Polygonum hydropiperoides (swamp smartweed)	10	Yes	OBL
3. Typha latifolia (broad-leaf cat-tail)	10	Yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 70

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 _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 15

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
130-2	10YR 2/1	100					Snady Loam	
2-30+	10Y 3/1	100					Sandy Cl. L.	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: We observed a bentonite clay liner that extended to a depth of greater than 30 inches. The bentonite layer is uniform and compacted suggesting it was installed as an aquitard to retain water in the landscape 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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

Water Table Present? Yes ☒ No ☐ Depth (inches): 25

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

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

Project/Site: English Hill City/County: King County Sampling Date: 3-14-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 16

Investigator(s): Kolten Kosters, Erik Christensen Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.711999 Long: -122.105917 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 16 is located south of NE 125th street in the southeast portion of the assemblage.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Gaultheria shallon (Salal)	10	Yes	FACU
2. Rhododendron macrophyllum (California Rhodoen.)	10	Yes	FACU
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Poa pratensis (Kentucky blue grass)	80	Yes	FAC
2. musci spp.	20	NA	NA
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 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	x 1 = 0
FACW species 0	x 2 = 0
FAC species 80	x 3 = 230
FACU species 20	x 4 = 80
UPL species 0	x 5 = 0
Column Totals: 100 (A)	310 (B)

Prevalence Index = B/A = 3.10

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 16

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/3	100					Sandy Loam	
10-16+	10YR 4/4	100					Gr.S.L	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill City/County: King County Sampling Date: 3-14-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 17

Investigator(s): Kolten Kosters, Erik Christensen Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.711999 Long: -122.105917 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 17 is south of NE 125th south central parcel

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii (Douglas-fir)	90	Yes	FACU
2.			
3.			
4.			
	90 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1. Thuja plicata (western arborvitae)	5	Yes	FAC
2. Rubus ursinus (California dewberry)	5	Yes	FACU
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Polisticum munitum (Pineland swordfern)	50	Yes	FACU
2. Geranium robertium (Roberts gernaium)	5	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 15

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 0	x 2 = 0
FAC species 5	x 3 = 15
FACU species 150	x 4 = 600
UPL species 0	x 5 = 0
Column Totals: 155 (A)	615 (B)

Prevalence Index = B/A = 3.96

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 17

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/2	100					Sandy Loam	
10-16+	10YR 4/4	100					Gr.S.L	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill City/County: King County Sampling Date: 3-14-25

Applicant/Owner: Murray Franklyn Homes LLC State: WA Sampling Point: SP 18

Investigator(s): Kolten Kosters, Erik Christensen Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Convex Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.711999 Long: -122.105917 Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 18 is south of NE 125th south west portion of the assembalge

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Thuja plicata (western arborvitae)	60	Yes	FAC
2.			
3.			
4.			
	80 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Ranunculus repens (creeping buttercup)	80	Yes	FAC
2. Poa pratensis (Kentucky blue grass)	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 15

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 _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 18

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/2	100					Sandy Loam	
10-16+	10YR 3/3	100					Gr.S.L	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators observed

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology observed

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

Project/Site: English Hill Mern Site City/County: King Sampling Date: June 5, 2025

Applicant/Owner: Murray Franklyn State: WA Sampling Point: SP 19

Investigator(s): Kolten Kosters, Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): concave Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.711577° Long: -122.106560° Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 19 is located in Wetland 1 in the northeast corner of the site.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus balsamifera (balsam poplar)	40	Yes	FAC
2. Alnus Rubra (red alder)	30	Yes	FAC
3.			
4.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: 3m)			
1. Salmon raspberry (Rubus spectabilis)	40	Yes	FAC
2.			
3.			
4.			
5.			
	40	= Total Cover	
Herb Stratum (Plot size: 1m)			
1. Carex obnupta (slough sedge)	20	YES	OBL
2. Ranunculus repens (creeping buttercup)	10	YES	FAC
3. Athyrium filix-femina (lady fern)	5	NO	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	25	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum 75

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 19

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1	100					Sandy Loam	
8-12+	5Y 5/1	75	10YR 4/6	25	C	M	Silt Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 12

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

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

Project/Site: English Hill Mern Site City/County: King Sampling Date: June 5, 2025

Applicant/Owner: Murray Franklyn State: WA Sampling Point: SP 20

Investigator(s): Kolten Kosters, Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): concave Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.711577° Long: -122.106560° Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 20 is located west of the wetland edge and slightly upslope

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus balsamifera (balsam poplar)	40	Yes	FAC
2. Alnus Rubra (red alder)	30	Yes	FAC
3.			
4.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: 3m)			
1. Oemleria cerasiformis (oso-berry)	30	Yes	FACU
2. Rubus spectabilis (salmon raspberry)	10	Yes	FAC
3. Rubus ursinus (California dewberry)	10	Yes	FACU
4.			
5.			
	50	= Total Cover	
Herb Stratum (Plot size: 1m)			
1. Polystichum munitum (sword fern)	5	YES	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	5	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum 95

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 6 (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	x 1 =	0
FACW species	0	x 2 =	0
FAC species	80	x 3 =	240
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	125 (A)		420 (B)

Prevalence Index = B/A = 3.36

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 20

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Sandy Loam	
4-12+	10YR 3/3	100					Sandy Loam	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology

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

Project/Site: English Hill Mern Site City/County: King Sampling Date: June 5, 2025

Applicant/Owner: Murray Franklyn State: WA Sampling Point: SP 21

Investigator(s): Kolten Kosters, Section, Township, Range: S25,T26N,R5E

Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): concave Slope (%): 1-3

Subregion (LRR): LRR A Lat: 47.711577° Long: -122.106560° Datum: NAD 83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 21 is located in the northwest portion of the site near landscape features

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 5m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii	25	Yes	FACU
2.			
3.			
4.			
	25 = Total Cover		
Sapling/Shrub Stratum (Plot size: 3m)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 1m)			
1. Poa pratensis (Kentucky bluegrass)	50	Yes	FAC
2. Taraxacum officinale (dandelion)	10	No	FACU
3. Hypochaeris radicata (hairy cats ear)	10	No	FACU
4. Agrostis stolonifera (creeping bentgrass)	10	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 20

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	x 1 = 0
FACW species 0	x 2 = 0
FAC species 60	x 3 = 180
FACU species 45	x 4 = 180
UPL species 0	x 5 = 0
Column Totals: 105 (A)	360 (B)

Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[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 21

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/3	100					Sandy Loam	
4-12+	10YR 3/4	100					Gr. S. L.	

[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) (**except MLRA 1**)
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: No hydric soil indicators

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1) (**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: No indicators of wetland hydrology

APPENDIX B

WDOE 2014 Wetland Ratings

Wetland name or number WL1

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland 1 Date of site visit: 2-13-2025

Rated by K. Kosters Trained by Ecology? ✓ Yes ___No Date of training March 2014

HGM Class used for rating Depressional Wetland has multiple HGM classes? ___Y ✓ N

NOTE: Form is not complete without the figures requested *(figures can be combined).*

Source of base aerial photo/map Google Earth, WDOE

OVERALL WETLAND CATEGORY II (based on functions ✓ or special characteristics ___)

1. Category of wetland based on FUNCTIONS

_____**Category I** – Total score = 23 - 27

✓ **Category II** – Total score = 20 - 22

_____**Category III** – Total score = 16 - 19

_____**Category IV** – Total score = 9 - 15

FUNCTION	Improving Water Quality			Hydrologic			Habitat			
	Circle the appropriate ratings									
Site Potential	H	M	L	H	M	L	H	M	L	
Landscape Potential	H	M	L	H	M	L	H	M	L	
Value	H	M	L	H	M	L	H	M	L	TOTAL
Score Based on Ratings	8			8			5			22

Score for each function based on three ratings *(order of ratings is not important)*

9 = H,H,H
8 = H,H,M
7 = H,H,L
7 = H,M,M
6 = H,M,L
6 = M,M,M
5 = H,L,L
5 = M,M,L
4 = M,L,L
3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	NA

Wetland name or number WL1

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	1
Hydroperiods	D 1.4, H 1.2	1
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	1
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	1
Map of the contributing basin	D 4.3, D 5.3	2
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	3
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	4
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	5

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number WL1

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO – go to 2 **YES –** the wetland class is **Tidal Fringe –** go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO – Saltwater Tidal Fringe (Estuarine) **YES – Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3 **YES –** The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?
   ___The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
   ___At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4 **YES –** The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?
   ___The wetland is on a slope (*slope can be very gradual*),
   ___The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
   ___The water leaves the wetland **without being impounded**.

NO – go to 5 **YES –** The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?
   ___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
   ___The overbank flooding occurs at least once every 2 years.

Wetland name or number WL1

NO – go to 6 **YES –** The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7 **YES –** The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8 **YES –** The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

   NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number WL1

DEPRESSIONAL AND FLATS WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0. Does the site have the potential to improve water quality?	
D 1.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1	1
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic *(use NRCS definitions).* Yes = 4 No = 0	0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): Wetland has persistent, ungrazed, plants > 95% of area points = 5 Wetland has persistent, ungrazed, plants > ½ of area points = 3 Wetland has persistent, ungrazed plants > $^1/_{10}$ of area points = 1 Wetland has persistent, ungrazed plants < $^1/_{10}$ of area points = 0	5
D 1.4. Characteristics of seasonal ponding or inundation: *This is the area that is ponded for at least 2 months. See description in manual.* Area seasonally ponded is > ½ total area of wetland points = 4 Area seasonally ponded is > ¼ total area of wetland points = 2 Area seasonally ponded is < ¼ total area of wetland points = 0	0
Total for D 1 Add the points in the boxes above	6

Rating of Site Potential If score is: ___ **12-16 = H** ✓ **6-11 = M** ___ **0-5 = L** *Record the rating on the first page*

D 2.0. Does the landscape have the potential to support the water quality function of the site?	
D 2.1. Does the wetland unit receive stormwater discharges? Yes = 1 No = 0	1
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland? Yes = 1 No = 0	1
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source_____ Yes = 1 No = 0	0
Total for D 2 Add the points in the boxes above	3

Rating of Landscape Potential If score is: ✓ **3 or 4 = H** ___ **1 or 2 = M** ___ **0 = L** *Record the rating on the first page*

D 3.0. Is the water quality improvement provided by the site valuable to society?	
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes = 1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (*answer YES if there is a TMDL for the basin in which the unit is found*)? Yes = 2 No = 0	2
Total for D 3 Add the points in the boxes above	3

Rating of Value If score is: ✓ **2-4 = H** ___ **1 = M** ___ **0 = L** *Record the rating on the first page*

Wetland name or number WL1

DEPRESSIONAL AND FLATS WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation

D 4.0. Does the site have the potential to reduce flooding and erosion?

D 4.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet points = 2 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	1
D 4.2. Depth of storage during wet periods: *Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.* Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "headwater" wetland points = 3 Wetland is flat but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in) points = 0	3
D 4.3. Contribution of the wetland to storage in the watershed: *Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.* The area of the basin is less than 10 times the area of the unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit points = 0 Entire wetland is in the Flats class points = 5	3
Total for D 4 Add the points in the boxes above	7

Rating of Site Potential If score is: ___ **12-16 = H** ✓ **6-11 = M** ___ **0-5 = L** *Record the rating on the first page*

D 5.0. Does the landscape have the potential to support hydrologic functions of the site?

D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0	1
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1 No = 0	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Yes = 1 No = 0	1
Total for D 5 Add the points in the boxes above	3

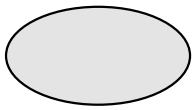
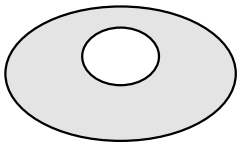
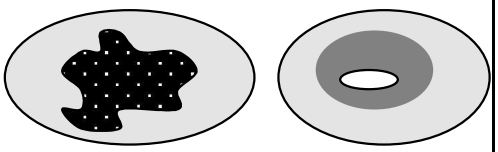
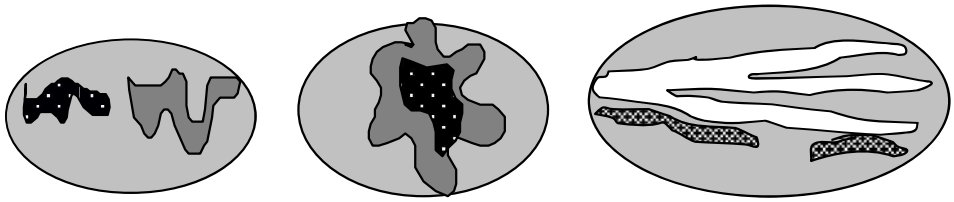
Rating of Landscape Potential If score is: ✓ **3 = H** ___ **1 or 2 = M** ___ **0 = L** *Record the rating on the first page*

D 6.0. Are the hydrologic functions provided by the site valuable to society?

D 6.1. The unit is in a landscape that has flooding problems. *Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.* The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 • Surface flooding problems are in a sub-basin farther down-gradient. points = 1 Flooding from groundwater is an issue in the sub-basin. points = 1 The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. *Explain why* _____ points = 0 There are no problems with flooding downstream of the wetland. points = 0	2
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	0
Total for D 6 Add the points in the boxes above	2

Rating of Value If score is: ✓ **2-4 = H** ___ **1 = M** ___ **0 = L** *Record the rating on the first page*

Wetland name or number WL1

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat	
H 1.0. Does the site have the potential to provide habitat?	
H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class.* Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.* ___Aquatic bed — 4 structures or more: points = 4 _✓_Emergent — 3 structures: points = 2 ___Scrub-shrub (areas where shrubs have > 30% cover) — 2 structures: points = 1 _✓_Forested (areas where trees have > 30% cover) — 1 structure: points = 0 *If the unit has a Forested class, check if:* ____The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon	1
H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*). ____Permanently flooded or inundated — 4 or more types present: points = 3 ____Seasonally flooded or inundated — 3 types present: points = 2 ___Occasionally flooded or inundated — 2 types present: points = 1 _✓_Saturated only — 1 type present: points = 0 ____Permanently flowing stream or river in, or adjacent to, the wetland ____Seasonally flowing stream in, or adjacent to, the wetland ____**Lake Fringe wetland** — **2 points** ____**Freshwater tidal wetland** — **2 points**	0
H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft^2. *Different patches of the same species can be combined to meet the size threshold and you do not have to name the species.* ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle*** If you counted: > 19 species — points = 2 5 - 19 species — points = 1 < 5 species — points = 0	1
H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*  **None** = 0 points  **Low** = 1 point  **Moderate** = 2 points All three diagrams in this row are **HIGH** = 3points 	1

Wetland name or number WL1

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. *The number of checks is the number of points.* ✓ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). ✓ Standing snags (dbh > 4 in) within the wetland ____Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) ____Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet weathered where wood is exposed)* ____At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated *(structures for egg-laying by amphibians)* ____Invasive plants cover less than 25% of the wetland area in every stratum of plants (*see H 1.1 for list of strata*)	2
Total for H 1 Add the points in the boxes above	5

Rating of Site Potential If score is: ___**15-18 = H** ___**7-14 = M** ✓ **0-6 = L** *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
H 2.1. Accessible habitat (include *only habitat that directly abuts wetland unit*). *Calculate:* % undisturbed habitat 0 + [(% moderate and low intensity land uses)/2] 1 = 1 % If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = 0	0
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat 11 + [(% moderate and low intensity land uses)/2] 3 = 15 % Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = 2 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon points = 0	1
H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = (- 2) ≤ 50% of 1 km Polygon is high intensity points = 0	-2
Total for H 2 Add the points in the boxes above	-1

Rating of Landscape Potential If score is: ___**4-6 = H** ___**1-3 = M** ✓ **< 1 = L** *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated.* Site meets ANY of the following criteria: points = 2 ✓ It has 3 or more priority habitats within 100 m (see next page) — It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) — It is mapped as a location for an individual WDFW priority species — It is a Wetland of High Conservation Value as determined by the Department of Natural Resources — It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 Site does not meet any of the criteria above points = 0	2

Rating of Value If score is: ✓ **2 = H** ___**1 = M** ___**0 = L** *Record the rating on the first page*

Wetland name or number WL1

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: ***NOTE:*** *This question is independent of the land use between the wetland unit and the priority habitat.*

— **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).

— **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).

— **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.

— **Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.

— **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).

✓ **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.

— **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).

✓ **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.

— **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page).*

— **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.

— **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.

— **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.

✓ **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number WL1

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

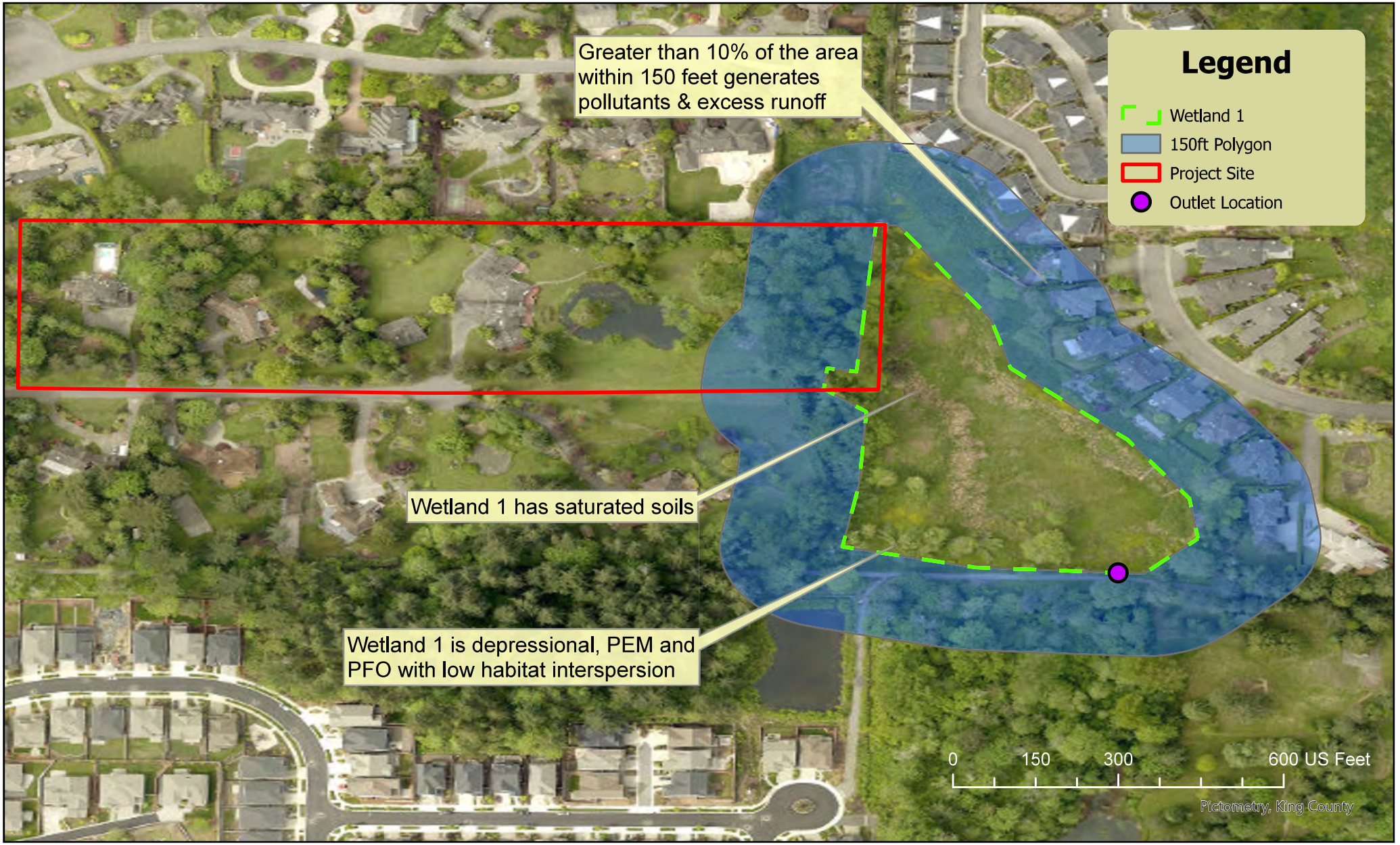
Wetland Type *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt Yes –Go to **SC 1.1** No= **Not an estuarine wetland**	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = **Category I** No - Go to **SC 1.2**	**Cat. I**
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are *Spartina*, see page 25) — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes = **Category I** No = **Category II**	**Cat. I** **Cat. II**
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? Yes **–** Go to **SC 2.2** No **–** Go to **SC 2.3** SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? Yes **= Category I** No **= Not a WHCV** SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf Yes **– Contact WNHP/WDNR and go to SC 2.4** No **= Not a WHCV** SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? Yes **= Category I** No **= Not a WHCV**	**Cat. I**
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? Yes – Go to **SC 3.3** No – Go to **SC 3.2** SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? Yes – Go to **SC 3.3** No = **Is not a bog** SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? Yes = **Is a Category I bog** No – Go to **SC 3.4** **NOTE:** If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? Yes = **Is a Category I bog** No = **Is not a bog**	**Cat. I**

Wetland name or number WL1

SC 4.0. Forested Wetlands Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.*** — **Old-growth forests** (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — **Mature forests** (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). Yes = **Category I** No = **Not a forested wetland for this section**	**Cat. I**
SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)* Yes – Go to **SC 5.1** No = **Not a wetland in a coastal lagoon** SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than $^{1}/_{10}$ ac (4350 ft^2) Yes = **Category I** No = **Category II**	**Cat. I** **Cat. II**
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.*** In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to **SC 6.1** No = **not an interdunal wetland for rating** SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = **Category I** No – Go to **SC 6.2** SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? Yes = **Category II** No – Go to **SC 6.3** SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = **Category III** No = **Category IV**	**Cat I** **Cat. II** **Cat. III** **Cat. IV**
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	NA

Wetland name or number WL1

This page left blank intentionally



ENGLISH HILL

RAI Project #: 2024-050-002
Date Created: 2/20/2025
Map Created by: EH

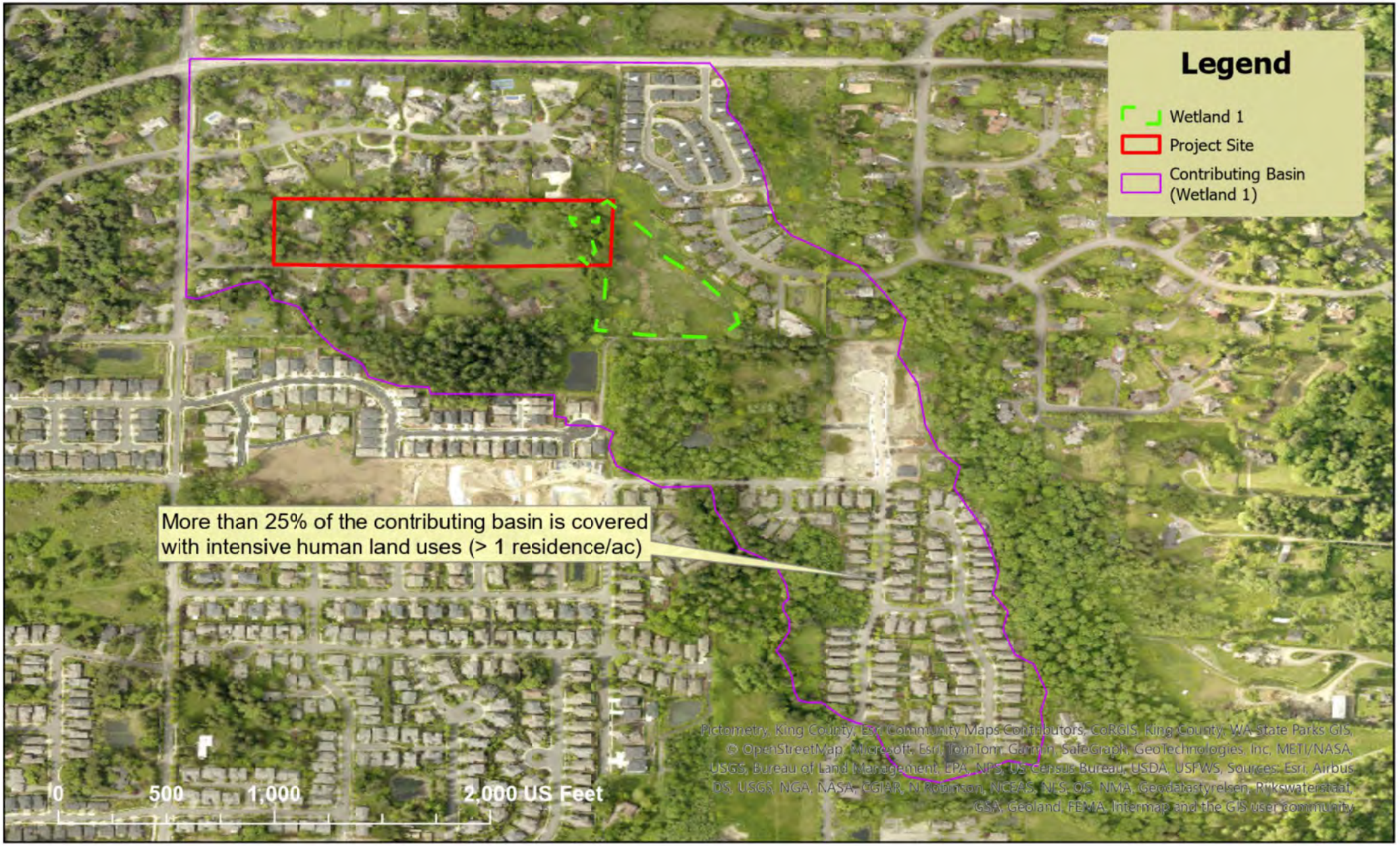
Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 1 - Figure 1

Questions: D1.1, 1.3, 1.4, 2.2, 4.1, 5.2; H1.1, 1.2, 1.4

Raedeke Associates, Inc.

N



ENGLISH HILL

RAI Project #: 2024-050-002
Date Created: 2/20/2025
Map Created by: EH

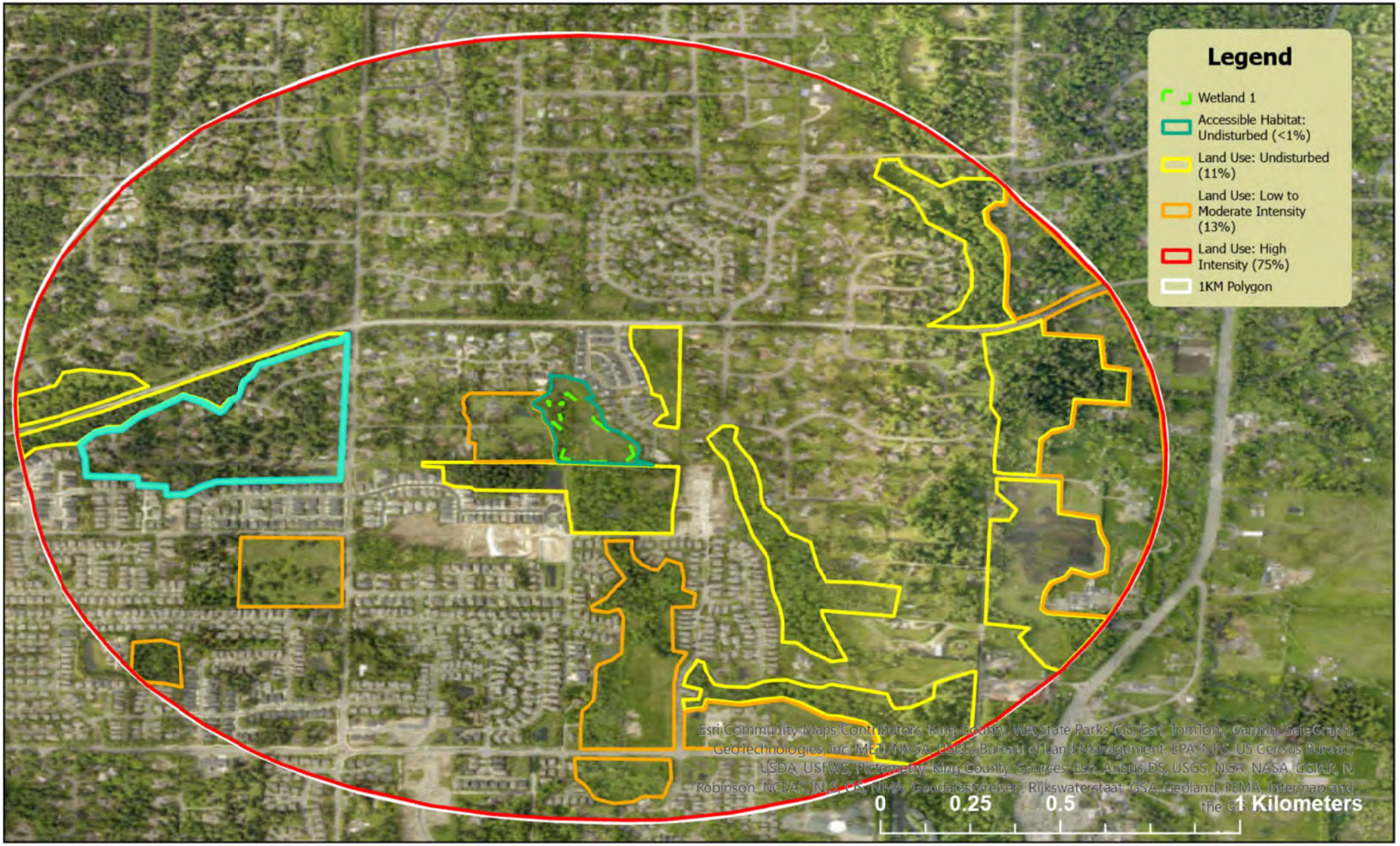
Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 1 - Figure 2

Questions: D4.3, D5.3

Raedeke Associates, Inc.

