Staff Report & Recommendations

Lockwood Creek Subdivision: Type II

Critical Areas and Tree Removal Permits

State Environmental Policy Act (SEPA) Determination

(#2023-008-CAR/TREE/SEPA) May 30, 2023

PROPOSAL:	The applicant proposes to temporarily impact approximately 978 square feet of the buffer of a Type IV wetland (Wetland B). The applicant is proposing to mitigate the temporary impact by reseeding the impacted area with native seed mix. The applicant also proposes to impact approximately 1,178 square feet of area within the dripline of an Oregon white oak in the southwest corner of the project site and to remove 162 trees that would be mitigated by planting 290 new trees. The applicant is proposing approximately 7,091 square feet of enhancement to existing oak dripline and oak woodland installation for the impacts to the oak tree dripline at a ratio of greater than 6:1. A portion of the mitigation for impacted oak habitat will be in the buffer of Wetland B.
LOCATION:	▪ 2000 NE Lockwood Creek Road ▪ #94 SEC 2 T4N R1E WM 20A (20911300)
HEARING:	Not required
APPLICABLE STANDARDS	La Center Municipal Code (LCMC) Title 18, Development Code: Type II Procedure, 18.30.090; Notices, 18.30.120; Critical Areas, 18.300.090(2)(5); Environmental Policy, 18.310; Tree Protection, 18.350.
RECOMMENDATION:	**APPROVAL,** subject to conditions

I. CONTACT LIST

APPLICANT/OWNER (PARCEL 209113000)
Scott Clayton, Cedar Ridge Homes
1905 SW 257th Ave.
Troutdale, OR 97060
(503) 666-4240
scott@cedarridgehomes.us

APPLICANT'S REPRESENTATIVE
Travis Johnson, PLS Engineering
604 W. Evergreen Blvd.
Vancouver, WA 98660
(360) 944-6519
pm@plsengineering.com

LA CENTER STAFF

Bryan Kast, PE, Public Works Director
Anthony Cooper, PE, Engineer
210 East 4th Street
La Center, WA 98629
360.263.7665
bkast@ci.lacenter.wa.us
acooper@ci.lacenter.wa.us

Ethan Spoo, AICP, Consulting Planner
Sam Rubin, AICP, Consulting Planner
WSP USA Inc.
210 East 13th Street, Suite 300
Vancouver, WA 98660
360.823.6138
ethan.spoo@wsp.com

II. OVERVIEW

The project site is on the eastern side of La Center north of Lockwood Creek Road and comprises one parcel totaling 20.00 acres. There are two category IV wetlands (Wetland A and Wetland B) located on the site. The applicant is proposing approximately 978 square feet (54 cubic yards) of temporary impacts to the buffer of Wetland B. The applicant also proposes to preserve the 40-inch Oregon White Oak at the southwest corner of the site, which is a priority habitat and regulated as a critical area by the City. However, the applicant is proposing 1,178 square feet of permanent impact to the Oregon White Oak dripline requiring that they file a critical areas permit, propose mitigation for the tree, and monitor the oak mitigation sites for a period of 10 years. The applicant is proposing approximately 7,091 square feet of enhancement in two areas: (1) the existing oak dripline and (2) oak woodland installation in Wetland B at a ratio of 6:1. A summary of the proposed impacts and mitigation is summarized in Table 1 below.

Table 1: Summary of Impacts and Mitigation

Type	Level of Impact	Proposed Mitigation Ratio	Applicant Proposed Enhancement	Number of Plantings
Existing Oak Dripline	1,178 sf	>6:1	• 1,1991 sf enhancement within existing oak dripline • 5,100 sf enhancement within Wetland B buffer Total Enhancement: 7,091 sf	• 80 shrubs within existing dripline • 87 trees and shrubs (includes 15 Oregon white Oak); within buffer of Wetland B
Wetland B Buffer	978 sf (54 cy)	1:1	• Replanting with native seed.	None required (see above for plantings within buffer)

The parcel and applicant received approval for a preliminary plat, critical areas permit on June 7, 2022. The City issued a SEPA mitigated determination of non-significance (MDNS) on May 9, 2022. The City reissued a joint notice of application and SEPA determination after the subject critical areas and tree removal permit were deemed complete on April 11, 2023. The City reopened the SEPA for notice after the applicant revealed that there are 204 trees on the site, 162 of which they would be cutting - a substantially larger number of trees than the 47 trees onsite, only four of which were to be cut initially disclosed at the time of preliminary plat review.

Figure 1-Project Location

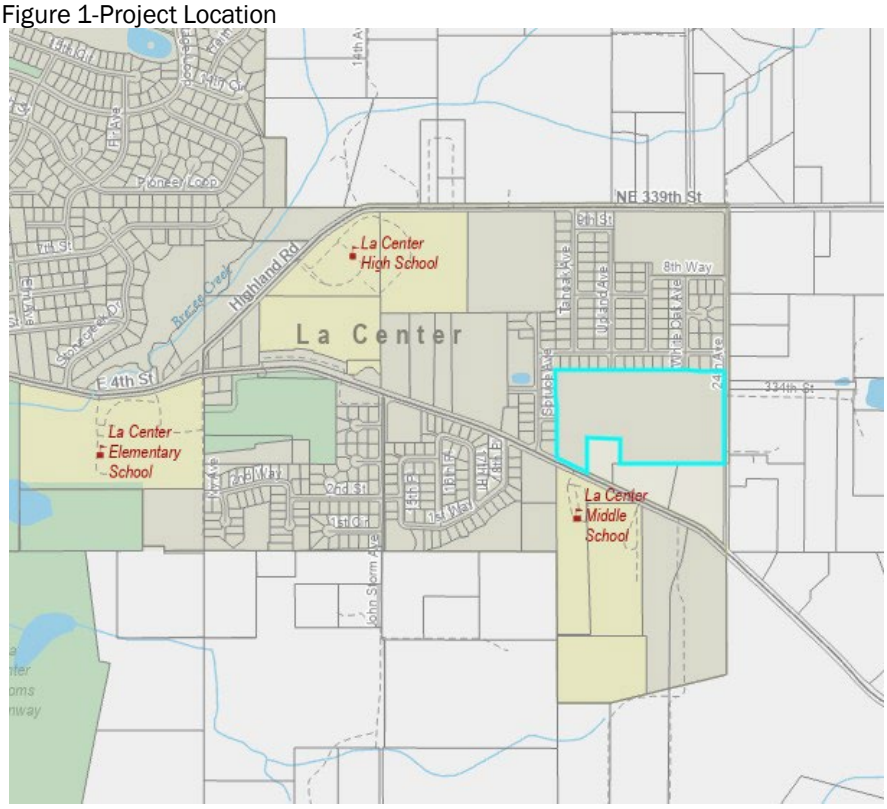


Figure 2- Project Site

III. REVIEW

III.A Jurisdiction

The property is within La Center city limits and is zoned Low Density Residential (LDR-7.5). The City of La Center provides sanitary sewer service and public streets. Clark Public Utilities provides potable water service. The project is within the La Center School District and the Clark County Fire and Rescue Fire District 11 service area.

III.B Public Notice

The City issued a notice of application and optional State Environmental Policy Act (SEPA) Likely mitigated determination of non-significance (MDNS) on April 12, 2023. The Department of Ecology entered the SEPA Checklist and MDNS in the Ecology SEPA Register on April 22, 2023 (Ecology SEPA # 202301694.) The notice of application and SEPA comment period closed on April 25, 2023, and the City received comments from the Washington Department of Ecology (Ecology), The Washington Department of Fish and Wildlife (WDFW), and private citizens. These comments are included in the application as Exhibit G.

As described in Section II of this staff report, the application for preliminary plat and SEPA was originally noticed on May 9, 2022. The City issued preliminary plat approval on June 7, 2022, but the approval did not include a critical areas permit for impacts to the priority Oregon white oak habitat or the impacts to the buffer of Wetland B. In addition, the applicant did not satisfy the City's tree removal permit requirements at the time of preliminary plat approval. Therefore, the preliminary plat approval included conditions of approval that the applicant obtain a critical areas and tree removal permit prior to engineering approval. Furthermore, when the applicant applied for the critical areas and tree removal permits in 2023, they disclosed that there were a far greater number of trees located on the site and a larger number that they would remove than originally disclosed during the preliminary plat stage of the project. For these reasons, staff reissued notice on the revised SEPA checklist provided by the applicant noting the increased number of trees on the site and the increased number the applicant was proposing to remove to allow for adequate evaluation and public notice of the impacts of tree removal.

State of Washington Department of Ecology (Ecology)

Ecology provided comments on April 25, 2023. A summary of their comments is provided below:

- Shorelands & Environmental Assistance
    - Requested an opportunity to review the wetland report for the project.
    - The wetland would be considered waters of the state subject to applicable state laws and requirements and may require a permit under Section 401 of the Clean Water Act.
- Solid Waste Management
    - The demolition of the existing structure on site should be done to ensure that any potentially hazardous materials are removed prior to demolition. Asbestos abatement procedures should be followed when required.
    - Demolition debris should be safely managed, especially if it contains painted wood or concrete, treated wood, or other possibly dangerous materials.
    - Review the "Dangerous Waste Rules for Demolition, Construction, and Renovation Wastes" on Ecology's website.
    - All removed debris resulting from the project must be disposed of at an approved site. All grading and filling of land must utilize only clean fill. All other materials may be considered solid waste and permit approval may be required from local health departments.
- Toxic Cleanup

  - The La Center School District Future Cleanup Site (ID 14855) is within the project area. The cleanup at the site has started. The site soil and groundwater were impacted by dieldrin but are likely meeting the cleanup standard.
  - If contamination is suspected, discovered, or occurs during construction, testing of the potentially contaminated media must be conducted. If contamination of soil or groundwater is readily apparent, or is revealed by sampling, the Department of Ecology must be notified.
- Water Quality/Watershed Resources Unit
  - Erosion control measures must be in place prior to any clearing, grading, or construction.
  - Control measures must effectively prevent stormwater runoff from carrying soil and other pollutants into surface water or storm drains leading to waters of the state.
  - Any discharge of sediment-laden runoff or other pollutants to waters of the state is in violation of Chapter 90.48 RCW and WAC 173-201A and is subject to enforcement.
  - Construction activities require coverage under the Construction Stormwater General Permit.

Finding: The City has provided the delineation report and mitigation plans to Ecology for review. Section III.E below addresses critical areas requirements and includes conditions of approval regarding any state and federal approvals. The applicant will be conditioned to follow on-site BMPs in compliance with Ecology comments.

State of Washington Department of Fish and Wildlife (WDFW)

WDFW provided comments on April 25, 2023. A summary of their comments is provided below:

- Emphasis on the importance of adequate protections for the mature Oregon white oak tree on site.
- WDFW believes the smaller DBH oak trees present on site, while small, could be providing valuable wildlife habitat and asks the applicant to assess the trees for wildlife potential, in particular the production of acorns prior to moving forward.
- The fifteen oak trees ranging from 2 to 8 inches, while small, are not considered priority oaks but are likely decades old and could be providing some wildlife value. WDFW considers acorn production a habitat function and trees this size (2 to 8 inches) are more than capable of producing acorns. If these trees provide this function, WDFW recommends plantings to replace this amount of lost habitat elsewhere on the site.
- Recommended BMPs during construction:
  - Follow the BMPs outlined in Tree Protection on Construction and Development Sites published by Oregon State University Extension Service.
  - The oak tree's critical root zone should be protectively fenced at either the dripline or a foot per inch DBH, whichever is larger.
  - If any digging needs to occur in this critical root zone, it should only be done under the supervision of an ISA certified arborist.
  - Avoid cutting tree roots greater than 4" in diameter.
- Recommended BMPs after construction:
  - Monitor the tree annually 3-5 years to determine if there were long-term impacts from the construction activities. Have a backup mitigation plan ready should the OWO not survive.

  - Avoid placing permanent irrigation near the Oregon white oak. Oak trees are drought tolerant and do not need irrigation. In fact, when permanent irrigation is present it has been linked to Oregon white oak death.
- Encouragement to not place any infrastructure under or near the mature Oregon white oak since the dead and dying limbs of the tree make valuable wildlife habitat.

Finding: The applicant will be conditioned to follow on-site BMPs in compliance with WDFW's comments to the degree they are applicable to the site and feasible. The city considered the recommendations from WDFW and amended them to be consistent with the most restrictive mitigation and monitoring requirements that already apply to the proposal. These amended recommendations are included as conditions of approval to this proposal. Key differences are that the proposal requires some work be conducted within the dripline of the tree so it cannot be ensured that no work would be near the critical root zone. The amended condition modifies the recommendation to say that no work should occur within the dripline enhancement area. Additionally, road improvements may require cutting roots greater than 4 inches so the recommendation is amended to say that roots greater than 4 inches should not be cut in the dripline enhancement area. The last amendment to the WDFW recommendations is changing the 3-5 year monitoring window to 10 years to be consistent with other monitoring requirements.

<u>Paul Huskey, Heritage Country Estates HOA</u>

Paul Huskey, the president of the Heritage Country Estates HOA, provided comments on April 2, 2023. Additionally, 31 copies of the same letter submitted by Mr. Huskey from residents associated with the HOA were also submitted. The full list of comments received are included in Attachment G. A summary of the comments made in the letter submitted by Mr. Huskey and the 31 copies of the letter are as follows.

- Heritage Country Estates is located directly north of the proposed subdivision that is requesting the critical areas permit and tree removal permit.
- The HOA is concerned with significant drainage issues within the Heritage Country Estates subdivision. Homes in the neighborhood experience standing water in their yards several months of the year.
- The HOA believes the project is not eligible for an MDNS.
- Emphasized that the 290 newly planted trees used to mitigate the 162 removed trees would take years to mature and would not absorb the same amount of water as the mature trees they will be replacing.
- Requests the following:
  - A full Environmental Impact Study be conducted.
  - Access to the checklists and materials used by the City of La Center to make their assessment.
  - Detailed contact and insurance information for the developer.
  - Details about how, when and what times the developer intends to access the property to conduct the proposed work covered under this application.

Finding: The City issued a response letter to the letters associated with the Heritage Country Estates HOA May 10, 2023 and is included as Exhibit H. The response letter addresses each of the issues raised by the public comment received including drainage, tree cutting and mitigation, mitigation for Wetland A, and the request for an EIS. With regard to the HOA's concerns about tree cutting, a notable requirement that the City will be conditioning the applicant to fulfill is to plant trees along the northern property boundary

bordering Heritage Country Estates to replace the existing trees to be removed and screening function they serve in this area.

III.C Key Issues

The relevant issues to consider include:

1. **Critical Areas:** There are two Type IV wetlands and a priority habitat Oregon white oak tree onsite. The approved street improvements include approximately 1,178 square feet of impact within the Oregon white oak tree's dripline, but the tree itself will be preserved. Mitigation for impacts to the Oregon white oak priority habitat include removing invasive species and planting understory within the existing tree's dripline and removing invasive species and planting oak trees and other native plants within the buffer of Wetland B. The applicant is also proposing to temporarily impact the buffer of Wetland B, but no wetland-specific mitigations are proposed since this area would be immediately seeded with a native mix and wetland functions would not be impacted.
2. **Tree Protection Plan and Mitigation for Tree Removal:** The applicant has submitted a tree protection plan proposing removal of 162 trees and mitigation for these trees by planting approximately 290 trees onsite primarily as street trees. The City is requiring that the applicant plant the northern property boundary bordering Heritage Country Estates with replacement trees to the L1, 5-foot buffers standard with trees spaced every 30 feet to replace the lost screening from removal of existing trees along this property line.

III.D Land Use Analysis

LCMC Title 18, Development Code.

LCMC 18.30 Procedures

The critical areas permit and tree cutting permit are being filed jointly and are subject to a Type II review Process. The public comment period started April 11, 2023 and ended April 25, 2023 and public comments were received and included in Exhibit G. The City responded to public comments as summarized above. The City issued the critical areas permit and tree removal permit within the 56-day review period permitted for a Type II application procedure.

III.E Critical Areas Review / SEPA Analysis

LCMC 18.300.090, Critical Areas

(2) Fish and Wildlife Habitat conservation Areas

Findings: A 40-inch diameter, Oregon white oak is located in the far southwestern corner of the site adjacent to NE Lockwood Road and is considered priority habitat by the applicant's consultant, ELS, and by WDFW. WDFW considers individual Oregon white oak trees to be priority habitat when found to be particularly valuable to wildlife (i.e. contains many cavities, has a large diameter at breast height, is used by priority species, or has a large canopy). Priority habitats and species require a 300-foot buffer, or a threshold based upon consultation with WDFW (see LCMC 18.300.090(2)(a). The applicant provided an email from WDFW stating that protecting the tree to its dripline is adequate (Appendix A of the Oak Mitigation Plan in Exhibit B). The applicant also provided a critical areas report (Exhibit A) in addition to the Oak Mitigation Plan. Together these two reports satisfy the requirements for a critical areas report in LCMC 18.300.090(2)(d).

The approximate dripline/buffer of the priority habitat Oregon white oak is shown on sheet 2 of 10 in the critical areas report in Exhibit A and is also shown on the Oak Mitigation Plan in Exhibit B. The oak's canopy extends into the existing NE Lockwood Road improvements area and the trees dripline is already impacted. The applicant is proposing road improvements along Lockwood Creek Road including travel way improvements, sidewalk, and planter strip within the dripline of the tree that will further impact the protected dripline. The project will not remove the tree but will impact approximately 1,178 square feet of area within the oak dripline. The impacts are necessary for street resurfacing and sidewalk construction. The applicant is proposing to mitigate for the impacted area through 2 methods both at a 6:1 ratio for area impacted; 1) enhancement of the understory of the existing onsite oak tree and totaling 1,991 square feet and, 2) creating oak habitat within Wetland B's buffer totaling 5,100 square feet. These mitigations will compensate for the immediate area of impact of 1,178 square feet of priority oak habitat.

In the long run, the tree's ability to survive may be negatively compromised by the applicant's proposed development and the City's required impacts to NE Lockwood Creek Road. Therefore, the City is requiring that the applicant either: (1) monitor the oak tree's health for a period of 10 years to ensure that it does not die and become a hazard tree or (2) compensate for the entire oak tree habitat at a ratio of 6:1 if the tree dies within the 10-year monitoring period. These requirements are further discussed below as conditions of approval.

18.300.090 (2)(i) Mitigation

(i) Approval. City approval of a mitigation plan is a prerequisite for approval of any development activities within a designated habitat area or habitat buffer.

(ii) Application. The applicant shall submit a written request describing the extent and nature of the proposed development activity on critical areas and buffers. The request shall include boundary locations of all critical areas and associated buffers.