N



ENGLISH HILL

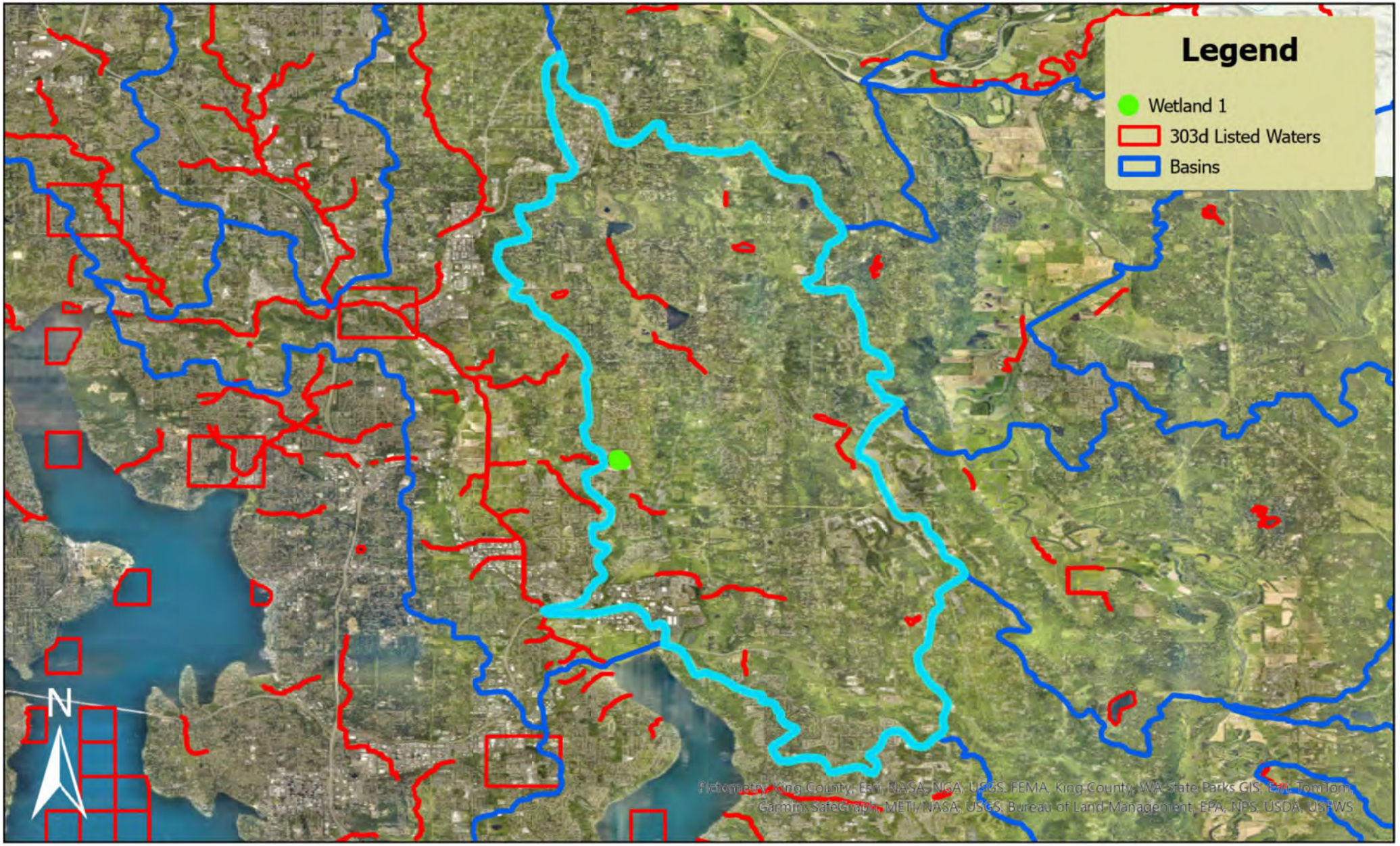
RAI Project #: 2024-050-002
Date Created: 2/20/2025
Map Created by: EH

Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 1 - Figure 3

Questions: H2.1, 2.2, 2.3

Raedeke Associates, Inc.



ENGLISH HILL

RAI Project #: 2024-050-002
Date Created: 2/20/2025
Map Created by: EH

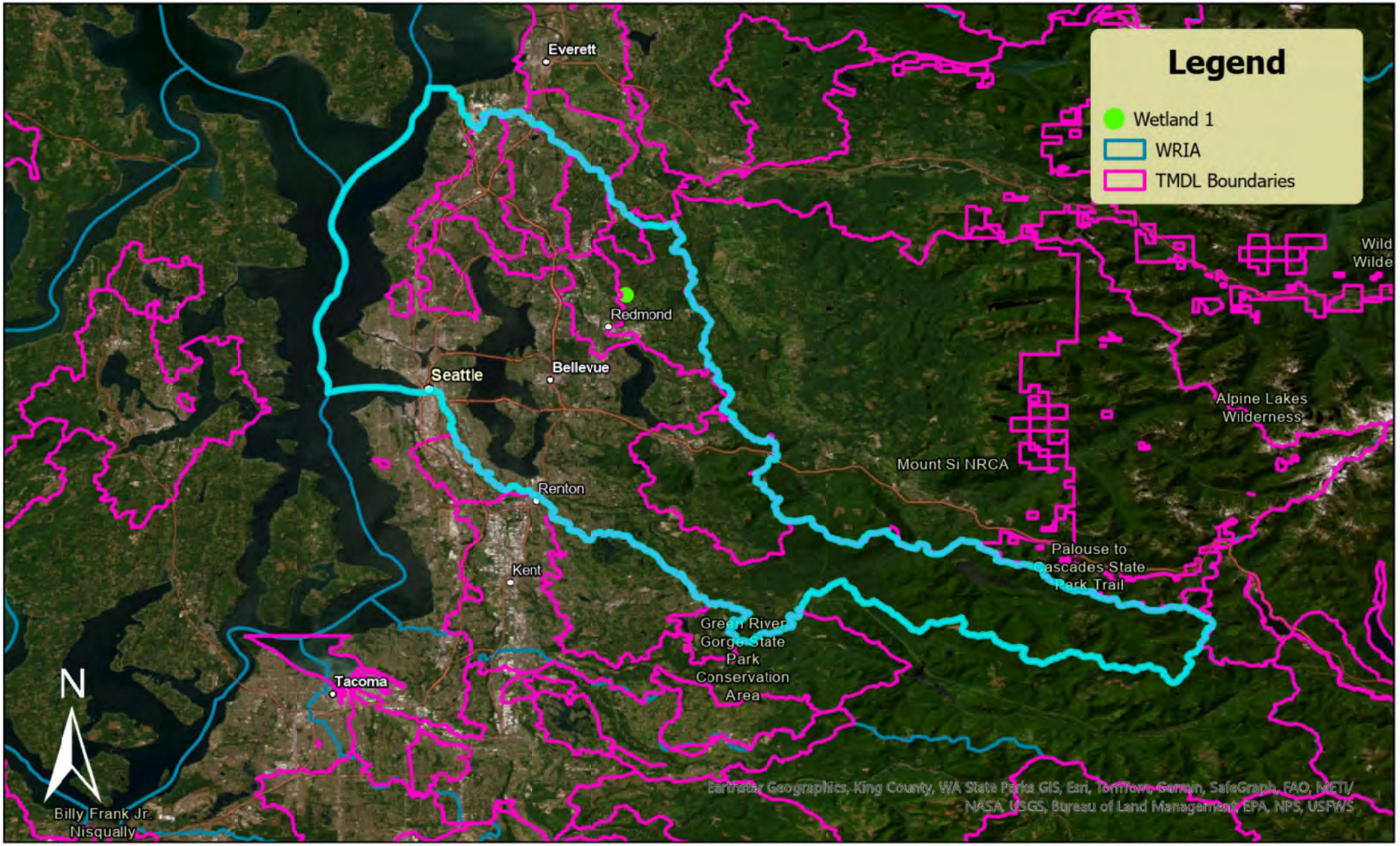
Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 1 - Figure 4

Questions: D3.1, D3.2

Raedeke Associates, Inc.

0 1.25 2.5 5 Miles



ENGLISH HILL

RAI Project #: 2024-050-002
Date Created: 2/20/2025
Map Created by: EH

Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 1 - Figure 5

Question: D3.3

Raedeke Associates, Inc.

0 5 10 20 Miles

Wetland name or number WL2

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland 2 (Off-Site) Date of site visit: 5-30-2024

Rated by K. Kosters Trained by Ecology? ✓ Yes ___No Date of training March 2014

HGM Class used for rating Depressional Wetland has multiple HGM classes? ___Y ✓ N

NOTE: Form is not complete without the figures requested *(figures can be combined).*

Source of base aerial photo/map Google Earth, WDOE

OVERALL WETLAND CATEGORY IV (based on functions ✓ or special characteristics ___)

1. Category of wetland based on FUNCTIONS

_____**Category I** – Total score = 23 - 27

_____**Category II** – Total score = 20 - 22

_____**Category III** – Total score = 16 - 19

✓ **Category IV** – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	Circle the appropriate ratings			
Site Potential	H M L	H M L	H M L	
Landscape Potential	H M L	H M L	H M L	
Value	H M L	H M L	H M L	TOTAL
Score Based on Ratings	6	5	4	15

Score for each function based on three ratings *(order of ratings is not important)*

9 = H,H,H
8 = H,H,M
7 = H,H,L
7 = H,M,M
6 = H,M,L
6 = M,M,M
5 = H,L,L
5 = M,M,L
4 = M,L,L
3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	NA

Wetland name or number WL2

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	1
Hydroperiods	D 1.4, H 1.2	1
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	1
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	1
Map of the contributing basin	D 4.3, D 5.3	2
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	3
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	4
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	5

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number WL2

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO – go to 2 **YES –** the wetland class is **Tidal Fringe –** go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO – Saltwater Tidal Fringe (Estuarine) **YES – Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3 **YES –** The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?
   ___The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
   ___At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4 **YES –** The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?
   ___The wetland is on a slope (*slope can be very gradual*),
   ___The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
   ___The water leaves the wetland **without being impounded**.

NO – go to 5 **YES –** The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?
   ___The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
   ___The overbank flooding occurs at least once every 2 years.

Wetland name or number WL2

NO – go to 6 **YES –** The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7 **YES –** The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8 **YES –** The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number WL2

DEPRESSIONAL AND FLATS WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0. Does the site have the potential to improve water quality?	
D 1.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1	2
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic *(use NRCS definitions).* Yes = 4 No = 0	0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): Wetland has persistent, ungrazed, plants > 95% of area points = 5 Wetland has persistent, ungrazed, plants > ½ of area points = 3 Wetland has persistent, ungrazed plants > $^1/_{10}$ of area points = 1 Wetland has persistent, ungrazed plants < $^1/_{10}$ of area points = 0	5
D 1.4. Characteristics of seasonal ponding or inundation: *This is the area that is ponded for at least 2 months. See description in manual.* Area seasonally ponded is > ½ total area of wetland points = 4 Area seasonally ponded is > ¼ total area of wetland points = 2 Area seasonally ponded is < ¼ total area of wetland points = 0	0
Total for D 1 Add the points in the boxes above	7

Rating of Site Potential If score is: ___ **12-16 = H** ✓ **6-11 = M** ___ **0-5 = L** *Record the rating on the first page*

D 2.0. Does the landscape have the potential to support the water quality function of the site?	
D 2.1. Does the wetland unit receive stormwater discharges? Yes = 1 No = 0	0
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland? Yes = 1 No = 0	1
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source_____ Yes = 1 No = 0	0
Total for D 2 Add the points in the boxes above	2

Rating of Landscape Potential If score is: ___ **3 or 4 = H** ✓ **1 or 2 = M** ___ **0 = L** *Record the rating on the first page*

D 3.0. Is the water quality improvement provided by the site valuable to society?	
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes = 1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (*answer YES if there is a TMDL for the basin in which the unit is found*)? Yes = 2 No = 0	2
Total for D 3 Add the points in the boxes above	3

Rating of Value If score is: ✓ **2-4 = H** ___ **1 = M** ___ **0 = L** *Record the rating on the first page*

Wetland name or number WL2

DEPRESSIONAL AND FLATS WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation

D 4.0. Does the site have the potential to reduce flooding and erosion?	
D 4.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet points = 2 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	2
D 4.2. Depth of storage during wet periods: *Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.* Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "headwater" wetland points = 3 Wetland is flat but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in) points = 0	0
D 4.3. Contribution of the wetland to storage in the watershed: *Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.* The area of the basin is less than 10 times the area of the unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit points = 0 Entire wetland is in the Flats class points = 5	3
Total for D 4 Add the points in the boxes above	5

Rating of Site Potential If score is: ___**12-16 = H** ___**6-11 = M** ✓ **0-5 = L** *Record the rating on the first page*

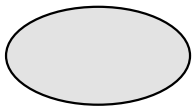
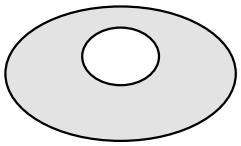
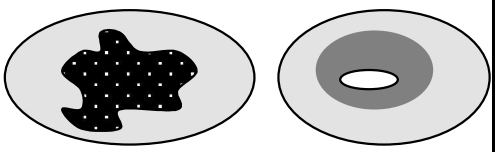
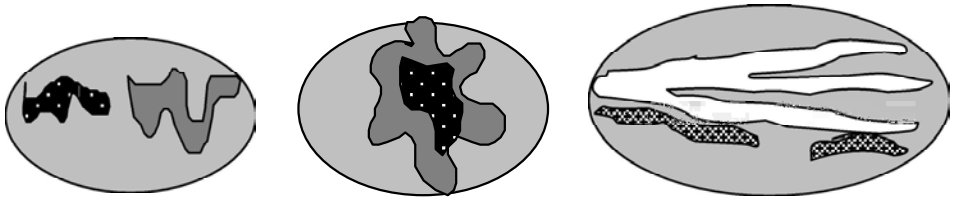
D 5.0. Does the landscape have the potential to support hydrologic functions of the site?	
D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0	0
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1 No = 0	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Yes = 1 No = 0	1
Total for D 5 Add the points in the boxes above	2

Rating of Landscape Potential If score is: ___**3 = H** ✓ **1 or 2 = M** ___**0 = L** *Record the rating on the first page*

D 6.0. Are the hydrologic functions provided by the site valuable to society?	
D 6.1. The unit is in a landscape that has flooding problems. *Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.* The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 • Surface flooding problems are in a sub-basin farther down-gradient. points = 1 Flooding from groundwater is an issue in the sub-basin. points = 1 The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. *Explain why* _____ points = 0 There are no problems with flooding downstream of the wetland. points = 0	0
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	0
Total for D 6 Add the points in the boxes above	0

Rating of Value If score is: ___**2-4 = H** ___**1 = M** ✓ **0 = L** *Record the rating on the first page*

Wetland name or number WL2

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat	
H 1.0. Does the site have the potential to provide habitat?	
H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class.* Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.* ____Aquatic bed — 4 structures or more: points = 4 ____Emergent — 3 structures: points = 2 ____Scrub-shrub (areas where shrubs have > 30% cover) — 2 structures: points = 1 ✓ Forested (areas where trees have > 30% cover) — 1 structure: points = 0 *If the unit has a Forested class, check if:* ____The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon	0
H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*). ____Permanently flooded or inundated — 4 or more types present: points = 3 ____Seasonally flooded or inundated — 3 types present: points = 2 ____Occasionally flooded or inundated — 2 types present: points = 1 ✓ Saturated only — 1 type present: points = 0 ____Permanently flowing stream or river in, or adjacent to, the wetland ____Seasonally flowing stream in, or adjacent to, the wetland ____**Lake Fringe wetland** — **2 points** ____**Freshwater tidal wetland** — **2 points**	0
H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft^2. *Different patches of the same species can be combined to meet the size threshold and you do not have to name the species.* ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle*** If you counted: > 19 species — points = 2 5 - 19 species — points = 1 < 5 species — points = 0	1
H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*  **None** = 0 points  **Low** = 1 point  **Moderate** = 2 points All three diagrams in this row are **HIGH** = 3points 	0

Wetland name or number WL2

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. *The number of checks is the number of points.* ✓ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). ____Standing snags (dbh > 4 in) within the wetland ____Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) ____Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet weathered where wood is exposed)* ____At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated *(structures for egg-laying by amphibians)* ____Invasive plants cover less than 25% of the wetland area in every stratum of plants (*see H 1.1 for list of strata*)	1
Total for H 1 Add the points in the boxes above	1

Rating of Site Potential If score is:___**15-18 = H** ___**7-14 = M** ✓**0-6 = L** *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
H 2.1. Accessible habitat (include *only habitat that directly abuts wetland unit*). *Calculate:* % undisturbed habitat___ + [(% moderate and low intensity land uses)/2]___ = 1 % If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = 0	0
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat___ + [(% moderate and low intensity land uses)/2]___ = 15 % Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = 2 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon points = 0	1
H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = (- 2) ≤ 50% of 1 km Polygon is high intensity points = 0	-2
Total for H 2 Add the points in the boxes above	-1

Rating of Landscape Potential If score is:___**4-6 = H** ___**1-3 = M** ✓**< 1 = L** *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated.* Site meets ANY of the following criteria: points = 2 — It has 3 or more priority habitats within 100 m (see next page) — It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) — It is mapped as a location for an individual WDFW priority species — It is a Wetland of High Conservation Value as determined by the Department of Natural Resources — It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan ✓ Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 Site does not meet any of the criteria above points = 0	1

Rating of Value If score is:___**2 = H** ✓**1 = M** ___**0 = L** *Record the rating on the first page*

Wetland name or number WL2

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: ***NOTE:*** *This question is independent of the land use between the wetland unit and the priority habitat.*

— **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).

— **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).

— **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.

— **Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.

— **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).

— **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.

— **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).

— **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.

— **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page).*

— **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.

— **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.

— **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.

✓ **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number WL2

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

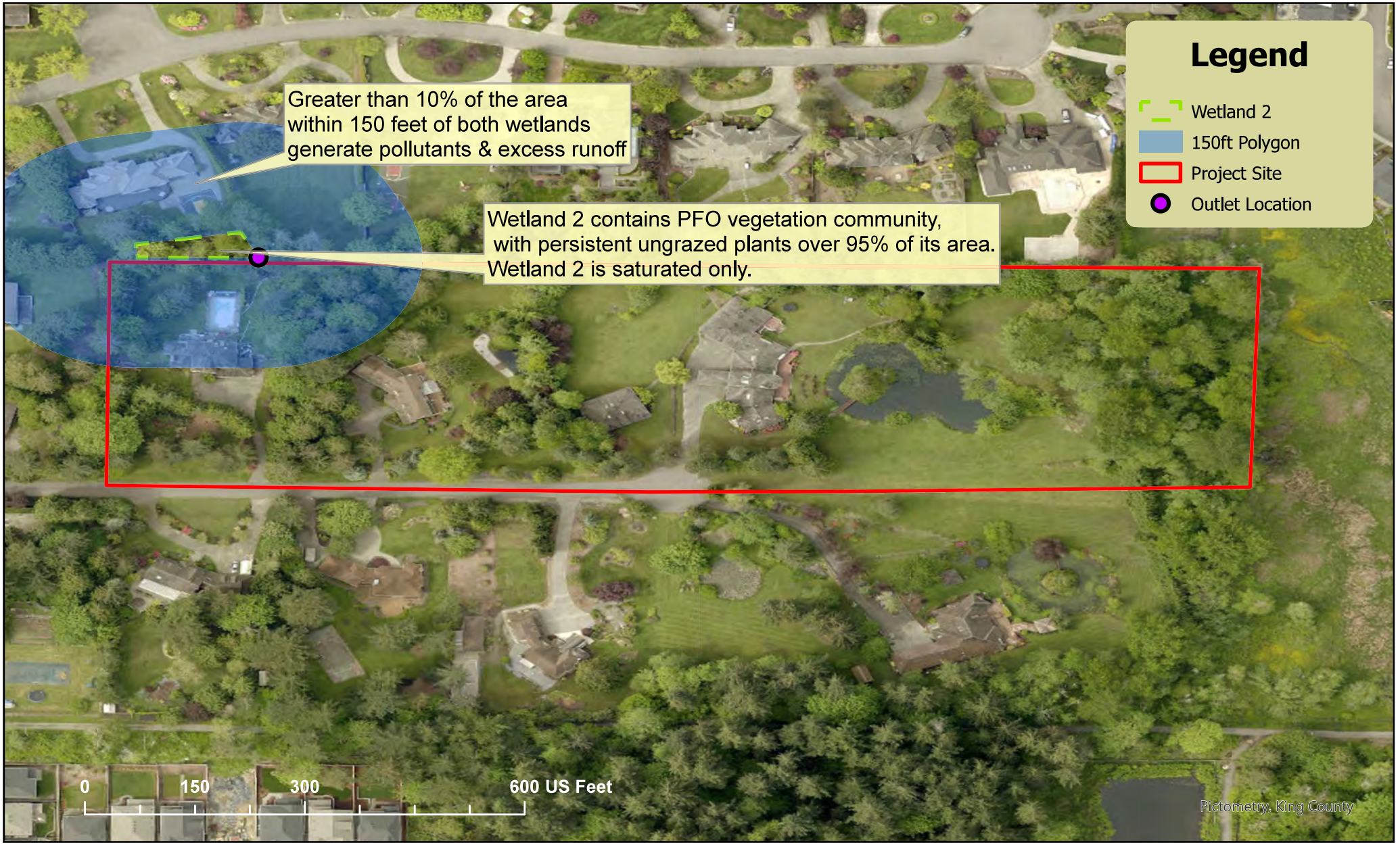
Wetland Type *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt Yes –Go to **SC 1.1** No= **Not an estuarine wetland**	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = **Category I** No - Go to **SC 1.2**	**Cat. I**
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are *Spartina*, see page 25) — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes = **Category I** No = **Category II**	**Cat. I** **Cat. II**
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? Yes **–** Go to **SC 2.2** No **–** Go to **SC 2.3** SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? Yes **= Category I** No **= Not a WHCV** SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf Yes **– Contact WNHP/WDNR and go to SC 2.4** No **= Not a WHCV** SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? Yes **= Category I** No **= Not a WHCV**	**Cat. I**
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? Yes – Go to **SC 3.3** No – Go to **SC 3.2** SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? Yes – Go to **SC 3.3** No = **Is not a bog** SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? Yes = **Is a Category I bog** No – Go to **SC 3.4** **NOTE:** If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? Yes = **Is a Category I bog** No **= Is not a bog**	**Cat. I**

Wetland name or number WL2

SC 4.0. Forested Wetlands Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.*** — **Old-growth forests** (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — **Mature forests** (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). Yes = **Category I** No = **Not a forested wetland for this section**	**Cat. I**
SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)* Yes – Go to **SC 5.1** No = **Not a wetland in a coastal lagoon**	**Cat. I**
SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland is larger than $^{1}/_{10}$ ac (4350 ft^2) Yes = **Category I** No = **Category II**	**Cat. II**
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.*** In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 Yes – Go to **SC 6.1** No = **not an interdunal wetland for rating**	**Cat I**
SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = **Category I** No – Go to **SC 6.2**	**Cat. II**
SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? Yes = **Category II** No – Go to **SC 6.3**	**Cat. III**
SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? Yes = **Category III** No = **Category IV**	**Cat. IV**
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	NA

Wetland name or number WL2

This page left blank intentionally



ENGLISH HILL

RAI Project #: 2024-050-002
Date Created: 2/21/2025
Map Created by: EH

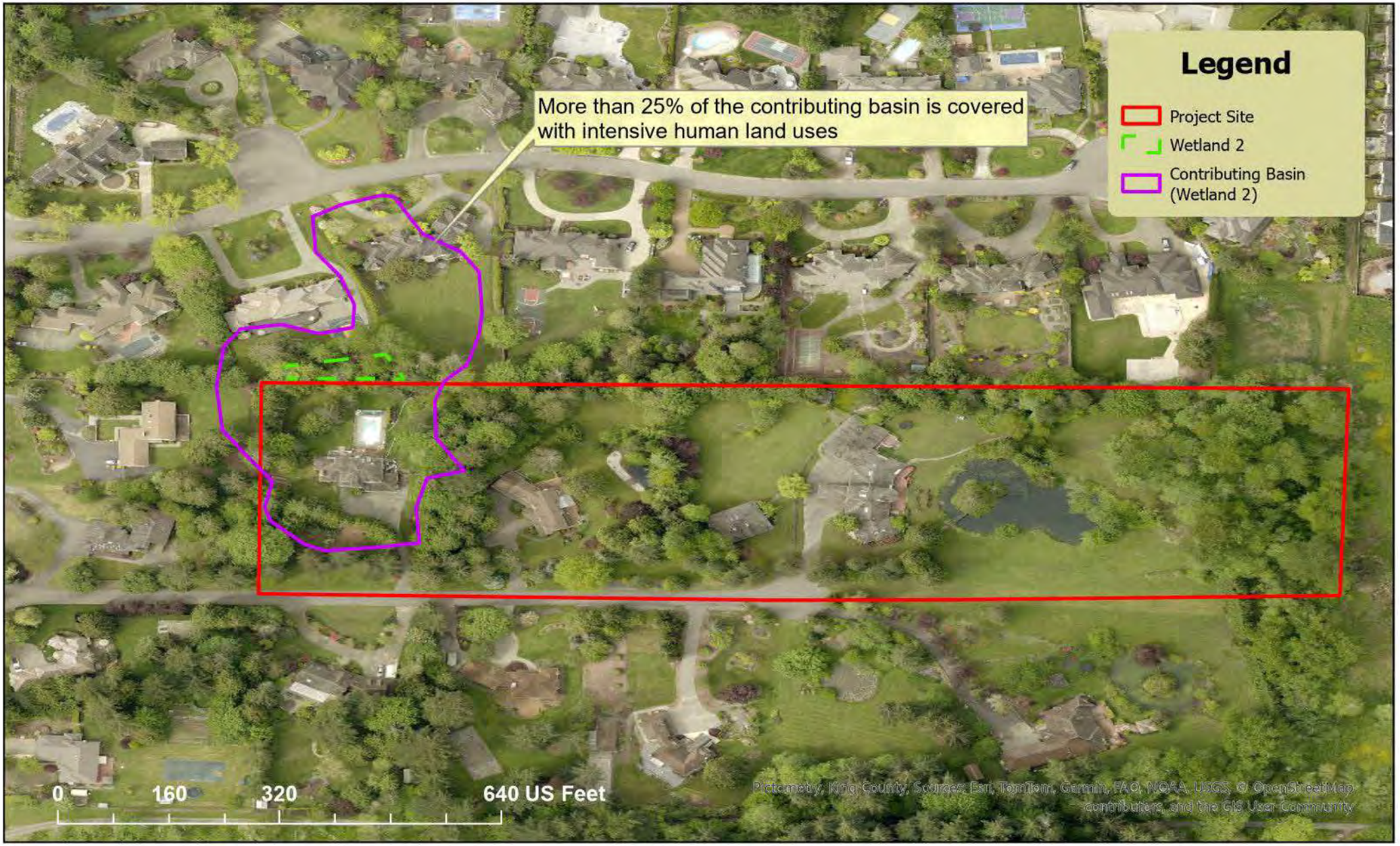
Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 2 - Figure 1

Questions: D1.1, 1.3, 1.4, 2.2, 4.1, 5.2, H1.1, 1.2, 1.4

Raedeke Associates, Inc.

N



ENGLISH HILL

RAI Project #: 2024-050-002
Date Created: 2/21/2025
Map Created by: EH

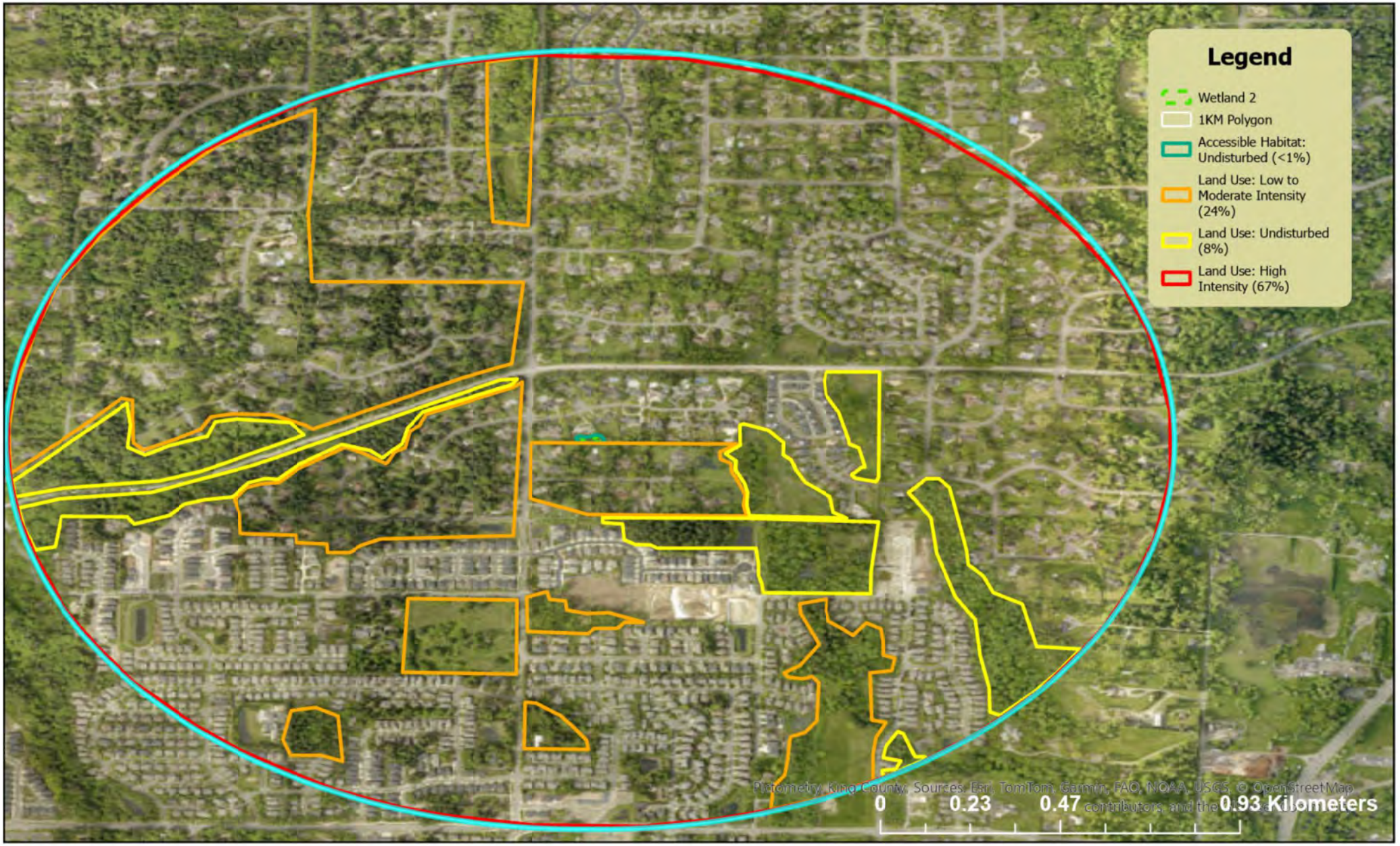
Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 2 - Figure 2

Questions: D4.3, D5.3

Raedeke Associates, Inc.