(A) The application for development shall include a mitigation plan prepared in compliance with this section.

(B) The city may require the applicant to prepare special reports evaluating potential adverse impacts upon critical areas and potential mitigation measures as part of the land use application process. These reports may include, but are not limited to, the following: stormwater management plan; hydrology, geology, and soils report; grading and erosion control plan; native vegetation report; fish and wildlife assessment and impact report; water quality report; wetlands delineation; and other reports determined necessary by the city.

(iii) The city may consult with state and federal resource management agencies and, in order to protect wildlife habitat or natural resource values, shall attach such conditions as may be necessary to effectively mitigate identified adverse impacts of the proposed development activity.

(iv) The city may request third party "peer review" of an application by qualified professionals and may incorporate recommendations from such third party reports in findings approving or denying the application.

(v) All reports recommending mitigation shall include provisions for monitoring of programs and replacement of improvements, on an annual basis, consistent with report recommendations and at years one, three, five, seven, and, if mitigation measures will result in reclassification of the resource to a higher category, year 10 shall be required.

(vi) The city may require replacement mitigation to be established and functional concurrent with project construction.

Findings: The applicant provided an Oak Mitigation Plan included as Exhibit B that the city reviewed. The city determined the submitted mitigation plan meets the requirements of this section provided the that the applicant amends the mitigation plan to account for the oak dying. The applicant or homeowners association for the subdivision will be responsible to conduct the required monitoring. An updated mitigation plan has to be submitted by the time of final plat approval. The updated mitigation plan will identify responsible parties for ongoing mitigation monitoring.

18.300.090(2)(j) No Net Loss.

(i) Mitigation efforts, when allowed, shall ensure that development activity does not yield a net loss of the area or function, including fish and wildlife habitat values, of the critical area. No net loss shall be measured by:

(A) Avoidance or mitigation of adverse impacts to fish or wildlife; or

(B) Avoidance or mitigation of net loss of habitat functions necessary to sustain fish life; or

(C) Avoidance or mitigation of loss of area by habitat type.

(ii) Mitigation to achieve no net loss should benefit those organisms being impacted.

(iii) Where development results in a loss of habitat area, the mitigation plan shall demonstrate that habitat area is replaced at an equal or greater functional value(s).

(A) Wherever possible, replacement or enhancement shall occur on site.

(B) However, where the applicant can demonstrate that off-site mitigation will provide greater functional values, the city may approve such off-site mitigation.

Finding: The applicant is proposing unavoidable impacts to the Oregon white oak priority habitat within the tree's dripline. These impacts are unavoidable because they are associated with the required street improvements along NE Lockwood Creek Road that will be built to the City's standards.

As proposed the mitigation plan meets the standard of no net loss for the immediate impacts to the oak habitat. The applicant is proposing mitigation at a 6:1 ratio within the project site including enhancement within the tree's existing dripline and planting new shrubs and oak trees within the buffer of Wetland B. However, the applicant's proposal may negatively impact the long-term viability of the Oregon white oak resulting in its death. Therefore, the City is requiring the following conditions of approval to ensure that the proposal meets the no net loss requirement now and in the future.

As a Condition of Approval, the applicant or homeowners association shall conduct monitoring of the priority Oregon white oak tree for 10 years and file annual monitoring reports to the City prepared be a certified arborist. If the tree does not survive, then the applicant will be required to install mitigation in accordance with an updated mitigation plan.

As a Condition of approval, the applicant shall submit an updated oak mitigation plan prior to final plat approval that compensates for the oak tree at a ratio of 6:1, if it dies before the end of the 10-year monitoring period. Additional mitigation could be located at various places within the subdivision including within wetland buffers, within the existing oak dripline, or open space areas.

As a condition of approval, the applicant shall comply with the recommended BMPs outlined in the letter from WDFW dated April 25, 2023 outlined below:

- BMPs during construction:
    - Follow the BMPs outlined in Tree Protection on Construction and Development Sites published by Oregon State University Extension Service.

- The oak tree's critical root zone should be protectively fenced at the dripline enhancement area.
- If any digging needs to occur in this critical root zone, it should only be done under the supervision of an ISA certified arborist.
- Avoid cutting tree roots greater than 4" in diameter within the dripline enhancement area.

- BMPs after construction:
  - Monitor the tree annually for 10 years to determine if there were long-term impacts from the construction activities. Update the oak mitigation plan prior to final plat approval should the Oregon white oak not survive.
  - Avoid placing permanent irrigation near the Oregon white oak. Oak trees are drought tolerant and do not need irrigation. When permanent irrigation is present it has been linked to Oregon white oak death.

18.300.090(2)(n) Standard Requirements.

(n) Standard Requirements. All applications requiring review under this section shall have the following minimum conditions applied:

(i) Marking Buffer During Construction. The location of the outer extent of the habitat buffer, or if no buffer is required the habitat area, shall be marked in the field and such markings shall be maintained throughout the duration of the permit.

(ii) Permanent Marking of Buffer Area. A permanent and perpetual physical demarcation along the upland boundary of the habitat buffer area shall be installed and thereafter maintained. Such demarcation may consist of logs, a tree or hedgerow, wood or wood-like fencing, or other prominent physical marking approved by the director. In addition, signs (measuring minimum size one foot by one foot and posted three and one-half feet above grade) shall be posted at an interval of one per lot or every 100 feet, whichever is less, and perpetually maintained at locations along the outer perimeter of the habitat buffer approved by the director worded substantially as follows: "Habitat Buffer – Please Retain in a Natural State."

(iii) A conservation covenant shall be recorded in a form approved by the city attorney as adequate to incorporate the other restrictions of this section and to give notice of the requirement to obtain a permit prior to engaging in regulated activities within a habitat area or its buffer.

Findings: The applicant is proposing to fence the onsite portion of the oak's dripline to protect it from disturbance during construction and site grading and to install permanent fencing with signs stating "Habitat Buffer – Please Retain in a Natural State." This requirement is met provided the applicant complies with the recommendations of the Oak Mitigation Plan (Exhibit B). The applicant filed a conservation covenant that has been reviewed by the City and comments have been provided to the applicant. The conservation covenant will need to be recorded prior to final plat approval.

As a condition of approval, the applicant shall clearly stake, flag, and fence the outside dripline of the oak tree prior to and through the completion of construction and shall place permanent fencing with signs reading "Habitat Buffer – Please Retain in a Natural State" following construction for permanent protection of the oak tree.

As a condition of approval, prior to final plat approval, the applicant shall record a conservation covenant in a form approved by the city attorney as adequate to incorporate the other restrictions of this section and to give notice of the requirement to obtain a permit prior to engaging in regulated activities within the dripline of the Oregon white oak tree.

(5) Wetlands

The subject parcels contain two category IV Wetlands (Wetland A and Wetland B). A critical areas report was completed in March 2021 and includes a delineation of the two wetlands (Exhibit A). Wetland A is 0.05 acres and Wetland B is 0.08 acres. Wetland A is exempt from avoidance requirements and filling of this wetland and offsite mitigation through purchase of credits was approved during preliminary plat review. Wetland B has a required 50-foot buffer under LCMC Table 18.300.090(5)(i)(i)-1. Category IV wetlands are the lowest quality wetland.

Impacts to Wetland B or its buffer are subject to the City's critical areas ordinance. The applicant's project will include 978 square feet (54 cubic yards) of temporary impact to the buffer of Wetland B. The applicant's Wetland Buffer Mitigation Plan (Exhibit C) documents that all impacts to its buffer will be temporary for the following reasons;

- No native trees or shrubs will be removed and grading will only occur in areas with grasses and weedy forbs;
- The grading activity will not result in a permanent structure in or under the wetland buffer.
- Placement of soil will not result in a reduction of buffer acreage or function or negative hydrologic changes in the buffer areas or adjacent wetland.
- There will be no loss of wetland acreage.
- The graded area within the buffer will be immediately reseeded with a native mix and planted with native shrubs and oak trees as specified in the Oak Mitigation Plan (Exhibit B) raising the overall condition of the buffer.

18.300.090(5)© Standard Requirements.

(vi) Enhancement of a wetland through the removal of nonnative invasive plant species. Removal of invasive plant species shall be restricted to hand removal unless permits from the appropriate regulatory agencies have been obtained for approved biological or chemical treatments. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

Findings: The applicant is proposing to enhance the wetland buffer, an allowed activity within wetlands as specified in this section. .

18.300.090(5)(g) Wetland Delineation.
18.300.090(5)(h) Ratings.

Findings: The applicant provided a wetland delineation included within their critical areas report (Exhibit A) that also rated the wetland in accordance with the Ecology 2014 wetland rating system. The delineation met the requirements of these two sections.

18.300.090(5)(i) Base Buffer Width.

(i) Buffer width, measured in feet, shall be based upon Alternative 3 in Appendix 8C of Wetlands in Washington State, Vol. 2. Intensity of use shall be based upon Table 8C-3 (Types of proposed

land use that can result in high, moderate, and low levels of impacts to adjacent wetlands) that is included in that source and is attached to the ordinance codified in this chapter.

Table 18.300.090(5)(i)(i)-1 – Buffers Required to Protect Hydrologic Functions

Wetland Rating	Low Intensity Use	Moderate Intensity Use	High Intensity Use
Category I	50 ft.	75 ft.	100 ft.
Category II	50 ft.	75 ft.	100 ft.
Category III	40 ft.	60 ft.	80 ft.
Category IV	25 ft.	40 ft.	50 ft.

Finding: Wetland B is a Category IV buffer adjacent to a high intensity land use and has a required buffer of 50 feet. The applicant is providing a 50-foot buffer that would be temporarily impacted and restored immediately by reseeding as described in the Wetland Buffer Mitigation Plan. These requirements are met.

18.300.090(5)(k) Wetland Development Standards - General.

(i) Any development proposal that impacts a wetland or wetland buffer shall not be allowed without an approved mitigation or enhancement plan consistent with LCMC 18.300.120 and the mitigation sequencing preference. (See "mitigation" in subsection (5)(o) of this section.)

(ii) The city shall not approve a development proposal that impacts wetlands or wetland buffers without a finding that:

(A) The proposed activity shall not cause significant degradation of groundwater or surface water quality or fish and wildlife habitat;

(B) The proposed activity shall comply with all state, local and federal laws, including those related to sediment control, pollution control, floodplain restrictions, stormwater management, and on-site wastewater disposal; a©(C) Wetland and wetland buffer impacts shall be avoided or substantially minimized consistent with the mitigation sequencing criteria.

Findings: The applicant provided a Wetland Buffer Mitigation Plan (Exhibit C) which the City hereby approves. The applicant is not proposing permanent impacts to Wetland B or its buffer, and therefore, many of the mitigation requirements in 18.300.090–5)(l - o) do not apply. The applicant will immediately restore temporary impacts to the buffer of Wetland B through reseeding with a native mix. Wetland B's buffer would be enhanced through the creation of a native plant community as detailed in the Oak Mitigation Plan (Exhibit B). A condition of approval will require that the applicant implement the recommendation of the wetland and oak mitigation plans. Since all impacts will be temporary, there will be no degradation of functions of the wetland as documented Wetland Buffer Mitigation Plan (Exhibit C). This requirement is met.

As a condition of approval, the applicant or homeowners association shall implement all recommendations of the Oak Mitigation Plan by Ecological Land Services Inc. dated December 2022 and

the Wetland Buffer Mitigation Plan by Ecological Land Services dated December 29, 2022 including annual monitoring and reporting requirements for 10 years.

18.300.090(5)(s) Wetland Permit - Approval.

(ii) Conditions. An approval of a wetland permit shall incorporate the following condition:

(A) Posting of a cash performance bond or other security acceptable to the city in an amount and with surety and conditions sufficient to fulfill the requirements of the required final plan, mitigation plan and enhancement plan and to secure compliance with other conditions and limitations set forth in the permit.

(B) The city shall release the bond upon determining that[…]

Findings: A condition of approval will require that the applicant post a performance bond meeting the requirements of this section prior to engineering approval implementing the requirements of the Wetland Mitigation Plan and the Oak Mitigation Plan. The City will release the performance bond once all of the requirements of the Mitigation Plan and Oak Mitigation Plan are met including the 10-year annual monitoring requirements.

As a condition of approval, the applicant shall file a performance bond meeting the requirements of LCMC 18.300.090(5)(s) prior to engineering approval.

Finding: In addition to the above requirements the city is including a general condition that would apply to all migration and monitoring requirements for the oak tree and wetlands.

As a **condition of approval,** all mitigation and monitoring requirements shall be recorded in the covenants, conditions, and restrictions of the homeowners association prior to final plat approval.

Chapter 18.310 LCMC Environmental Policy

The Applicant submitted an amended SEPA Checklist (Exhibit D) along with other application materials. The City reviewed the checklist and relevant materials and the Responsible Official issued an optional Mitigated Determination of Non-Significance (MDNS) on April 11, 2023 under reference # 202301694. The City issued and filed the final MDNS on April 11, 2023.

The applicant shall meet the following SEPA mitigation measures:

General: The applicant shall comply with the recommended measures outlined in the response letter from Ecology dated April 25, 2023, and attached to this staff report in Exhibit G.

Water: The applicant or homeowners association must comply with the recommendations of the Wetland Buffer Mitigation Plan (ELS, December 29, 2023).

Plants: The applicant or homeowners association must comply with the recommendations of the Oak Mitigation Plan (ELS, December 29, 2023).

Chapter 18.350 LCMC Tree Protection

18.350.050 Mitigation Required

With the exception of dead trees, hazard trees, and trees that are 10 inches or less in diameter removed from developed single-family lots, an applicant shall provide mitigation for any tree approved for removal. The mitigation requirement shall be satisfied as follows:

Finding: The site contains 204 trees regulated under LCMC 18.350 and an unspecified number of other trees that were part of the prior Christmas tree farm. The Christmas tree farm meets the City's definition of "Agricultural uses" and therefore staff have interpreted that the Christmas trees are not subject to the City's tree protection ordinance, but all other trees onsite which are greater than 5 inches are regulated.

The applicant has submitted a Tree Protection (Exhibit E) per LCMC 18.350.060 proposing to remove 162 trees on the site of the 204 regulated trees. As documented in the preliminary plat approval and on the Landscape Plan (Exhibit F) the applicant is proposing to plant 290 plants on-site meeting the minimum criteria for two-inch caliper DBH for deciduous trees and six-to-eight-foot height minimum for evergreen trees which exceeds the City's mitigation requirement.

The tree protection plan states that 4-foot-tall chain link, orange pvc, or silt fence will be installed around trees to be preserved.

As a Condition of Approval, per LCMC 18.350.060 (3)(b) chain link fencing must be a minimum of six feet tall with steel posts placed no farther than 10 feet apart.

(1) Replanting On-Site. The applicant shall plant either a minimum two-inch caliper DBH deciduous tree or a six- to eight-foot-tall evergreen tree for each tree removed. Trees shall be planted according to the specifications in Chapter 18.340 LCMC.

Finding: The applicant has submitted a Tree Protection (Exhibit E) per LCMC 18.350.060 showing that there are 204 jurisdiction trees on site, of which 162 are to be removed. As documented in the preliminary plat approval and on the Landscape Plan (Exhibit F) the applicant is proposing to plant 290 plants on-site meeting the minimum criteria for two-inch caliper DBH for deciduous trees and six-to-eight-foot height minimum for evergreen trees.

18.350.060 Tree Protection Plan Required

(1) A tree protection plan, approved by the city planner, shall be required prior to conducting any development activities including, but not limited to, clearing, grading, excavation, or demolition work on a property or site which requires Type II or Type III permit approval.

Finding: The applicant has prepared and submitted a Tree Protection and is included as Exhibit E.

(3) Tree Protection Measures Required.

(a) Except as otherwise determined by the city planner, all required tree protection measures set forth in this section shall be instituted prior to any development activities, including, but not limited to, clearing, grading, excavation or demolition work, and shall be removed only after completion of all construction activity, including landscaping and irrigation installation.

(b) Chain link fencing, a minimum of six feet tall with steel posts placed no farther than 10 feet apart, shall be installed at the edge of the tree protection zone or dripline, whichever is greater,

and at the boundary of any open space tracts or conservation easements that abut the parcel being developed.
(c) The fencing shall be flush with the initial undisturbed grade.
(d) Approved signs shall be attached to the chain link fencing stating that inside the fencing is a tree protection zone, not to be disturbed unless prior approval has been obtained from the city planner and arborist for the project.
(e) No construction activity shall occur within the tree protection zone, including, but not limited to, dumping or storage of materials such as building supplies, soil, waste items, or parked vehicles or equipment.
(f) The tree protection zone shall remain free of chemically injurious materials and liquids such as paints, thinners, cleaning solutions, petroleum products, and concrete or dry wall excess, construction debris, or runoff.
(g) No excavation, trenching, grading, root pruning or other activity shall occur within the tree protection zone unless directed by an arborist present on-site and approved by the director.

Finding: The applicant has submitted a tree protection plan included as Exhibit E. The applicant is required to comply with the provisions LCMC 18.360.060 (3) a-g.

As a Condition of Approval, the installed tree protection fencing around trees to be preserved must meet the requirements for fencing under LCMC 18.350.060 which include the requirement that fencing be a minimum of six feet tall with steel posts placed no farther apart than 10 feet and be flush with the initial undisturbed grade.

As a Condition of Approval, the applicant shall flag with yellow flagging tape any trees proposed for removal identified on the plan consistent with LCMC 18.350.060 so that the City can verify trees to be removed and preserved consistent with 18.350.070(3). In addition, the applicant shall install construction fencing around trees to remain, so they are not inadvertently removed, and grading does not occur within their root zones.

As a Condition of Approval, signage shall be attached to the tree protection zone fencing stating that inside the fencing is a tree protection zone and is not to be disturbed.

As a Condition of Approval, no construction activity, except installation of erosion control measures, shall proceed until the city has inspected and approved the installation of the required tree protection measures and a building and/or grading permit has been issued by the city.

18.350.080 Approval Criteria
An applicant for a tree removal permit shall demonstrate that the following criteria are satisfied. The city planner may require an arborist's report to substantiate the criteria for a permit.

(1) Removal of the tree will not have a significant negative impact on erosion, soil stability, flow of surface waters, protection of adjacent trees, or existing windbreaks;

Finding: 162 trees are proposed for removal to adequately grade the subdivision. Stormwater and erosion control plans have previously been approved under the preliminary plat approval process. The trees proposed for removal do not function as an existing windbreak and do not provide protection to adjacent trees.

(2) Removal of the tree is not for the sole purpose of providing or enhancing views;

Finding: The purpose of the removal of the trees is not for the sole purpose of providing or enhancing views. The purpose of the tree removal is to clear and grade the site.

(3) The tree is proposed for removal for landscaping purposes or in order to construct development approved or allowed pursuant to the La Center Municipal Code or other applicable development regulations. The city planner may require the building footprint of the development to be staked to allow for accurate verification of the permit application; and

Finding: The trees proposed for removal are to construct development approved under a previously approved preliminary plat approval process.

(4) Removal of the tree will not have a significant negative impact on the character, aesthetics, or property values of the neighborhood. The city may grant an exception to this criterion when alternatives to the tree removal have been considered and no reasonable alternative exists to allow the property to be used as permitted in the zone. In making this determination, the city may consider alternative site plans or placement of structures or alternate landscaping designs that would lessen the impact on trees, so long as the alternatives continue to comply with other provisions of the La Center Municipal Code.

Finding: A portion of the trees proposed to be removed are on the northern boundary of the project site adjacent to the Heritage Country Estates subdivision. These trees although necessary to be removed for adequate grading provide aesthetic value and screening. Per LCMC 18.350.080 (6), below, the City may impose conditions of approval on any tree cutting permit if reasonably related to preventing, eliminating or mitigating a negative impact or potential impact on natural features or processes or on the building environment of the neighborhood. Conditions may include requiring vegetation to be planted. The City will condition the applicant to provide a vegetated buffer meeting the standards of the L1 buffer per LCMC 18.245.060. The L1 screening buffer is for open areas intended to be used where distance is the principal means of separating uses or development, and landscapes enhances the areas between them.

As a **Condition of Approval,** prior to engineering approval, the applicant shall provide an updated landscape plan showing an L1 buffer along the site's northern boundary abutting the Heritage Country Estates development.

As a condition of approval, prior to occupancy, the applicant shall install an L1 landscaping buffer along the northern edge of the project site adjacent to the Heritage Country Estates subdivision where trees are proposed to be removed.

As a Condition of Approval, the applicant shall submit a covenant for the L1 buffer on the north end of the property ensuring the trees are maintained and replaced if they die. The covenant shall be provided and recorded prior to final plat approval.

(5) The city shall require the applicant to mitigate for the removal of each tree pursuant to LCMC 18.350.050. Such mitigation requirements shall be a condition of approval of the permit.

Finding: The applicant has demonstrated they will mitigate for the removal of each tree proposed to be removed by planting 290 trees throughout the site primarily as street trees. This requirement is met.

As a **condition of approval,** prior to final plat approval, the applicant shall plant the trees shown on the landscape plan (Exhibit F) in Tracts A, B, C and D, including street trees along proposed roadways fronting these tracts. Street trees elsewhere within the development must be planted prior to occupancy approval.

(6) The city may impose conditions of approval on any tree cutting permit if the condition is reasonably related to preventing, eliminating or mitigating a negative impact or potential impact on natural features or processes or on the built environment of the neighborhood which is as created or contributed to by the approved tree removal. Conditions of approval may include, but are not limited to:

(a) Cutting a tree or stump flush with the grade instead of grinding or fully removing a stump;

(b) Requiring modifications in the location, design or intensity of a development or activities on a site or to require or prohibit certain construction methods;

(c) Requiring vegetation not requiring a tree removal permit to remain in place or be planted;

(d) Requiring the removal of injurious vegetation (English ivy) from other trees on the property.

Finding: As conditioned, the tree removal permit and critical areas permit are consistent with La Center municipal code.

III.F Public Works and Engineering Analysis

Public Works and Engineering have no comments.

IV. CONCLUSIONS & RECOMMENDATION

The review authority finds the applicant has sustained the burden of proving the application complies with the applicable provisions of the La Center Municipal Code. The subject application should be **APPROVED, SUBJECT TO THE FOLLOWING CONDITIONS.**

IV.A Planning Conditions

1. The applicant or homeowners association shall conduct monitoring of the priority Oregon white oak tree for 10 years and file annual monitoring reports to the City prepared by a certified arborist. If the tree does not survive, the applicant will be required to install mitigation in accordance with an updated mitigation plan.
2. The applicant shall submit an updated oak mitigation plan prior to final plat approval that compensates for the oak tree at a ratio of 6:1, if it dies before the end of the 10-year monitoring period.
3. The applicant shall comply with the recommended BMPs outlined in the letter from WDFW dated April 25, 2023 outlined below:
    a. BMPs during construction:
        - Follow the BMPs outlined in Tree Protection on Construction and Development Sites published by Oregon State University Extension Service.
        - The oak tree's critical root zone should be protectively fenced at the dripline enhancement area.
        - If any digging needs to occur in this critical root zone, it should only be done under the supervision of an ISA certified arborist.
        - Avoid cutting tree roots greater than 4" in diameter within the dripline enhancement area.
    b. BMPs after construction:
        - Monitor the tree annually for 10 years to determine if there were long-term impacts from the construction activities. Update the oak mitigation plan should the Oregon white oak not survive.
        - Avoid placing permanent irrigation near the Oregon white oak. Oak trees are drought tolerant and do not need irrigation. When permanent irrigation is present it has been linked to Oregon white oak death.
4. The applicant shall clearly stake, flag, and fence the outside dripline of the oak tree prior to and through the completion of construction and shall place permanent fencing with signs reading "Habitat Buffer – Please Retain in a Natural State" following construction for permanent protection of the oak tree.
5. Prior to final plat approval, the applicant shall record a conservation covenant in a form approved by the city attorney as adequate to incorporate the other restrictions of this section and to give notice of the requirement to obtain a permit prior to engaging in regulated activities within the dripline of the Oregon white oak tree.
6. The applicant or homeowners association shall implement all recommendations of the Oak Mitigation Plan by Ecological Land Services Inc. dated December 2022 and the Wetland Buffer Mitigation Plan by Ecological Land Services dated December 29, 2022 including annual monitoring and reporting requirements for 10 years.

7. The applicant shall file a performance bond meeting the requirements of LCMC 18.300.090(5)(s) prior to engineering approval.
8. All mitigation and monitoring requirements shall be recorded in the covenants, conditions, and restrictions of the homeowners association prior to final plat approval.
9. The applicant shall comply with the recommended measures outlined in the response letter from Ecology dated April 25, 2023, and attached to this staff report in Exhibit G.
10. Per LCMC 18.350.060 (3)(b), chain link fencing must be a minimum of six feet tall with steel posts placed no farther than 10 feet apart.
11. The installed tree protection fencing around trees to be preserved must meet the requirements for fencing under LCMC 18.350.060 which include the requirement that fencing be a minimum of six feet tall with steel posts placed no farther apart than 10 feet and be flush with the initial undisturbed grade.
12. The applicant shall flag with yellow flagging tape any trees proposed for removal identified on the plan consistent with LCMC 18.350.060 so that the City can verify trees to be removed and preserved consistent with 18.350.070(3). In addition, the applicant shall install construction fencing around trees to remain, so they are not inadvertently removed, and grading does not occur within their root zones.
13. Signage shall be attached to the tree protection zone fencing stating that inside the fencing is a tree protection zone and is not to be disturbed.
14. No construction activity, except installation of erosion control measures, shall proceed until the city has inspected and approved the installation of the required tree protection measures and a building and/or grading permit has been issued by the city.
15. Prior to engineering approval, the applicant shall provide an updated landscape plan showing an L1 buffer along the site's northern boundary abutting the Heritage Country Estates development.
16. Prior to occupancy, the applicant shall install an L1 landscaping buffer along the northern edge of the project site adjacent to the Heritage Country Estates subdivision where trees are proposed to be removed.
17. The applicant shall submit a covenant for the L1 buffer on the north end of the property ensuring the trees are maintained and replaced if they die. The covenant shall be provided and recorded prior to final plat approval.
18. Prior to final plat approval, the applicant shall plant the trees shown on the landscape plan (Exhibit F) in Tracts A, B, C and D, including street trees along proposed roadways fronting these tracts. Street trees elsewhere within the development must be planted prior to occupancy approval.

IV.B SEPA Mitigation Measures

1. General: The applicant shall comply with Ecology's requirements in the letter dated April 25, 2023.
2. Water: The applicant or homeowners association must comply with the recommendations of the Wetland Buffer Mitigation Plan (ELS, December 29, 2023).
3. Plants: The applicant or homeowners association must comply with the recommendations of the Oak Mitigation Plan (ELS, December 29, 2023).

V. APPEALS

The applicant, applicant's representative, or any person, agency or firm with an interest in the matter may appeal this decision. The appellant shall file the appeal together with the requisite fee and information within 14 calendar days of the date of the decision being appealed. (18.030.130 LCMC.)

Bryan Kast, P.E.,
Public Works Director
City of La Center

Anthony Cooper, P.E.
City Engineer
City of La Center

Exhibits

Exhibit A - Critical Areas Report
Exhibit B - Oak Mitigation Plan
Exhibit C- Wetland Buffer Mitigation Plan
Exhibit D - Amended SEPA Checklist and MDNS
Exhibit E - Tree Protection Plan
Exhibit F - Landscape Plan
Exhibit G – Public Comments Received
Exhibit H – Public Comments Response Letter to Heritage Country Estates HOA

Attachment A

CRITICAL AREAS REPORT

March 24, 2021

Lockwood Meadows Subdivision

La Center, Washington

Prepared for

PLS Engineering

604 W. Evergreen Blvd.

Vancouver, Washington 98660

(360) 944-6519

Prepared by

Ecological Land Services

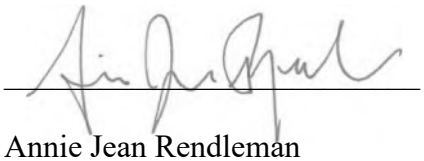
1157 3rd Avenue, Suite 220A • Longview, WA 98632

(360) 578-1371 • Project Number 2245.14

NWS-2020-1015

SIGNATURE PAGE

The information and data in this report was compiled and prepared under the supervision and direction of the undersigned.



Annie Jean Rendleman
Biologist

TABLE OF CONTENTS

INTRODUCTION 1
SITE DESCRIPTION 1
METHODOLOGY 2
VEGETATION 4
SOILS 4
HYDROLOGY 5
WETLAND INVENTORY 6
CRITICAL AREAS SUMMARY 7
CONCLUSION 8
LIMITATIONS 9
REFERENCES 10

Tables:

Table 1 Precipitation Data
Table 2 Wetland Summary

Sheets:

Sheet 1 Vicinity Map
Sheet 2 Site Map
Sheet 3 Aerial with Topo
Sheet 4 NRCS Soil Survey Map
Sheet 5 Clark County Environmental Constraints
Sheet 6 DNR Water Type Map
Sheet 7 National and Wetlands Inventory Map
Sheet 8A 150' Offset Wetland A Rating Figure
Sheet 8B 150' Offset Wetland B Rating Figure
Sheet 9 1KM Offset Wetland Rating Figure
Sheet 10 303(d) Listed Waters and TMDLs
Photoplates 1-3

Appendix A

Wetland Determination Data Forms

Appendix B

Wetland Rating Forms

Appendix C

Precipitation Data

Appendix D

Email Communication with WDFW

INTRODUCTION

Ecological Land Services, Inc. (ELS) has completed this critical areas report on behalf of PLS Engineering for the purpose of constructing a residential subdivision. The project site consists of Clark County Parcel 209113-000 located at 2000 NE Lockwood Creek Road in La Center, Washington. The site is located within the southeast portion of Section 10, Township 3 North, and Range 2 East of the Willamette Meridian (Sheet 1). This report discusses onsite critical areas in accordance with *La Center Municipal Code (LCMC) Title 18 Development Code* (December 2020).

Project History

- ELS conducted a broad-scope assessment of the site March of 2020.
- ELS delineated wetlands and mapped critical areas September 8, 2020.
- During a site visit with Miranda Adams (Department of Ecology) on November 10, 2020, the Wetland A boundary was confirmed. Five additional test plots were taken near Wetland A to further support the delineation (TPs AA – AE). The pond area was also re-delineated (Wetland B), encompassing a larger area than what was originally outlined. Three additional test plots were taken to support the Wetland B delineation.
- ELS collected additional data from test plots made during the November site visit with Ecology, as well as TP-6, on February 24, 2021.

SITE DESCRIPTION

The project site can be accessed from the southwest via NE Lockwood Creek Road. The 20-acre site is zoned Urban Holding (UH-10) and currently has a single-family residence, barn, and existing well. NE Lockwood Creek Road abuts the southeastern portion of the site and NE 24th Avenue abuts the site to the east. The site is surrounded by high-density subdivision lots to the north and west, and low-density single-family parcels to the south (Sheet 2).

The majority of the site consists of mowed field grasses with scattered trees, including Oregon white oaks (*Quercus garryana*). The eastern portion of the site is a decommissioned Christmas tree farm. The site contains two Category IV wetlands and one priority habitat Oregon white oak (Sheet 2).

Site History

General

The property has been used as both a hobby and commercial farm operation for several decades that included agricultural activities such as livestock, hay, and Christmas tree production, as well as rental pasture and barn stalls for horses. The Christmas trees were grown on a third-party lease arrangement and the last selective tree harvest occurred during the winter of 2020/2021. Site feature and recent maintenance activities performed in the past two years are discussed below.

Ditch Maintenance

The ditch along the north property boundary appears to have been installed circa 2005, according to aerial imagery (Clark County GIS). The owner at that time was concerned about future development activities upslope releasing uncontrolled stormwater onto the property. The ditch

funneled seasonal flow (only in winter) to a swale underlaid by a 4-inch perforated flex pipe (drain tile shown on Sheet 2). The tile drains south to Wetland B, which was excavated to serve as a livestock water pond between 2000 and 2002. In the past two years, the property line ditch was cleaned to original depth and the swale had minor maintenance performed by cleaning deposited silt. As the 4-inch pipe below the swale was plugged in places, it was replaced with a 6-inch flex pipe. The increased pipe size was intended to account for stormwater discharge volumes from upslope developments. Care was taken to daylight the downstream end of the pipe in the Wetland B area (pond) in a flat spot to avoid erosive flows during high rainfall events.

Well Maintenance

An existing hand-dug well, approximately three feet in diameter with a partial brick well casing, is located northeast of Wetland B. The well was a potential falling hazard, as it was previously unmarked. The well perked water to the surface during high ground water events and saturated the immediate downslope area making it further hazardous, as the well casing could slough. As part of the recent maintenance work, the farm contractor filled the well and collapsed the vertical sides to prevent cave-ins and for the site's overall safety. A 4-inch drainpipe was installed downslope of the well to ensure that water no longer saturated the surface area during high groundwater events. The pipe also drains to Wetland B.

Blackberry Removal on Dam

The old pond (Wetland B) was originally constructed by building an earthen dam across the swale before it exited the property toward the south. The dam was overgrown with Himalayan blackberries (*Rubus armeniacus*) and there was evidence of erosion on the downstream side of the dam where the old pond drainpipe went through the dam. This risked a complete dam failure and subsequent downstream damage to a neighboring home and property. The farm contractor removed the blackberries on the dam, removed the pipe, and cut an overflow swale that is open and has gradual grades, to allow water to exit the pond. This prevents high water events from flooding the pond and threatening downstream properties with a dam blow-out.

Noxious Weed Removal

The western portion of the site previously had internal fences. Recent maintenance in this area included removal the internal fences as well as some tree removal, in order to aid in annual mowing, either for hay production or, at minimum, for weed mowing. After horses were removed, there was an infestation of County-listed noxious weeds Canada thistle (*Cirsium arvense*) and tansy ragwort (*Jacobaea vulgaris*) that has since and is currently being routinely maintained with mowing and spraying.

METHODOLOGY

Wetlands

The wetland delineation followed the Routine Determination Method according to the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (Corps 2010).

The Routine Determination Method examines three parameters—vegetation, soils, and hydrology—to determine if wetlands exist in a given area. Hydrology is critical in determining what is wetland, but is often difficult to assess because hydrologic conditions can change periodically (hourly, daily, or seasonally). Consequently, it is necessary to determine if hydrophytic vegetation and hydric soils are present, which would indicate that water is present for a long enough duration to support a wetland plant community. By definition, wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are regulated as "Waters of the United States" by the Corps, as "Waters of the State" by the Washington Department of Ecology (Ecology), and locally by the City of La Center.

ELS biologists completed fieldwork on September 8, 2020 and February 24, 2021 to determine the presence or absence of critical areas and if present, to map their approximate locations. Prior to conducting the initial fieldwork, an ELS biologist reviewed current and historic aerial photographs dating back to 1955 and reviewed the Clark County GIS database (2020) for information regarding soils, topography, wetlands, and habitat conservation areas. ELS biologists collected vegetation, soil, and hydrology information from 18 test plots to determine the presence or absence of wetlands onsite (Sheet 2). Test plot locations were determined based on changes in elevation, vegetation, the presence of hydrology, and according to potential wetland signatures based on an interpretation of aerial imagery. ELS biologists flagged the test plots and wetland boundaries in the field and recorded the locations with a hand-held GPS unit with sub meter accuracy under ideal conditions.

Wetland signatures were observed on aerial imagery within the tree farm area. Wetland A was delineated within a wet signature area in September, and the delineation was supported with several additional test plots in the vicinity during the site visit with Ecology. Wetland A was delineated primarily using vegetation: Pennyroyal (*Mentha pulegium*, OBL), creeping St. John's wort (*Hypericum anagalloides*, OBL), and soft rush (*Juncus effusus*, FACW) were observed within the wetland boundary. Additionally, oxeye daisy (*Leucanthemum vulgare*, FACU) and Himalayan blackberry (FAC) were observed outside of the wetland. Black cottonwood (*Populus balsamifera*, FAC) trees and shrubs are established within Wetland A as well as the area southeast of the wetland. Several test plots were taken in the signature southeast of the wetland (Sheet 2). These test plots contained similar vegetation as Wetland A, but soils were not hydric. Additionally, during the February site visit, standing water was not observed in these areas, but was observed within the wetland.

Wetland B was delineated with Ecology based on changes in vegetation, soils, and hydrology. The permanently ponded portion of the wetland is dominated by black cottonwood and Scouler's willow (*Salix scouleriana*, FAC) and the remainder of the wetland is dominated by creeping buttercup (*Ranunculus repens*, FAC) and mowed grass with some Himalayan blackberry. Hydric soils were observed within Wetland B, including the hydric soil indicator Hydrogen Sulfide (A4). Soils in the wetland buffer contained depleted matrices relatively deeper in the soil with little to no redoximorphic features (1 percent or less). During the follow-up fieldwork in February, less than an inch of standing water was observed at TP-BB, but not outside the wetland boundary.