N



ENGLISH HILL

RAI Project #: 2024-050-002
Date Created: 2/21/2025
Map Created by: EH

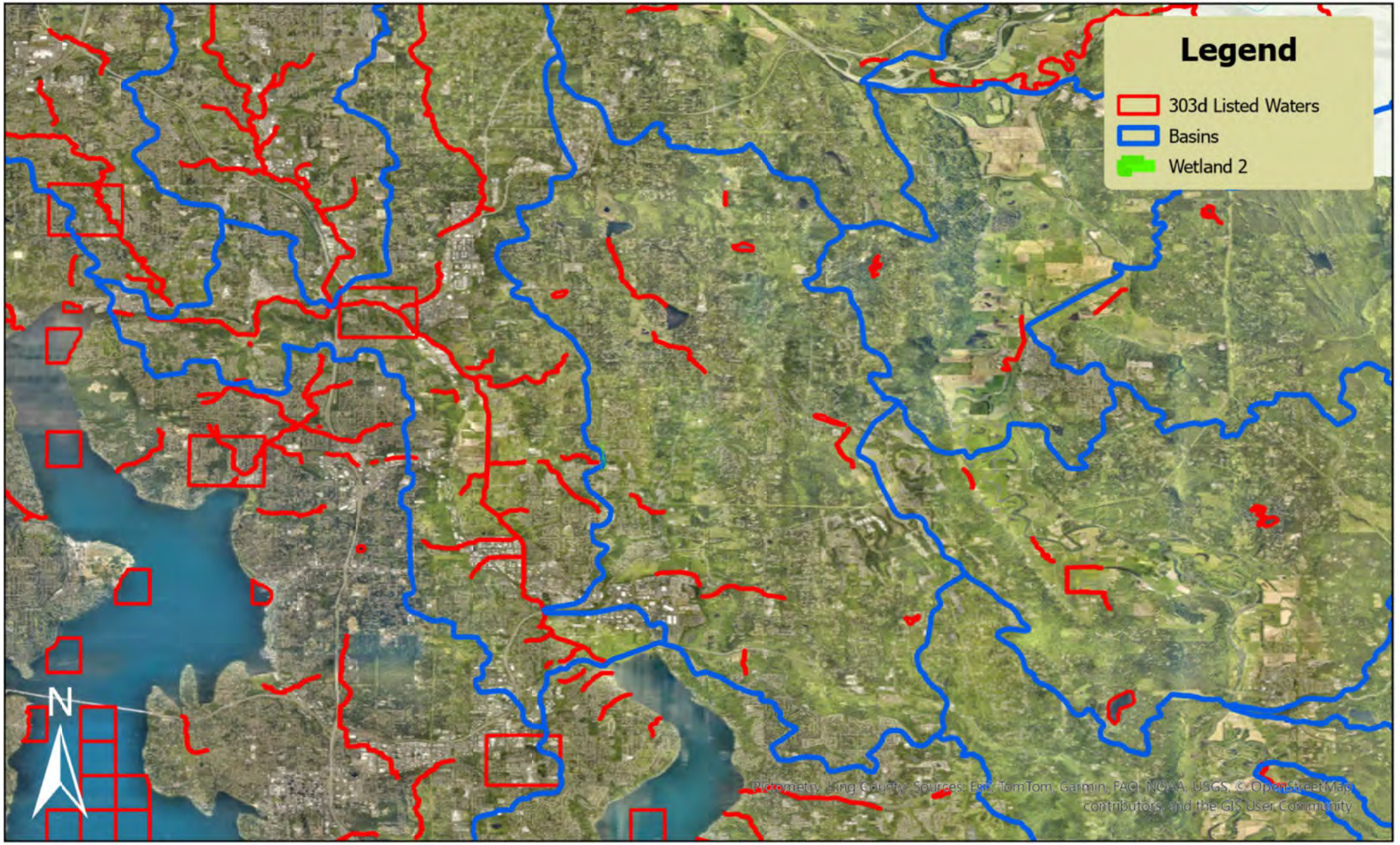
Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 2 - Figure 3

Questions: H2.1, 2.2, 2.3

Raedeke Associates, Inc.

N



ENGLISH HILL

RAI Project #: 2024-050-002
Date Created: 2/21/2025
Map Created by: EH

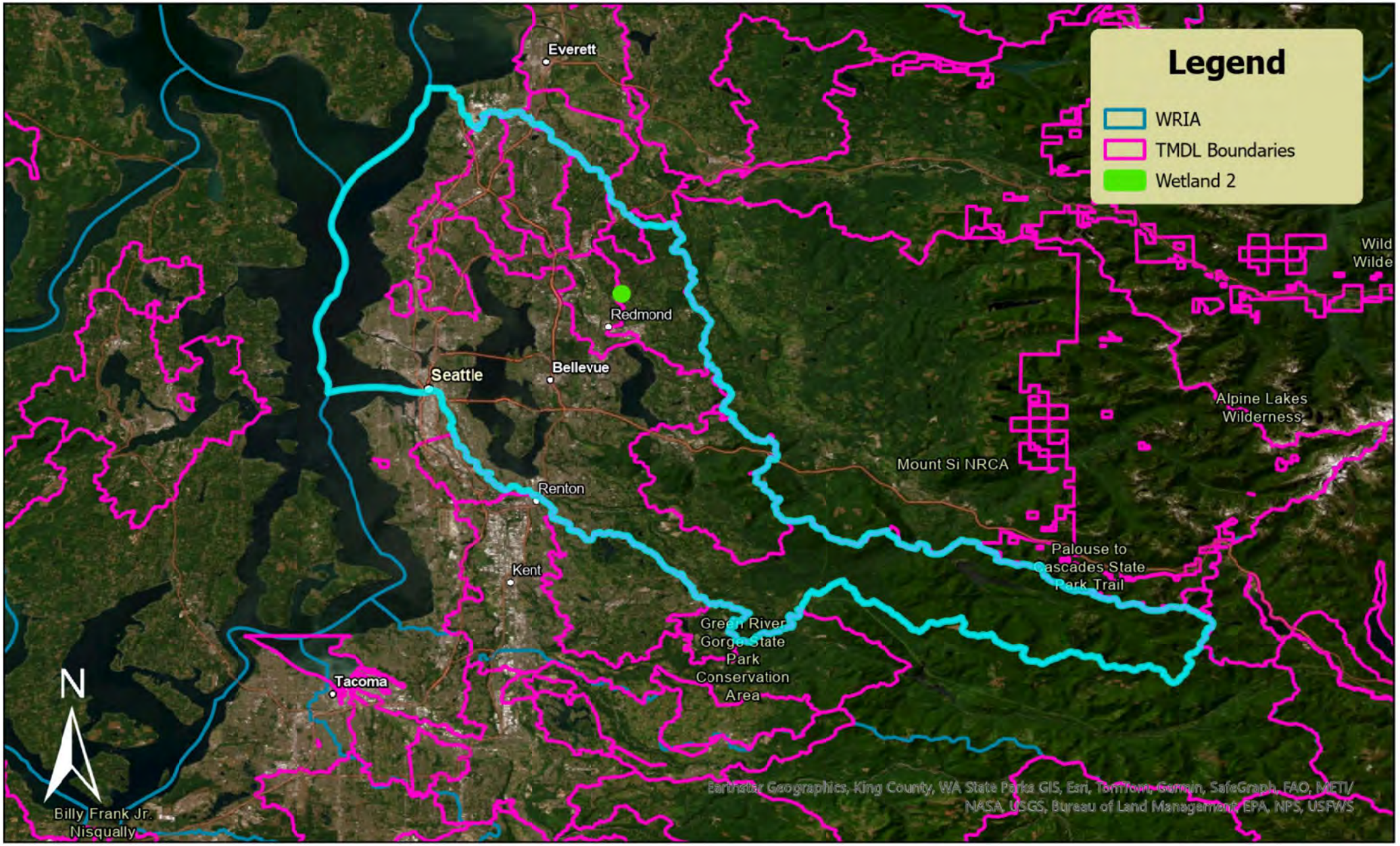
Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 2 - Figure 4

Questions: D3.1, D3.2

Raedeke Associates, Inc.

0 1.25 2.5 5 Miles



ENGLISH HILL

RAI Project #: 2024-050-002
Date Created: 2/21/2025
Map Created by: EH

Note: Wetland boundaries are based on GPS coordinates and aerial images. Boundaries are approximate.

Wetland 2 - Figure 5

Question: D3.3

Raedeke Associates, Inc.

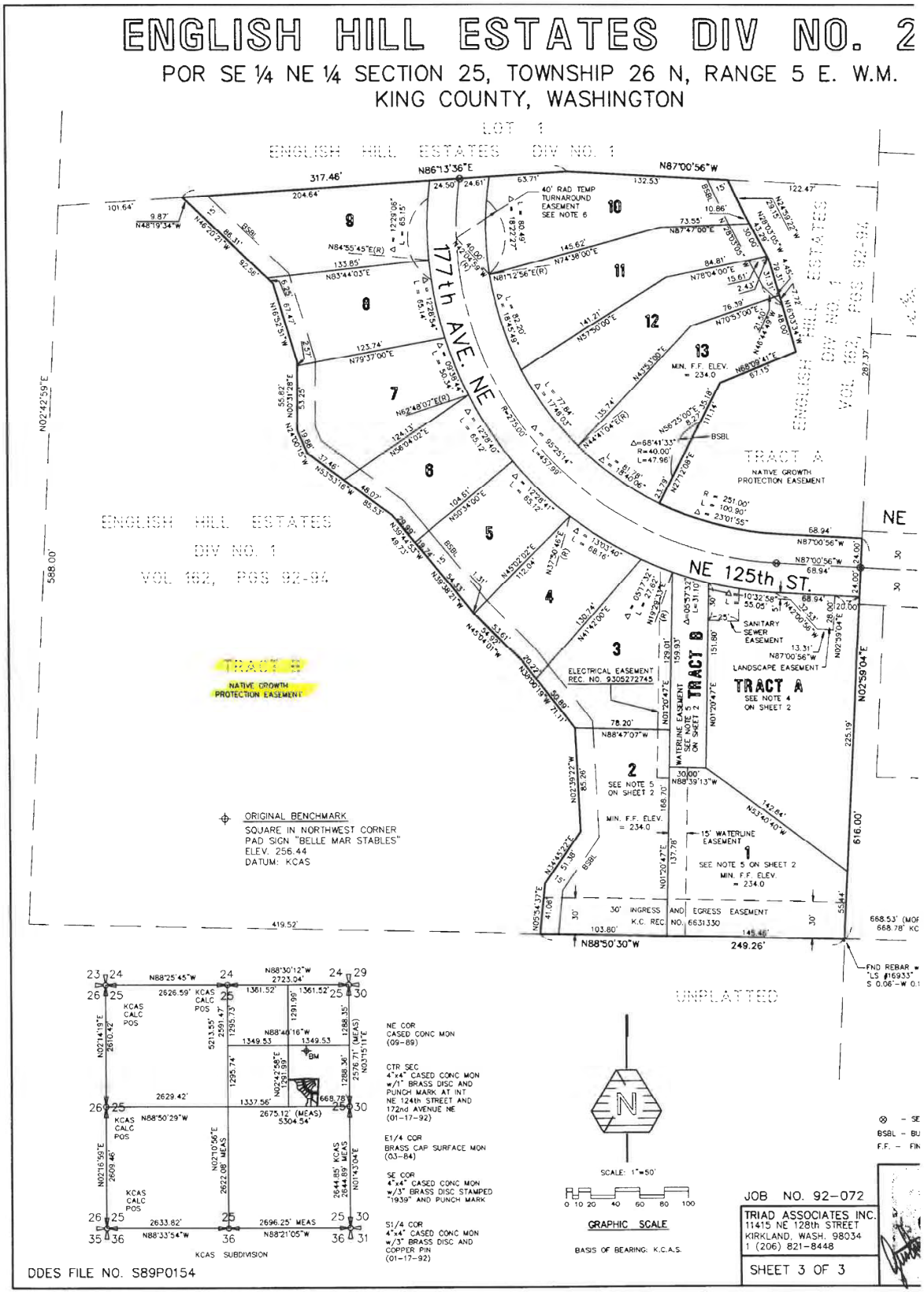
0 5 10 20 Miles

APPENDIX C

English Hills Plat Map

ENGLISH HILL ESTATES DIV NO. 2

POR SE ¼ NE ¼ SECTION 25, TOWNSHIP 26 N, RANGE 5 E. W.M.
KING COUNTY, WASHINGTON



JOB NO. 92-072

TRIAD ASSOCIATES INC.
11415 NE 128th STREET
KIRKLAND, WASH. 98034
1 (206) 821-8448

SHEET 3 OF 3

ENGLISH HILL ESTATES DIV NO. 1

162 92

POR SE¼ NE¼ SECTION 25, TOWNSHIP 26 N, RANGE 5 E. W.M.
KING COUNTY, WASHINGTON

9212090508

162/92-94

DEDICATION

KNOW ALL PEOPLE BY THESE PRESENTS that we, the undersigned owners of ...st in the land hereby subdivided, hereby declare this plat to be the ...c representation of the subdivision made hereby, and do hereby ...te to the use of the public forever all streets and avenues not shown ...vate hereon and dedicate the use thereof for all public purposes not ...istent with the use thereof for public highway purposes, and also the ...to make all necessary slopes for cuts and fills upon the lots shown ...n in the original reasonable grading of said streets and avenues, and ...r dedicate to the use of the public all the easements and tracts ...on this plat for all public purposes as indicated thereon, including ...t limited to parks, open space, utilities and drainage unless such ...nts or tracts are specifically identified on this plat as being ...ted or conveyed to a person or entity other than the public, in which ...e do hereby dedicate such streets, easements, or tracts to the person ...ity identified and for the purpose stated.

...r, the undersigned owners of the land hereby subdivided, waive for ...lves, their heirs and assigns and any person or entity deriving title ...he undersigned, any and all claims for damages against King County, ...ccessors and assigns which may be occasioned by the establishment, ...uction, or maintenance of roads and/or drainage systems within this ...ision other than claims resulting from inadequate maintenance by King ...

...r, the undersigned owners of the land hereby subdivided, agree for ...lves, their heirs and assigns to indemnify and hold King County, its ...ors and assigns, harmless from any damage, including any costs of ...e, claimed by persons within or without this subdivision to have been ... by alterations of the ground surface, vegetation, drainage, or ...e or subsurface water flows within this subdivision or by ...lishment, construction or maintenance of the roads within this ...ision. Provided, this waiver and indemnification shall not be ...ued as releasing King County, its successors or assigns, from ...ity for damages, including the cost of defense, resulting in whole or ...t from the negligence of King County, its successors or assigns. ...subdivision, dedication, waiver of claims and agreement to hold ...ss is made with the free consent and in accordance with the desires ...d owners.

...NESS WHEREOF we set our hands and seals.

...URES

...hey S. McKenzie, Owner

...Jennifer I. McKenzie, Owner

SOUND NATIONAL BANK, A WASHINGTON CORPORATION

...VICE PRESIDENT

BY:
ITS:

...NMENTAL DEVELOPMENT CORPORATION, A WASHINGTON CORPORATION

...omas W. Ichelson, President

...KNOWLEDGMENTS

...of Washington
...y of KING
...rtify that I know or have satisfactory evidence that Rodney S. McKenzie ...d this instrument and acknowledged it to be his free and voluntary act ...ses and purposes mentioned in the instrument.

Dated 10/13/92
Signature of Notary Public
Title PROJECT MANAGER
My Appointment expires 10/10/95

...of Washington
...y of Snohomish
...rtify that I know or have satisfactory evidence that Jennifer I. ...ie signed this instrument and acknowledged it to be her free and ...tary act for the uses and purposes mentioned in the instrument.

Dated October 15 1992
Signature of Notary Public
Title Project Manager
My Appointment expires 5/12/95

...of Washington
...y of KING
...ertify that I know or have satisfactory evidence that ...ENNETH PARHW and ...d this instrument, on oath stated that they were authorized to execute ...nstrument and acknowledged it as the VICE PRESIDENT and ...of PUGET SOUND NATIONAL BANK, A WASHINGTON ...RATION to be the free and voluntary act of such party for the uses ...urposes mentioned in the instrument.

Dated 10/15/92
Signature of Notary Public
Title King County Notary
My Appointment expires 10/14/95

...E NO. S89P0154

State of Washington
County of KING
I certify that I know or have satisfactory evidence that THOMAS W. ICHELSON signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the PRESIDENT of ENVIRONMENTAL DEVELOPMENT CORPORATION, A WASHINGTON CORPORATION, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated 9-28-92
Signature of Notary Public
Title Notary Public
My Appointment expires 12/14/94

APPROVALS

PARKS, PLANNING AND RESOURCES DEPARTMENT
Examined and approved this 16th day of November, 1992.
Development Engineer

Examined and approved this 1st day of December, 1992.
Manager, Building & Land Development Division

KING COUNTY DEPARTMENT OF ASSESSMENTS
Examined and approved this 3 day of DECEMBER, 1992.
SCOTT NOAH
King County Assessor
Deputy King County Assessor
Account Number

KING COUNTY COUNCIL
Examined and approved this 7th day of December, 1992.
Chairman, King County Council
ATTEST: Clerk of the Council

FINANCE DIVISION CERTIFICATE

I hereby certify that all property taxes are paid, that there are no delinquent special assessments certified to this office for collection and that all special assessments certified to this office for collection on any of the property herein contained, dedicated as streets, alleys or for any other public use, are paid in full. This 3rd day of December 1992.

FINANCE DIVISION
Manager, Finance Division
Deputy

COUNTY RECORDING OFFICIAL'S INFORMATION BLOCK (WAC 332-130-050)

LAND SURVEYOR'S CERTIFICATE

I hereby certify that this plat of ENGLISH HILL ESTATES, DIVISION NO.1, is based upon an actual survey and subdivision of Section 25, Township 26 North, Range 5 East of W.M., that the courses and distances are shown correctly thereon; that the monuments will be set and the lot and block corners will be staked correctly on the ground as construction is completed and that I have fully complied with the provisions of the platting regulations.

Gustav B. Osterbeck Professional Land Surveyor. Certificate No. 18094
Triad Associates Phone: (206) 821-8448
11415 NE 128th Street
Kirkland, Washington 98034

RECORDING CERTIFICATE 9212090508

Filed for record at the request of the King County Council this 9th day of December, 1992, at 41 minutes past 2 p.m. and recorded in Volume 162 of Plats, Page(s) 92-94, records of King County, Washington.

DIVISION OF RECORDS AND ELECTIONS
Manager
Superintendent of Records
Original destroyed after recording: Mary Traville (deputy)

SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 25, TOWNSHIP 26 NORTH, RANGE 5 EAST, WILLAMETTE MERIDIAN
KING COUNTY, WASHINGTON

VOL/PG 162 92

SHEET 1 OF 3 JOB NO. 89-251

230-12

162 93

ENGLISH HILL ESTATES DIV NO. 1

POR SE¼ NE¼ SECTION 25, TOWNSHIP 26 N, RANGE 5 E. W.M.
KING COUNTY, WASHINGTON

SCRIPTION

HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION SHIP 26 NORTH, RANGE 5 EAST, WILLAMETTE MERIDIAN, IN KING COUNTY, ON;

THE NORTH 30 FEET THEREOF AS CONVEYED TO KING COUNTY BY DEED FEBRUARY 20, 1973 UNDER RECORDING NUMBER 7302200056.

PROVISIONS

ment is hereby reserved for and granted to PUGET SOUND POWER AND MPANY, GENERAL TELEPHONE COMPANY OF THE NORTHWEST, INC., WASHINGTON GAS COMPANY, WOODINVILLE WATER AND SEWER DISTRICT, A CABLE TV. and their respective successors and assigns, under and upon the 10 feet parallel with and adjoining the street frontage of all tracts in which to install, lay, construct, renew, operate and underground conduits, cable, pipeline, and wires with the y facilities and other equipment for the purpose of service to this ion and other property with electric, telephone, gas, cable TV. sewer and water, together with the right to enter upon the s at all time for the purposes stated.

ment is hereby reserved for and granted to WOODINVILLE WATER AND STRICT under and upon the easements shown on the plat and described as "waterline easement" or "sanitary sewer easement" to install, , replace, repair and operate water and sewer mains and ances for this subdivision and other property together with the enter upon said easements at all times for the purposes stated. es shall not be constructed upon any area reserved for these s.

TO AN EASEMENT TO PUGET SOUND POWER AND LIGHT OVER A RIGHT OF WAY) FEET IN WIDTH HAVING THREE AND ONE HALF (3.5) FEET ON EACH SIDE TERLINE DESCRIBED AS FOLLOWS: THE CENTERLINE OF GRANTEE'S ES "AS PRESENTLY STAKED OR AS MAY BE CONSTRUCTED, EXTENDED OR D..." AS DISCLOSED BY INSTRUMENT RECORDED UNDER KING COUNTY G NO. 7901080538.

GENERAL NOTES

1. INSTRUMENTATION FOR THIS SURVEY WAS A 1 MINUTE THEODOLITE AND ELECTRONIC DISTANCE MEASURING UNIT. PROCEDURES USED IN THIS SURVEY WERE FIELD TRAVERSE, MEETING OR EXCEEDING STANDARDS SET BY WAC 332-130-090

2. BUILDING SETBACKS AND NATIVE GROWTH PROTECTION EASEMENTS, STRUCTURES, FILL AND OBSTRUCTIONS (INCLUDING, BUT NOT LIMITED TO DECKS, PATIOS, OUTBUILDINGS OR OVERHANGS BEYOND 18 INCHES) ARE PROHIBITED WITHIN THE BUILDING SETBACK LINE (BSBL) AND WITHIN 25/100 FLOODPLAINS (IF APPLICABLE), AND WITHIN THE NATIVE GROWTH PROTECTION EASEMENT(S) AS SHOWN.

DEDICATION OF A NATIVE GROWTH PROTECTION EASEMENT (NGPE) CONVEYS TO THE PUBLIC A BENEFICIAL INTERREST IN THE LAND WITHIN THE EASEMENT. THIS INTEREST INCLUDES THE PRESERVATION OF NATIVE VEGETATION FOR ALL PURPOSES THAT BENEFIT THE PUBLIC HEALTH, SAFETY AND WELFARE, INCLUDING CONTROL OF SURFACE WATER AND EROSION, MAINTENANCE OF SLOPE STABILITY, VISUAL AND AURAL BUFFERING, AND PROTECTION OF PLANT AND ANIMAL HABITAT. THE NGPE IMPOSES UPON ALL PRESENT AND FUTURE OWNERS AND OCCUPIERS OF THE LAND SUBJECT TO THE EASEMENT, THE OBLIGATION, ENFORCEABLE ON BEHALF OF THE PUBLIC BY KING COUNTY, TO LEAVE UNDISTURBED ALL TREES AND OTHER VEGETATION WITHIN THE EASEMENT. THE VEGETATION WITHIN THE EASEMENT MAY NOT BE CUT, PRUNED, COVERED BY FILL, REMOVED OR DAMAGED WITHOUT THE EXPRESS PERMISSION FROM KING COUNTY, WHICH PERMISSION MUST BE OBTAINED IN WRITING FROM THE KING COUNTY BUILDING AND LAND DEVELOPMENT DIVISION OR ITS SUCCESSOR AGENCY.

BEFORE AND DURING THE COURSE OF ANY GRADING, BUILDING CONSTRUCTION, OR OTHER DEVELOPMENT ACTIVITY ON A LOT SUBJECT TO THE NGPE, THE COMMON BOUNDARY BETWEEN THE EASEMENT AND THE AREA OF DEVELOPMENT ACTIVITY MUST BE FENCED OR OTHERWISE MARKED TO THE SATISFACTION OF KING COUNTY.

3. LOT 1 CONTAINS STRUCTURES EXISTING PRIOR TO RECORDING THAT MAY BE REBUILT IN THEIR EXISTING LOCATIONS.

4. LOTS 1 AND 2 ARE ESTABLISHED FOR THE PURPOSE OF FUTURE DEVELOPMENT.

5. TRACTS A AND B ARE NATIVE GROWTH PROTECTION EASEMENTS FOR THE PROTECTION OF WETLANDS AND/OR RIPARIAN CORRIDORS.

6. THE NATIVE GROWTH PROTECTION EASEMENTS WITHIN LOT 1 SHALL BE OWNED AND MAINTAINED BY THE OWNER OF LOT 1, ITS SUCCESSORS AND ASSIGNS. SEE NOTE 2 REGARDING THE MAINTENANCE AND PURPOSE OF NATIVE GROWTH PROTECTION EASEMENTS.

7. TRACTS A AND B SHALL BE OWNED AND MAINTAINED BY THE OWNER OF LOT 2, ITS SUCCESSORS AND ASSIGNS. SEE NOTE 2 REGARDING THE MAINTENANCE AND PURPOSE OF NATIVE GROWTH PROTECTION EASEMENTS.

JOB NO. 89-251

TRIAD ASSOCIATES INC.
11415 NE 128th STREET
KIRKLAND, WASH. 98034
1 (206) 821-8448

SHEET 2 OF 3

GUSTAV B. OSWALD
STATE OF WASHINGTON
REGISTERED LAND SURVEYOR
EXPIRES 09/05

VOL/PG 162 93

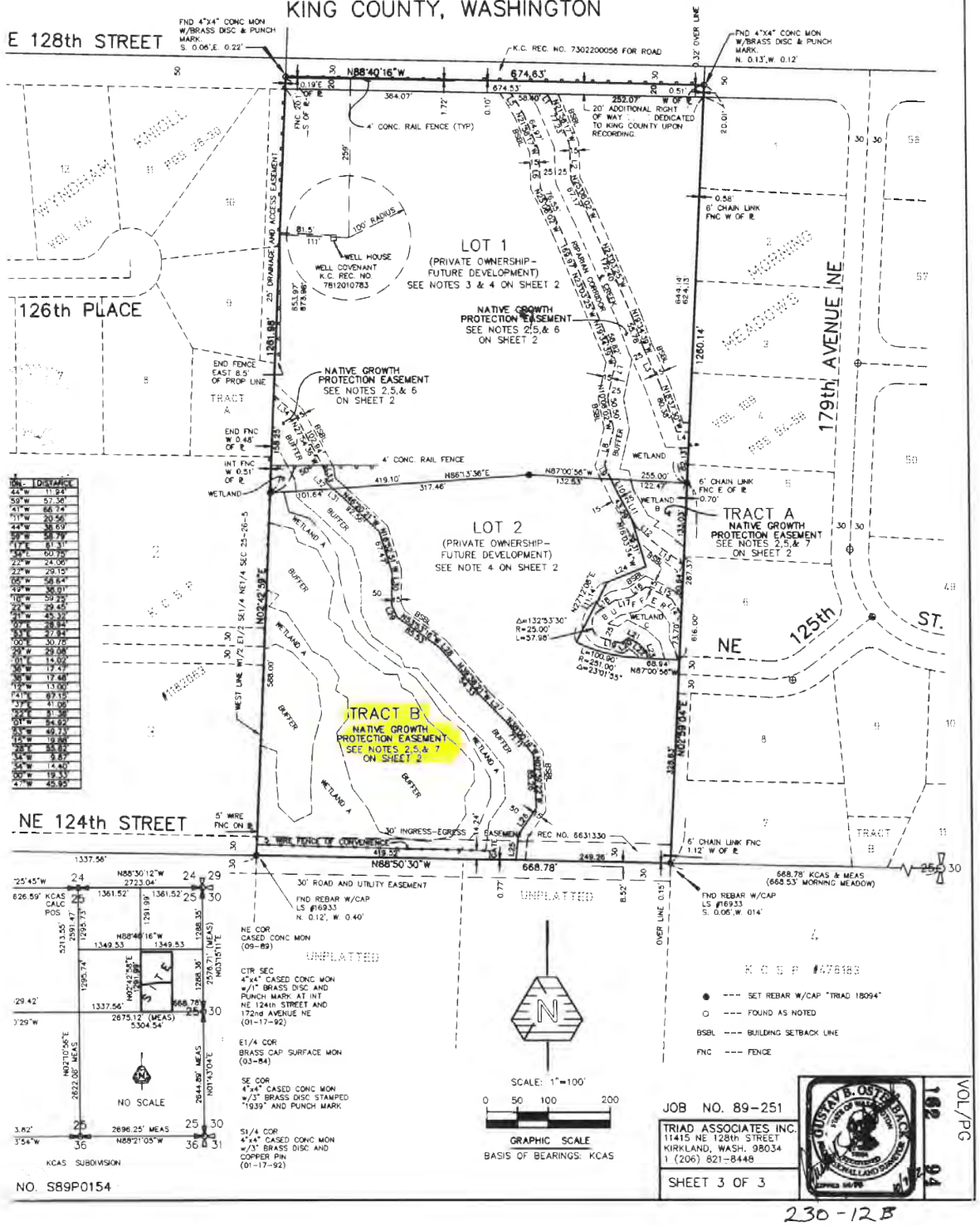
NO. S89P0154

230-12A

162 94

ENGLISH HILL ESTATES DIV NO. 1

POR SE¼ NE¼ SECTION 25, TOWNSHIP 26 N, RANGE 5 E. W.M.
KING COUNTY, WASHINGTON



APPENDIX D

Wyndham Knoll Plat Map

144/28

WYNDHAM KNOLL

SEC. 25, TWP. 26 N., RGE. 5 E., W.M.

KING COUNTY, WASHINGTON

144/28

226-50

DESCRIPTION

This plat of Wyndham Knoll embraces that portion of the South half of the Northwest quarter of the Northeast quarter of Section 25, Township 26 North, Range 5 East, W.M., in King County Washington, described as follows:

BEGINNING at the intersection of the East line of said subdivision and the Northerly margin of N.E. 128th Street as conveyed to King County by deed recorded under Recording No. 7302090029, Records of said County; thence N 88°39'57" W along said road margin 1008.20 feet to the beginning of a curve to the left with a radius of 1480.00 feet; thence Westerly along said road margin and curve through a central angle of 12°10'21" an arc distance of 314.43 feet to a point on the Easterly margin of 172nd Avenue N.E.; thence N 2°10'22" E along said road margin 630.70 feet to the Southwest corner of Mount Clare Estates, according to the plat thereof recorded in Volume 111 of Plats, Pages 1 through 5, Records of said County; thence S 88°35'13" E along the South boundary of said plat 1325.40 feet to the East line of said South half of the Northwest quarter of the Northeast quarter, also being the West boundary of Hollymor IV, according to the plat thereof recorded in Volume 130 of Plats, Pages 1 through 3 and Hollymor, according to the plat thereof recorded in Volume 123 of Plats, Pages 29 through 32, Records of said County; thence S 2°42'59" W along said East line and the West boundary of said plats a distance of 595.71 feet to the POINT OF BEGINNING.