VEGETATION

The indicator status, following the scientific names indicate the likelihood of a plant species to be established in wetlands. Listed from most likely to least likely, the indicator status categories are:

- **OBL** (obligate wetland) - occur almost always under natural conditions in wetlands.
- **FACW** (facultative wetland) - usually occur in wetlands, but occasionally found in non-wetlands.
- **FAC** (facultative) - equally likely to occur in wetlands or non-wetlands.
- **FACU** (facultative upland) - usually occur in non-wetlands, but occasionally found in wetlands.
- **UPL** (obligate upland) - occur almost always under natural conditions in non-wetlands.
- **NI** (no indicator) - insufficient data to assign to an indicator category.

Wetlands

Wetland A is a forested slope located within the decommissioned tree farm in the eastern portion of the site. Wetland B is forested depressional wetland located in the central southern portion of the site. Wetland A is dominated by **grasses**: sweet vernal grass (*Anthoxanthum odoratum*, FACU), velvet grass (*Holcus lanatus*, FAC), and soft rush (FACW); and **trees**: black cottonwood (FAC) and planted Nordmann fir (*Abies nordmanniana*, assumed to be FACU).

Wetland B is dominated by **herbs**: chickweed (*Stellaria media*, FACU), marsh cudweed (*Gnaphalium uliginosum*, FAC), marsh willowherb (*Epilobium palustre*, OBL), and creeping buttercup (FAC); and **trees**: black cottonwood and Scouler's willow (FAC).

Uplands

Onsite uplands within the field areas were dominated by **herbs and grasses**: sweet vernal grass, colonial bentgrass (*Agrostis capillaris*, FAC), tall fescue (*Schedonorus arundinaceus*, FAC), orchard grass (*Dactylis glomerata*, FACU), and English plantain (*Plantago lanceolata*, FACU); with scattered **shrubs**: Himalayan blackberry and **trees**: Oregon white oak and black cottonwood. The tree farm portion of the site is dominated by **grasses**: sweet vernal grass and colonial bentgrass; and **trees**: Nordmann fir and black cottonwood (Wetland A vicinity only). Regularly mowed Himalayan blackberry is also scattered throughout the tree farm area.

SOILS

Soil onsite is mapped as:

- Gee silt loam, 0 to 8 percent slopes (GeB),
- Gee silt loam, 8 to 20 percent slopes (GeD),
- Hillsboro silt loam, 0 to 3 percent slopes (HoA),
- Hillsboro silt loam, 8 to 15 percent slopes (HoC), and
- Odne silty clay loam, 0 to 3 percent slopes (OdB),

as referenced on the Natural Resources Conservation Service (NRCS) website (2020; Sheet 4).

Gee silt loam, 0 to 8 percent slopes and Gee silt loam, 8 to 20 percent slopes are characterized as moderately well-drained soils with an approximate depth to water table of about 24 to 48 inches

below ground surface (BGS). These soils are generally found on terraces. A typical profile consists of silt loam from 0 to 22 and silty clay loam from 22 to 60 inches BGS.

Hillsboro silt loam, 0 to 3 percent slopes and Hillsboro silt loam, 8 to 15 percent slopes are characterized as well-drained soils with an approximate depth to water table of more than 80 inches BGS. These soils are generally found on terraces. A typical profile consists of silt loam from 0 to 60 inches BGS.

Odne silty clay loam, 0 to 3 percent slopes is characterized as a poorly-drained soil with an approximate depth to water table of about 0 to 18 inches BGS. This soil is generally found on terraces and drainageways. A typical profile consists of ashy silt loam from 0 to 5, silt loam from 5 to 33, and loam from 33 to 60 inches BGS. Odne silty clay loam, 0 to 3 percent slopes is listed as a hydric soil on the *Washington State Hydric Soils List* (NRCS 2019).

Wetland test plots met primary hydric soil indicators Hydrogen Sulfide (A4), Depleted Below Dark Surface (A11), and Depleted Matrix (F3). Soil data from the test plots can be found in Appendix A.

HYDROLOGY

Precipitation data were gathered from the Battle Ground WETS Station and are summarized in the table below from data in Appendix C. Rainfall was below the 30-year monthly average in July and October and was above the 30-year monthly average in June, September, January, and February. In August, November, and December, rainfall did not deviate from the 30-year monthly average. February received 88 percent of its normal rainfall by the day of the site visit on February 24th.

Table 1. Precipitation Data.

Field-work Dates	Precipitation (inches)						
	Prior 14 Day Total	3 Months Prior		30 Year Monthly Average	Deviation from 30 Year Monthly Average	30% Below	30% Above
		Month	Monthly Total				
2/24/21	3.19	02/2021	6.69	5.36	+1.33	3.65	6.40
		01/2021	9.70	7.31	+2.39	5.70	8.45
		12/2020	7.10	7.98	-0.88	6.33	9.18
11/10/20	2.19	11/2020	8.51	7.67	+0.84	5.50	9.06
		10/2020	2.59	4.81	-2.22	3.29	5.74
		09/2020	2.69	2.20	+0.49	1.12	2.65
9/8/2020	0.00	08/2020	0.44	0.80	-0.36	0.37	0.94

Field-work Dates	Precipitation (inches)						
	Prior 14 Day Total	3 Months Prior		30 Year Monthly Average	Deviation from 30 Year Monthly Average	30% Below	30% Above
		Month	Monthly Total				
		07/2020	0.18	0.63	-0.45	0.23	0.70
		06/2019	3.88	2.31	+1.57	1.61	2.75

Oxidized Rhizospheres on Livings Roots (C3) were observed within Wetland A test plots in September and November, and Surface Water (A1), High Water Table (A2), and Saturation (A3) were observed within Wetland A in February. The secondary hydrology indicator Saturation Visible on Aerial Imagery (C9) was also noted during September fieldwork, due to the wet signatures discussed in the *Methodology* section above.

Oxidized Rhizospheres on Livings Roots (C3) were observed within Wetland B test plots during each site visit, and Surface Water (A1), High Water Table (A2), Saturation (A3), and Hydrogen Sulfide Odor (C1) were observed within Wetland B in February. The recorded hydrological data from test plots are in Appendix A.

According to the Washington Department of Natural Resources Stream Type Map (WDNR 2020), a Type Ns stream is mapped onsite, flowing south through the center of the site (Sheets 5 and 6). The Type Ns stream is mapped originating approximately 700 feet offsite to the north, through the center of the site, and continuing offsite southwesterly for another 975 feet before a water type break (Sheet 6). From there, the Type F stream continues southwest for approximately 0.5 miles before reaching a wetland adjacent to East Fork Lewis River. The site lies within Water Resource Inventory Area (WRIA) 27 Lewis and Hydrologic Unit Code (HUC) 170800020507 Lockwood Creek – East Fork Lewis River.

ELS biologists did not observed flowing water, nor any signs of a waterbody in the onsite mapped area onsite. According to *LCMC 18.300.030 Definitions*, "streams" are defined as "those areas where surface waters produce a defined channel or bed excluding streams and lakes regulated under the State Shorelines Management Act." The presence of a stream can be indicated by either hydraulically sorted sediments or by the removal of vegetation from the action of moving water. Photos 7 and 8 show the onsite mapped area, which does not feature a channel, bed, bank, or signs of regular water flow, seasonal or otherwise. An ordinary high water mark (OHWM) could not be delineated because, although slight changes in topography were present, the area does not exhibit changes in vegetation or sediment. Test plots located along the mapped riparian area (TPs 3, 4, and 6) did not contain hydric soils, nor hydrologic indicators. Therefore, ELS has determined that the mapped stream does not meet stream criteria.

WETLAND INVENTORY

The National Wetlands Inventory (NWI 2020) shows a palustrine wetland in the vicinity of Wetland A, and Wetland B is not mapped (Sheet 7). The NWI and Clark County Inventory (Clark

County GIS 2020) show an offsite wetland north of the site, aligned with the Type Ns stream mapping. ELS findings differ somewhat from the mapped critical areas, as an additional wetland was delineated in the southern portion of the site (Wetland B). Wetland inventory maps should be used with discretion, as they are typically used to gather wetland information about a region and, because of the large scale necessary for regional mapping, are limited in accuracy for localized analyses.

CRITICAL AREAS SUMMARY

Wetlands

Two wetlands (Wetlands A and B) were delineated onsite based on topography and soil, vegetative, and hydrologic indicators. The wetland determination data forms are in Appendix A and the wetland rating forms are in Appendix B. Table 2 summarizes the onsite wetlands. All wetland buffers were designated assuming high land use intensity.

Wetland A

Wetland A is a Category IV forested, slope wetland located near the center of the decommissioned tree farm, totaling 0.05 acres (Sheet 2). Wetland A receives most of its hydrology from a seasonally high groundwater table, precipitation, and surface runoff from surrounding uplands. The wetland is saturated only and functions to recharge groundwater. According to the *Washington State Wetland Rating System for Western Washington: 2014 Update* (rating system), Wetland A is a Category IV wetland scoring 5 points for water quality functions, 5 points for hydrologic functions, and 4 points for habitat functions with a total of 14 points. According to *LCMC 18.300.090(5)(d) Exempted Wetlands*, Wetland A is exempted from La Center buffer regulations.

Wetland B

Wetland B is a Category IV emergent and forested, depressional wetland located in the central southern portion of the site, totaling 0.08 acres (Sheet 2). The wetland receives it hydrology from groundwater and precipitation. Wetland B is permanently flooded and saturated only and functions to recharge groundwater. According to the rating system, Wetland B is a Category IV wetland scoring 5 points for water quality functions, 6 points for hydrologic functions, and 4 points for habitat functions with a total of 15 points. The designated buffer width for a Category IV wetland with a habitat score of 4 is 50 feet, as listed in *LCMC Table 18.300.090(5)(i)(i)-1*.

Table 2. Wetland Summary.

Wetland	Category[1]	HGM Class[2]	Cowardin Class[3]	Habitat Score	Wetland Area (ac.)	Buffer[4] (ft.)
A	IV	Slope	Forested	4	0.05	Exempted[5]
B	IV	Depressional	Emergent, Forested	4	0.08	50

[1] *Hruby 2014*
[2] *NRCS 2008*
[3] *Cowardin et al. 1979*
[4] *LCMC Table 18.300.090(5)(i)(i)-1*
[5] *LCMC 18.300.090(5)(d)*

Oregon White Oaks

According to *LCMC 18.300.090(2) Fish and Wildlife Conservation Areas*, oaks are considered a priority habitat by the Washington Department of Fish and Wildlife (WDFW) and locally by the City of La Center. In urban or urbanizing areas west of the Cascades, WDFW defines priority oak habitat as single oaks, or stands of pure oak, or oak/conifer associations, 1 acre or greater in size (2008). WDFW may also consider individual Oregon white oak trees a priority habitat when found to be particularly valuable to wildlife (i.e., contains many cavities, has a large diameter at breast height (DBH), is used by priority species, or has a large canopy) (Larsen and Morgan, 1998). WDFW recommendation is that in urban and urbanizing areas, single trees should be maintained if they are deemed important to species highly associated with Oregon white oak. Oaks and their associated floras comprise distinct woodland ecosystems with various plant communities providing valuable habitat that contributes to wildlife diversity; Oak woodlands provide a mix of feeding, resting, and breeding habitat for many wildlife species (Larsen and Morgan, 1998). WDFW considers oak trees with a DBH of greater than 20 inches to be large and greater than 12 inches to be medium.

Fifteen small oaks were observed onsite with DBHs ranging from 2 to 8 inches (Photo 12). An additional oak in the southwestern corner of the site has a DBH of 40 inches and is considered priority habitat. The priority oak canopy is approximately 0.10 acres (Sheet 2). *LCMC Table 18.300.090(2)(a)* states that nonriparian priority habitats and species require a buffer of 300 feet or a threshold based upon consultation with WDFW. Appendix D shows email correspondence with WDFW Habitat Specialist, Isaac Holowatz, stating that the dripline is adequate to protect the priority oak tree (February 17, 2021).

CONCLUSION

One depressional wetland and one slope wetland were delineated onsite. The wetland boundaries were confirmed by Ecology on November 10, 2020. One priority habitat Oregon white oak is located in the southwestern corner of the site. The mapped Type Ns stream was not observed onsite, as no channel, bed, bank, or signs of regular water flow were observed onsite. Upon the forthcoming site plan design for a residential subdivision development, a mitigation plan will be submitted to satisfy any necessary critical areas impacts.

LIMITATIONS

ELS bases this report's determinations on standard scientific methodology and best professional judgment. In our opinion, local, state, and federal regulatory agencies should agree with our determinations. However, the information contained in this report should be considered preliminary and used at your own risk until it has been approved in writing by the appropriate regulatory agencies. ELS is not responsible for the impacts of any changes in environmental standards, practices, or regulations after the date of this report.

REFERENCES

City of La Center. 2020. *La Center Municipal Code 18.300 Critical Areas*. La Center, Washington. December 2, 2020.

Clark County GIS. 2020. Maps Online. https://gis.clark.wa.gov/mapsonline/. Accessed September 2020.

Cowardin, L.M., C. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. FWS/OBS-78/31. U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services, Washington D.C.

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual,* Technical Report Y-87-1. U.S. Army Corps of Engineer Waterways Experiment Station, Vicksburg, Mississippi.

Hruby, T. 2014. *Washington State Wetland Rating System for Western Washington – 2014 update*. Washington State Department of Ecology Publication #14-06-029. Olympia, Washington.

Larsen, Eric M. and Morgan, John T. 1998. *Management Recommendations for Washington's Priority Habitats Oregon White Oak Woodlands*. Washington Department of Fish and Wildlife (WDFW), Olympia. 37pp.

Natural Resources Conservation Service (NRCS). 2020. *Soil Survey of Clark County, Washington*. March 31, 2020. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed September 2020.

Natural Resources Conservation Service (NRCS). 2019. *Washington State Hydric Soils List.* July 31, 2019. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html. Accessed September 2020.

U.S. Army Corps of Engineers. 2010. *Final Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-13. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center.

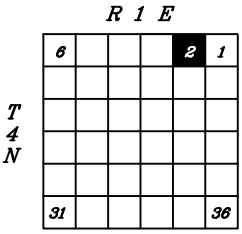
U.S. Fish and Wildlife Service (WDFW). October 1, 2020. *National Wetlands Inventory*. http://wetlandsfws.er.usgs.gov/wtlnds/launch.html. Accessed February 2021.

Washington Department of Fish and Wildlife (WDFW). 2008. *Priority Habitat and Species List*. Olympia, Washington. 292pp.

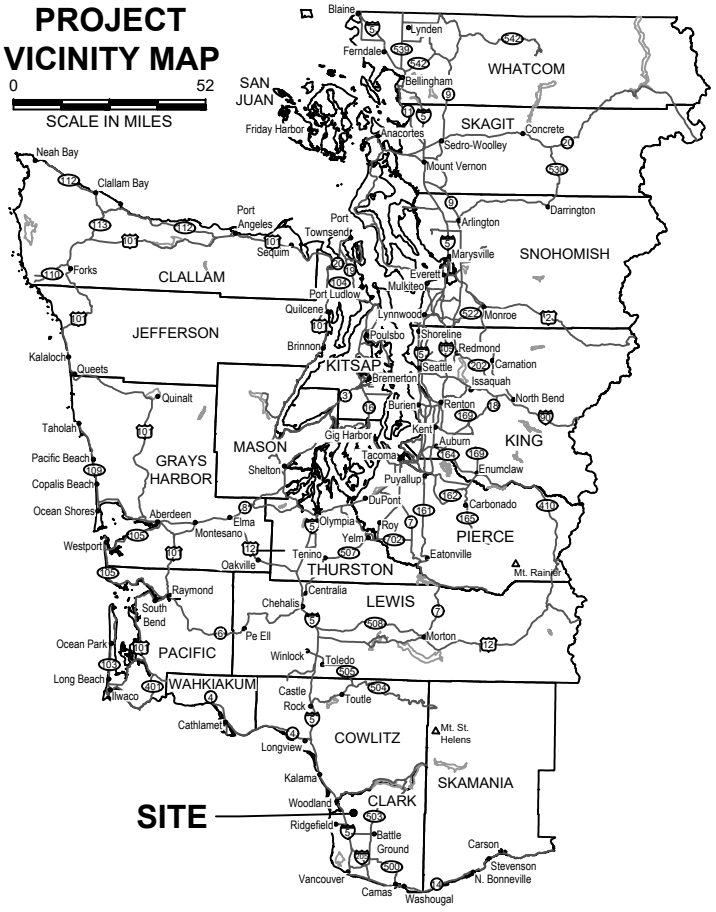
SHEET SET & PHOTOPLATES

Latitude: 45.8620°
Longitude: -122.6487°

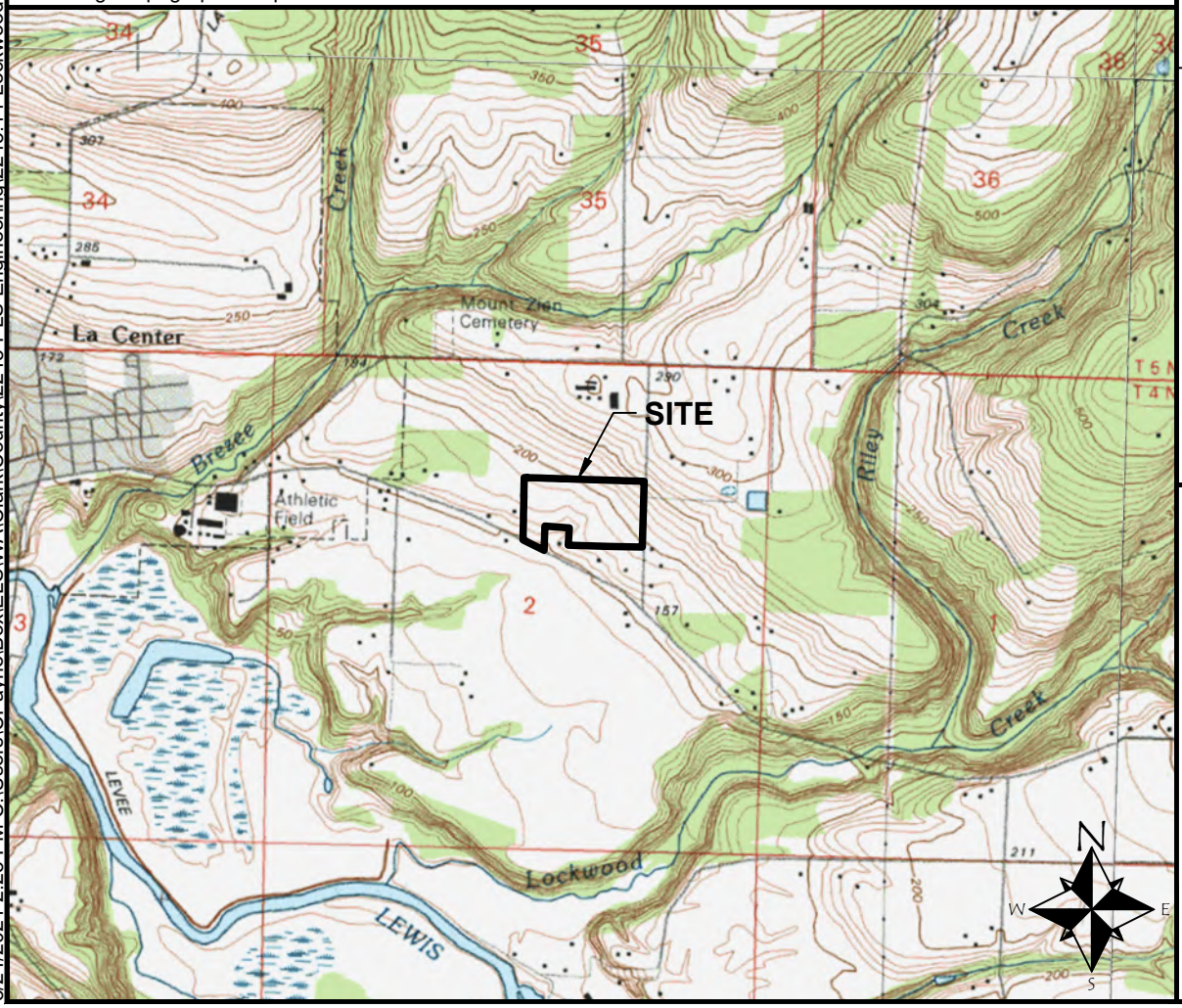
LOCATION MAP



PROJECT VICINITY MAP



NOTE:
Quadrangle topographic map from USGS.