TOGETHER WITH that portion of the North half of the Southwest quarter of the Northeast quarter of said Section 25, described as follows:

BEGINNING at the intersection of the East line of said subdivision and the South margin of N.E. 128th Street as conveyed to King County by said deed recorded under Recording No. 7302090029; thence S 2°42'59" W along said East line 595.95 feet to the Southeast corner of said subdivision; thence N 88°45'28" W along the South line of said subdivision 1313.21 feet to the East margin of 172nd Avenue N.E.; thence N 2°10'22" E along said road margin 561.84 feet to intersect the Southerly margin of N.E. 128th Street at a point on a curve from which the center lies S 11°47'59" E 1380.00 feet distant; thence Easterly along said road margin and said curve to the right through a central angle of 13°08'02" an arc distance of 316.34 feet to a point of tangency; thence S 88°39'57" E along said road margin 1005.78 feet to the POINT OF BEGINNING.

EASEMENT PROVISIONS

An easement is hereby reserved for and granted to PUGET SOUND POWER AND LIGHT COMPANY, GENERAL TELEPHONE COMPANY, WASHINGTON NATURAL GAS, CABLE TV, WOODINVILLE WATER DISTRICT, and their respective successors and assigns, under and upon the exterior 10 feet parallel with and adjoining the street frontage of all lots and parcels in which to install, lay, construct, renew, operate and maintain underground conduits, cables, pipe, and wires with necessary facilities and other equipment for the purpose of serving this subdivision and other property with electric, telephone, and utility service together with the right to enter upon the lots and parcels at all times for the purposes herein stated. Also, each lot and parcel shall be subject to an easement 2.5 feet in width, parallel with and adjacent to all interior lot lines for purposes of utilities and private drainage.

No lines or wires for the transmission of electric current or for telephone use, CATV, fire or police signals, or for other purposes, shall be placed or permitted to be placed upon any lot outside the buildings thereon unless the same shall be underground or in conduit attached to the building.

RECORDING CERTIFICATE B901240554

Filed for Record at the request of the King County Council this 24th day of JAN., 1989, at 27 minutes past 1 P.M. and recorded in Volume 144 of Plats, Pages 28-30, Records of King County, Washington.

DIVISION OF RECORDS AND ELECTIONS

JANE HAGUE
Manager

CAROLYN ABLEMAN
Superintendent of Records

BALD FILE NO. 1187-2

RESTRICTIONS

No lot or portion of a lot in this plat shall be divided and sold or resold or ownership changed or transferred whereby the ownership of any portion of this plat shall be less than the area required for the use district in which located. No further subdivision of any lot without resubmitting for formal plat procedure.

LAND SURVEYOR'S CERTIFICATE

I hereby certify that this plat of Wyndham Knoll is based upon actual survey and subdivision of Section 25, Twp. 26 N., Range 5 E., W.M., that the courses and distances are shown correctly thereon; that the monuments will be set and the lot and block corners staked correctly on the ground and that I have fully complied with the provisions of the platting regulations.

DERWIN K. ROUPE STATE OF WASHINGTON REGISTERED PROFESSIONAL LAND SURVEYOR

D.K. Roupe, Pro. Land Surveyor
Certificate No. 9435

APPROVALS

PARKS, PLANNING AND RESOURCES DEPARTMENT

Examined and approved this 18th day of January, 1989.

Manager, Building and Land Development Division

Examined and approved this 18th day of January, 1989.

Development Engineer

DEPARTMENT OF ASSESSMENTS

Examined and approved this 18 day of January, 1989.

King County Assessor

Deputy, King County Assessor

Account Number

KING COUNTY COUNCIL

Examined and approved this 23rd day of January, 1989.

Chairman, King County Council

Attest: Clerk of the Council

FINANCE DIVISION CERTIFICATE

I hereby certify that all property taxes are paid, that there are no delinquent special assessments certified to this office for collection and that all special assessments certified to this office for collection on any of the property herein contained, dedicated as streets, alleys or for other public use, are paid in full. This 19th day of January, 1989.

FINANCE DIVISION

Manager, King County Finance Division

Deputy

SHEET 1 OF 3 SHEETS

DEDICATION

KNOW ALL PEOPLE BY THESE PRESENTS that we, the undersigned owners of interest in the land hereby subdivided, hereby declare this plat to be the graphic representation of the subdivision made hereby, and do hereby dedicate to the use of the public forever all streets and avenues not shown as private hereon and dedicate the use thereof for all public purposes not inconsistent with the use thereof for public highway purposes, and also the right to make all necessary slopes for cuts and fills upon the lots shown thereon in the original reasonable grading of said streets and avenues, and further dedicate to the use of the public all the easements and tracts shown on this plat for all public purposes as indicated thereon, including but not limited to parks, open space, utilities and drainage, unless such easements or tracts are specifically identified on this plat as being dedicated or conveyed to a person or entity other than the public.

Further, the undersigned owners of the land hereby subdivided waive for themselves, their heirs and assigns and any person or entity deriving title from the undersigned, any and all claims for damages against King County, its successors and assigns which may be occasioned by the establishment, construction, or maintenance of roads and/or drainage systems within this subdivision other than claims resulting from inadequate maintenance by King County.

Further, the undersigned owners of the land hereby subdivided agree for themselves, their heirs and assigns to indemnify and hold King County, its successors and assigns, harmless from any damage, including any costs of defense, claimed by persons within or without this subdivision to have been caused by alterations of the ground surface, vegetation, drainage, or surface or sub-surface water flows within this subdivision or by establishment, construction or maintenance of the roads within this subdivision. Provided, this waiver and indemnification shall not be construed as releasing King County, its successors or assigns, from liability for damages, including the cost of defense, resulting in whole or in part from the negligence of King County, its successors, or assigns.

IN WITNESS WHEREOF we have set our hands and seals.

* C.C.&R. RECORDED UNDER # B901240555

ENGLISH HILL ASSOCIATES

MICHAEL E. ANDREWS

CHARLES L. HENDERSON

CINDY WALTERS HENDERSON

PUGET SOUND SAVINGS BANK

Asst. Sec.

88-8008

144/29

WYNDHAM KNOLL

SEC. 25, TWP. 26 N., RGE. 5 E., W.M.

KING COUNTY, WASHINGTON

144/29

226-50A

ACKNOWLEDGMENT

STATE OF WASHINGTON)
COUNTY OF) ss

This is to certify that on this 4th day of SEPTEMBER, 1988, before me, the undersigned, a Notary Public personally appeared MICHAEL E. ANDREWS, CHARLES L. HENDERSON, & CINDY WALTERS HENDERSON, doing business as ENGLISH HILL ASSOCIATES a WASHINGTON JOINT VENTURE to me known to be the individuals who executed the within dedication, and acknowledged to me that they signed and sealed the same as their voluntary act and deed for the uses and purposes therein mentioned and on oath stated that they were authorized to execute said instrument.

WITNESS my hand and official seal the day and year first above written.

Carol McClanahan
Notary Public in and for the State of Washington, residing at Kirkland.

STATE OF WASHINGTON)
COUNTY OF KING) ss

This is to certify that on this 13TH day of SEPT, 1988, before me, the undersigned, a Notary Public personally appeared REBECCA FARDUE and ASST SECRETARY of PUGET SOUND SAVINGS BANK, a WASHINGTON corporation, to me known to be the individual who executed the within dedication, and acknowledged to me that she signed and sealed the same as her free and voluntary act and deed for the uses and purposes therein mentioned and on oath stated that she was authorized to execute said instrument.

WITNESS my hand and official seal the day and year first above written.

CAROL M. McCLANAHAN NOTARY PUBLIC 10-31-91 STATE OF WASHINGTON

Carol M. McClain
Notary Public in and for the State of Washington, residing at Kent
My commission expires 10/31/91

NOTES:

1. Structures, fill and obstructions (including but not limited to decks, patios, outbuildings, or overhangs beyond 18 inches) are prohibited beyond the building setback line and within the native growth protection easement as shown.

   Dedication of a native growth protection easement (N.G.P.E.) conveys to the public a beneficial interest in the land within the easement. This interest includes the preservation of native vegetation for all purposes that benefit the public health, safety and welfare, including control of surface water and erosion, maintenance of slope stability, visual and aural buffering, and protection of land and animal habitat. The N.G.P.E. imposes upon all present and future owners and occupiers of land subject to the easement the obligation, enforceable on behalf of the public by King County, to leave undisturbed all trees and other vegetation within the easement. The vegetation within the easement may not be cut, pruned, covered by fill, removed or damaged without express permission from King County, which permission must be obtained in writing from the King County Building and Land Development Division or its successor agency.

   Before beginning and during the course of any grading, building construction, or other development activity on a lot subject to the N.G.P.E., the common boundary between the easement and the area of development activity must be fenced or otherwise marked to the satisfaction of King County.

2. There shall be no vehicular ingress or egress directly onto N.E. 128th ST. from lots 10, 11, 12, 13, 14, 15, 16, 17, 18, 21, 22, 23, 24, 25 AND 26.

   There shall be no vehicular ingress or egress directly onto 172nd AVE. N.E. from lots 1, 18, 19, 20, 21 AND 38.

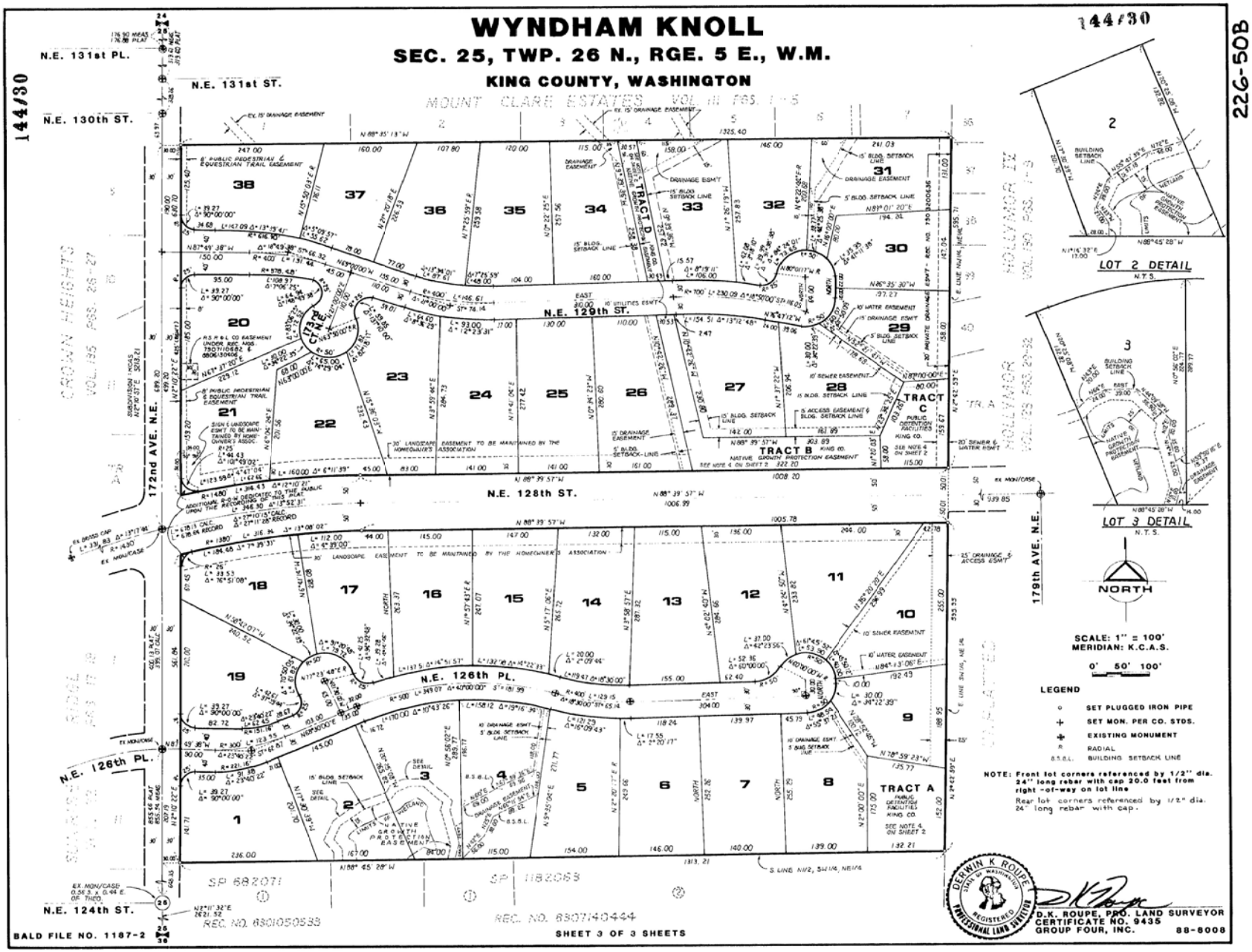
3. All building downspouts, footing drains and drains conveying runoff from all impervious surfaces such as patios and driveways shall be connected to the approved storm drainage outlet as shown on construction drawing # P 0177 A through L on file with King County Building and Land Development, unless otherwise approved by Engineering Review, King County Building and Land Development Division, or its successor agency.

4. Tracts A and C shall be dedicated to King County upon the recording of this plat for public drainage facilities. Tracts B and D shall be dedicated to King County upon the recording of this plat for native growth protection easement. King County shall be responsible for the perpetual maintenance of Tracts A, B, C and D.

5. Maintenance of landscaping in traffic island planters, within the 30' landscape easements across lots 10 through 18 and 21 through 26, and within the sign and landscape easement on lot 21 shall be the responsibility of the Wyndham Knoll Homeowner's Association.

6. DRAINAGE ESMT. RESTRICTIONS:

   Structures, fill or obstructions (including but not limited to decks, patios, outbuildings, or overhangs) shall not be permitted beyond the building setback line or within drainage easements. Additionally grading and construction of fencing shall not be allowed within the drainage easements shown on this plat map unless otherwise approved by King County Building and Land Development Division.



APPENDIX E

King County Critical Area Designations

King County
Department of Local Services
Permitting Division
RTN-LS-0300
919 SW Grady Way, Suite 300
Renton, WA 98057
206-296-6600 TTY Relay: 711
https://kingcounty.gov/depts/local-services/permits

May 26, 2025

T.C. Colleran
Murray Franklyn
14410 Bellevue-Redmond Road
Bellevue, Washington 98007

RE: Critical Areas Designation CADS25-0080, Parcel 2526059003
Status: Complete

Dear Applicant:

The King County Department of Local Services, Permitting Division (Permitting) has completed a Critical Area Designation (CAD) for King County parcel no. 2526059003, as requested in permit application no. CADS25-0080. During preparation of this CAD, we reviewed available published data and mapping, critical areas data from nearby completed permits as applicable, and documents submitted with the application including a critical areas report by Raedeke Associates, Incorporated dated March 20, 2025. As part of our review, we also visited the parcel to confirm the site conditions.

We conclude that each of the critical areas discussed below are currently present within the limits of the site (as defined below). These determinations as to the existence, location, and classification of critical areas are effective for five years from the date of this letter, unless there is a change in site conditions or a state or federal agency adopts critical area maps that conflict with this determination.

The determinations of this CAD are valid only for the *site,* which for the purposes of this designation refers to the limits of the parcel identified above, as shown on the attached critical areas site map. Off-site critical areas have also been identified and classified within 300 feet of the site to the maximum extent feasible, given limitations in visibility and off-site access. The area including both the site and off-site areas within 300 feet is referred to the as the *evaluation area*.

Additional off-site critical areas may be present that impact future development but could not be identified within the scope of this CAD. For this reason, all information presented regarding the existence, location, and classification of off-site critical areas within the evaluation area is preliminary and provided for the applicant's reference only. Any applicable critical area standards

and buffers relating to off-site critical areas within the evaluation area will be finalized at the time of critical areas review of a permit application.

If a development proposal includes alterations outside of the site as defined above, additional information such as an expanded critical areas report addressing the area within 300 feet of all proposed alterations may be required. In some cases, a new CAD which encompasses that area may also be required.

Please note that per the King County Code (KCC) Chapter 21A.24, many critical area standards and regulations, including critical area buffers, may vary depending on the specifics of the proposed land use or development. This CAD has been prepared assuming development activities typically associated with residential uses. Some critical area standards and buffer widths that may apply under residential use are discussed in this CAD. All information regarding critical area standards and regulations, including critical area buffers, should be understood to be preliminary and is provided for the applicant's reference only. A CAD does not represent a comprehensive source of all applicable critical area standards or other regulations that may apply to a development proposal. The applicant is responsible for preparing a future permit application with the correct buffer widths and other limitations of use specific to their development proposal and all applicable critical areas code. Compliance with all critical areas code and regulations including the application of appropriate buffer widths will be determined at the time of critical areas review for a future development permit.

Wetlands (KCC 21A.24.318 to 21A.24.345)

Wetlands include areas that are inundated or saturated by ground or surface water at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions (see KCC 21A.06.1391). In King County, wetlands are classified as Category I, II, III, or IV based on the adopted *Washington State Wetland Rating System for Western Washington* by the Washington State Department of Ecology. Wetland ratings and development standards recognize the potential that wetlands have to provide benefits to both ecological and hydrological function.

A buffer is required between a wetland and any proposed development. Within a currently undeveloped buffer, no development of any kind is usually allowed; this includes clearing, grading, or any other alteration of the existing vegetation. Within legally developed buffers, maintenance of existing structures and landscaping is allowed as well as limited expansions of some structures. Structures must maintain an additional 15-foot building setback (BSBL) beyond the edge of the buffer.

The width of the buffer depends on multiple factors, such as: the wetland rating, function, site location, proximity to other critical areas, and intensity of impact of adjacent land use. This CAD has been prepared assuming impacts typically associated with residential uses. Since the site is within the Urban Growth Area (UGA) and has residential zoning greater than one unit per acre,

'high impact' buffers apply for residential projects per 21A.24.325A.2.a. The applicable wetland buffer under these assumptions is referred to as a "standard buffer" and is shown on the attached critical areas site map for reference.

In this case, the site contains a Category **II** wetland**.** The standard buffer width for this category of wetland (which on an undeveloped lot is to remain unaltered native vegetation) is 100 feet. Structures must honor an additional 15-foot building setback beyond the buffer. The wetland was described in the report (dated March 20, 2025) by Raedeke Associates, Incorporated. This Category II wetland is located on the east end of the parcel and extends beyond the parcel. It has a habitat score of 5 points: wetlands such as these are assigned 100-foot buffers for high impact projects.

There is an unmapped flood plain (KCC 21A.24.230) associated with this wetland. The elevation change between the boundary of the wetland and the proposed development site is less than 10 feet based upon iMap. A minor flood study may be required to demonstrate the proposed development is not located within the flood hazard area.

Flood Hazard Areas (KCC 21A.24.223 to 21A.24.272)

The evaluation area contains an unmapped flood hazard area as defined in KCC 21.24.230, associated with the wetland. The wetland is estimated to be well over 5000 square feet. It features small areas of shallow seasonal inundation and a seasonally flowing stream. The remainder of the wetland is seasonally saturated. Determination of the limits of the unmapped flood hazard area is outside the scope of this CAD; this determination is made under a Floodplain Development Application. For this reason, a Floodplain Development Application will be required for the site prior to applying for any future development permit. As part of the Floodplain Development Application, a flood plain study as outlined in KCC Title 9 and the King County Surface Water Design Manual (currently Chapter 4.4.2) must be submitted.

Information regarding floodplain designations, elevations, flood insurance rate maps or the National Flood Insurance Program is available on the King County River and Floodplain Management Section website at http://www.kingcounty.gov/environment/waterandland/flooding.aspx, or you can call them at 206-296-8001.

If you have questions regarding how these flood hazard regulations may affect your future development plans, you can contact Permitting by phone at 206-296-6600 or by email at DPERWebInquiries@kingcounty.gov.

Wildlife Habitat Conservation Area (KCC 21A.24.382, 21A.24.383, and 21A.24.388)

The King County Comprehensive Plan and critical areas code identify wildlife and wildlife habitats for State listed species, Federally listed species, and species of local importance as being

valued resources in King County. Wildlife habitat conservations areas (WHCAs) are areas of habitat for species that the County is required to protect. Identification and protection of WHCAs including but not limited to active breeding sites for State listed species, Federally listed species, and species of local importance will be required for future permits and may have an impact on timing of development activity (see KCC 21A.24.382.K).

In this case, we did not identify any specific wildlife habitat within the scope of this CAD. However, for future permits, wildlife surveys and habitat protection for additional State listed species, Federally listed species, and species of local importance may be required. Changes in wildlife habitat including but not limited to the establishment or abandonment of a breeding site by a protected species would constitute a change in site conditions and may supersede the WHCA findings of this CAD.

Water Service

If potable water is required for development, a Certificate of Water Availability or approval of an alternative water source consistent with the priority order provided in KCC 13.24.138 will be required under KCC 21A.28.040. The permitting process for an alternative water source is conducted through King County Public Health or the Washington State Department of Health. Attached is a flow chart summarizing water service requirements and links to additional information.

It is the applicant's responsibility to verify water availability, in priority order, before submitting a permit application. Please note that if approval of an alternative water source requires establishment of a well, both pre-approval of the well location as well as final approval following development of the well are required by the permitting agency. Site disturbances within critical areas or buffers associated with development of a well would also require a clearing and grading permit from King County Permitting. The King County iMap website provides mapped information on water service providers: to view, navigate to the *Layer List*, select and expand the *Groundwater* tab, and then select the sublayer *Water service areas*. If you have questions about these requirements, please contact a Permit Review Coordinator at the Permitting Division.

Closure

This Critical Areas Designation has been prepared in accordance with KCC 21A.24.500 and is intended to document Permitting's determinations regarding the existence, location and classification of critical areas on the site, as defined above. It is not based on a professional survey of the site. As a result, this CAD may only be relied on for the type and general location of critical areas; it does not represent the precise boundaries of identified critical areas. Depending upon the nature of a future permit application and the characteristics of the site, a detailed topographic survey by a licensed surveyor may be advisable or even required. This document is not an approval of existing or proposed development.

Depending on the scope and type of development proposed on the site, critical area buffers and other regulations related to critical areas may vary from the discussion provided in this letter. Additional off-site critical areas may be present that affect future development but could not be identified within the scope of this CAD. Compliance with all applicable critical areas regulations will be required during critical areas review of all future permit applications. Additional data including but not limited to ecological studies, geotechnical reports, or a site survey may be required at the time of permit review. Additional reviews, including but not limited to drainage, floodplain, clearing, grading, critical areas, and fire flow may occur during the permit review process.

When you are applying to the Health Department for septic system design approval or water well site approval, please include a copy of this letter and any attachments with your application to them. Similarly, a copy should be included with any permit application submitted within the Critical Area Designation's effective period.

A clearing and grading permit would be required to clear land to access a well site, create access roads, or other actions within critical areas or their buffers prior to obtaining a building permit.

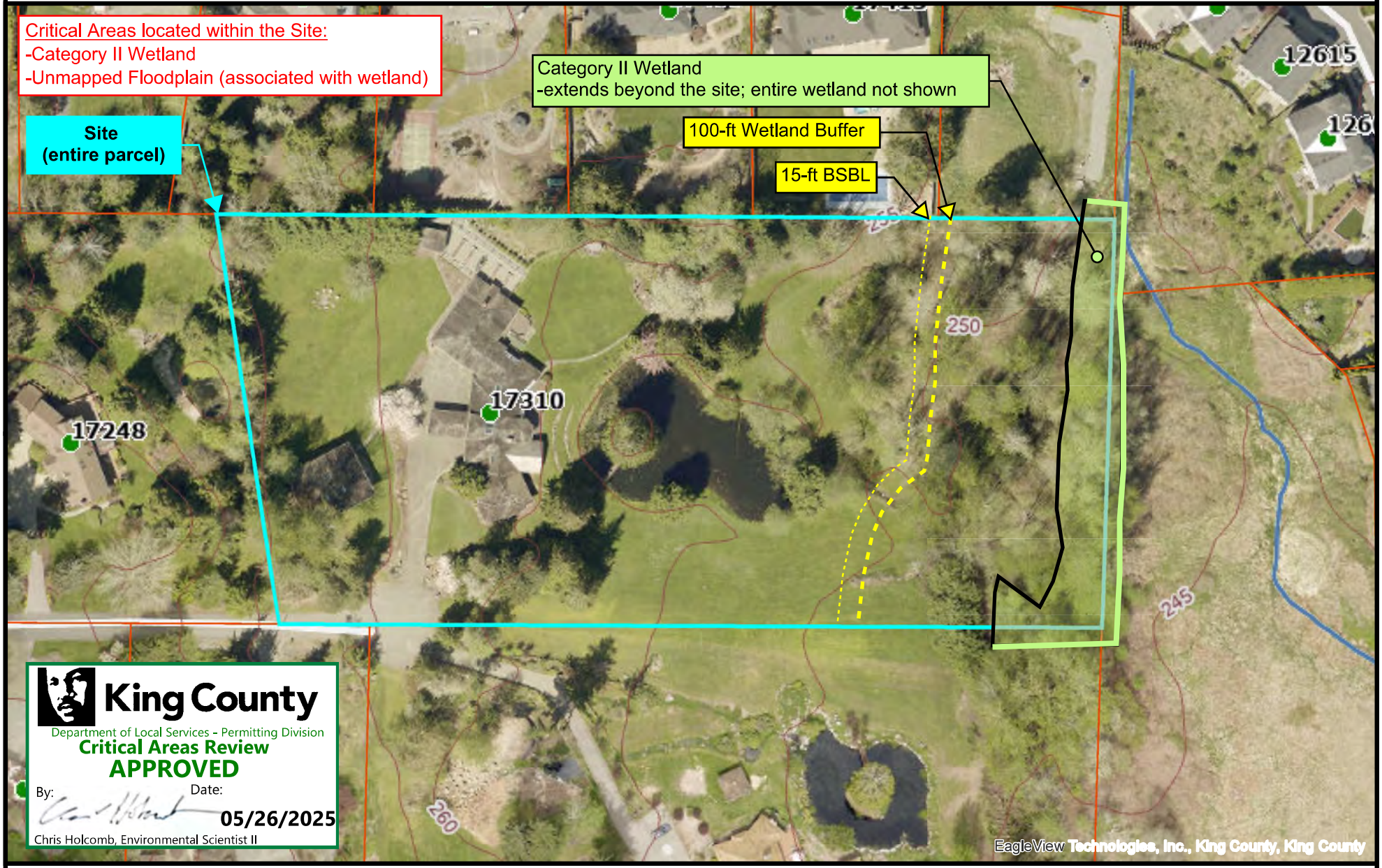
Please feel free to contact me at cholcmb@kingcounty.gov if you have any questions regarding critical areas.

Sincerely,

Chris Holcomb, MES
Environmental Scientist - Ecologist

Attachments: Critical Areas Site Map
Water Service Requirements Flow Chart

CADS25-0080 Critical Areas Site Map



King County
Department of Local Services - Permitting Division
Critical Areas Review
APPROVED
By: Date: **05/26/2025**
Chris Holcomb, Environmental Scientist II

Date: 5/26/2025 Notes:

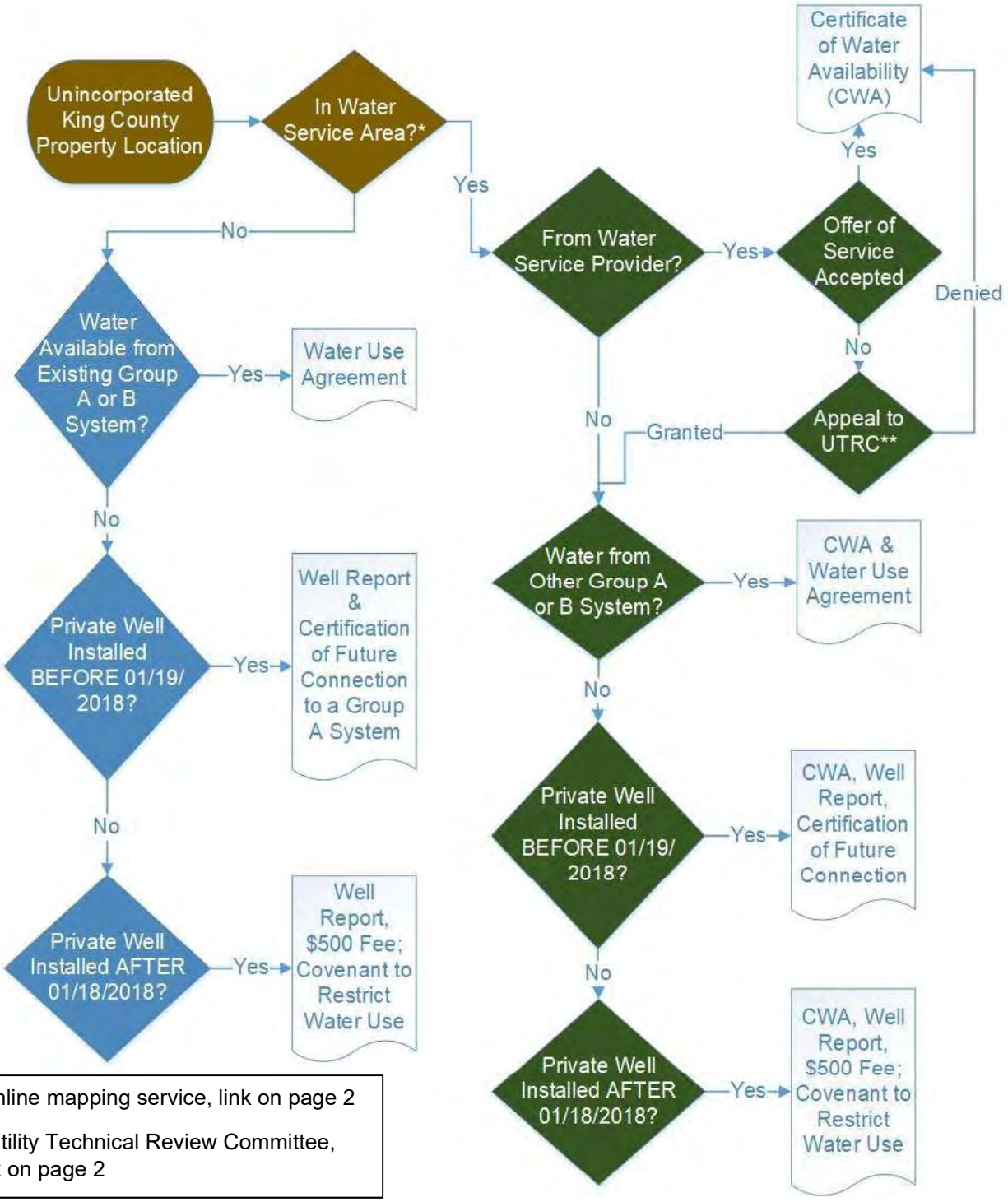
N

King County

King County
Local Services

PERMITS

Water Service Requirements



*Online mapping service, link on page 2

**Utility Technical Review Committee, link on page 2

Water Service Area Provider Notes:

If the water service area provider is not willing or able to provide a Certificate of Water Availability (CWA) that indicates water is not presently available at a property, a letter or email to that effect from the water service area provider will be sufficient in lieu of the CWA.