PROPOSED: Residential subdivision
IN Wetland
NEAR: La Center
COUNTY: Clark **STATE:** WA
SHEET 1 **OF** 10
DATE: 3/24/21

VICINITY MAP
APPLICANT: PLS Engeneering
PROJECT NAME: Lockwood Meadows Subdivision
REFERENCE #: NWS-2020-1015
SITE LOCATION ADDRESS:
2000 NE Lockwood Creek Road,
La Center WA 98629

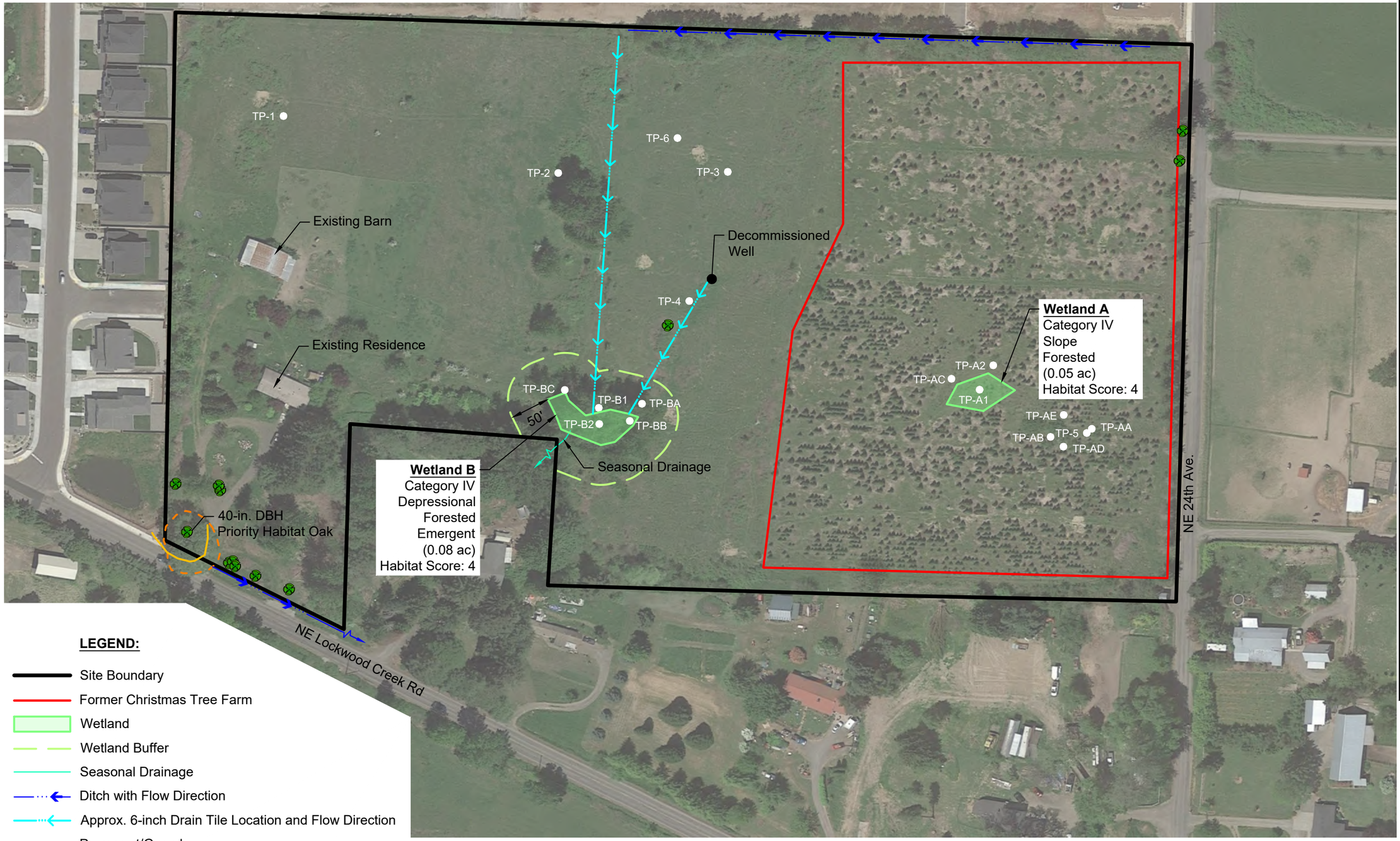
PURPOSE: Wetland Fill
DATUM: NAD83
ADJACENT PROPERTY OWNERS: See JARPA

SCALE IN FEET
0 2000 4000

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

Ecological Land Services

3/24/2021 2:25 PM C:\Users\CPayne\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14.dwg Cpayne



LEGEND:

- Site Boundary
- Former Christmas Tree Farm
- Wetland
- Wetland Buffer
- Seasonal Drainage
- Ditch with Flow Direction
- Approx. 6-inch Drain Tile Location and Flow Direction
- Pavement/Gravel
- Oak Tree
- Oak Tree Dripline (0.10 ac)
- TP-1 Test Plot Location
- Continues Offsite

NOTE(S):

1. Aerial from May 2019 Google Earth™.
2. Wetlands, test plots, and oak trees were mapped by an ELS Biologist using a hand-held GPS unit with submeter accuracy.
3. Wetland A is exempted from La Center buffers per LCMC 18.300.090(5)(d) Exempted Wetlands.

N W E S

SCALE IN FEET 0 120 240

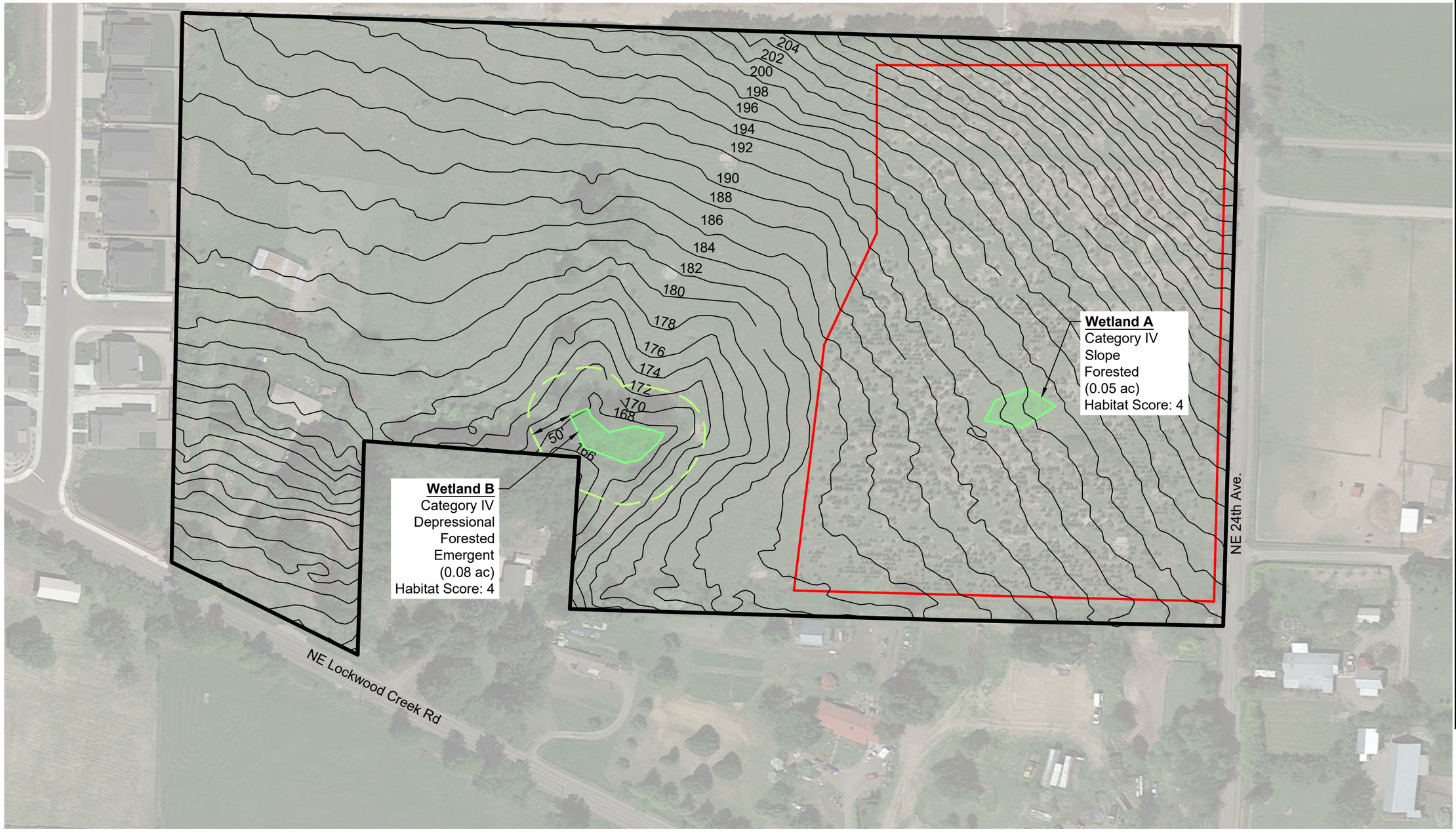
Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

SITE MAP
APPLICANT: PLS Engeneering
PROJECT NAME: Lockwood Meadows Subdivision
REFERENCE #: NWS-2020-1015
SITE LOCATION ADDRESS: 2000 NE Lockwood Creek Road, La Center WA 98629

PROPOSED: Residential subdivision
IN Wetland
NEAR: La Center **STATE:** WA
COUNTY: Clark
SHEET 2 **OF** 10
DATE: 3/24/21

PURPOSE: Wetland Fill
DATUM: NAD83
ADJACENT PROPERTY OWNERS: See JARPA

3/24/2021 2:25 PM C:\Users\CPayne\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14.dwg Cpayne



LEGEND:

- Site Boundary
- Former Christmas Tree Farm
- Wetland
- Wetland Buffer

NOTE(S):

1. Aerial from May 2019 Google Earth™.
2. Wetlands, test plots, and oak trees were mapped by an ELS Biologist using a hand-held GPS unit with submeter accuracy.
3. Wetland A is exempted from La Center buffers per LCMC 18.300.090(5)(d) Exempted Wetlands.

N W E S

0 120 240
SCALE IN FEET

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

Ecological Land Services

AERIAL WITH TOPO

APPLICANT: PLS Engeneering
PROJECT NAME: Lockwood Meadows Subdivision
REFERENCE #: NWS-2020-1015
SITE LOCATION ADDRESS: 2000 NE Lockwood Creek Road, La Center WA 98629

PURPOSE: Wetland Fill

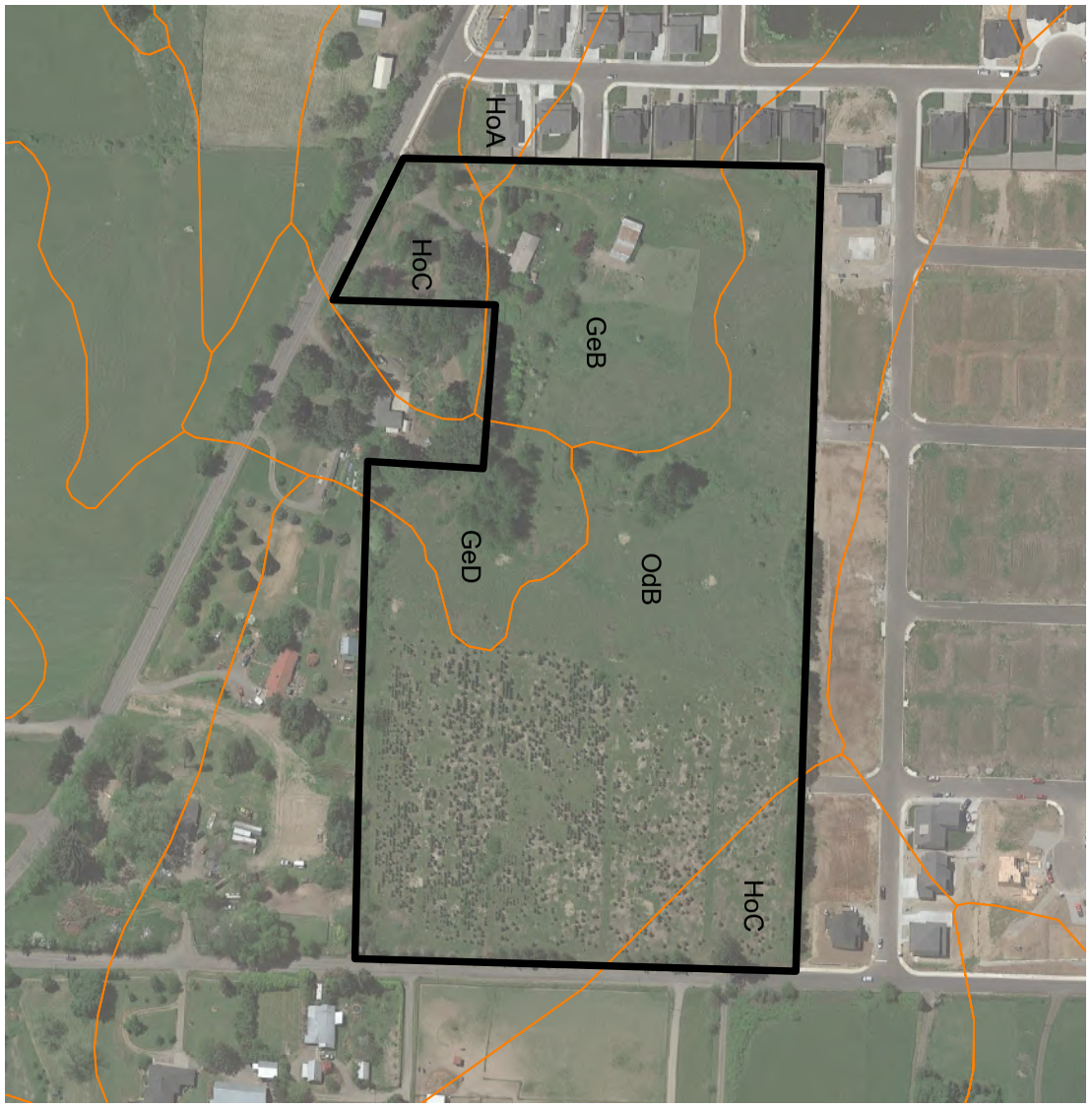
DATUM: NAD83

ADJACENT PROPERTY OWNERS: See JARPA

PROPOSED: Residential subdivision

IN Wetland
NEAR: La Center **STATE:** WA
COUNTY: Clark
SHEET 3 **OF** 10
DATE: 3/24/21

3/24/2021 2:25 PM C:\Users\CPayne\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14.dwg Cpayne



LEGEND:

Site Boundary

GeB Gee silt loam, 0 to 8 percent slopes. Not hydric.

GeD Gee silt loam, 8 to 20 percent slopes. Not hydric.

HoA Hillsboro silt loam, 0 to 3 percent slopes. Not hydric.

HoC Hillsboro silt loam, 8 to 15 percent slopes. Not hydric.