If the water service area provider is not willing to sign the Certification of Future Water Connection, an email or letter to that effect from the water service area provider will be sufficient and the applicant can record the certification with the email or letter as an attachment, in lieu of the water district signature.

The certification of future connection for properties not located in a water service area need only to be signed by the owner.

If you feel the offer of water availability from the water service provider is not timely and/or reasonable, you can appeal their determination of water availability to the Utility Technical Review Committee (UTRC), King County Department of Natural Resources and Parks. The link to their appeal procedures and application requirements are included below.

Resources:

Parcel Located in King County, Check Jurisdiction and Zoning

* Interactive Water Service Area Maps

Water Availability; Certificate of Availability

Dept. of Ecology, Well Construction & Licensing and Well Notice of Intent

Water Connection; Certification of Future Water Connection

Water Connection; Certification of Future Water Connection to a Group A System

Water Usage, Recording Document; Covenant Form

Groundwater Maps and Reports

Public Health, Private Wells, Plumbing, Gas Piping and Onsite-Sewage Systems

** Utility Technical Review Committee (UTRC) - Water Service Appeal Procedures and Forms

King County
Department of Local Services
Permitting Division
RTN-LS-0300
919 SW Grady Way, Suite 300
Renton, WA 98057
206-296-6600 TTY Relay: 711
https://kingcounty.gov/depts/local-services/permits

May 26, 2025

T.C. Colleran
Murray Franklyn
14410 Bellevue-Redmond Road
Bellevue, Washington 98007

RE: Critical Areas Designation CADS25-0081, Parcel 2526059161
Status: Complete

Dear Applicant:

The King County Department of Local Services, Permitting Division (Permitting) has completed a Critical Area Designation (CAD) for King County parcel no. 2526059161, as requested in permit application no. CADS25-0081. During preparation of this CAD, we reviewed available published data and mapping, critical areas data from nearby completed permits as applicable, and documents submitted with the application including a critical areas report by Raedeke Associates, Incorporated dated March 20, 2025. As part of our review, we also visited the parcel to confirm the site conditions.

We conclude that each of the critical areas discussed below are currently present within the limits of the site (as defined below). These determinations as to the existence, location, and classification of critical areas are effective for five years from the date of this letter, unless there is a change in site conditions or a state or federal agency adopts critical area maps that conflict with this determination.

The determinations of this CAD are valid only for the *site,* which for the purposes of this designation refers to the limits of the parcel identified above, as shown on the attached critical areas site map. Off-site critical areas have also been identified and classified within 300 feet of the site to the maximum extent feasible, given limitations in visibility and off-site access. The area including both the site and off-site areas within 300 feet is referred to the as the *evaluation area*.

Additional off-site critical areas may be present that impact future development but could not be identified within the scope of this CAD. For this reason, all information presented regarding the existence, location, and classification of off-site critical areas within the evaluation area is preliminary and provided for the applicant's reference only. Any applicable critical area standards and buffers relating to off-site critical areas within the evaluation area will be finalized at the time of critical areas review of a permit application.

If a development proposal includes alterations outside of the site as defined above, additional information such as an expanded critical areas report addressing the area within 300 feet of all proposed alterations may be required. In some cases, a new CAD which encompasses that area may also be required.

Please note that per the King County Code (KCC) Chapter 21A.24, many critical area standards and regulations, including critical area buffers, may vary depending on the specifics of the proposed land use or development. This CAD has been prepared assuming development activities typically associated with residential uses. Some critical area standards and buffer widths that may apply under residential use are discussed in this CAD. All information regarding critical area standards and regulations, including critical area buffers, should be understood to be preliminary and is provided for the applicant's reference only. A CAD does not represent a comprehensive source of all applicable critical area standards or other regulations that may apply to a development proposal. The applicant is responsible for preparing a future permit application with the correct buffer widths and other limitations of use specific to their development proposal and all applicable critical areas code. Compliance with all critical areas code and regulations including the application of appropriate buffer widths will be determined at the time of critical areas review for a future development permit.

Wetlands (KCC 21A.24.318 to 21A.24.345)

Wetlands include areas that are inundated or saturated by ground or surface water at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions (see KCC 21A.06.1391). In King County, wetlands are classified as Category I, II, III, or IV based on the adopted *Washington State Wetland Rating System for Western Washington* by the Washington State Department of Ecology. Wetland ratings and development standards recognize the potential that wetlands have to provide benefits to both ecological and hydrological function.

A buffer is required between a wetland and any proposed development. Within a currently undeveloped buffer, no development of any kind is usually allowed; this includes clearing, grading, or any other alteration of the existing vegetation. Within legally developed buffers, maintenance of existing structures and landscaping is allowed as well as limited expansions of some structures. Structures must maintain an additional 15-foot building setback (BSBL) beyond the edge of the buffer.

The width of the buffer depends on multiple factors, such as: the wetland rating, function, site location, proximity to other critical areas, and intensity of impact of adjacent land use. This CAD has been prepared assuming impacts typically associated with residential uses. Since the site is within the Urban Growth Area (UGA) and has residential zoning greater than one unit per acre, 'high impact' buffers apply for residential projects per 21A.24.325A.2.a. The applicable wetland buffer under these assumptions is referred to as a "standard buffer" and is shown on the attached critical areas site map for reference.

In this case, the site contains a buffer from a Category **IV** wetland**.** The standard buffer width for this category of wetland (which on an undeveloped lot is to remain unaltered native vegetation) is 50 feet. Structures must honor an additional 15-foot building setback beyond the buffer. The wetland is located directly northwest of the parcel and was described in the report (dated March 20, 2025) by Raedeke Associates, Incorporated. Since this wetland is located offsite, its shape and characteristics were estimated. Category IV wetlands are assigned 50-foot buffers for high impact projects.

Wildlife Habitat Conservation Area (KCC 21A.24.382, 21A.24.383, and 21A.24.388)

The King County Comprehensive Plan and critical areas code identify wildlife and wildlife habitats for State listed species, Federally listed species, and species of local importance as being valued resources in

King County. Wildlife habitat conservations areas (WHCAs) are areas of habitat for species that the County is required to protect. Identification and protection of WHCAs including but not limited to active breeding sites for State listed species, Federally listed species, and species of local importance will be required for future permits and may have an impact on timing of development activity (see KCC 21A.24.382.K).

In this case, we did not identify any specific wildlife habitat within the scope of this CAD. However, for future permits, wildlife surveys and habitat protection for additional State listed species, Federally listed species, and species of local importance may be required. Changes in wildlife habitat including but not limited to the establishment or abandonment of a breeding site by a protected species would constitute a change in site conditions and may supersede the WHCA findings of this CAD.

Water Service

If potable water is required for development, a Certificate of Water Availability or approval of an alternative water source consistent with the priority order provided in KCC 13.24.138 will be required under KCC 21A.28.040. The permitting process for an alternative water source is conducted through King County Public Health or the Washington State Department of Health. Attached is a flow chart summarizing water service requirements and links to additional information.

It is the applicant's responsibility to verify water availability, in priority order, before submitting a permit application. Please note that if approval of an alternative water source requires establishment of a well, both pre-approval of the well location as well as final approval following development of the well are required by the permitting agency. Site disturbances within critical areas or buffers associated with development of a well would also require a clearing and grading permit from King County Permitting. The King County iMap website provides mapped information on water service providers: to view, navigate to the *Layer List*, select and expand the *Groundwater* tab, and then select the sublayer *Water service areas*. If you have questions about these requirements, please contact a Permit Review Coordinator at the Permitting Division.

Closure

This Critical Areas Designation has been prepared in accordance with KCC 21A.24.500 and is intended to document Permitting's determinations regarding the existence, location and classification of critical areas on the site, as defined above. It is not based on a professional survey of the site. As a result, this CAD may only be relied on for the type and general location of critical areas; it does not represent the precise boundaries of identified critical areas. Depending upon the nature of a future permit application and the characteristics of the site, a detailed topographic survey by a licensed surveyor may be advisable or even required. This document is not an approval of existing or proposed development.

Depending on the scope and type of development proposed on the site, critical area buffers and other regulations related to critical areas may vary from the discussion provided in this letter. Additional off-site critical areas may be present that affect future development but could not be identified within the scope of this CAD. Compliance with all applicable critical areas regulations will be required during critical areas review of all future permit applications. Additional data including but not limited to ecological studies, geotechnical reports, or a site survey may be required at the time of permit review. Additional reviews,

including but not limited to drainage, clearing, grading, critical areas, and fire flow may occur during the permit review process.

When you are applying to the Health Department for septic system design approval or water well site approval, please include a copy of this letter and any attachments with your application to them. Similarly, a copy should be included with any permit application submitted within the Critical Area Designation's effective period.

A clearing and grading permit would be required to clear land to access a well site, create access roads, or other actions within critical areas or their buffers prior to obtaining a building permit.

Please feel free to contact me at cholcomb@kingcounty.gov if you have any questions regarding critical areas.

Sincerely,

Chris Holcomb, MES
Environmental Scientist - Ecologist

Attachments: Critical Areas Site Map
Water Service Requirements Flow Chart

CADS25-0081 Critical Areas Site Map

Date: 5/26/2025 Notes:

King County
Department of Local Services - Permitting Division
Critical Areas Review
APPROVED
By: Date: **05/26/2025**
Chris Holcomb, Environmental Scientist II

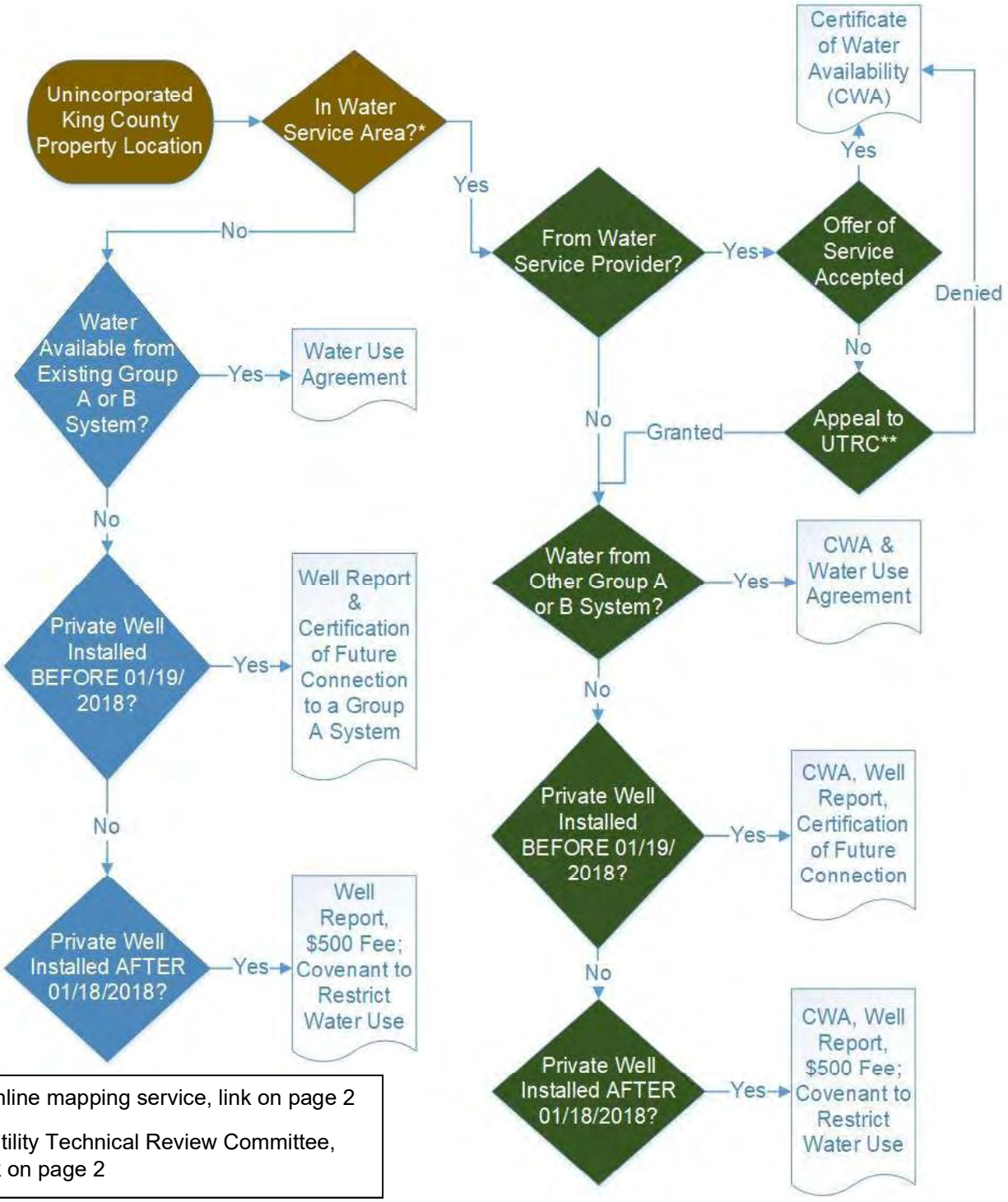
N

King County

King County
Local Services

PERMITS

Water Service Requirements



*Online mapping service, link on page 2

**Utility Technical Review Committee, link on page 2

Water Service Area Provider Notes:

If the water service area provider is not willing or able to provide a Certificate of Water Availability (CWA) that indicates water is not presently available at a property, a letter or email to that effect from the water service area provider will be sufficient in lieu of the CWA.

If the water service area provider is not willing to sign the Certification of Future Water Connection, an email or letter to that effect from the water service area provider will be sufficient and the applicant can record the certification with the email or letter as an attachment, in lieu of the water district signature.

The certification of future connection for properties not located in a water service area need only to be signed by the owner.

If you feel the offer of water availability from the water service provider is not timely and/or reasonable, you can appeal their determination of water availability to the Utility Technical Review Committee (UTRC), King County Department of Natural Resources and Parks. The link to their appeal procedures and application requirements are included below.

Resources:

Parcel Located in King County, Check Jurisdiction and Zoning

* Interactive Water Service Area Maps

Water Availability; Certificate of Availability

Dept. of Ecology, Well Construction & Licensing and Well Notice of Intent

Water Connection; Certification of Future Water Connection

Water Connection; Certification of Future Water Connection to a Group A System

Water Usage, Recording Document; Covenant Form

Groundwater Maps and Reports

Public Health, Private Wells, Plumbing, Gas Piping and Onsite-Sewage Systems

** Utility Technical Review Committee (UTRC) - Water Service Appeal Procedures and Forms

King County
Department of Local Services
Permitting Division
RTN-LS-0300
919 SW Grady Way, Suite 300
Renton, WA 98057
206-296-6600 TTY Relay: 711
https://kingcounty.gov/depts/local-services/permits

July 12, 2025

T.C. Colleran
Murray Franklyn Custom Homes
14410 Bellevue- Redmond Road
Bellevue, Washington 98007

RE: Critical Areas Designation CADS25-0134, Parcel 2526059163
Status: Complete

Dear Applicant:

The King County Department of Local Services, Permitting Division (Permitting) has completed a Critical Area Designation (CAD) for King County parcel no. 2526059163, as requested in permit application no. CADS25-0134. During preparation of this CAD, we reviewed available published data and mapping, critical areas data from nearby completed permits as applicable, and documents submitted with the application including a critical areas report by Raedeke Associates, Incorporated dated June 12, 2025. As part of our review, we also visited the parcel to confirm the site conditions.

We conclude that each of the critical areas discussed below are currently present within the limits of the site (as defined below). These determinations as to the existence, location, and classification of critical areas are effective for five years from the date of this letter, unless there is a change in site conditions or a state or federal agency adopts critical area maps that conflict with this determination.

The determinations of this CAD are valid only for the *site,* which for the purposes of this designation refers to the limits of the parcel identified above, as shown on the attached critical areas site map. Off-site critical areas have also been identified and classified within 300 feet of the site to the maximum extent feasible, given limitations in visibility and off-site access. The area including both the site and off-site areas within 300 feet is referred to the as the *evaluation area.*

Additional off-site critical areas may be present that impact future development but could not be identified within the scope of this CAD. For this reason, all information presented regarding the existence, location, and classification of off-site critical areas within the evaluation area is preliminary and provided for the applicant's reference only. Any applicable critical area standards and buffers relating to off-site critical areas within the evaluation area will be finalized at the time of critical areas review of a permit application.

If a development proposal includes alterations outside of the site as defined above, additional information such as an expanded critical areas report addressing the area within 300 feet of all proposed alterations may be required. In some cases, a new CAD which encompasses that area may also be required.

Please note that per the King County Code (KCC) Chapter 21A.24, many critical area standards and regulations, including critical area buffers, may vary depending on the specifics of the proposed land use or development. This CAD has been prepared assuming development activities typically associated with residential uses. Some critical area standards and buffer widths that may apply under residential use are discussed in this CAD. All information regarding critical area standards and regulations, including critical area buffers, should be understood to be preliminary and is provided for the applicant's reference only. A CAD does not represent a comprehensive source of all applicable critical area standards or other regulations that may apply to a development proposal. The applicant is responsible for preparing a future permit application with the correct buffer widths and other limitations of use specific to their development proposal and all applicable critical areas code. Compliance with all critical areas code and regulations including the application of appropriate buffer widths will be determined at the time of critical areas review for a future development permit.

Wetlands (KCC 21A.24.318 to 21A.24.345)

Wetlands include areas that are inundated or saturated by ground or surface water at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions (see KCC 21A.06.1391). In King County, wetlands are classified as Category I, II, III, or IV based on the adopted *Washington State Wetland Rating System for Western Washington* by the Washington State Department of Ecology. Wetland ratings and development standards recognize the potential that wetlands have to provide benefits to both ecological and hydrological function.

A buffer is required between a wetland and any proposed development. Within a currently undeveloped buffer, no development of any kind is usually allowed; this includes clearing, grading, or any other alteration of the existing vegetation. Within legally developed buffers, maintenance of existing structures and landscaping is allowed as well as limited expansions of some structures. Structures must maintain an additional 15-foot building setback (BSBL) beyond the edge of the buffer.

The width of the buffer depends on multiple factors, such as: the wetland rating, function, site location, proximity to other critical areas, and intensity of impact of adjacent land use. This CAD has been prepared assuming impacts typically associated with residential uses. Since the site is within the Urban Growth Area (UGA) and has residential zoning greater than one unit per acre, 'high impact' buffers apply for residential projects per 21A.24.325A.2.a. The applicable wetland buffer under these assumptions is referred to as a "standard buffer" and is shown on the attached critical areas site map for reference.

In this case, the site contains a Category **II** wetland**.** The standard buffer width for this category of wetland (which on an undeveloped lot is to remain unaltered native vegetation) is 100 feet. Structures must honor an additional 15-foot building setback beyond the buffer. The wetland on the east end of the parcel and extends east and north of the parcel. This Category II wetland features a habitat score of 5 points. Wetlands such as these are assigned 100-foot buffers for moderate impact projects.

Some ponds and watercourses on the central and west ends of the site were determined to be created ornamental features and therefore not regulated.

There is an unmapped flood plain (KCC 21A.24.230) associated with this wetland. The elevation change between the boundary of the wetland and the proposed development site is less than 10 feet based upon iMap. A minor flood study may be required to demonstrate the proposed development is not located within the flood hazard area.

Flood Hazard Areas (KCC 21A.24.223 to 21A.24.272)

The evaluation area contains an unmapped flood hazard area as defined in KCC 21.24.230, associated with the Category II wetland, which is over 5000 square feet in area and subject to seasonal inundation. Determination of the limits of the unmapped flood hazard area is outside the scope of this CAD; this determination is made under a Floodplain Development Application. For this reason, a Floodplain Development Application will be required for the site prior to applying for any future development permit. As part of the Floodplain Development Application, a flood plain study as outlined in KCC Title 9 and the King County Surface Water Design Manual (currently Chapter 4.4.2) must be submitted.

Information regarding floodplain designations, elevations, flood insurance rate maps or the National Flood Insurance Program is available on the King County River and Floodplain Management Section website at Flood services - King County, Washington or you can call them at 206-477 4812.

If you have questions regarding how these flood hazard regulations may affect your future development plans, you can contact Permitting by phone at 206-296-6600 or by email at DPERWebInquiries@kingcounty.gov.

Wildlife Habitat Conservation Area (KCC 21A.24.382, 21A.24.383, and 21A.24.388)

The King County Comprehensive Plan and critical areas code identify wildlife and wildlife habitats for State listed species, Federally listed species, and species of local importance as being valued resources in King County. Wildlife habitat conservations areas (WHCAs) are areas of habitat for species that the County is required to protect. Identification and protection of WHCAs including but not limited to active breeding sites for State listed species, Federally listed species, and species of local importance will be required for future permits and may have an impact on timing of development activity (see KCC 21A.24.382.K).

In this case, we did not identify any specific wildlife habitat within the scope of this CAD. However, for future permits, wildlife surveys and habitat protection for additional State listed species, Federally listed species, and species of local importance may be required. Changes in wildlife habitat including but not limited to the establishment or abandonment of a breeding site by a protected species would constitute a change in site conditions and may supersede the WHCA findings of this CAD.

Water Service

If potable water is required for development, a Certificate of Water Availability or approval of an alternative water source consistent with the priority order provided in KCC 13.24.138 will be required under KCC 21A.28.040. The permitting process for an alternative water source is conducted through

King County Public Health or the Washington State Department of Health. Attached is a flow chart summarizing water service requirements and links to additional information.

It is the applicant's responsibility to verify water availability, in priority order, before submitting a permit application. Please note that if approval of an alternative water source requires establishment of a well, both pre-approval of the well location as well as final approval following development of the well are required by the permitting agency. Site disturbances within critical areas or buffers associated with development of a well would also require a clearing and grading permit from King County Permitting. The King County iMap website provides mapped information on water service providers: to view, navigate to the *Layer List*, select and expand the *Groundwater* tab, and then select the sublayer *Water service areas*. If you have questions about these requirements, please contact a Permit Review Coordinator at the Permitting Division.

Closure

This Critical Areas Designation has been prepared in accordance with KCC 21A.24.500 and is intended to document Permitting's determinations regarding the existence, location and classification of critical areas on the site, as defined above. It is not based on a professional survey of the site. As a result, this CAD may only be relied on for the type and general location of critical areas; it does not represent the precise boundaries of identified critical areas. Depending upon the nature of a future permit application and the characteristics of the site, a detailed topographic survey by a licensed surveyor may be advisable or even required. This document is not an approval of existing or proposed development.

Depending on the scope and type of development proposed on the site, critical area buffers and other regulations related to critical areas may vary from the discussion provided in this letter. Additional off-site critical areas may be present that affect future development but could not be identified within the scope of this CAD. Compliance with all applicable critical areas regulations will be required during critical areas review of all future permit applications. Additional data including but not limited to ecological studies, geotechnical reports, or a site survey may be required at the time of permit review. Additional reviews, including but not limited to drainage, floodplain, clearing, grading, critical areas, and fire flow may occur during the permit review process.

When you are applying to the Health Department for septic system design approval or water well site approval, please include a copy of this letter and any attachments with your application to them. Similarly, a copy should be included with any permit application submitted within the Critical Area Designation's effective period.

A clearing and grading permit would be required to clear land to access a well site, create access roads, or other actions within critical areas or their buffers prior to obtaining a building permit.

This parcel has an open enforcement case, ENFR23-0425Per KCC 16.82.130, Permitting cannot accept or approve future permits for parcels with unpermitted alterations until the parcel has been restored, alterations have brought into compliance with applicable code including KCC 16.82 and KCC 21A.24, or the department has approved a permit which addresses the corrective action and posts any required financial

guarantee. For planning purposes, be aware that corrective actions for any unpermitted alterations may be required prior to review or approval of future permits.

Please feel free to contact me at chocomb@kingcounty.gov if you have any questions regarding critical areas.

Sincerely,

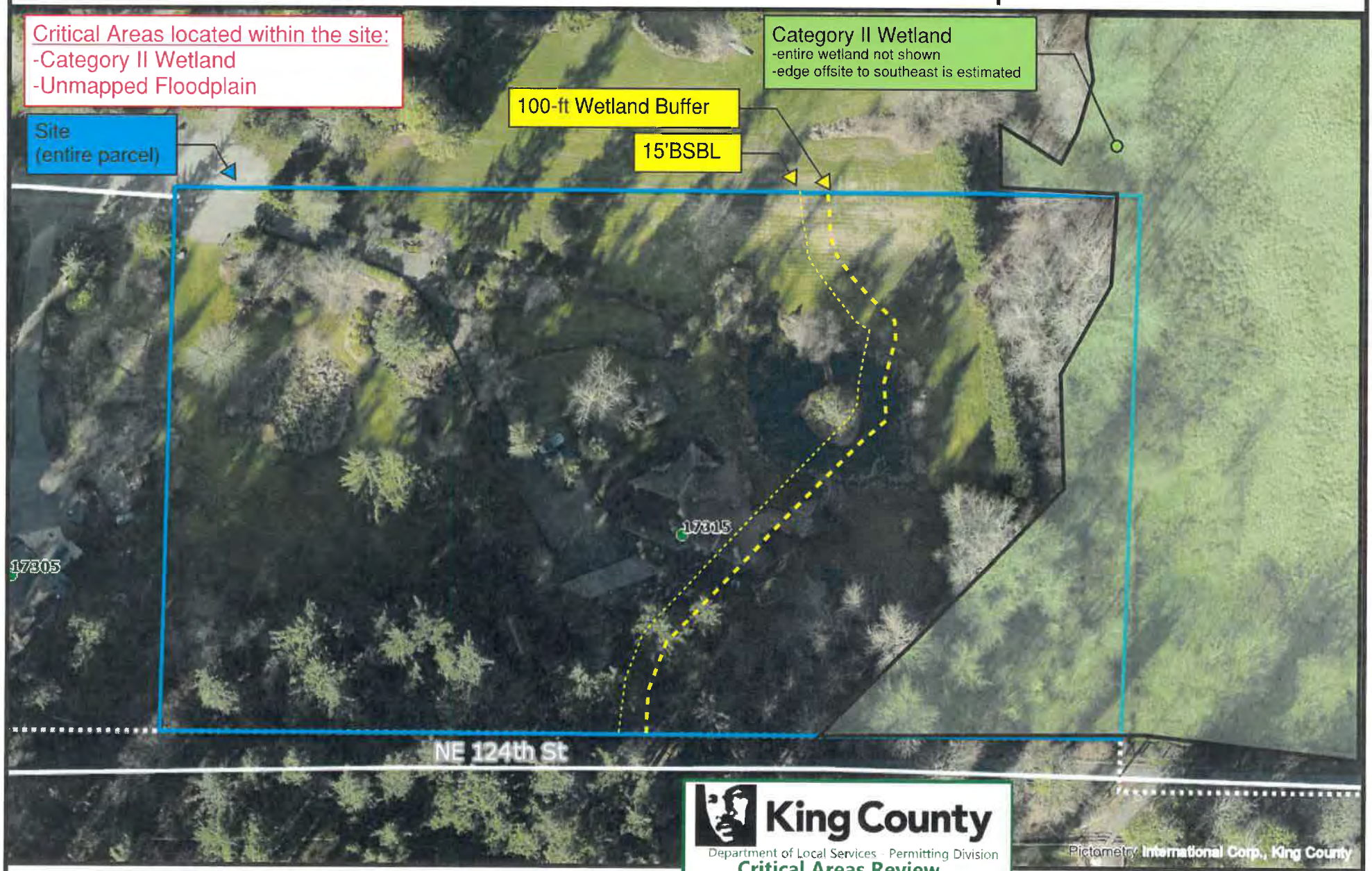
Chris Holcomb, MES

Digitally signed by Chris Holcomb, MES
DN: C=US, E=cholcomb@kingcounty.gov, O=Permitting Division, OU=King County Department of Local Services, CN="Chris Holcomb, MES"
Date: 2025.07.12 15:10:18-07'00'

Chris Holcomb, MES
Environmental Scientist - Ecologist

Attachments: Critical Areas Site Map
Water Service Requirements Flow Chart

CADS25-0134 Critical Areas Site Map



Date: 7/11/2025 Notes:

King County
Department of Local Services - Permitting Division
Critical Areas Review
APPROVED
By: Date: 07/12/2025
Chris Holcomb, Environmental Scientist II

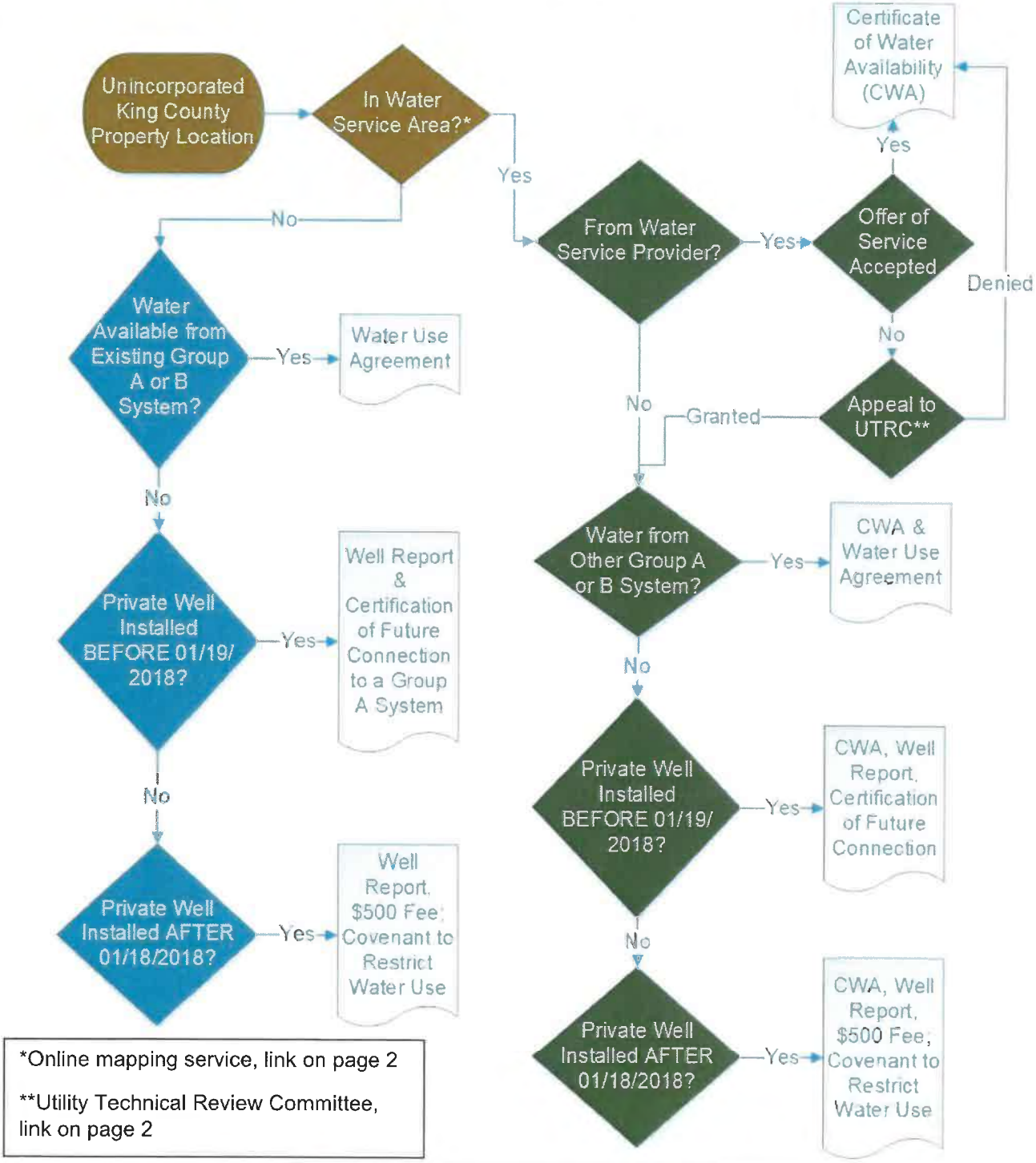
N

King County

King County
Local Services

PERMITS

Water Service Requirements



*Online mapping service, link on page 2

**Utility Technical Review Committee, link on page 2

Water Service Requirements, continued

Water Service Area Provider Notes:

If the water service area provider is not willing or able to provide a Certificate of Water Availability (CWA) that indicates water is not presently available at a property, a letter or email to that effect from the water service area provider will be sufficient in lieu of the CWA.

If the water service area provider is not willing to sign the Certification of Future Water Connection, an email or letter to that effect from the water service area provider will be sufficient and the applicant can record the certification with the email or letter as an attachment, in lieu of the water district signature.

The certification of future connection for properties not located in a water service area need only to be signed by the owner.

If you feel the offer of water availability from the water service provider is not timely and/or reasonable, you can appeal their determination of water availability to the Utility Technical Review Committee (UTRC), King County Department of Natural Resources and Parks. The link to their appeal procedures and application requirements are included below.

Resources:

Parcel Located in King County, Check Jurisdiction and Zoning

* Interactive Water Service Area Maps

Water Availability; Certificate of Availability

Dept. of Ecology, Well Construction & Licensing and Well Notice of Intent

Water Connection; Certification of Future Water Connection

Water Connection; Certification of Future Water Connection to a Group A System

Water Usage, Recording Document; Covenant Form

Groundwater Maps and Reports

Public Health, Private Wells, Plumbing, Gas Piping and Onsite-Sewage Systems

** Utility Technical Review Committee (UTRC) - Water Service Appeal Procedures and Forms

APPENDIX F

Eastside Environmental Pros
Critical Area Report and Restoration Plan

CRITICAL AREAS REPORT AND RESTORATION PLAN

17315 NE 125th Street,
Tax Parcel (252605-9163)
Redmond, Washington 98052
(ENFR23-0425)

Robert & Martha Hsueh,
King County, Washington

Prepared By:
Eastside Environmental Pros, Inc.
Woodinville, Washington

15 April 2024

Report To: Robert & Martha Hsueh,
17315 NE 125th Street,
Redmond, Washington 98052.

Report Title: Critical Areas Report and Restoration Plan
King County, Washington.

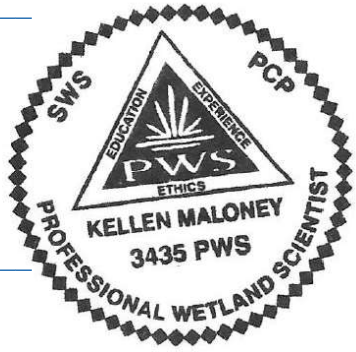
Project Number: EE-404

Prepared By: Eastside Environmental Pros, Inc.
18500 156th Ave NE, Suite 203,
Woodinville, WA 98072

Emily Newton-Weideman, Ecologist

Rebecca Bramwell, Ecologist

Kellen Maloney, PWS



Date: 15 April 2024

TABLE OF CONTENTS

Lists of Figures, Photos, Tables, and Appendices ii

1. Introduction 4

1.1 Report Purpose 4
1.2 Limitations 4

2. General Property Description and Land Use 4

2.1 Project Location 4
2.2 General Property Description 4

3. Methodology 5

3.1 Field Investigation Procedures 5
3.1.1 Routine Methodology 5

4. Results 6

4.1 Analysis of Existing Site Conditions 6
4.1.1 Wetland A 6

5. Unregulated Water Features 8

5.1 Site History 8
5.2 Landscape Amenity Design and Construction (1982 – 1983) 9
5.3 Neighborhood Stormwater Conveyance 10
5.4 Evidence of Artificial Creation 10

6. Regulatory Review 12

7. Impact Analysis 13

7.1 Unpermitted Tree Removal 14
7.2 Unpermitted Grading 15

8. Critical Area Restoration Plan 16

8.1 Agency Policies and Guidance 16
8.2 Proposed Restoration 16
8.2.1 Monitoring Plan 16
8.3 Maintenance and Contingency Plan 17

9. Summary 17

10. References 18

List of Figures

Figure 1: Existing Conditions Map
Figure 2: Stormwater Conveyance Map
Figure 3: Tree Replacement Plan
Figure 4: Container Tree Planting Detail

Figures are located between the references page and the Appendices.

List of Appendices

Appendix A: Wetland Determination Datasheets
Appendix B: Wetland Rating Forms

1. Introduction

1.1 Report Purpose

Eastside Environmental Pros, Inc. was retained to prepare a Critical Areas Report and Restoration Plan for the property located at 17315 NE 125th Street, Redmond, WA in King County (Tax Parcel 252605-9163) in response to a code enforcement case issued by the County (ENFR23-045). The subject property is hereafter referred to as "Project Site" or "Site". As part of this assessment, we evaluated critical areas (*i.e.* wetlands and streams) within 250 feet of the Site. This area within 250 feet of the Project Site is referred to as the "Study Area".

This report has been prepared to comply with the requirements of King County Zoning Code (KCZC) §21A.24.110 – *Critical Area Report Requirements* and KCZC §21A.24.340 – *Wetlands – Specific Mitigation Requirements*.

1.2 Limitations

This report and the information provided herein were prepared per the guidance of the best available science and technical guidance documents available during the time of report preparation. The findings, discussions, and conclusions made in this report are based on the best professional judgement of the author(s) and field technicians available during the Site evaluation. All project work was limited by the scope, budget, and timing requirements of the project. The findings and conclusions provided in this report are subject to confirmation by applicable Local, State, and Federal agencies, depending on the scope of the project. No other warranty, expressed or implied, is made.

2. General Property Description and Land Use

2.1 Project Location

The Site is a single unincorporated King County tax parcel (Tax Parcel 252605-9163) located at 17315 NE 125th Street, near Redmond, Washington. The Site is located within the northeastern quarter of Section 25, Township 26 North, Range 05 East, of the Willamette Meridian.

2.2 General Property Description

The Site is a single 3.89-acre parcel zoned R-6 (Residential, six DU per acre) developed with one single-family residence, driveway, shed structure, two gazebos, constructed pond features, and maintained lawn and garden areas. The single-family residence, shed structure, and gazebos are located within the central portion of the Site. The driveway extends from NW 125th Street to the single-family residence to the southeast. The southern and eastern portions of the parcel are comprised of a mixed coniferous-deciduous forest with a dense shrub stratum. The Site is bound to the north and west by developed single-family residence parcels, to the east by an undeveloped parcel associated with a wetland ("Wetland A"), and to the south by a trail system and stormwater pond.

Vegetation

Vegetation within the Site is grouped into two communities: A mixed coniferous-deciduous forest along the southern and eastern boundaries of the Site and maintained lawn and mixed native and ornamental landscaped area surrounding the residence.

The forested areas are vegetated with Douglas fir (*Psuedotsuga menziesii*), western redcedar (*Thuja plicata*), red alder (*Alnus rubra*), big-leaf maple (*Acer macrophyllum*), Himalayan blackberry (*Rubus armeniacus*), salmonberry (*Rubus spectabilis*), red elderberry (*Sambucus racemosa*), Oso berry (*Oemleria cerasiformis*), and swordfern (*Polystichum munitum*). The central and western portion of the Site is dominated by maintained lawn and a mix of native and ornamental landscaped areas associated with the residence.

Topography

Topography onsite generally slopes down from the west to the east with the lowest elevation on the southeastern property corner at 240 feet in elevation and the highest elevation on the western boundary at 270 feet.

3. Methodology

3.1 Field Investigation Procedures

3.1.1 Routine Methodology

A wetland delineation was conducted by Eastside Environmental Pros on 7 March 2024. Wetland delineations utilized the routine approach described in the *Corps of Engineers Wetland Delineation Manual* (Corps 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (U.S. Army Corps of Engineers, 2010) (referred to as "Corps Manual"). Wetlands were classified according to KCZC §21A.24.318.

Plant species were identified according to the taxonomy of *Flora of the Pacific Northwest* (Hitchcock and Cronquist 2018). Taxonomic nomenclature was updated by the U.S. Army Corps of Engineers National Wetland Plant List (Lichvar and Kartesz 2016). Wetland classes were determined using the U.S. Fish and Wildlife Service's system of wetland classification (Cowardin 1979). Hydrophytic vegetation was determined using the standard procedures described in the Army Corps of Engineers (Corps) Regional Supplement, which requires use of the dominance test, except when positive indicators of wetland hydrology and hydric soils are met, in which case the prevalence index or alternative indicators of hydrophytic vegetation may also be required.

Wetland hydrology was determined based on the presence of hydrologic indicators listed in the Army Corps of Engineers (Corps) regional supplement. Hydrology indicators include both Primary Indicators and Secondary Indicators. To meet the definition of wetland hydrology, one Primary Indicator or two Secondary Indicators must be observed. Examples of wetland hydrology indicators include but are not limited to: drainage patterns drift lines, sediment

deposition, watermarks, stream gauge data and flood predictions, historic records, visual observation of saturated soils, and visual observation of inundation.

Soil test pits were excavated to a depth of at least 20 inches below the soil surface to categorize and describe soil and hydrologic conditions within the Study Area. Soils on the Site were considered hydric if one or more of the hydric soil indicators listed in the Corps Regional Supplement were present. Examples of hydric soil indicators include: presence of organic soils, reduced matrix, depleted or gleyed soils, or, redoximorphic features in association with a reduced soil matrix. Soil colors were determined using the Munsell Soil Color Charts (Munsell Color 2009).

Appendix A contains wetland determination datasheets prepared by Eastside Environmental Pros for representative locations within the Study Area. These datasheets document vegetation, soils, and hydrology characteristics. **Appendix B** contains wetland rating forms used to categorize wetlands within the Study Area.

4. Results

4.1 Analysis of Existing Site Conditions

One (1) wetland (Wetland A) was identified onsite during the 7 March 2024 delineation (**Figure 1**). **No other critical areas were identified within the Study Area.**

4.1.1 Wetland A

Wetland A is approximately 3.65-acres and is located in the eastern portion of the Site and extends offsite to the east (**Photo 1**). Wetland A has a depressional hydrogeomorphic classification (Brinson, 1993) and palustrine emergent, scrub-shrub, and forested Cowardin classifications (Cowardin *et al.* 1979).

Vegetation within Wetland A includes red alder (*Alnus rubra*), vine maple (*Acer circinatum*), black cottonwood (*Populus balsamifera*), salmonberry (*Rubus spectabilis*), Robert's herb (*Geranium robertianum*), creeping buttercup (*Ranunculus repens*), Sitka willow (*Salix sitchensis*), and reed canarygrass (*Phalaris arundinacea*).

Soils within Wetland A are characterized by a very dark grayish brown (10YR 3/2) loam surface layer from 0-7 inches. This is underlain by a very dark grayish brown (10YR 3/2) sandy clay loam with 5% prominent dark yellowish brown (10YR 4/4) redoximorphic concentrations and 5% dark gray (10YR 4/1) redoximorphic depletions from 7-15 inches below the surface. This is further underlain by a dark greyish brown (10YR 4/2) and dark yellowish brown (10YR 4/4) sandy clay loam mixed matrix with 8% dark yellowish brown (10YR 4/6) prominent redox concentrations. These characteristics generally meet the criteria for the *Redox Dark Surface* (F6) Hydric Soil Indicator.

Hydrology within Wetland A is primarily supported by groundwater and precipitation. Hydrologic indicators present during the 7 March 2024 Site visit include *High Water Table* (A2) and *Saturation* (A3).

Wetland A scored 7 points for Water Quality functions, 8 points for Hydrologic functions, and 5 points for Habitat functions through Ecology's 2014 Rating System (**Appendix C**), for a total score of 20 points. These scores meet the criteria of a Category II wetland in King County, which requires a standard **100-foot buffer** for high-impact land uses. The Site qualifies as a high impact land use because the residential zoning is greater than one dwelling unit per acre (R-6). Wetland buffers also require a standard **15-foot building setback** measured from the edge of the buffer per KCC § 21A.24.325.

Photo 1. Photo of Wetland A taken from the offsite trail facing toward the northwest.

5. Unregulated Water Features

In addition to the regulated critical areas discussed in **Chapter 4**, several unregulated landscape amenity water features are located within the Study Area. This Chapter discusses the development history of the Site, the design of constructed ponds and stormwater conveyances, and the designed vs. as-built condition of the landscape amenity. A regulatory review of these features is discussed in **Chapter 6**.

5.1 Site History

Historical aerial imagery and permitting documents were reviewed prior to the onsite evaluation to determine if the onsite water features were artificially created from a nonwetland site. Features with these characteristics are excluded from the wetland definition Per KCZC §21A.06.1391. The Site was forested with conifer species prior to development in 1984, dating back to 1936, with no evidence of ponding or saturation (**Photos 2 & 3**). Aerial imagery dated 1990 clearly depicts the presence of the ponds and swales post-construction (**Photo 4**). A similar pond was constructed on the property on Parcel 252605-9003 to the north.

Photos 2, 3, 4. Site circled in red. Clockwise from top: 1936 aerial, 1981 aerial, 1990 aerial. The Site appears visually consistent with surrounding non-wetland sites. No saturation is visible from aerial imagery, and the vegetation community appears identical to properties located to the south of the Site, which are developed upland sites. Recent pond construction is clearly visible in the 1990 aerial (left).

5.2 Landscape Amenity Design and Construction (1982 – 1983)

The design of the landscape amenity ponds was documented on a County-stamped Site plan dated 13 December 1983 (**Photo 5**) prior to residential construction. The site plan's northwestern section features a bridge detail over a designed surface water flow path, along with a constructed island in the central portion of the main pond. The site plan also shows a drainage easement along the northern boundary of the property. The surface water flow path identified on the site plan is consistent with a culvert outlet that conveys water to the east from a roadside ditch system along 125th Street (**Figure 2**).

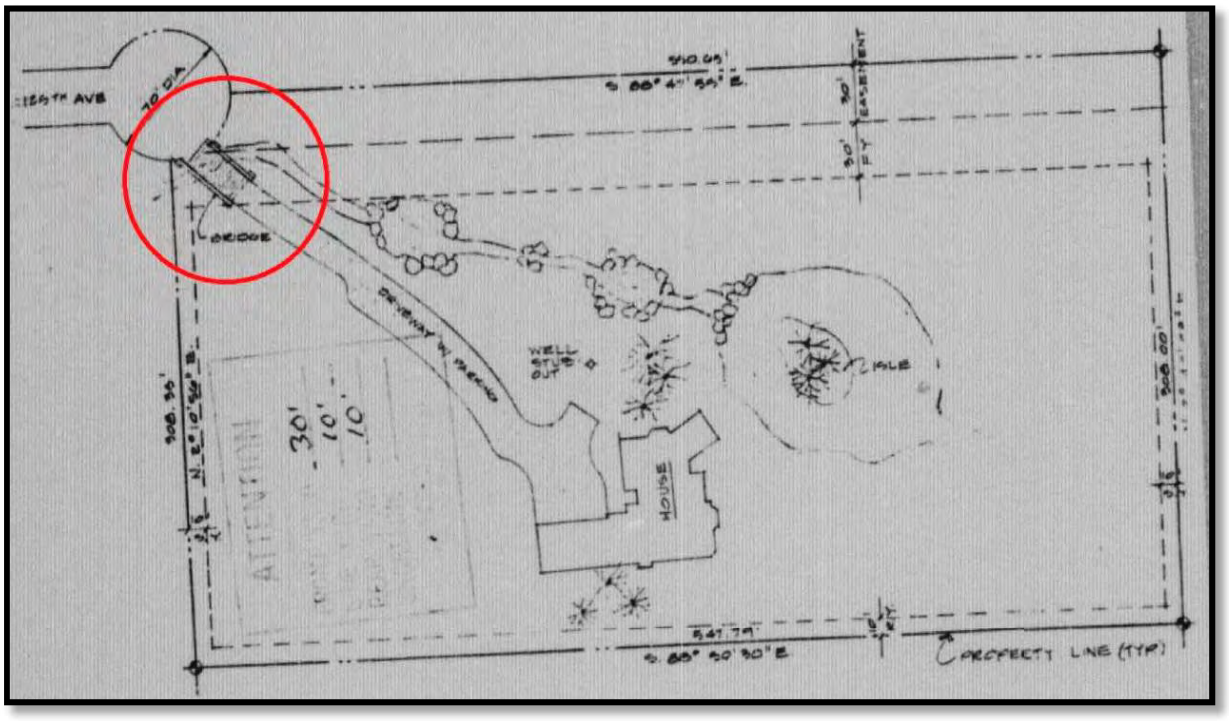


Photo 5. Historical Site Plan dated 1983.

Design vs. As-Built

The site plan has several noticeable differences compared to as-built conditions on the property. Firstly, the driveway was constructed without a bridge and instead routes stormwater under the driveway via culverts. Secondly, Three ponds were constructed on the western side of the driveway. These ponds convey hydrology eastward underneath the driveway into two separate grass lined swales. These swales converge before flowing into the northwestern corner of the main pond containing the island (**Figure 1**).

The differences between the site plan and as built conditions demonstrate that the features were constructed, not pre-existing, and were intentionally designed to manage storm and surface water from uphill development, while also functioning as a landscape amenity.

5.3 Neighborhood Stormwater Conveyance

During the site evaluation on March 7, 2024, EEP staff investigated whether the landscape amenities and grass-lined swales have a natural water source by tracing the hydrology back to its origin.

Hydrology Source for Onsite Ponds

The source of hydrology to the landscape amenities was determined to be storm- and surface water runoff from uphill developments to the west. A catch basin located at the northwestern corner of Parcel 252605-9074 receives water from the south and directs it eastward through a large concrete culvert that runs underground to the Site, where it discharges into the roadside ditch. Several pipes channeling roof runoff from residences were found flowing into this roadside ditch on the south side of NE 125th Street. This ditch also collects runoff from NE 125th Street itself, driveways, and other impervious surfaces associated with neighboring residences and conveys it eastward directly into the northwesternmost onsite landscape pond (**Figure 2**). This ditch contains significant sediment accumulation and scouring, indicating a substantial volume of water is channeled through these structures. All of this stormwater flows downslope onto the Site. **No streams or wetlands contribute to this source of hydrology.**

Hydrology Source for Offsite Ponds (North) and Swales

Just as the properties to the south of NE 125th Street contribute hydrology to the Site, properties to the north of NE 125th Street convey hydrology to Parcel 252605-9003. A concrete culvert conveys the stormwater from the north side of NE 125th Street eastward, in between the Site and Parcel 252605-9003. The culvert outlets into an excavated swale that further directs the stormwater eastward towards Wetland A. A stand of cattail (*Typha latifolia*) is present at the culvert outlet, and the hydrology flows south through a constructed ditch until it's confluence with Wetland A.

These observations demonstrate that a large volume of storm and surface water has been intentionally designed to flow through the properties and provide enough hydrology to support the formation of wetland conditions.

5.4 Evidence of Artificial Creation

During the site evaluation, evidence such as pond liners, flow controls, and bentonite clay suggested that the onsite features were artificially created.

Pond Liners and Rockery

Remnants of black plastic pond liner were observed in several locations within the constructed ponds (**Photo 6 & 7**). These liners were placed within the smaller ponds located on the western side of the driveway. The liners appear to have been in place since the pond's original construction in the early '80s but have been recently disturbed by the owner in an attempt to change the flow path of the system.

In addition to pond liners, several locations along the edges of the pond contain concrete and imported landscape rockery. These materials were used to construct waterfall features with **plumbed pipes, spigots, and electrical wiring** (**Photo 8 & 9**). The applicant stated that the waterfalls were present prior to their ownership, and the applicant removed the fountain pump and electrical wiring because it posed a safety hazard.

Photo 6 & 7. Photos of black plastic pond liner that was identified throughout the western portion of the Site.

Photo 8 & 9. Photo 8 (left) depicts an elevated concrete basin surrounded by rockery. This basin has collected leaf litter and organic debris but includes pipe at the bottom of the basin that once pumped water to create a fountain. Photo 9 (right) shows a spigot located at the top of a constructed rockery and concrete wall that previously functioned as a waterfall.

Three (3) Soil Test Pits were excavated along the southern edge of two southern ponded areas to the west of the driveway. Test Pit 1 contained **an impermeable layer of bentonite clay** 5 inches below ground surface. Test Pit 3 contained this same bentonite clay layer 25 inches below ground surface. The bentonite clay layer at Test Pit 1 was so dense and compacted that it could not be excavated below 8 inches. These soil characteristics were unique to the ponded areas, and were not identified elsewhere onsite (*i.e.,* Test Pit 2). There was significant surface hydrology at both of these sample points, however, when the bentonite clay peds were opened they were completely dry. These conditions indicate that hydrology is conveyed to this area from the top-down, rather than from groundwater upwelling typical of slope wetlands.

Bentonite clay is often used to create ponds in non-wetland areas by first over excavating a depression, placing the clay, and then regrading and placing native soils on top of the confining layer. Test Pit 3's location outside of the original pond edge indicates that the bentonite clay was placed generously throughout the western portion of the property, which has prevented infiltration and perched hydrology sourced from the neighborhood stormwater system.

The presence of bentonite clay demonstrates that the features were artificially created from a nonwetland site, that no groundwater is capable of contributing to this feature, and that the only source of hydrology is the storm and surface water that was designed to flow into these features.

6. Regulatory Review

King County Zoning Code defines aquatic areas and wetlands as follows:

21A.06.072C - Aquatic areas.

A. Aquatic areas:

1. Nonwetland water features including: all shorelines of the state, rivers, streams, marine waters and bodies of open water, such as lakes, ponds and reservoirs;

2. Impoundments, such as reservoirs or ponds, if any portion of the contributing water is from a nonwetland water feature listed in subsection A.1. of this section; and

3. Above-ground open water conveyance systems, such as ditches, if any portion of the contributing water is from either a wetland or a nonwetland water feature listed in subsection A.1. or A.2. of this section, or both.

B. "Aquatic areas" does not include water features where the source of contributing water is entirely artificial, including, but not limited to, ground water wells [bolded for emphasis]**.**

21A.06.1391 Wetland.

A. An area that is inundated or saturated by ground or surface water at a frequency and duration sufficient to support, and under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

B. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands.

C. Wetlands do not include those artificially created wetlands intentionally created from nonwetlands sites, including, but not limited to:

1. **Surface water conveyances for drainage or irrigation;**
2. **Grass-lined swales;**
3. Canals;
4. [A]* flow control facilities or **wetponds**;
5. Wastewater treatment facilities;
6. Farm ponds;
7. **Landscape amenities; or**
9. Those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street or highway.

The Site evaluation concluded that water features located onsite were artificially created from nonwetland sites and designed onsite for the purpose of conveying storm and surface water, consistent with the County's "Wetpond" definition, while also functioning as a landscape amenity. There is sufficient hydrology provided by the neighborhood drainage design to create and sustain these features, and no natural sources of hydrology contribute to them.

Per KCZC definitions listed above, "Aquatic areas" do not include water features where the source of contributing water is entirely artificial, and "Wetlands" do not include those artificially created wetlands intentionally created from nonwetlands sites. Furthermore, the wetland definition specifically excludes "Surface water conveyances for drainage…grass-lined swales…wetponds…and landscape amenities." **Therefore, the water features onsite are excluded from the definition of aquatic areas and wetlands and are not regulated features.**

7. Impact Analysis

King County Code Enforcement Case ENFR23-0425 was opened on the subject parcel for unpermitted tree removal. The pre-application meeting letter (PREA23-0139) dated 7 November 2023 stated "*unauthorized clearing (over 7,000 sq. ft) and grading within potential critical areas. The unauthorized work appears to have involved the clearing of several mature conifers and grading/filling within presumed on-site wetland areas*."

7.1 Unpermitted Tree Removal

Unpermitted tree removal occurred on the property in spring of 2023. Per the owner's statement, several large trees had fallen on the property and caused damage in previous years, and the applicant removed these trees because of safety concerns. 13 trees were cut in total and left as snags, as shown in **Table 1**. These trees include nine (9) Douglas firs and four (4) red alders (**Photo 10**). Of these trees, two (2) red alders and one (1) Douglas fir was removed within the buffer of Wetland A. No other tree removal or clearing occurred within critical areas or their associated buffers.

Per KCZC 21A. 24.045.D.18., removal of hazard trees within a wetland buffer is allowed. However, the hazardous condition is required to be documented by a certified arborist and a clearing permit must be obtained. The applicant did not obtain documentation by arborists or a permit, and therefore, the trees must be replaced.

Table 1. Tree Removal

Tree #	Species	DBH (inches)	Within Buffer?	Proposed Replacement Trees
1	Douglas Fir	38	N	0
2	Douglas Fir	40	N	0
3	Douglas Fir	20	N	0
4	Douglas Fir	28	N	0
5	Douglas Fir	30	N	0
6	Douglas Fir	24	N	0
7	Douglas Fir	26	N	0
8	Douglas Fir	24	N	0
9	Red Alder	10	N	0
10	**Douglas Fir**	**12**	**Y**	**3**
11	**Red Alder**	**14**	**Y**	**3**
12	**Red Alder**	**28**	**Y**	**3**

Photo 10. Photo of tree removal area taken facing toward the southwest.

7.2 Unpermitted Grading

Unpermitted grading was conducted within the central-western portion of the Site, within the unregulated landscape ponds. Fill placed within these ponds included soil, organic material (leaves, mulch, logs), broken concrete slabs, and rocks (**Photo 11 & 12**). As discussed in Chapter 6, these features were artificially constructed from a nonwetland site and do not receive any natural sources of contributing water. Therefore, the features are not regulated critical areas and **the unpermitted grading activities did not result in any impacts to critical areas or their associated buffers.**

Photo 11. Photo of onsite conditions within and along the edges of the constructed ponds in the western portion of the Site. Photo taken facing northward.

Photo 12. Photo of onsite conditions within and along the edges of the constructed ponds in the western portion of the Site. Photo taken facing toward the northwest.

8. Critical Area Restoration Plan

8.1 Agency Policies and Guidance

King County requested a restoration plan in the PREA23-0139/ENFR23-0425 letter dated 7 November 2023 for clearing of several mature conifers and grading/filling within presumed on-site wetland areas. The 7 March 2024 Site evaluation conducted by EEP staff concluded that no grading work was conducted within critical areas or their associated buffers, and that two (2) red alders and one (1) Douglas fir was removed from the buffer of Wetland A. This report and restoration plan have been prepared to meet the requirements outlined in KCC 21A.24.130- *Mitigation and monitoring* and 21A.24.340- *Wetlands - specific mitigation requirements.*

8.2 Proposed Restoration

The applicant proposes to restore the impacted portion of Wetland A by replacing the removed trees at a 3:1 ratio per the specifications of **Figure 3 & 4**. The replacement trees will consist of six (6) red alders and three (3) Douglas firs. The replacement trees will be located within the buffer of Wetland A near the trees that was originally removed.

8.2.1 Monitoring Plan

Due to the size and scope of the restoration plan, the applicant proposes to submit photos to the County on a yearly basis for a period of 3 years to demonstrate that the restoration area is meeting the proposed performance standards.

The overall goal of this restoration plan is to restore the ecological functions associated with the removed red alder. Specific objectives and performance standards include the following**:**

Objective A: *Replace the structural and habitat functions of the removed red alder.*

Performance Standard A1: *Percent survival of planted replacement trees must be at least 100% at the end of Year 1 (per contactor warranty), and remain at 100% for each subsequent year of the monitoring period.*

King County will be notified upon completion of the restoration plantings and will be requested to conduct a Site review for initial approval. Annual photos will then be submitted to the County for a period of 3 years.

8.3 Maintenance and Contingency Plan

A contingency plan shall be established for compensation in the event the restoration project is inadequate or fails. The most probable maintenance and contingency items include the following:

- Replacement of any dead plantings during the monitoring period and an assessment of causation of plant mortality (e.g. lack of irrigation, exposure to sun, etc.) Replacements should be conducted within one growing season with the same species or an approved substitute species, and
- Soil amendments, including topsoil and mulch, as needed.

9. Summary

The Site is a single King County tax parcel (Tax Parcel 252605-9163) located at 17315 NE 125th Street, in incorporated King County. King County Code Enforcement Case ENFR23-0425 was opened on the subject parcel for unpermitted clearing of several mature conifers and grading/filling within presumed on-site wetland areas.

Eastside Environmental Pros evaluated the Subject Property for critical areas on 7 March 2024. One (1) wetland (Wetland A) was identified within the Study Area (**Figure 1**). In addition to the regulated critical areas, a series of constructed ponds and grass lined swales were identified on the Site. Onsite investigation results concluded that these features do not receive contributing water from any natural sources and were artificially created from a nonwetland site, and therefore are not regulated. Wetland A is a Category II wetland with a habitat score of 5 which requires a 75-foot buffer and 15-foot building setback from the buffer edge per KCC §21A.24.325 and §21A.24.200.