OdB Odne silty clay loam, 0 to 3 percent slopes. **Hydric.**

NOTE(S):

1. Map provided online by NRCS at web address: *https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey*

0 300 600

SCALE IN FEET

Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

PURPOSE: Wetland Fill

DATUM: NAD83

ADJACENT PROPERTY OWNERS:

See JARPA

NRCS SOIL SURVEY MAP

APPLICANT: PLS Engeneering

PROJECT NAME: Lockwood Meadows Subdivision

REFERENCE #: NWS-2020-1015

SITE LOCATION ADDRESS:
2000 NE Lockwood Creek Road,
La Center WA 98629

PROPOSED: Residential subdivision

IN Wetland

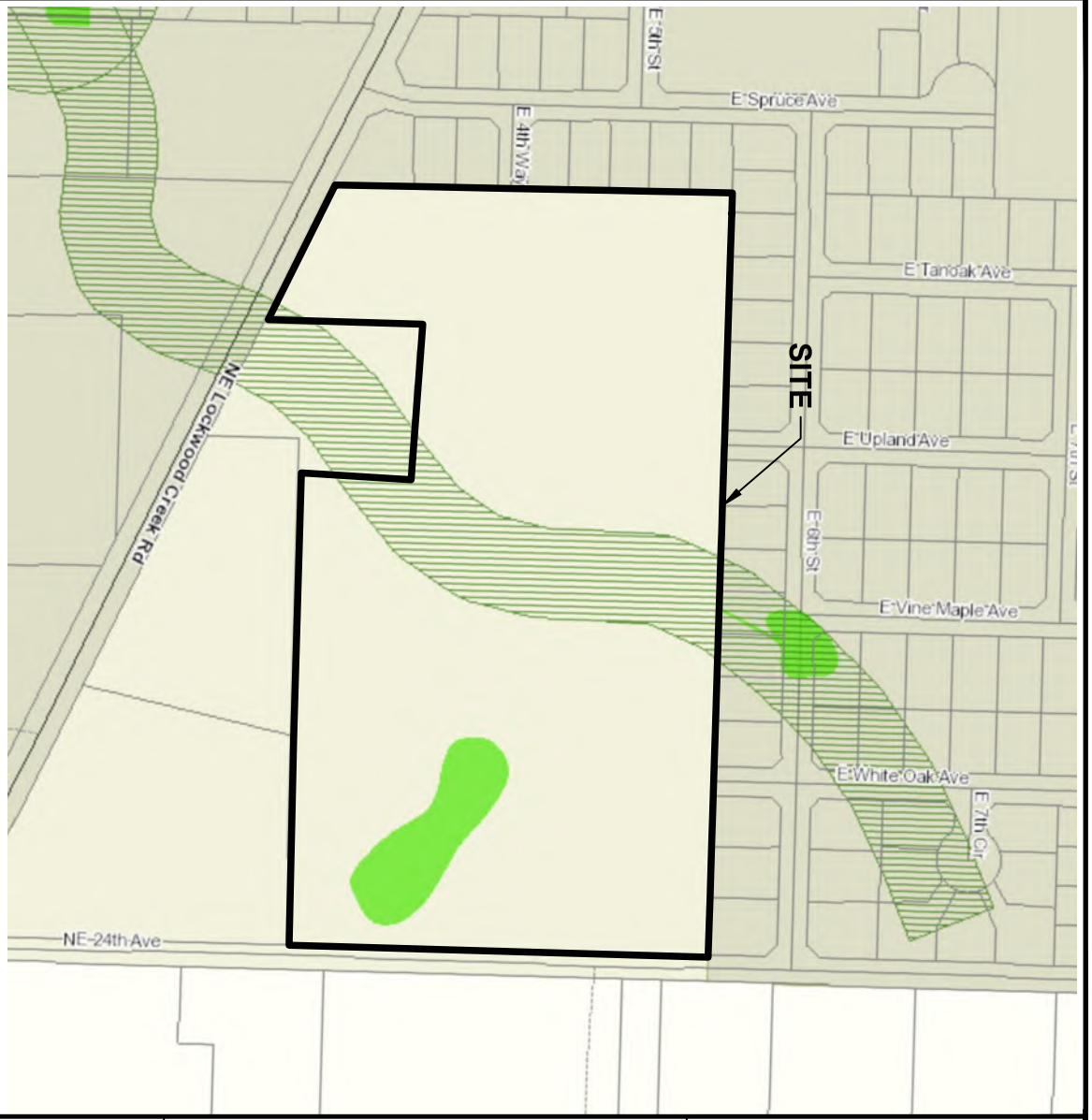
NEAR: La Center

COUNTY: Clark **STATE:** WA

SHEET 4 **OF** 10

DATE: 3/24/21

3/24/2021 2:25 PM C:\Users\CPayne\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14.dwg Cpayne



Site Boundary

Environmental

Priority Habitats and Species Group

Species

Species Area

Adjacent to Species Area

Habitat

Habitat Area

Adjacent to Habitat Area

Riparian Habitat

Riparian Habitat Area

Location generalized due to sensitivity

Species Area

Habitat Area

Wetlands Presence - Component

NOTE: Map provided online by Clark County, Washington at web address:
https://gis.clark.wa.gov/mapsonline/

W N S E

0 300 600
SCALE IN FEET

Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

PURPOSE: Wetland Fill

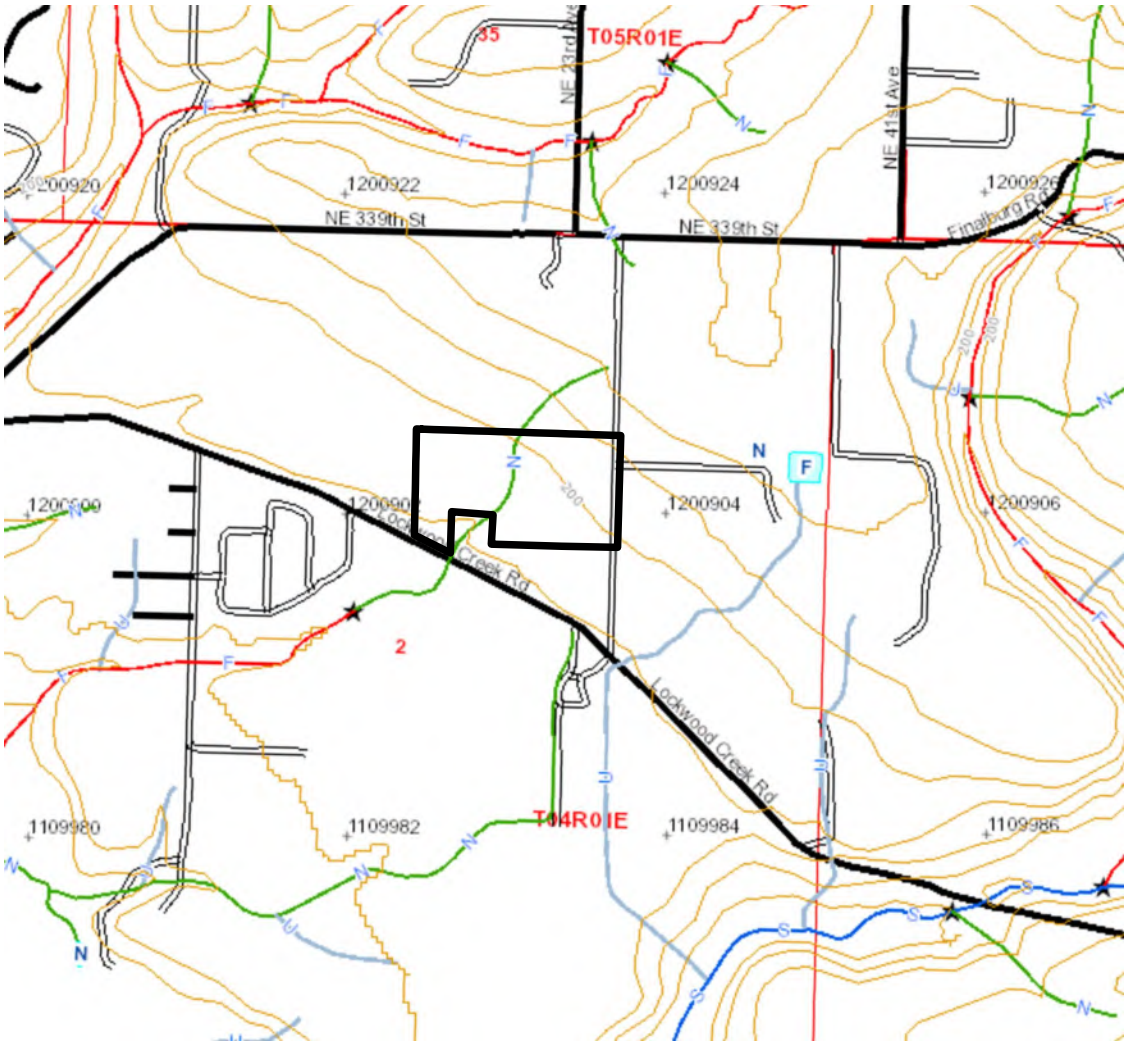
DATUM: NAD83
ADJACENT PROPERTY OWNERS:

See JARPA

CLARK COUNTY ENVIROMENTAL CONSTRAINTS
APPLICANT: PLS Engeneering
PROJECT NAME: Lockwood Meadows Subdivision
REFERENCE #: NWS-2020-1015
SITE LOCATION ADDRESS:
2000 NE Lockwood Creek Road,
La Center WA 98629

PROPOSED: Residential subdivision

IN Wetland
NEAR: La Center
COUNTY: Clark **STATE:** WA
SHEET 5 **OF** 10
DATE: 3/24/21



Mapped streams indicated onsite by the Washington State Department of Natural Resources (DNR).

LEGEND:

Site Boundary

Water Bodies (FP)

Water Bodies (FP)

- Other Impoundments
- Open Freshwater
- Subject to Inundation
- Glacier / Snowfield
- Wet Area
- Open Saltwater
- Artificial Feature

Water Courses (FP)

Water Courses (FP)

- Type S
- Type F
- Type N, Np, Ns
- U, unknown
- X, non-typed per WAC 222-16

NOTE: Map provided online by Washington State Department of Natural Resources at web address: *https://fortress.wa.gov/dnr/protectiongis/fpamt/index.html*

N W E S

0 1200 2400 SCALE IN FEET

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

Ecological Land Services

DNR WATER TYPE MAP

APPLICANT: PLS Engeneering
PROJECT NAME: Lockwood Meadows Subdivision
REFERENCE #: NWS-2020-1015
SITE LOCATION ADDRESS: 2000 NE Lockwood Creek Road, La Center WA 98629

PURPOSE: Wetland Fill

DATUM: NAD83

ADJACENT PROPERTY OWNERS: See JARPA

PROPOSED: Residential subdivision

IN Wetland
NEAR: La Center
COUNTY: Clark **STATE:** WA
SHEET 6 **OF** 10
DATE: 3/24/21

3/24/2021 2:25 PM C:\Users\CPayne\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14.dwg Cpayne

Mapped wetlands indicated onsite by US Fish & Wildlife Service.

LEGEND:

- Site Boundary
- Freshwater Emergent Wetland

PEM1A	Palustrine, emergent, persistent, temporarily flooded.
PEM1Ad	Palustrine, emergent, persistent, temporarily flooded, partially drained/ditched.

NOTE(S):

1. Map provided online by US Fish & Wildlife Service at web address: *https://www.fws.gov/wetlands/data/Mapper.html*

N W E S

0 300 600 SCALE IN FEET

Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

PURPOSE: Wetland Fill

DATUM: NAD83

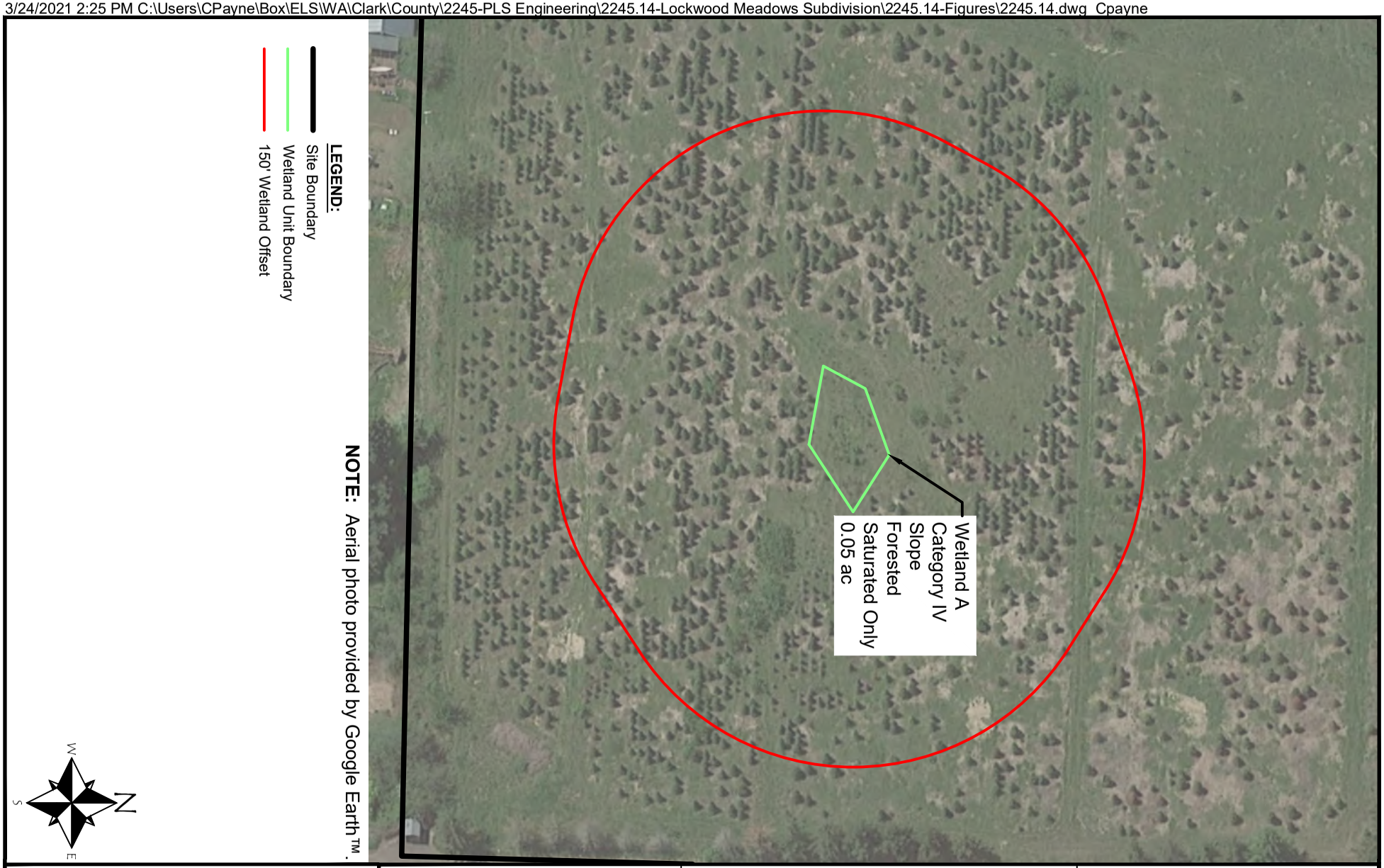
ADJACENT PROPERTY OWNERS: See JARPA

NATIONAL WETLAND INVENTORY MAP
APPLICANT: PLS Engeneering
PROJECT NAME: Lockwood Meadows Subdivision
REFERENCE #: NWS-2020-1015
SITE LOCATION ADDRESS: 2000 NE Lockwood Creek Road, La Center WA 98629

PROPOSED: Residential subdivision

IN Wetland
NEAR: La Center **STATE:** WA
COUNTY: Clark
SHEET 7 **OF** 10
DATE: 3/24/21

3/24/2021 2:25 PM C:\Users\CPayne\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14.dwg Cpayne



Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

PURPOSE: Wetland Fill

DATUM: NAD83
ADJACENT PROPERTY OWNERS:

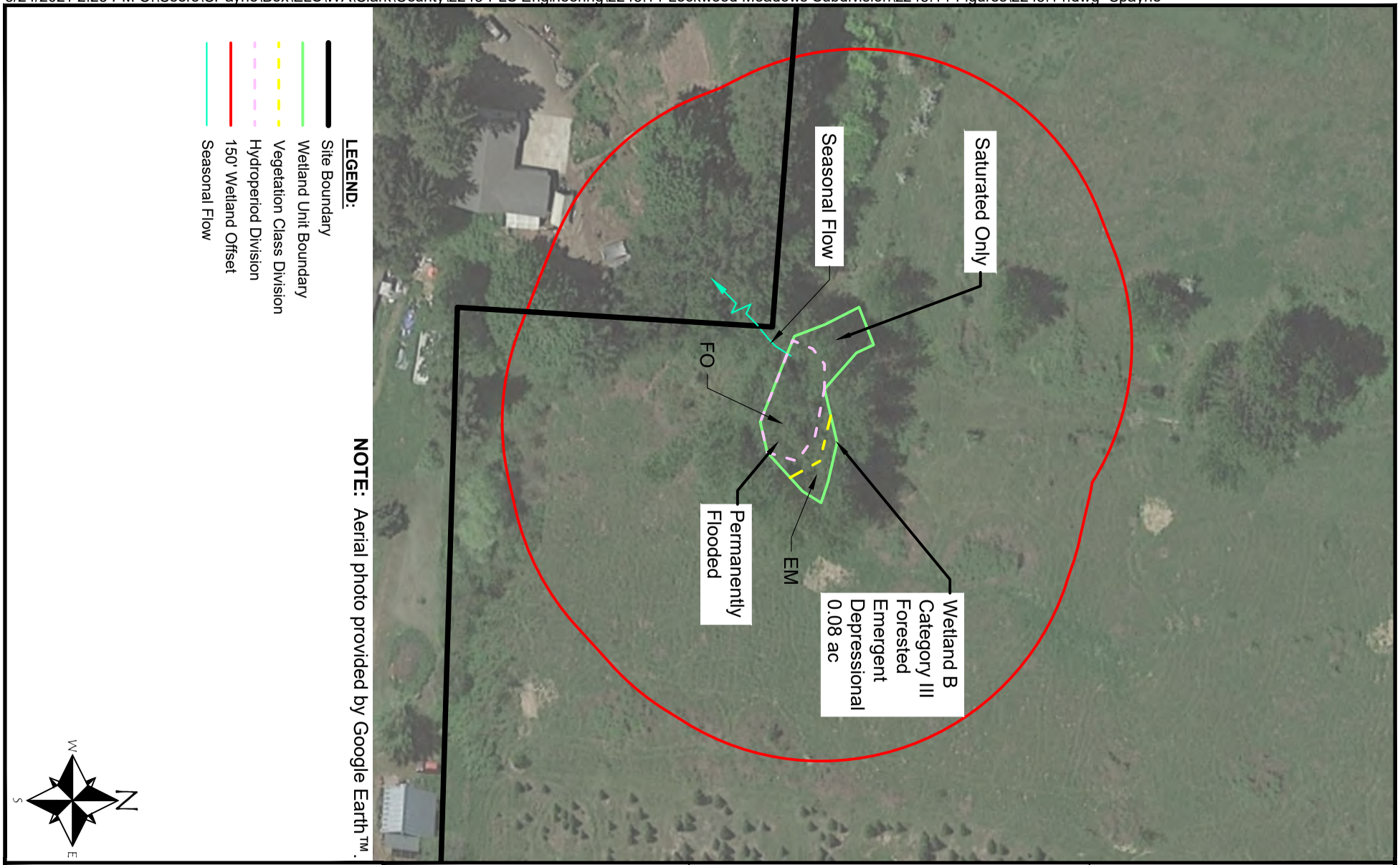
See JARPA

150' OFFSET WETLAND A RATING FIGURE
APPLICANT: PLS Engeneering
PROJECT NAME: Lockwood Meadows Subdivision
REFERENCE #: NWS-2020-1015
SITE LOCATION ADDRESS:
2000 NE Lockwood Creek Road,
La Center WA 98629

PROPOSED: Residential subdivision

IN Wetland
NEAR: La Center
COUNTY: Clark **STATE:** WA
SHEET 8A **OF** 10
DATE: 3/24/21

3/24/2021 2:25 PM C:\Users\CPayne\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14.dwg Cpayne



Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

PURPOSE: Wetland Fill

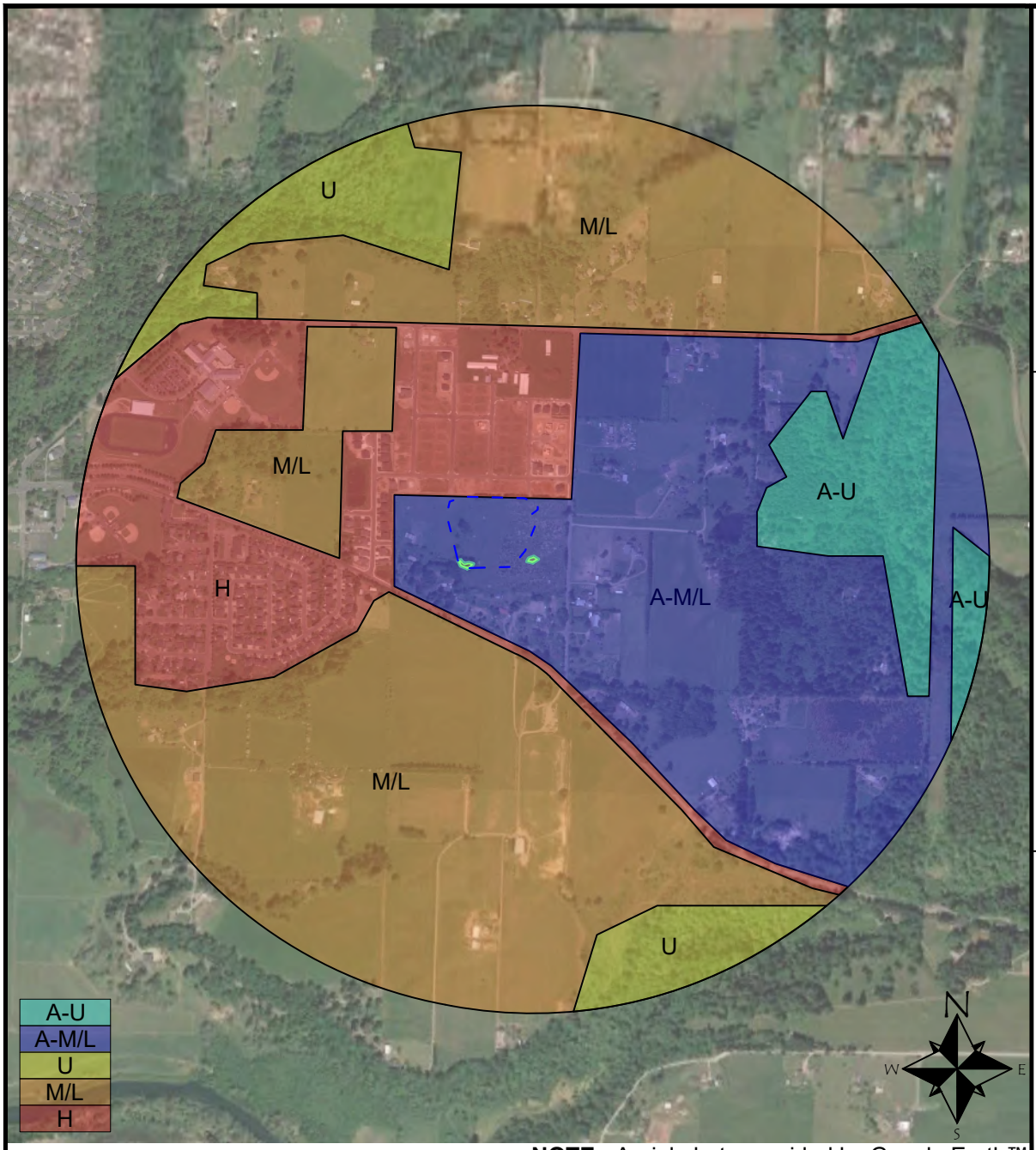
DATUM: NAD83
ADJACENT PROPERTY OWNERS:

See JARPA

150' OFFSET WETLAND B RATING FIGURE
APPLICANT: PLS Engeneering
PROJECT NAME: Lockwood Meadows Subdivision
REFERENCE #: NWS-2020-1015
SITE LOCATION ADDRESS:
2000 NE Lockwood Creek Road,
La Center WA 98629

PROPOSED: Residential subdivision

IN Wetland
NEAR: La Center
COUNTY: Clark **STATE:** WA
SHEET 8B **OF** 10
DATE: 3/24/21



NOTE: Aerial photo provided by Google Earth™

LEGEND:

Wetland Unit Boundary

Contributing Basin (10-100x area of Wetland B)

H2.1 Accessible Habitat

- A-U: A-U (6%)
- A-M/L: A-M/L (26%)

H2.2 Undisturbed Habitat

- U: U (6%)
- M/L: M/L (44%)

H2.3 Land Use Intensity

- H: H (18%)

H 2.1. Accessible Habitat Equation

6% A-U habitat + [(**26%** A-M/L intensity land uses)/2] **13%** = **19%**

H 2.2. Total Undisturbed Habitat Equation

6% A-U + **6%** U habitat + [(**26%** A-M/L + **44%** M/L land uses)/2] **35%** = **47%**

PROPOSED: Residential subdivision

IN Wetland

NEAR: La Center **STATE:** WA

COUNTY: Clark

SHEET 9 **OF** 10

DATE: 3/24/21

1KM OFFSET WETLAND RATING FIGURE

APPLICANT: PLS Engeneering

PROJECT NAME: Lockwood Meadows Subdivision

REFERENCE #: NWS-2020-1015

SITE LOCATION ADDRESS: 2000 NE Lockwood Creek Road, La Center WA 98629

ADJACENT PROPERTY OWNERS: See JARPA

DATUM: NAD83

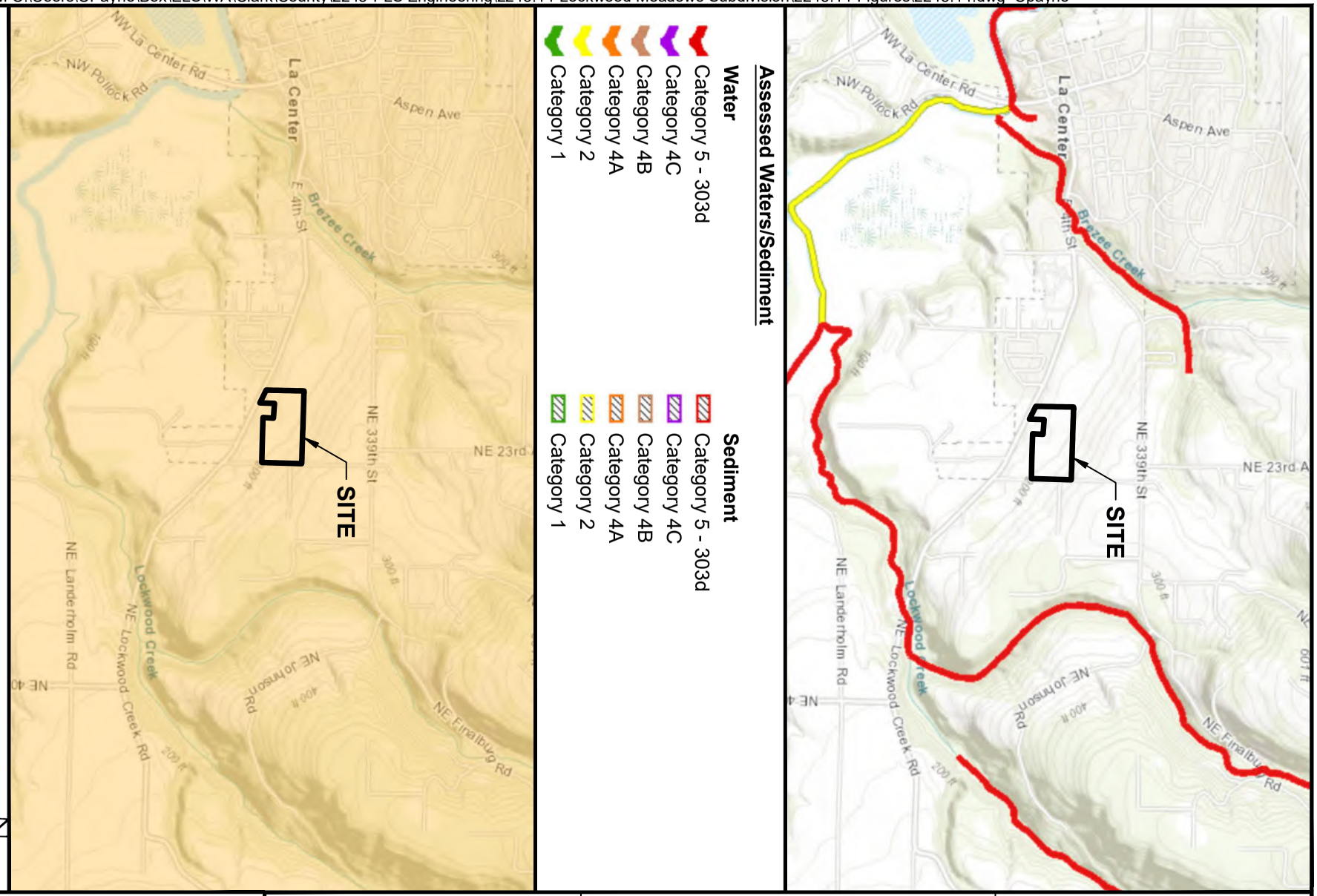
PURPOSE: Wetland Fill

0 1200 2400 SCALE IN FEET

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

Ecological Land Services

3/24/2021 2:25 PM C:\Users\CPayne\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14.dwg Cpayne



NOTE(S):

1. Map provided on-line by Washington State Department of Ecology at web address: *https://fortress.wa.gov/ecy/waterqualityatlas/map.aspx?*

0 2500 5000

SCALE IN FEET

Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371

PURPOSE: Wetland Fill

DATUM: NAD83

ADJACENT PROPERTY OWNERS:

See JARPA

303(D) LISTED WATERS AND TMDLS

APPLICANT: PLS Engeneering

PROJECT NAME: Lockwood Meadows Subdivision

REFERENCE #: NWS-2020-1015

SITE LOCATION ADDRESS:
2000 NE Lockwood Creek Road,
La Center WA 98629

PROPOSED: Residential subdivision

IN Wetland

NEAR: La Center

COUNTY: Clark **STATE:** WA

SHEET 10 **OF** 10

DATE: 3/24/21

Photo 1. Mowed grass portion of the site that was previously used for livestock, facing south. Photo taken September 2020.

Photo 2. View facing south from TP-2. Photo taken September 2020.

Photo 3. View facing SW from the NE corner of the site. Nordmann firs from the tree farm can be seen. Photo taken September 2020.

Photo 4. Cottonwood trees growing in the decommissioned tree farm area, near Wetland A. Photo taken September 2020.

Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305

DATE: 3/24/2021
DWN: AJR
PRJ. MGR: AJR
PROJ #: 2245.14
NWS-2020-1015

Photoplate 1
Site Photos
Lockwood Meadows Subdivision
PLS Engineering
La Center, Washington
Section 2, Township 4N, Range 1E, W.M.

Photo 5. View facing southwest near TP-A1, within Wetland A. Nordmann firs can be seen outside the wetland boundary in background. Photo taken February 2021.

Photo 6. Cottonwood patch southeast of Wetland A. Photo taken February 2021.

Photo 7. View facing north of tile location where Type Ns stream is mapped. Photo taken September 2020.

Photo 8. View facing south of tile location where Type Ns stream is mapped. Photo taken February 2021.

Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305

DATE: 3/24/2021
DWN: AJR
PRJ. MGR: AJR
PROJ #: 2245.14
NWS-2020-1015

Photoplate 2
Site Photos
Lockwood Meadows Subdivision
PLS Engineering
La Center, Washington
Section 2, Township 4N, Range 1E, W.M.

Photo 9. View of Wetland B facing south. Photo taken September 2020.

Photo 10. Vegetation within the ponded portion of Wetland B. Photo taken September 2020.

Photo 11. Seasonal drainage south of Wetland B. Arrow shows drainage path through blackberry bushes offsite. Photo taken September 2020.

Photo 12. Small, non-priority oaks located in the southwestern portion of the site. Photo taken February 2021.

Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305

DATE: 3/24/2021
DWN: AJR
PRJ. MGR: AJR
PROJ #: 2245.14
NWS-2020-1015

Photoplate 3
Site Photos
Lockwood Meadows Subdivision
PLS Engineering
La Center, Washington
Section 2, Township 4N, Range 1E, W.M.

APPENDIX A: WETLAND DETERMINATION DATA FORMS

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 9/8/2020
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TP1
Investigator(s): Naglich, Francis; Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Terraces Local relief: (concave, convex, none): None Slope (%): 0-8%
Subregion (LRR): A Lat: 45.862444 Long: -122.650711 Datum: NAD83
Soil Map Unit Name: Gee silt loam, 0 to 8 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** **Yes☐ No☒**
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located in the northwest portion of Clark County Tax Parcel 209113000. TP1 only met one of the three wetland parameters; therefore, it is not considered to be within a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.	%		
2.	%		
3.	%		
4.	%		
50% = ___ 20% = ___	%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Rubus armeniacus*	30%	yes	FAC
2.	%		
3.	%		
4.	%		
5.	%		
50% = 15 20% = 6	30%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Anthoxanthum odoratum*	25%	yes	FACU
2. *Agrostis capillaris*	25%	yes	FAC
3. *Leucanthemum vulgare*	10%	no	FACU
4. *Asclepias syriaca*	5%	no	FACU
5. *Lotus corniculatus*	5%	no	FAC
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 35 20% = 14	70%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 30%

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:The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having FAC indicator statuses.

Sampling Point: TP1

SOIL

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/3	100%		%			Silt loam	
7-16	10YR 4/3	99%	10YR 4/6	1%	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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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: Soil was very dry and compact. No hydric soil indicators were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:Hydrology was not present and there were no indicators of wetland hydrology.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 9/8/2020
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TP2
Investigator(s): Naglich, Francis; Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces Local relief: (concave, convex, none): None Slope (%): 0-3%
Subregion (LRR): A Lat: 45.862269 Long: -122.649359 Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** Yes☐ No☒
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located within the north-central portion of Clark County Tax Parcel 209113000, near a DNR mapped Type N stream. This test plot only met one of the three wetland parameters; therefore, TP2 is not considered to be within a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	45%	yes	FAC
2.	%		
3.	%		
4.	%		
50% = 22 20% = 9	45%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Rubus armeniacus*	20%	yes	FAC
2.	%		
3.	%		
4.	%		
5.	%		
50% = 10 20% = 5	20%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Agrostis capillaris*	25%	yes	FAC
2. *Ranunculus repens*	25%	yes	FAC
3. *Holcus lanatus*	5%	no	FAC
4. *Cirsium arvense*	5%	no	FAC
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 30 20% = 12	60%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 40%

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:The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having FAC indicator statuses.

SOIL

Sampling Point: TP2

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
0-16	10YR 3/2	100%		%			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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes ☐ No ☒**

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

Remarks:Hydrology was not present and there were no indicators of wetland hydrology.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 9/8/2020
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TP3
Investigator(s): Naglich, Francis; Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces Local relief: (concave, convex, none): None Slope (%): 0-3%
Subregion (LRR): A Lat: 45.862305 Long: -122.648575 Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** **Yes☐ No☒**
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located within the north-central portion of Clark County Tax Parcel 209113000, east of a DNR mapped Type N stream. This test plot only met one of the three wetland parameters; therefore, TP3 is not considered to be within a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.	%		
2.	%		
3.	%		
4.	%		
50% = ___ 20% = ___	%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Rubus armeniacus*	5%	yes	FAC
2.	%		
3.	%		
4.	%		
5.	%		
50% = 2 20% = 1	5%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Agrostis capillaris*	40%	yes	FAC
2. *Dactylis glomerata*	40%	yes	FACU
3. *Leucanthemum vulgare*	10%	no	FACU
4. *Cirsium arvense*	10%	no	FAC
5. *Rumex crispus*	5%	no	FAC
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 52 20% = 21	105%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=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: 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:The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having FAC indicator statuses.

SOIL

Sampling Point: TP3

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

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

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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:Hydrology was not present and there were no indicators of wetland hydrology.

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

Project/Site: Lockwood Meadows Subdivision | City/County: La Center/Clark | Sampling Date: 9/8/2020
Applicant/Owner: PLS Engeneering | State: WA | Sampling Point: TP4
Investigator(s): Naglich, Francis; Rendleman, Annie Jean | Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Terraces | Local relief: (concave, convex, none): None | Slope (%): 8-20%
Subregion (LRR): A | Lat: 45.861826 | Long: -122.648692 | Datum: NAD83
Soil Map Unit Name: Gee silt loam, 8 to 20 percent slopes | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** Yes☐ No☒
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located in the central portion of Clark County Tax Parcel 209113000, south of the existing well. This test plot only met one of the three wetland parameters; therefore, TP4 is not considered to be within a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.	%		
2.	%		
3.	%		
4.	%		
50% = ___ 20% = ___	%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Rubus armeniacus*	5%	yes	FAC
2.	%		
3.	%		
4.	%		
5.	%		
50% = 2 20% = 1	5%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Schedonorus arundinaceus*	20%	yes	FAC
2. *Agrostis capillaris*	20%	yes	FAC
3. *Plantago lanceolata*	20%	yes	FACU
4. *Asclepias syriaca*	15%	no	FACU
5. *Cirsium arvense*	10%	no	FAC
6. *Leucanthemum vulgare*	10%	no	FACU
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 47 20% = 19	95%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 5%

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:The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having FAC indicator statuses.

SOIL

Sampling Point: TP4

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	100%		%			Silt loam	
9-16	10YR 4/3	100%		%			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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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:Hydrology was not present and there were no indicators of wetland hydrology.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 9/8/2020
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TP5
Investigator(s): Naglich, Francis; Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces Local relief: (concave, convex, none): None Slope (%): 0-3%
Subregion (LRR): A Lat: 45.862305 Long: -122.648575 Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** **Yes☐ No☒**
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located within the southeast portion of Clark County Tax Parcel 209113000, southeast of Wetland A. This test plot only met one of the three wetland parameters; therefore, TP5 is not considered to be within a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	15%	yes	FAC
2. **Abies nordmanniana*	5%	yes	FACU
3.	%		
4.	%		
50% = 10 20% = 4	20%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Rubus armeniacus*	10%	yes	FAC
2.	%		
3.	%		
4.	%		
5.	%		
50% = 5 20% = 2	10%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Anthoxanthum odoratum*	40%	yes	FACU
2. *Agrostis capillaris*	30%	yes	FAC
3. *Holcus lanatus*	20%	yes	FAC
4. *Cirsium arvense*	5%	no	FAC
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 47 20% = 19	95%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 5%

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:*Abies nordmanniana is assumed to be FACU. The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having either OBL, FACW, or FAC indicator statuses.