Onsite investigation results concluded that no grading occurred within critical areas or their associated buffers, and one (1) red alder was removed within the buffer of Wetland A. No other impacts to critical areas or their associated buffers were identified. The applicant proposes to restore this impact by replacing the removed alder with three (3) red alders.

10. References

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. *Classification of Wetlands and Deepwater Habitats of the United States.* FWSOBS-70/31, U.S. Fish and Wildlife Service, Department of the Interior, 1979.

Environmental Laboratory. *US Army Corps of Engineers Wetlands Delineation Manual.* Technical Report Y-87-1, Vicksburg, Miss.: US Army Corps of Engineers Waterways Experiment Station, 1987.

Hitchcock, C. Leo, Arthur Cronquist, Marion Owensby, and J. W. Thompson. *Vascular Plants of the Pacific Northwest.* Seattle: University of Washington Press, 2018 update.

Hruby 2014. *Washington State Wetland Rating System for Western Washington:* 2014 (Publication #14-06-029). Olympia, WA: Washington Department of Ecology.

Lichvar, R.W. *National Wetland Plant List.* ERCD/CRREL TR-12-11, Hanover, NH: U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory, 2016.

Natural Resources Conservation Service. *Web Soil Survey.* 2023. http://soils.usda.gove/use/hydric/lists/state.html

King County. 2023. King County Critical Areas Code, Chapter 21A.24.

King County. IMap interactive mapping tool. Accessed January 2023.

U.S. Army Corps of Engineers. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0).* Final Report, U. S. Army Corps of Engineers, Wetlands Regulatory Assistance Program, 2010.

U.S. Fish and Wildlife Service. *National Wetlands Inventory, Wetlands Online Mapper.* 2023. http://wetlandsfws.er.usgs.gov/wtlnds/launch.html.

Washington State Department of Fish and Wildlife. "*Priority Habitats and Species Database*." 2023. www.wdfw.wa.gov/mapping/phs

Washington State Department of Natural Resources. (2023). *Natural Heritage Information System*. Retrieved from http://www1.dnr.wa.gov/nhp/refdesk/datasearch/

FIGURES

Figure 1: Existing Conditions Map
Figure 2: Stormwater Conveyance Map
Figure 3: Tree Replacement Plan
Figure 4: Container Tree Planting Detail

EXISTING CONDITIONS MAP

Department of Local Services
Permitting Division

Residential Site Plan Template
11" x 17"

For Permitting Use

Received Date _____

Max. Impervious Surface Allowed _____
Max. Bldg. Height Allowed _____
Min. Bldg. setback from Street _____
Min. Garage setback from Street _____
Min. Bldg. setback from Interior _____

Signature _____
Date _____

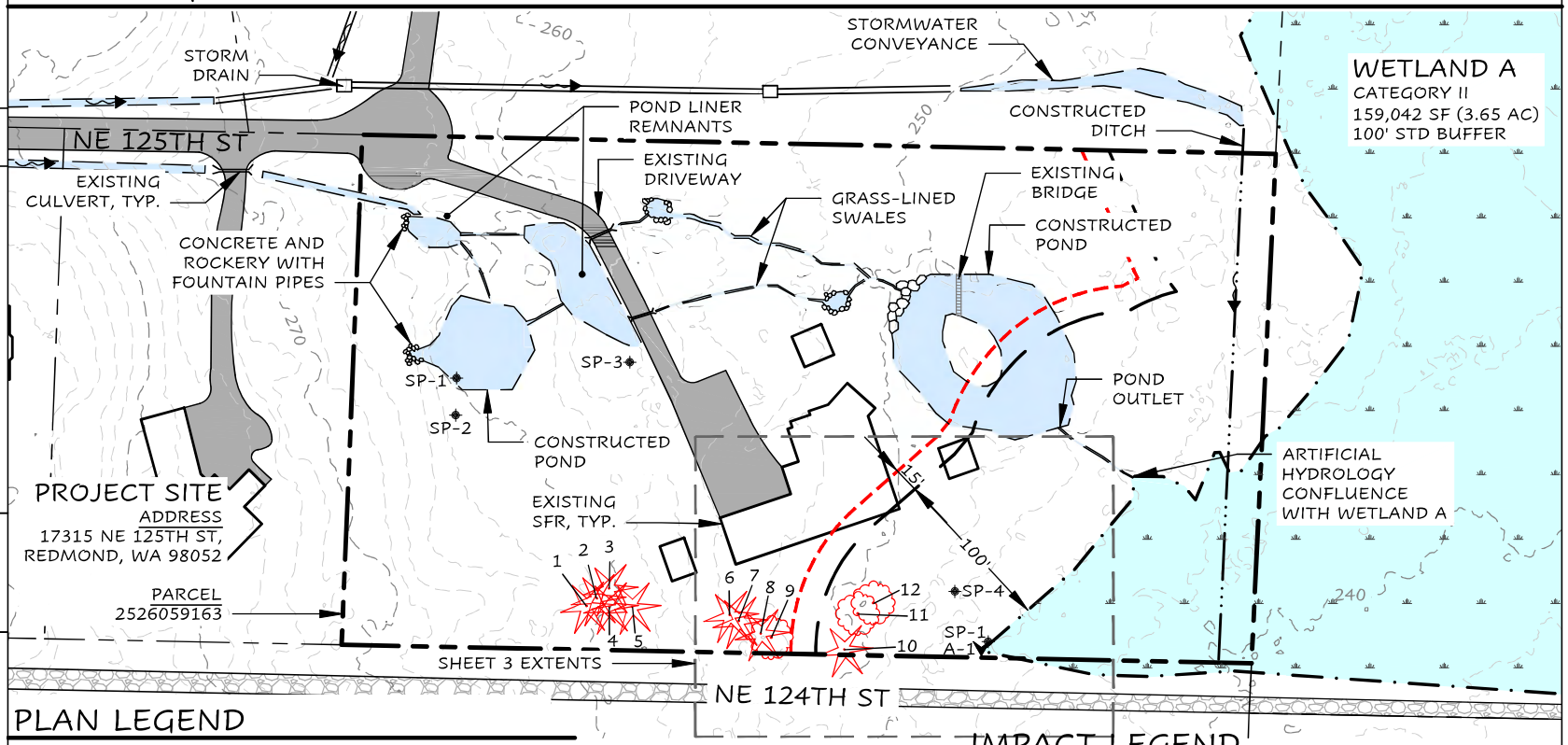
Building Approval
Signature _____
Date _____

Engineering / Drainage Approval
Signature _____
Date _____

Critical Areas Approval
Signature _____
Date _____

Clearing / Grading Approval
Signature _____
Date _____

Fire Approval
Signature _____
Date _____



PLAN LEGEND

- PROPERTY LINE
- EXISTING WETLAND
- WETLAND BUFFER
- A-# WETLAND FLAG LOCATION
- SP-# SOIL TEST PIT LOCATION
- UNREGULATED WATER FEATURES/ OPEN PORTIONS OF WATER CONVEYANCE
- CONSTRUCTED DITCH
- 15-FT BUILDING SETBACK (BSBL)
- 100 EXISTING CONTOUR (2-FT)
- DECIDUOUS - CONIFER LOCATION OF REMOVED TREES
- STORM DRAINS CONNECTED TO PIPED CULVERTS

GRAPHIC SCALE
0 35' 70' 140'
1"=70'
(IN FEET)

N

PARCEL DATA EXTRACTED FROM KING COUNTY GIS. ELEVATION DATA EXTRACTED FROM 2021 LiDAR DATA. WETLAND BOUNDARIES LOCATED WITH EOS ARROW 100 SUB-METER GPS DEVICE.

IMPACT LEGEND

TREE #	SPECIES	DBH (IN.)	WITHIN BUFFER?	PROPOSED REPLACEMENT TREES
1	DOUGLAS FIR	38	N	0
2	DOUGLAS FIR	40	N	0
3	DOUGLAS FIR	20	N	0
4	DOUGLAS FIR	28	N	0
5	DOUGLAS FIR	30	N	0
6	DOUGLAS FIR	24	N	0
7	DOUGLAS FIR	26	N	0
8	DOUGLAS FIR	24	N	0
9	RED ALDER	10	N	0
10	DOUGLAS FIR	12	Y	3
11	RED ALDER	14	Y	3
12	RED ALDER	28	Y	3

Permit Number ENFR23-0425 Parcel Number 2526059163 Applicant Name MARTHA HSEUH

Site Address 17315 NE 125TH ST REDMOND, WA 98052

Engineering Scale: 1" = 70

Sheet 1 of 4

Department of Local Services
Permitting Division

Residential Site Plan Template
11" x 17"

For Permitting Use

Received Date _____

Max. Impervious Surface Allowed _____
Max. Bldg. Height Allowed _____
Min. Bldg. setback from Street _____
Min. Garage setback from Street _____
Min. Bldg. setback from Interior _____

Signature _____
Date _____

Building Approval
Signature _____
Date _____

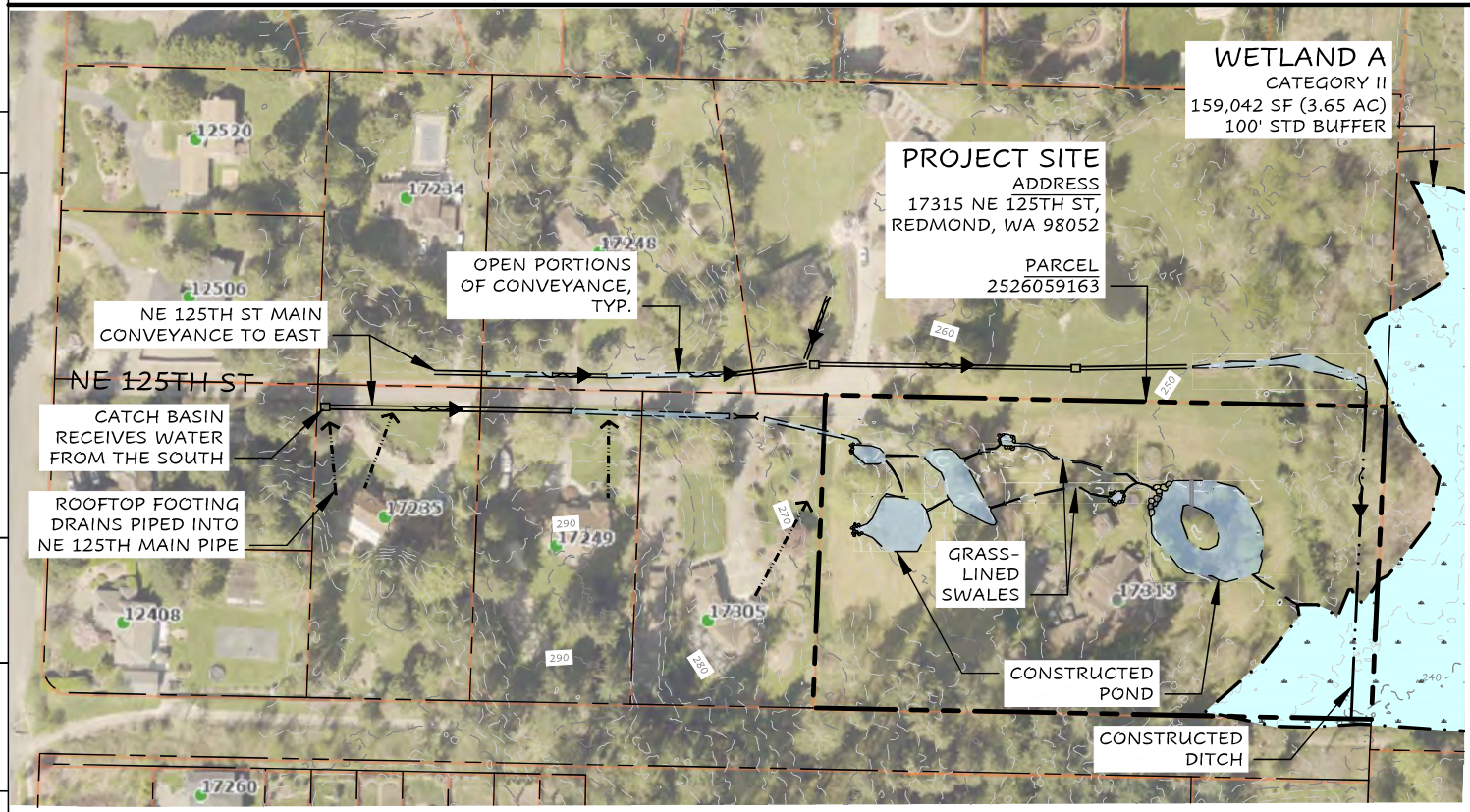
Engineering / Drainage Approval
Signature _____
Date _____

Critical Areas Approval
Signature _____
Date _____

Clearing / Grading Approval
Signature _____
Date _____

Fire Approval
Signature _____
Date _____

STORMWATER CONVEYANCE MAP



PLAN LEGEND

- PROPERTY LINE
- EXISTING WETLAND
- UNREGULATED WATER FEATURES/ OPEN PORTIONS OF WATER CONVEYANCE
- CONSTRUCTED DITCH
- 100 EXISTING CONTOUR (2-FT)
- STORM DRAINS CONNECTED TO PIPED CULVERTS
- ROOFTOP FOOTING DRAINS

GRAPHIC SCALE

0 60' 120' 240'

1"=120'
(IN FEET)

N

PARCEL DATA EXTRACTED FROM KING COUNTY GIS. ELEVATION DATA EXTRACTED FROM 2021 LiDAR DATA. WETLAND BOUNDARIES LOCATED WITH EOS ARROW 100 SUB-METER GPS DEVICE.

Permit Number ENFR23-0425 Parcel Number 2526059163 Applicant Name MARTHA HSEUH Site Address 17315 NE 125TH ST REDMOND, WA 98052 Engineering Scale: 1" = 120 Sheet 2 of 4

Department of Local Services
Permitting Division

Residential Site Plan Template
11" x 17"

For Permitting Use

Received Date _____

Max. Impervious Surface Allowed _____
Max. Bldg. Height Allowed _____
Min. Bldg. setback from Street _____
Min. Garage setback from Street _____
Min. Bldg. setback from Interior _____

Signature _____
Date _____

Building Approval
Signature _____
Date _____

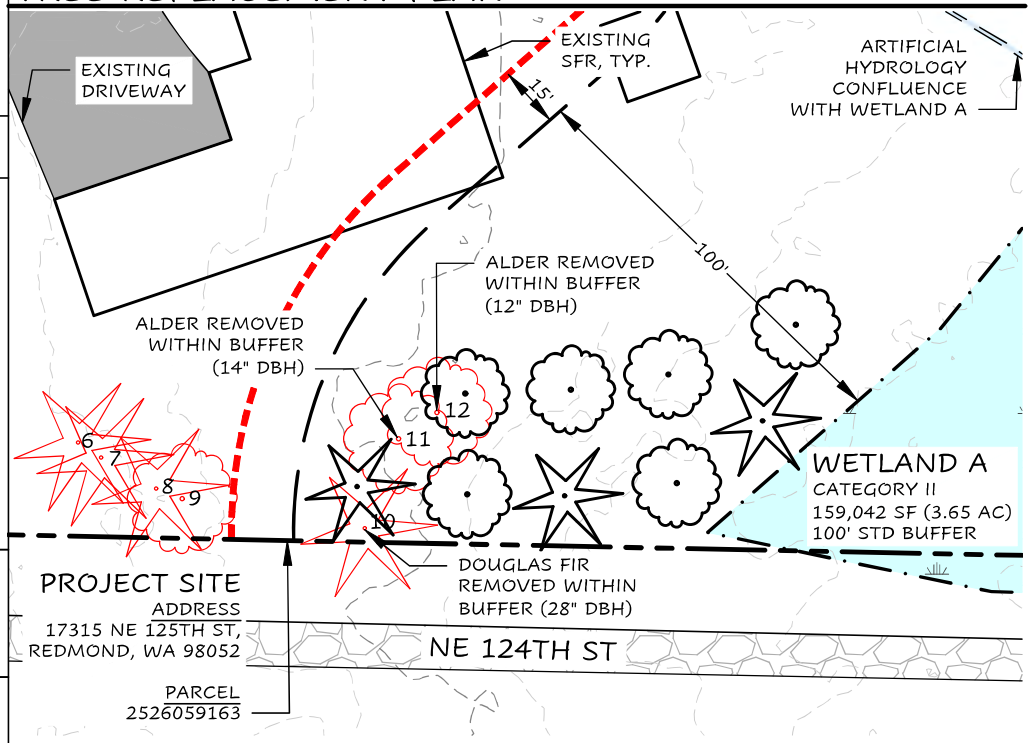
Engineering / Drainage Approval
Signature _____
Date _____

Critical Areas Approval
Signature _____
Date _____

Clearing / Grading Approval
Signature _____
Date _____

Fire Approval
Signature _____
Date _____

TREE REPLACEMENT PLAN



PLAN LEGEND

- PROPERTY LINE
- EXISTING WETLAND
- WETLAND BUFFER
- 15-FT BUILDING SETBACK (BSBL)
- 100 EXISTING CONTOUR (2-FT)
- DECIDUOUS - CONIFER LOCATION OF REMOVED TREES

PARCEL DATA EXTRACTED FROM KING COUNTY GIS.
ELEVATION DATA EXTRACTED FROM 2021 LiDAR DATA.
WETLAND BOUNDARIES LOCATED WITH EOS ARROW 100 SUB-METER GPS DEVICE.

GRAPHIC SCALE
0 15' 30' 60'
1"=30'
(IN FEET)

N

IMPACT LEGEND

TREE #	SPECIES	DBH (IN.)	WITHIN BUFFER?	PROPOSED REPLACEMENT TREES
1	DOUGLAS FIR	38	N	0
2	DOUGLAS FIR	40	N	0
3	DOUGLAS FIR	20	N	0
4	DOUGLAS FIR	28	N	0
5	DOUGLAS FIR	30	N	0
6	DOUGLAS FIR	24	N	0
7	DOUGLAS FIR	26	N	0
8	DOUGLAS FIR	24	N	0
9	RED ALDER	10	N	0
10	DOUGLAS FIR	12	Y	3
11	RED ALDER	14	Y	3
12	RED ALDER	28	Y	3

PLANT SCHEDULE

TREE REPLACEMENT IN FORESTED WETLAND BUFFER

SCIENTIFIC NAME	COMMON NAME	QTY.	WL STATUS	AVERAGE SPACING	SIZE (MIN.)	NOTES
ALNUS RUBRA	RED ALDER	6	FAC	10' O.C.	2-3' HT.	SINGLE TRUNK, WELL BRANCHED
PSEUDOTSUGA MENZIESII	DOUGLAS FIR	3	FACU	10' O.C.	2-3' HT.	SINGLE TRUNK, WELL BRANCHED

Permit Number ENFR23-0425 Parcel Number 2526059163 Applicant Name MARTHA HSEUH Site Address 17315 NE 125TH ST REDMOND, WA 98052 Engineering Scale: 1" = 30 Sheet 3 of 4

Department of Local Services
Permitting Division

Residential Site Plan Template
11" x 17"

For Permitting Use

Received Date _____

Max. Impervious Surface Allowed _____
Max. Bldg. Height Allowed _____
Min. Bldg. setback from Street _____
Min. Garage setback from Street _____
Min. Bldg. setback from Interior _____

Signature _____
Date _____

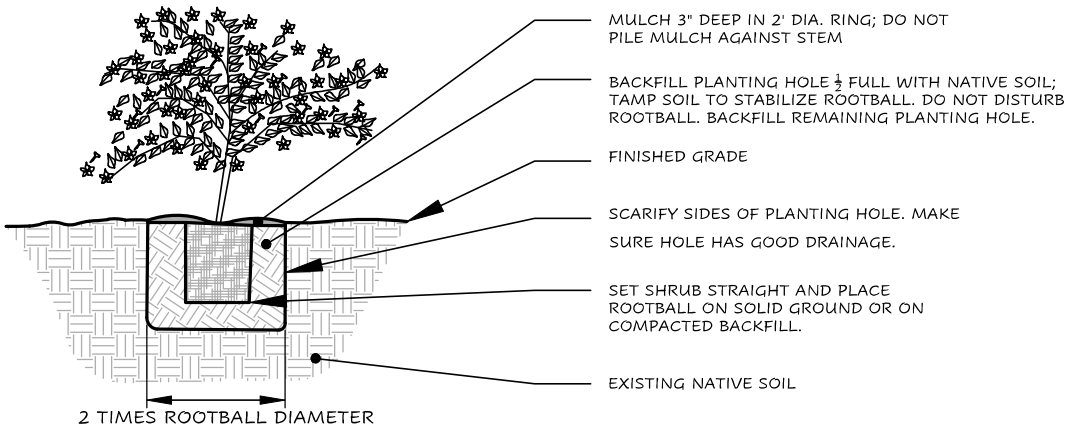
Building Approval
Signature _____
Date _____

Engineering / Drainage Approval
Signature _____
Date _____

Critical Areas Approval
Signature _____
Date _____

Clearing / Grading Approval
Signature _____
Date _____

Fire Approval
Signature _____
Date _____



1 CONTAINER TREE PLANTING DETAIL

N.T.S

PLANTING SPECIFICATIONS

1. ALL PLANTS SHOULD BE INSTALLED BETWEEN SEPTEMBER 1ST AND NOVEMBER 28TH UNLESS SUPPLEMENTAL WATERING IS PROVIDED IMMEDIATELY DURING PLANT INSTALLATION.
2. ALL PLANTS SHALL BE NURSERY GROWN (IN WESTERN WASHINGTON OR OREGON) FOR AT LEAST 1 YEAR FROM PURCHASE DATE, FREE FROM DISEASE OR PESTS, WELL-ROOTED, BUT NOT ROOT-BOUND AND TRUE TO SPECIES.
3. PLANTING IN UNDISTURBED, NON-GRADED AREAS: PLANTS INSTALLED IN UNDISTURBED AREAS SHALL BE INTEGRATED WITH EXISTING NATIVE VEGETATION AND PLANTED AS SHOWN IN PLANTING PLAN.
4. PLANT LAYOUT SHALL BE CONDUCTED AND APPROVED BY EEP PRIOR TO INSTALLATION AND APPROVED UPON COMPLETION OF PLANTING. NON-GRADED BUFFER AREAS: PROVIDE A 36-INCH DIAMETER, 3-INCH DEEP MULCH RING AROUND THE BASE OF EACH TREE.
2. WATER PLANTS THOROUGHLY AFTER MULCHING.
3. PLANTINGS SHALL BE HAND-WATERED OR WATERED VIA TEMPORARY IRRIGATION SYSTEM CAPABLE OF PROVIDING 1/2" OF FLOW TO EACH PLANT AT LEAST 2 TIMES PER WEEK FROM JULY 1 - OCTOBER 31 FOR THE FIRST TO YEARS AFTER PLANTING.

APPENDIX A

Wetland Determination Datasheets (*i.e.*, "Test Pits")
Eastside Environmental Pros, 2024.

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

Project/Site: EE-404 City/County: King Sampling Date: 7 March 2024

Applicant/Owner: Hsueh State: WA Sampling Point: SP-1

Investigator(s): RB Section, Township, Range: S25-T26N-R05E

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): A Lat: 47.71154 Long: -122.10694 Datum: NAD83

Soil Map Unit Name: Alderwood gravelly sandy 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 X, Soil X, or Hydrology X 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 point taken at the edge of the "log pond" in the western portion of the property. This feature was artificially constructed from a nonwetland site and includes an impermiable layer of bentonite clay. Hydrology is sourced exclusivly by storm and surface water and the area is maintained landscaped area. Therefore, the sample point includes signficantly disturbed vegetation, soils, and hydrology. Normal climatic conditions.Sample point does meet wetland criteria.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Rubus spectabilis*	20	Yes	FAC
2.			
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Agrostis capillaris*	10	Yes	FAC
2. *Ranunculus rapens*	10	Yes	FAC
3. *Epilobium ciliatum*	10	Yes	FACW
4.			
5.			
6.			
7.			
8.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: 15 ft)			
1. *None*			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 70 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☒ Dominance Test is >50%

☐ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ 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: Hydrophytic vegetation criteria met. Sample point taken in a lawn and landscaped area and vegetation is disturbed.

SOIL

Sampling Point: SP-1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	2.5Y 4/2	100					loam	
5-8	5Y 6/1	90	10YR 5/4	10	C	M	clay	bentonite clay, very compacted

[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 (**except MLRA 1**))
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Hydric soil criteria met. Starting at 5 inches below ground surface a very dense and compacted layer of dry bentonite clay was identified. Soils could not be excavated below 8 inches due to the compaction.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1)(**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6(**LRR A**)
- ☐Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 3

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

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): at surface

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Wetland hydrology criteria met. Bentonite clay layer is acting as an impermeable layer and causing water to perch in this area. Hydrology source is storm and surface water that has been intentionally routed to this feature.No groundwater or water table present in this location. No saturation present below 5 inches- bentonite clay layer is completely dry.

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

Project/Site: EE-404 City/County: King Sampling Date: 7 March 2024

Applicant/Owner: Hsueh State: WA Sampling Point: SP-2

Investigator(s): RB Section, Township, Range: S25-T26N-R05E

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): none Slope (%): 2

Subregion (LRR): A Lat: 47.71154 Long: -122.10694 Datum: NAD83

Soil Map Unit Name: Alderwood gravelly sandy 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 X, 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 point taken south of SP-1, within a maintained lawn area. Normal climatic conditions. Wetland criteria not met.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Agrostis capillaris*	80	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: 15 ft)			
1. *None*			
2.			
	= Total Cover		

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

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	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 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: Hydrophytic vegetation criteria met, however, only lawn grass is located in this area. 20% moss cover.

SOIL

Sampling Point: SP-2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					loam	
8-14	10YR 4/2	80					loam	
	10YR 4/3	20						mixed matrix
14-20	2.5Y 5/1	85	10YR 5/6	15	C	M	loam	prominent redox concentrations

[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 (**except MLRA 1**))
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: Hydric soil criteria not met.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1)(**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6(**LRR A**)
- ☐Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 18

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: Wetland hydrology criteria not met.

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

Project/Site: EE-404 City/County: King Sampling Date: 7 March 2024

Applicant/Owner: Hsueh State: WA Sampling Point: SP-3

Investigator(s): RB Section, Township, Range: S25-T26N-R05E

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): none Slope (%): 2

Subregion (LRR): A Lat: 47.71154 Long: -122.10694 Datum: NAD83

Soil Map Unit Name: Alderwood gravelly sandy 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 X, Soil X, or Hydrology X 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 point taken west of SP-1, just outside the southern edge of one of the ponded features.This feature was artifically constructed from a nonwetland site and includes an impermiable layer of bentonite clay. Hydrology is sourced exclusivly by storm and surface water and the area is maintained landscaped area. Therefore, the sample point includes signficantly disturbed vegetation, soils, and hydrology. Normal climatic conditions.Sample point does meet wetland criteria.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Alnus rubra*	60	Yes	FAC
2. *Pseudotsuga menziesii*	10	No	FACU
3.			
4.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Agrostis capillaris*	50	Yes	FAC
2. *Ranunculus rapens*	30	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	80	= Total Cover	
Woody Vine Stratum (Plot size: 15 ft)			
1. *None*			
2.			
		= Total Cover	

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

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	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☒ Dominance Test is >50%

☐ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ 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: Hydrophytic vegetation criteria is met.

SOIL

Sampling Point: SP-3

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					loam	
10-25	10YR 3/2	85	10YR 4/2	5	D	M	loam	
	10YR 3/4	10						mixed matrix
25-29	5Y 6/1	100	10YR 4/6	15	C	M	clay	bentonite clay

[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 (**except MLRA 1**))
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: Hydric soil criteria not met. Starting at 25 inches below ground surface a very dense and compacted layer of dry bentonite clay was identified.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1)(**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6(**LRR A**)
- ☐Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 2

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Wetland hydrology criteria met. Bentonite clay layer is acting as an impermeable layer and causing water to perch in this area. Hydrology source is storm and surface water that has been intentionally routed to this feature.No groundwater or water table present in this location. No saturation present below 25 inches- bentonite clay layer is completely dry.

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

Project/Site: EE-404 City/County: King Sampling Date: 7 March 2024

Applicant/Owner: Hsueh State: WA Sampling Point: SP-4

Investigator(s): RB Section, Township, Range: S25-T26N-R05E

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): none Slope (%): 3

Subregion (LRR): A Lat: 47.71154 Long: -122.10694 Datum: NAD83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 point taken in the southeastern portion of the property. Normal climatic conditions. Sample point does not meet wetland criteria.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer macrophyllum*	30	Y	FACU
2. *Alnus rubra*	60	Y	FAC
3.			
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Rubus spectabilis*	60	Y	FAC
2. *Sambucus racemosa*	20	Y	FACU
3. *Oemleria cerasiformis*	10	N	FACU
4.			
5.			
	90	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Rubus ursinus*	10	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	10	= Total Cover	
Woody Vine Stratum (Plot size: 15 ft)			
1. *None*			
2.			
		= Total Cover	

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

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 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: Hydrophytic vegetation criteria not met.

SOIL

Sampling Point: SP-4

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/2	100					loam	

[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 (**except MLRA 1**))
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks: Hydric soil criteria not met.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1)(**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6(**LRR A**)
- ☐Frost-Heave Hummocks (D7)

Field Observations:

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

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

Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 19

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks: Wetland hydrology criteria not met.

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

Project/Site: EE-404 City/County: King Sampling Date: 7 March 2024

Applicant/Owner: Hsueh State: WA Sampling Point: SP-5

Investigator(s): RB Section, Township, Range: S25-T26N-R05E

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): A Lat: 47.71154 Long: -122.10694 Datum: NAD83

Soil Map Unit Name: Alderwood gravelly sandy 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 – Attach site map showing sampling point locations, transects, important features, etc.

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 point taken in the southeastern portion of the Site within Wetland A. Normal climatic conditions. Sample point does meet wetland criteria.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Alnus rubra*	50	Y	FAC
2. *Populus balsamiferia*	10	N	FAC
3.			
4.			
	60 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Rubus spectabilis*	60	Y	FAC
2. *Rubus armeniacus*	30	Y	FAC
3.			
4.			
5.			
	90 = Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Ranunculus rapens*	10	N	FAC
2. *Tolmiea menziesii*	60	Y	FAC
3. *Geranium robertianum*	5	N	FACU
4.			
5.			
6.			
7.			
8.			
	75 = Total Cover		
Woody Vine Stratum (Plot size: 15 ft)			
1. *None*			
2.			
	= Total Cover		

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 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: Hydrophytic vegetation criteria is met.

SOIL

Sampling Point: SP-5

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/2	100					loam	
7-15	10YR 3/2	90	10YR 4/4	5	C	M	loam	prominent redox concentrations
			10YR 4/1	5	D	M		prominent redox depletions
15-20	10YR 4/2	73	10YR 4/6	8	C	M	loam	prominent redoc concentrations
	10YR 4/4	20						mixed matrix

[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 (**except MLRA 1**))
- ☐ 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, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: Hydric soil criteria is met.

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 (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible 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 Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stressed Plants (D1)(**LRR A**)
- ☐ 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 Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6(**LRR A**)
- ☐Frost-Heave Hummocks (D7)

Field Observations:

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

Water Table Present? Yes ☒ No ☐ Depth (inches): 4

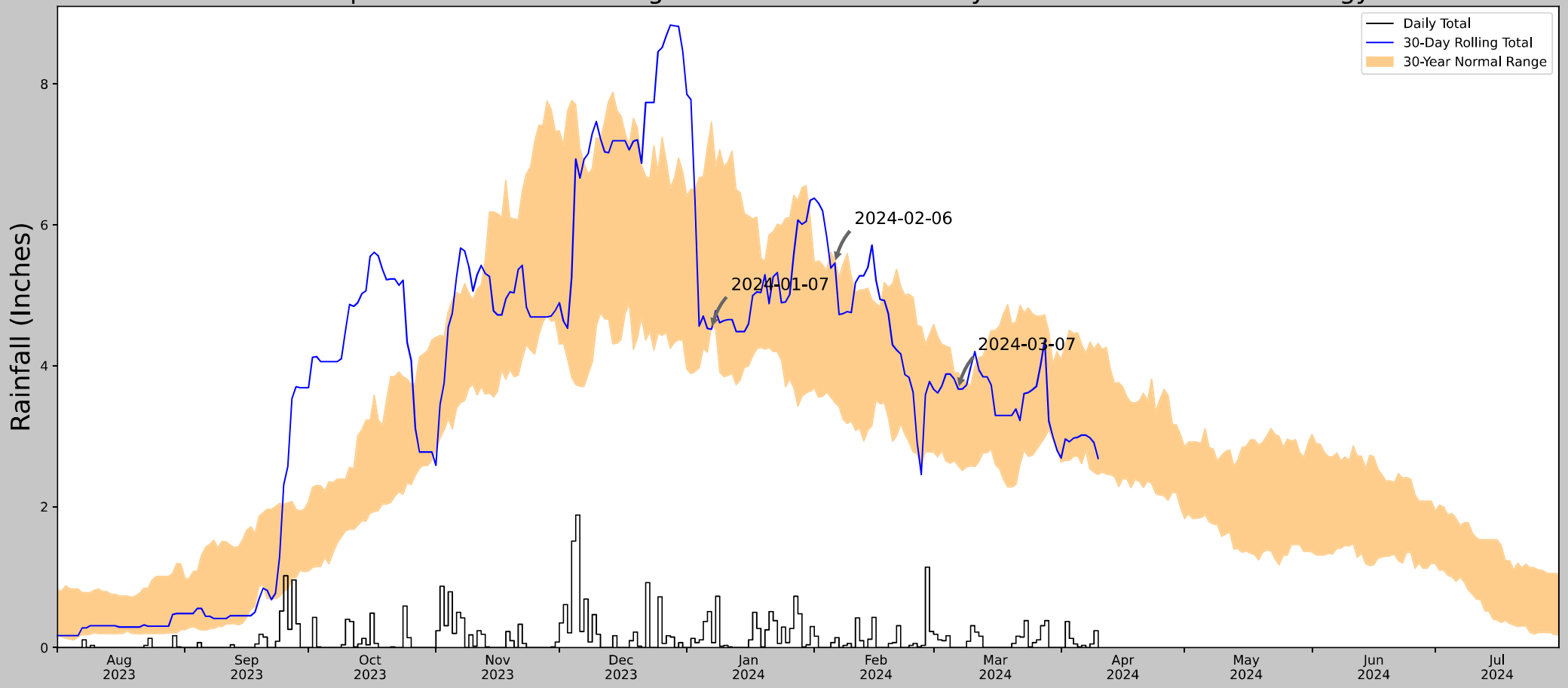
Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 2

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks: Wetland hydrology criteria is met.

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	47.71154, -122.10694
Observation Date	2024-03-07
Elevation (ft)	258.183
Drought Index (PDSI)	Moderate drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-07	2.580315	3.9	3.669291	Normal	2	3	6
2024-02-06	3.47441	5.503543	5.456693	Normal	2	2	4
2024-01-07	4.573622	7.459449	4.519685	Dry	1	1	1
Result							Normal Conditions - 11

US Army Corps of Engineers

ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
SEATTLE SAND PT WFO	47.6872, -122.2553	60.039	7.101	198.144	4.602	10916	90
SEATTLE URBAN SITE	47.65, -122.3	19.029	3.306	41.01	1.623	62	0
SEATTLE BOEING FLD	47.5456, -122.3147	24.934	10.167	35.105	4.932	221	0
RENTON MUNI AP	47.495, -122.2144	18.045	13.416	41.994	6.601	54	0
MONROE	47.8453, -121.9944	120.079	16.314	60.04	8.321	98	0
KENT	47.4172, -122.2433	28.871	18.664	31.168	8.981	1	0

APPENDIX B

Wetland Rating Forms
Eastside Environmental Pros, 2024.

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Date of site visit:
Rated by KM Trained by Ecology? ☒ Yes ☐ No Date of training 10-2018
HGM Class used for rating Wetland has multiple HGM classes? ☐ Y ☐ N

NOTE: **Form is not complete without the figures requested** *(figures can be combined)*. Source of base aerial photo/map _____

OVERALL WETLAND CATEGORY (based on functions ☐ or special characteristics ☐)

1. Category of wetland based on FUNCTIONS

- ☐ **Category I** – Total score = 23 - 27
- ☒ **Category II** – Total score = 20 - 22
- ☐ **Category III** – Total score = 16 - 19
- ☐ **Category IV** – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
		Circle the appropriate ratings		
Site Potential	M	M	M	
Landscape Potential	M	H	L	
Value	H	H	M	TOTAL
Score Based on Ratings	7	8	5	20

Score for each function based on three ratings *(order of ratings is not important)*

9 = H,H,H
8 = H,H,M
7 = H,H,L
7 = H,M,M
6 = H,M,L
6 = M,M,M
5 = H,L,L
5 = M,M,L
4 = M,L,L
3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC		CATEGORY
Estuarine	☐	I II
Wetland of High Conservation Value	☐	I
Bog	☐	I
Mature Forest	☐	I
Old Growth Forest	☐	I
Coastal Lagoon	☐	I II
Interdunal	☐	I II III IV
None of the above		☐

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream *(can be added to another figure)*	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

Wetland name or number

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

☒ NO – go to 2 ☐ **YES** – the wetland class is **Tidal Fringe** – go to 1.1

1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

☐ **NO – Saltwater Tidal Fringe (Estuarine)** ☐ **YES – Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

☒ NO – go to 3 ☐ **YES** – The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?
___The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size; ___At least 30% of the open water area is deeper than 6.6 ft (2 m).

☒ NO – go to 4 ☐ **YES –** The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?
☐ The wetland is on a slope (*slope can be very gradual*),
☐ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
☐ The water leaves the wetland **without being impounded**.

☒ NO – go to 5 ☐ **YES –** The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?
☐ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
☐ The overbank flooding occurs at least once every 2 years.

☒ NO – go to 6 ☐ **YES** – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

Wetland name or number

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

☐ NO – go to 7 ☒ **YES** – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

☒ NO – go to 8 ☐ **YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number

DEPRESSIONAL AND FLATS WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0. Does the site have the potential to improve water quality?	
D 1.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1	2
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic *(use NRCS definitions).* Yes = 4 No = 0	0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): Wetland has persistent, ungrazed, plants > 95% of area points = 5 Wetland has persistent, ungrazed, plants > ½ of area points = 3 Wetland has persistent, ungrazed plants > $^1/_{10}$ of area points = 1 Wetland has persistent, ungrazed plants < $^1/_{10}$ of area points = 0	3
D 1.4. Characteristics of seasonal ponding or inundation: *This is the area that is ponded for at least 2 months. See description in manual.* Area seasonally ponded is > ½ total area of wetland points = 4 Area seasonally ponded is > ¼ total area of wetland points = 2 Area seasonally ponded is < ¼ total area of wetland points = 0	2
Total for D 1 Add the points in the boxes above	7

Rating of Site Potential If score is: ☐ **12-16 = H** ☒ **6-11 = M** ☐ **0-5 = L** *Record the rating on the first page*

D 2.0. Does the landscape have the potential to support the water quality function of the site?	
D 2.1. Does the wetland unit receive stormwater discharges? Yes = 1 No = 0	1
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland? Yes = 1 No = 0	0
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source_____ Yes = 1 No = 0	0
Total for D 2 Add the points in the boxes above	2

Rating of Landscape Potential If score is: ☐ **3 or 4 = H** ☒ **1 or 2 = M** ☐ **0 = L** *Record the rating on the first page*

D 3.0. Is the water quality improvement provided by the site valuable to society?	
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes = 1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (*answer YES if there is a TMDL for the basin in which the unit is found*)? Yes = 2 No = 0	2
Total for D 3 Add the points in the boxes above	3

Rating of Value If score is: ☒ **2-4 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

DEPRESSIONAL AND FLATS WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation

D 4.0. Does the site have the potential to reduce flooding and erosion?

D 4.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet points = 2 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	2
D 4.2. Depth of storage during wet periods: *Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.* Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "headwater" wetland points = 3 Wetland is flat but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in) points = 0	3
D 4.3. Contribution of the wetland to storage in the watershed: *Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.* The area of the basin is less than 10 times the area of the unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit points = 0 Entire wetland is in the Flats class points = 5	5
Total for D 4 Add the points in the boxes above	10

Rating of Site Potential If score is: ☐ **12-16 = H** ☒ **6-11 = M** ☐ **0-5 = L** *Record the rating on the first page*

D 5.0. Does the landscape have the potential to support hydrologic functions of the site?

D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0	1
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1 No = 0	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Yes = 1 No = 0	1
Total for D 5 Add the points in the boxes above	3

Rating of Landscape Potential If score is: ☒ **3 = H** ☐ **1 or 2 = M** ☐ **0 = L** *Record the rating on the first page*

D 6.0. Are the hydrologic functions provided by the site valuable to society?

D 6.1. The unit is in a landscape that has flooding problems. *Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.* The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 • Surface flooding problems are in a sub-basin farther down-gradient. points = 1 Flooding from groundwater is an issue in the sub-basin. points = 1 The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. *Explain why* points = 0 There are no problems with flooding downstream of the wetland. points = 0	2
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	0
Total for D 6 Add the points in the boxes above	2

Rating of Value If score is: ☒ **2-4 = H** ☐ **1 = M** ☐ **0 = L** *Record the rating on the first page*

HABITAT FUNCTIONS - These questions apply to wetlands of all HGM classes. Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class.* Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- ☐ Aquatic bed
- ☒ Emergent
- ☒ Scrub-shrub (areas where shrubs have > 30% cover)
- ☒ Forested (areas where trees have > 30% cover)

4 structures or more: points = 4
3 structures: points = 2
2 structures: points = 1
1 structure: points = 0

If the unit has a Forested class, check if:

☒ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

4

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

- ☐ Permanently flooded or inundated
- ☒ Seasonally flooded or inundated
- ☐ Occasionally flooded or inundated
- ☒ Saturated only
- ☐ Permanently flowing stream or river in, or adjacent to, the wetland
- ☒ Seasonally flowing stream in, or adjacent to, the wetland
- ☐ **Lake Fringe wetland** **2 points**
- ☐ **Freshwater tidal wetland** **2 points**

4 or more types present: points = 3
3 types present: points = 2
2 types present: points = 1
1 type present: points = 0

2

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft^2.

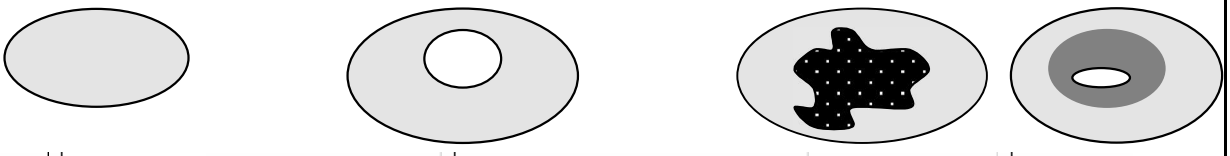
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle***

If you counted: > 19 species — points = 2
5 - 19 species — points = 1
< 5 species — points = 0

2

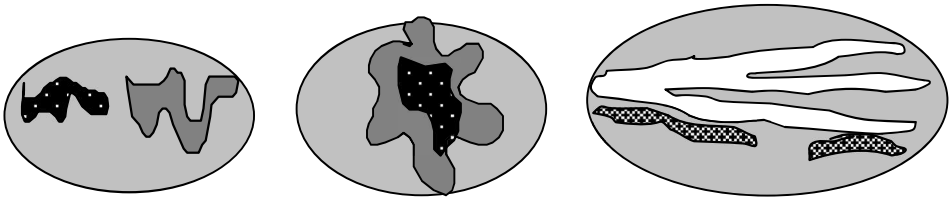
H 1.4. Interspersion of habitats

Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points **Low** = 1 point **Moderate** = 2 points

All three diagrams in this row are **HIGH** = 3points



3

Wetland name or number

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. *The number of checks is the number of points.* ☒ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). ☒ Standing snags (dbh > 4 in) within the wetland ☐ Undercut banks are present for at least 6.6 ft (2 m) **and/or** overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present *(cut shrubs or trees that have not yet weathered where wood is exposed)* ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated *(structures for egg-laying by amphibians)* ☐ Invasive plants cover less than 25% of the wetland area in every stratum of plants (*see H 1.1 for list of strata*)	2
Total for H 1 Add the points in the boxes above	13

Rating of Site Potential If score is: ☐ **15-18 = H** ☒ **7-14 = M** ☐ **0-6 = L** *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?

H 2.1. Accessible habitat (include *only habitat that directly abuts wetland unit*). *Calculate:* % undisturbed habitat 5 **+** [(% moderate and low intensity land uses)/2] 3 **=** 8% If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1 < 10% of 1 km Polygon points = 0	0
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat 10 **+** [(% moderate and low intensity land uses)/2] 5 **=** 15% Undisturbed habitat > 50% of Polygon points = 3 Undisturbed habitat 10-50% and in 1-3 patches points = 2 Undisturbed habitat 10-50% and > 3 patches points = 1 Undisturbed habitat < 10% of 1 km Polygon points = 0	1
H 2.3. Land use intensity in 1 km Polygon: If > 50% of 1 km Polygon is high intensity land use points = (- 2) ≤ 50% of 1 km Polygon is high intensity points = 0	-2
Total for H 2 Add the points in the boxes above	-1

Rating of Landscape Potential If score is: ☐ **4-6 = H** ☐ **1-3 = M** ☒ **< 1 = L** *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?

H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated.* Site meets ANY of the following criteria: points = 2 ☐ It has 3 or more priority habitats within 100 m (see next page) ☐ It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) ☐ It is mapped as a location for an individual WDFW priority species ☐ It is a Wetland of High Conservation Value as determined by the Department of Natural Resources ☐ It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1 Site does not meet any of the criteria above points = 0	1

Rating of Value If score is: ☐ **2 = H** ☒ **1 = M** ☐ **0 = L** *Record the rating on the first page*

Wetland name or number

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: ***NOTE:*** *This question is independent of the land use between the wetland unit and the priority habitat.*

☐ **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).

☐ **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).

☐ **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.

☐ **Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multilayered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.

☐ **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).

☒ **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.

☐ **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).

☐ **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.

☐ **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page).*

☐ **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.

☐ **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.

☐ **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.

☒ **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type *Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.*	**Category**
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? ☐ The dominant water regime is tidal, ☐ Vegetated, and ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to **SC 1.1** ☐ No= **Not an estuarine wetland**	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? ☐ Yes = **Category I** ☐ No - Go to **SC 1.2**	No
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are *Spartina*, see page 25) ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. ☐ The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. Yes = **Category I** No = **Category II**	No
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? ☐ Yes – Go to **SC 2.2** ☐ No – Go to **SC 2.3** SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? ☐ Yes **= Category I** ☐ No **= Not a WHCV** SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf ☐ Yes **– Contact WNHP/WDNR and go to SC 2.4** ☐ No **= Not a WHCV** SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? ☐ Yes **= Category I** ☐ No **= Not a WHCV**	No
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? *Use the key below.* ***If you answer YES you will still need to rate the wetland based on its functions.*** SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? ☐ Yes – Go to **SC 3.3** ☐ No – Go to **SC 3.2** SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? ☐ Yes – Go to **SC 3.3** ☐ No = **Is not a bog** SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? ☐ Yes = **Is a Category I bog** ☐ No – Go to **SC 3.4** **NOTE:** If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? ☐ Yes = **Is a Category I bog** ☐ No **= Is not a bog**	No

SC 4.0. Forested Wetlands Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? ***If you answer YES you will still need to rate the wetland based on its functions.*** ☐ **Old-growth forests** (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. ☐ **Mature forests** (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). ☐ Yes = **Category I** ☐ No = **Not a forested wetland for this section**	No
SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? ☐ The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks ☐ The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon *(needs to be measured near the bottom)* ☐ Yes – Go to **SC 5.1** ☐ No = **Not a wetland in a coastal lagoon** SC 5.1. Does the wetland meet all of the following three conditions? ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. ☐ The wetland is larger than $^1/_{10}$ ac (4350 ft^2) ☐ Yes = **Category I** ☐ No = **Category II**	No
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? ***If you answer yes you will still need to rate the wetland based on its habitat functions.*** In practical terms that means the following geographic areas: ☐ Long Beach Peninsula: Lands west of SR 103 ☐ Grayland-Westport: Lands west of SR 105 ☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109 ☐ Yes – Go to **SC 6.1** ☐ No = **not an interdunal wetland for rating** SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? ☐ Yes = **Category I** ☐ No – Go to **SC 6.2** SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? ☐ Yes = **Category II** ☐ No – Go to **SC 6.3** SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? ☐ Yes = **Category III** ☐ No = **Category IV**	No
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	N/A

This page left blank intentionally

PLAN LEGEND

- EXISTING WETLAND
- PALUSTRINE FORESTED, SATURATED ONLY
- PALUSTRINE SCRUB-SHRUB, SATURATED ONLY
- PALUSTRINE EMERGENT
- SEASONALLY PONDED
- 150-FOOT BOUNDARY

N

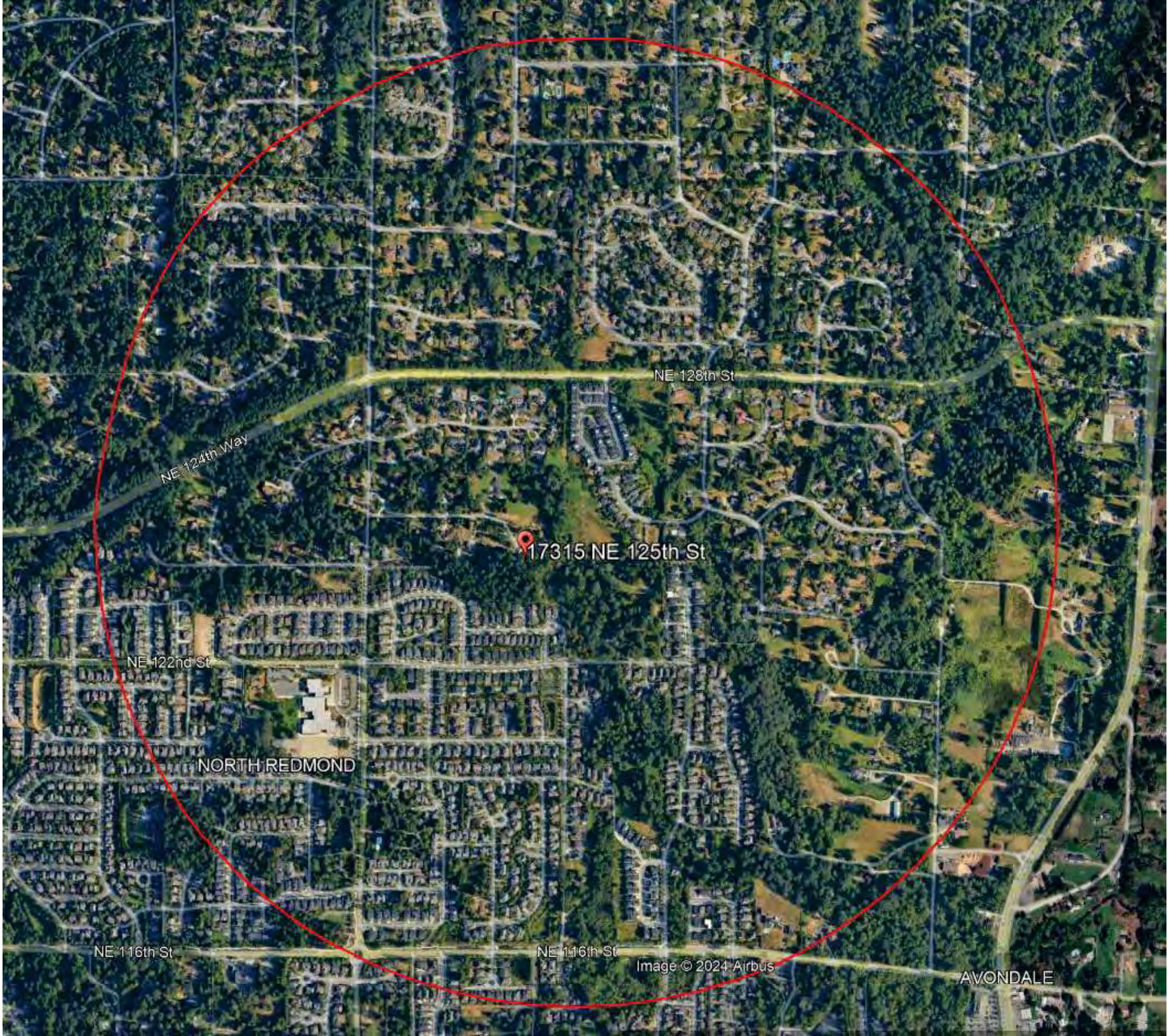
EASTSIDE ENVIRONMENTAL PROS, INC.
18500 156th Ave NE, Suite 203
Woodinville, Washington 98072
Bus (425) 949-6659

FIGURE #A

COWARDIN AND HYDROPERIOD CLASSES
HSUEH FEASIBILITY
KING COUNTY, WASHINGTON

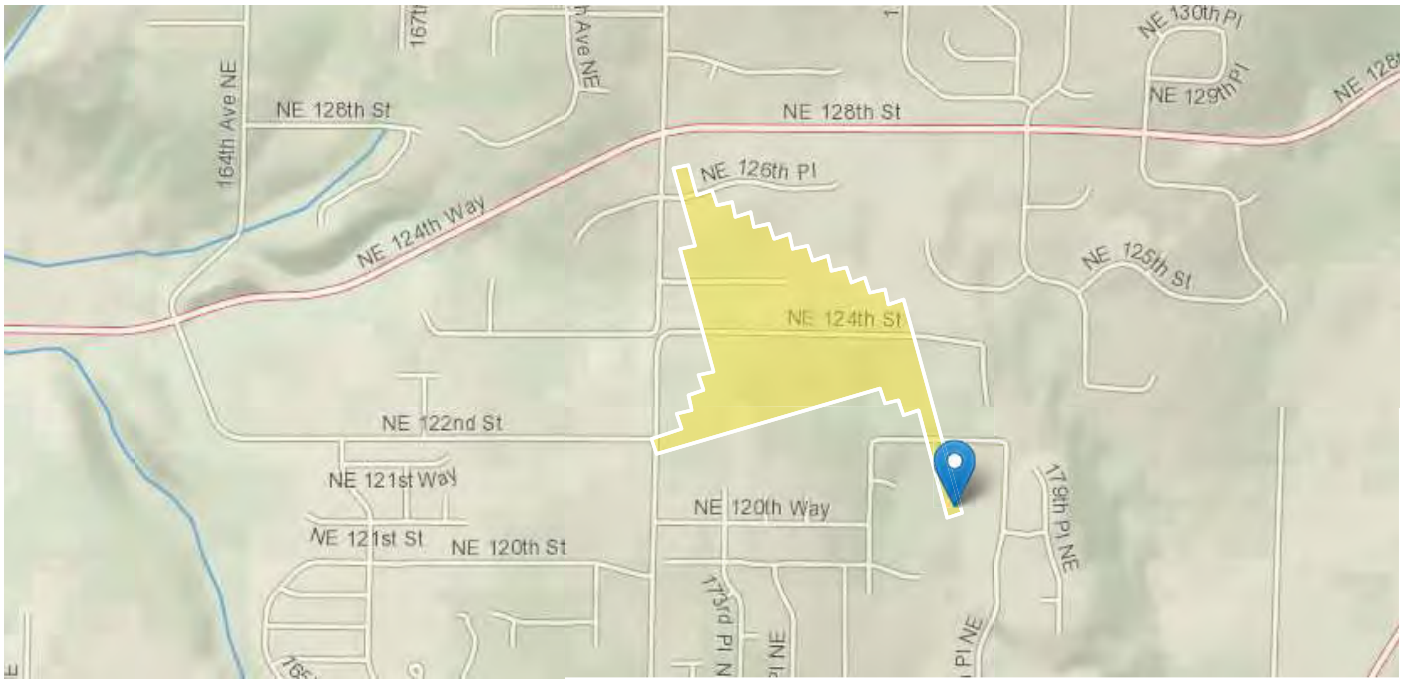
SCALE	DRAWN BY:
NTS	AS
DATE	
04-15-2024	
FIGURE	A

C:\Users\scott\Client ID 3542290\Eastside Environmental Pros - Documents\General\CAD Drive\EE-404 (Hsueh Feasibility Delineation)\Plans\EEP-404 CA 2024-02.dwg


NE 128th St
NE 124th Way
17315 NE 125th St
NE 122nd St
NORTH REDMOND
NE 116th St
NE 116th St
Image © 2024 Airbus
AVONDALE

StreamStats Report

Region ID: WA
Workspace ID: WA20240409233458705000
Clicked Point (Latitude, Longitude): 47.70814, -122.10312
Time: 2024-04-09 16:35:25 -0700



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.06	square miles

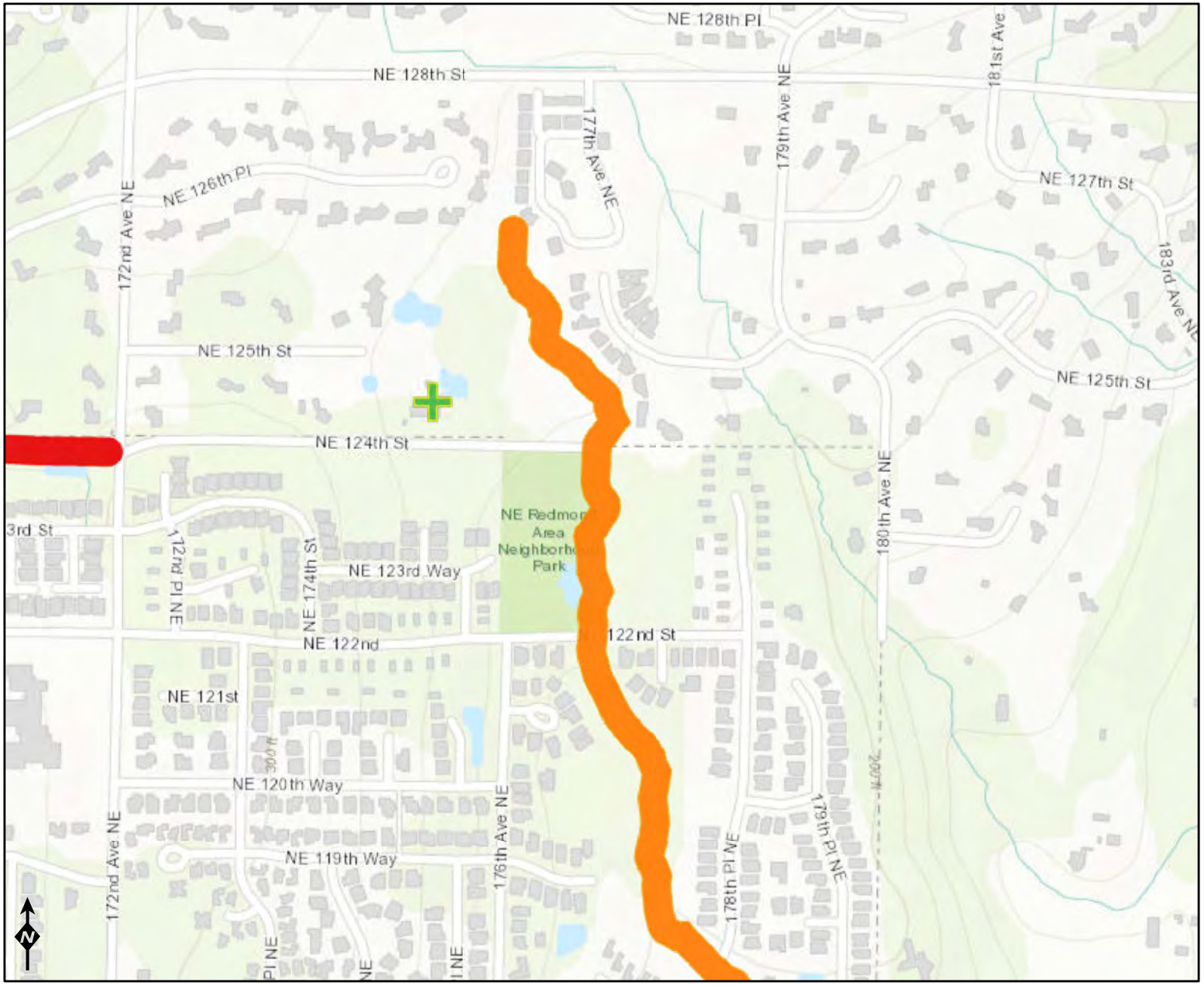
Application Version: 4.19.4

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

April 12, 2024

303(d) waterbodies



Assessed Water/Sediment

Water
- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1

Sediment
- Category 5 - 303d
- Category 4C
- Category 4B
- Category 4A
- Category 2
- Category 1

Miles
0 0.05 0.1 0.2

Esri, NASA, NGA, USGS, FEMA
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri

Bear-Evans Watershed
Fecal Coliform Bacteria
Total Maximum Daily Load

Water Quality Improvement Report

June 2008

Publication No. 08-10-026

DEPARTMENT OF
ECOLOGY
State of Washington