SOIL

Sampling Point: TP5

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/2	100%		%			Silt loam	
8-16	10YR 3/2	100%		%			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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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:Hydrology was not present and there were no indicators of wetland hydrology.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 2/24/2021
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TP6
Investigator(s): Naglich, Francis; Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces Local relief: (concave, convex, none): Convex Slope (%): 0-3%
Subregion (LRR): A Lat: 45.8624002 Long: -122.6487743 Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** Yes☐ No☒
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located in the northern central portion of the site, along the DNR mapped Type N stream. Because all three wetland indicators were not met, TP-6 was considered to be in uplands.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.	%		
2.	%		
3.	%		
4.	%		
50% = ___ 20% = ___	%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1.	%		
2.	%		
3.	%		
4.	%		
5.	%		
50% = ___ 20% = ___	%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. **Poa sp.*	90%	yes	FAC
2. *Rumex acetosella*	10%	no	FACU
3.	%		
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 50 20% = 20	100%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=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:*Poa sp. assumed to be FAC. The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having FAC indicator statuses.

SOIL

Sampling Point: TP6

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
0-16	10YR 3/2	100%		%			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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 indicators of hydric soil were observed in the test plot during the site visit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes ☐ No ☒**

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

Remarks:No indicators of hydrology were observed in the test plot during the site visit.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 9/8/2020
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPA1
Investigator(s): Naglich, Francis; Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces Local relief: (concave, convex, none): Concave Slope (%): 0-3%
Subregion (LRR): A Lat: 45.861598 Long: -122.647313 Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** **Yes☒ No☐**
Hydric Soils Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: This test plot is located within the southeast portion of Clark County Tax Parcel 209113000, within Wetland A. This test plot met all three wetland parameters; therefore, TPA1 is considered to be within a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	30%	yes	FAC
2.	%		
3.	%		
4.	%		
50% = 15 20% = 6	30%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1.	%		
2.	%		
3.	%		
4.	%		
5.	%		
50% = ___ 20% = ___	%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Holcus lanatus*	60%	yes	FAC
2. *Anthoxanthum odoratum*	20%	yes	FACU
3. *Juncus effusus*	20%	yes	FACW
4. *Mentha pulegium*	15%	no	OBL
5. *Hypericum anagalloides*	10%	no	OBL
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 62 20% = 25	125%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 0%

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:The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having either OBL, FACW, or FAC indicator statuses.

SOIL

Sampling Point: TPA1

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100%		%			Silt loam	
4-16	10YR 4/1	85%	10YR 4/6	15%	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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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: The hydric soil indicator Depleted Matrix (F3) was met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:Wetland hydrology indicator Oxidized Rhizospheres along Living Roots (C3) and secondary indicator Saturation Visible on Aerial Imagery (C9) were met.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 9/8/2020
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPA2
Investigator(s): Naglich, Francis; Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces Local relief: (concave, convex, none): None Slope (%): 0-3%
Subregion (LRR): A Lat: 45.861677 Long: -122.647211 Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** **Yes☐ No☒**
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located within the southeast portion of Clark County Tax Parcel 209113000, just north of Wetland A. This test plot only met one of the three wetland parameters; therefore, TPA2 is not considered to be within a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	20%	yes	FAC
2. **Abies nordmanniana*	10%	yes	FACU
3.	%		
4.	%		
50% = 15 20% = 6	30%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Rubus armeniacus*	10%	yes	FAC
2.	%		
3.	%		
4.	%		
5.	%		
50% = 5 20% = 2	10%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Holcus lanatus*	30%	yes	FAC
2. *Anthoxanthum odoratum*	30%	yes	FACU
3. *Cirsium arvense*	20%	no	FAC
4. *Mentha pulegium*	10%	no	OBL
5. *Leucanthemum vulgare*	10%	no	FAC
6. *Hypochaeris radicata*	5%	no	FACU
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 52 20% = 21	105%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 0%

Dominance Test Worksheet

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

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

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

Prevalence Index worksheet

Total % Cover of:		Multiply by:	
OBL species		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:*Abies nordmanniana is assumed to be FACU. The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having FAC indicator statuses.

SOIL

Sampling Point: TPA2

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR 4/2	99%	10YR 4/6	1%	C	M	Silt loam	
11-16	10YR 4/2	95%	10YR 4/6	5%	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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:Wetland hydrology secondary indicator Saturation Visible on Aerial Imagery (C9) was met; however wetland hydrology criteria was not met due to only one secondary indicator being met and there were no other indicators of wetland hydrology observed.

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

Project/Site: Lockwood Meadows Subdivision | City/County: La Center/Clark | Sampling Date: 2/24/2021
Applicant/Owner: PLS Engeneering | State: WA | Sampling Point: TPAA
Investigator(s): Rendleman, Annie Jean | Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces | Local relief: (concave, convex, none): Convex | Slope (%): 0-3%
Subregion (LRR): A | Lat: 45.861438 | Long: -122.646694 | Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** Yes☐ No☒
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located southeast of Wetland A in an area where Cottonwood saplings are established. Because all three wetland indicators were not met, TP-AA was considered to be in uplands.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1. **Abies nordmanniana*	25%	yes	FACU
2.	%		
3.	%		
4.	%		
50% = 13 20% = 5	25%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Rubus armeniacus*	10%	yes	FAC
2. *Populus balsamifera*	8%	yes	FAC
3.	%		
4.	%		
5.	%		
50% = 9 20% = 4	18%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Holcus lanatus*	70%	yes	FAC
2. *Anthoxanthum odoratum*	30%	yes	FACU
3.	%		
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 50 20% = 20	100%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 0%

Dominance Test Worksheet

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

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

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

Prevalence Index worksheet

Total % Cover of:		Multiply by:	
OBL species		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:*Abies nordmanniana assumed to be FACU. The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having either OBL, FACW, or FAC indicator statuses.

SOIL

Sampling Point: TPAA

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
0-16	10YR 3/1	100%		%			Clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 indicators of hydric soil were observed in the test plot during the site visit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:No indicators of hydrology were observed in the test plot during the site visit. The soil was moist from recent rainfall, but not saturated. Standing water was not observed at this test plot, but was observed within Wetland A.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 2/24/2021
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPAB
Investigator(s): Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces Local relief: (concave, convex, none): Convex Slope (%): 0-3%
Subregion (LRR): A Lat: 45.861406 Long: -122.646896 Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☒	**Is the Sampled Area within a Wetland?** Yes☐ No☒
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located southeast of Wetland A in an area where Cottonwood saplings are established. Because all three wetland indicators were not met, TP-AB was considered to be in uplands.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Abies grandis*	10%	yes	FACU
2. **Abies nordmanniana*	10%	yes	FACU
3.	%		
4.	%		
50% = 10 20% = 4	20%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Populus balsamifera*	60%	yes	FAC
2.	%		
3.	%		
4.	%		
5.	%		
50% = 30 20% = 12	60%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Holcus lanatus*	80%	yes	FAC
2. *Anthoxanthum odoratum*	20%	yes	FACU
3.	%		
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 50 20% = 20	100%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=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: 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:

- ☐ 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:*Abies nordmanniana assumed to be FACU. The hydrophytic vegetation criterion is not met due to less than 50% of the dominant vegetation within the test plot having either OBL, FACW, or FAC indicator statuses.

SOIL

Sampling Point: TPAB

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 3/2	100%		%			Clay loam	
9-16	10YR 3/2	99%	10YR 4/6	1%	C	M	Clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 indicators of hydric soil were observed in the test plot during the site visit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:No indicators of hydrology were observed in the test plot during the site visit. The soil was moist from recent rainfall, but not saturated. Standing water was not observed at this test plot, but was observed within Wetland A.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 2/24/2021
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPAC
Investigator(s): Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces Local relief: (concave, convex, none): Convex Slope (%): 0-3%
Subregion (LRR): A Lat: 45.861597 Long: -122.647392 Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 Soils Present? Yes☐ No☒ Wetland Hydrology Present? Yes☐ No☒	**Is the Sampled Area within a Wetland?**	**Yes☐ No☒**

Remarks: This test plot is located northwest of Wetland A. Because all three wetland indicators were not met, TP-AC was considered to be in uplands.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. **Abies nordmanniana*	10%	yes	FACU
2. *Abies grandis*	10%	yes	FACU
3.	%		
4.	%		
50% = 10 20% = 4	20%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Populus balsamifera*	25%	yes	FAC
2. *Rubus armeniacus*	15%	yes	FAC
3.	%		
4.	%		
5.	%		
50% = 20 20% = 8	40%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Holcus lanatus*	70%	yes	FAC
2. *Anthoxanthum odoratum*	20%	yes	FACU
3. *Leucanthemum vulgare*	10%	no	FACU
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 50 20% = 20	100%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 0%

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		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:*Abies nordmanniana assumed to be FACU. The hydrophytic vegetation criterion is not met due to 50% of the dominant vegetation within the test plot having either OBL, FACW, or FAC indicator statuses.

SOIL

Sampling Point: TPAC

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100%		%			Clay loam	
10-16	10YR 3/2	93%	10YR 4/6	7%	C	M	Clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 indicators of hydric soil were observed in the test plot during the site visit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes ☐ No ☒**

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

Remarks:No indicators of hydrology were observed in the test plot during the site visit. The soil was moist from recent rainfall, but not saturated. Standing water was not observed at this test plot, but was observed within Wetland A.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 2/24/2021
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPAD
Investigator(s): Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces Local relief: (concave, convex, none): Convex Slope (%): 0-3%
Subregion (LRR): A Lat: 45.861438 Long: -122.646694 Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☒	**Is the Sampled Area within a Wetland?** Yes☐ No☒
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located southeast of Wetland A in an area where Cottonwood saplings are established. Because all three wetland indicators were not met, TP-AD was considered to be in uplands.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. **Abies nordmanniana*	30%	yes	FACU
2. *Abies grandis*	5%	no	FACU
3.	%		
4.	%		
50% = 18 20% = 7	35%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Populus balsamifera*	15%	yes	FAC
2.	%		
3.	%		
4.	%		
5.	%		
50% = 8 20% = 3	15%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Holcus lanatus*	80%	yes	FAC
2. *Anthoxanthum odoratum*	20%	yes	FACU
3.	%		
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 50 20% = 20	100%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=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: 4 (B)

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

Prevalence Index worksheet

Total % Cover of:		Multiply by:	
OBL species		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:*Abies nordmanniana assumed to be FACU. The hydrophytic vegetation criterion is not met due to 50% of the dominant vegetation within the test plot having either OBL, FACW, or FAC indicator statuses.

SOIL

Sampling Point: TPAD

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
0-16	10YR 3/2	100%		%			Clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 indicators of hydric soil were observed in the test plot during the site visit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:No indicators of hydrology were observed in the test plot during the site visit. The soil was moist from recent rainfall, but not saturated. Standing water was not observed at this test plot, but was observed within Wetland A.

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

Project/Site: Lockwood Meadows Subdivision | City/County: La Center/Clark | Sampling Date: 2/24/2021
Applicant/Owner: PLS Engeneering | State: WA | Sampling Point: TPAE
Investigator(s): Rendleman, Annie Jean | Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Drainageways, Terraces | Local relief: (concave, convex, none): Convex | Slope (%): 0-3%
Subregion (LRR): A | Lat: 45.861483 | Long: -122.646834 | Datum: NAD83
Soil Map Unit Name: Odne silty clay loam, 0 to 3 percent slopes | NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** Yes☐ No☒
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located southeast of Wetland A in an area where Cottonwood saplings are established. Because all three wetland indicators were not met, TP-AE was considered to be in uplands.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. **Abies nordmanniana*	25%	yes	FACU
2. *Abies grandis*	5%	no	FACU
3.	%		
4.	%		
50% = 15 20% = 6	30%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Rubus armeniacus*	10%	yes	FAC
2. *Populus balsamifera*	5%	yes	FAC
3.	%		
4.	%		
5.	%		
50% = 8 20% = 3	15%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Holcus lanatus*	80%	yes	FAC
2. *Anthoxanthum odoratum*	20%	yes	FACU
3.	%		
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 50 20% = 20	100%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 0%

Dominance Test Worksheet

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

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

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

Prevalence Index worksheet

Total % Cover of:		Multiply by:	
OBL species		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:*Abies nordmanniana assumed to be FACU. The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having either OBL, FACW, or FAC indicator statuses.

SOIL

Sampling Point: TPAE

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%		%			Clay loam	
10-16	10YR 3/1	100%		%			Clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 indicators of hydric soil were observed in the test plot during the site visit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes ☐ No ☒**

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

Remarks:No indicators of hydrology were observed in the test plot during the site visit. The soil was moist from recent rainfall, but not saturated. Standing water was not observed at this test plot, but was observed within Wetland A.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 9/8/2020
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPB1
Investigator(s): Naglich, Francis; Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Terraces Local relief: (concave, convex, none): None Slope (%): 8-20%
Subregion (LRR): A Lat: 45.861468 Long: -122.649143 Datum: NAD83
Soil Map Unit Name: Gee silt loam, 8 to 20 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** Yes☐ No☒
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located in the south-central portion of Clark County Tax Parcel 209113000, north of Wetland B. This test plot only met one of the three wetland parameters; therefore, TP-B1 is not considered to be within a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	60%	yes	FAC
2.	%		
3.	%		
4.	%		
50% = 30 20% = 12	60%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Salix scouleriana*	20%	yes	FAC
2. *Rubus armeniacus*	5%	yes	FAC
3.	%		
4.	%		
5.	%		
50% = 12 20% = 5	25%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Dactylis glomerata*	15%	yes	FACU
2. *Gnaphalium uliginosum*	10%	yes	FAC
3. *Vicia sativa*	10%	yes	UPL
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 17 20% = 7	35%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 65%

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:The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having FAC indicator statuses.

SOIL

Sampling Point: TPB1

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/4	100%		%			Silty clay loam	
10-16	10YR 4/3	100%		%			Silty clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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:Hydrology was not present and there were no indicators of wetland hydrology.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 9/8/2020
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPB2
Investigator(s): Naglich, Francis; Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Terraces Local relief: (concave, convex, none): Concave Slope (%): 8-20%
Subregion (LRR): A Lat: 45.861385 Long: -122.649159 Datum: NAD83
Soil Map Unit Name: Gee silt loam, 8 to 20 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** **Yes☒ No☐**
Hydric Soils Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: This test plot is located in the south-central portion of Clark County Tax Parcel 209113000, within Wetland B. Because all three wetland parameters were met, TP-B2 is considered a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	90%	yes	FAC
2. *Salix scouleriana*	10%	no	FAC
3.	%		
4.	%		
50% = 50 20% = 20	100%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1.	%		
2.	%		
3.	%		
4.	%		
5.	%		
50% = ___ 20% = ___	%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Stellaria media*	20%	yes	FACU
2. *Gnaphalium uliginosum*	20%	yes	FAC
3. *Epilobium palustre*	10%	yes	OBL
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 25 20% = 10	50%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 50%

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:The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having either FAC and OBL indicator statuses.

SOIL

Sampling Point: TPB2

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
0-4	10YR 3/2	100%		%			Silty clay loam	
4-16	10YR 4/1	60%	10YR 4/6	40%	C	M	Silty clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☒ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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: The hydric soil indicators Depleted Below Dark Surface (A11) and Depleted Matrix (F3) were met.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes ☒ No ☐**

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

Remarks:Wetland hydrology indicator Oxidized Rhizospheres along Living Roots (C3) was met.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 2/24/2021
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPBA
Investigator(s): Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Terraces Local relief: (concave, convex, none): Convex Slope (%): 8-20%
Subregion (LRR): A Lat: 45.861482 Long: -122.648913 Datum: NAD83
Soil Map Unit Name: Gee silt loam, 8 to 20 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** **Yes☐ No☒**
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: This test plot is located northeast of Wetland B. Because all three wetland indicators were not met, TP-BA was considered to be in uplands.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	10%	yes	FAC
2.	%		
3.	%		
4.	%		
50% = 5 20% = 2	10%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1.	%		
2.	%		
3.	%		
4.	%		
5.	%		
50% = ___ 20% = ___	%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. **Poa sp.*	80%	yes	FAC
2. *Ranunculus repens*	20%	yes	FAC
3.	%		
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 50 20% = 20	100%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 0%

Dominance Test Worksheet

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

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

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

Prevalence Index worksheet

Total % Cover of:	Multiply by:
OBL species ___	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:*Poa sp. assumed to be FAC. The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having either FAC and OBL indicator statuses.

SOIL

Sampling Point: TPBA

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100%		%			Clay loam	
8-16	10YR 4/2	99%	10YR 4/6	1%	C	M	Clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 indicators of hydric soil were observed in the test plot during the site visit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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? Yes ☐ No ☒ Depth (Inches): ____
(Includes Capillary fringe)

Wetland Hydrology Present? **Yes** ☐ **No** ☒

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

Remarks:The soil was moist from recent rainfall, but not saturated. No indicators of hydrology were observed in the test plot during the site visit.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 2/24/2021
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPBB
Investigator(s): Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Terraces Local relief: (concave, convex, none): Concave Slope (%): 8-20%
Subregion (LRR): A Lat: 45.861437 Long: -122.648925 Datum: NAD83
Soil Map Unit Name: Gee silt loam, 8 to 20 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** **Yes☒ No☐**
Hydric Soils Present?	Yes ☒ No ☐	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: This test plot is located in the easternmost portion of Wetland B. Because all three wetland parameters were met, TP-BB is considered a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus balsamifera*	50%	yes	FAC
2. *Salix scouleriana*	5%	no	FAC
3.	%		
4.	%		
50% = 28 20% = 11	55%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1.	%		
2.	%		
3.	%		
4.	%		
5.	%		
50% = ___ 20% = ___	%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. **Poa sp.*	60%	yes	FAC
2. *Stellaria media*	20%	yes	FACU
3. *Gnaphalium uliginosum*	10%	no	FAC
4. *Epilobium palustre*	5%	no	OBL
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 48 20% = 19	95%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 5%

Dominance Test Worksheet

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

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

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

Prevalence Index worksheet

Total % Cover of:		Multiply by:	
OBL species		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:*Poa sp. assumed to be FAC. The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having either FAC and OBL indicator statuses.

SOIL

Sampling Point: TPBB

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
0-5	10YR 3/2	100%		%			Clay loam	
5-16	10YR 4/1	80%	10YR 4/6	20%	C	M	Clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☒ Hydrogen Sulfide (A4)
- ☒ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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: The hydric soil indicators Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Hydrogen Sulfide (A4) were met due to a matrix value of 4, chroma of 1, and redoximorphic features from 5-16 inches below the surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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): 0.5
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:The wetland hydrology indicators Surface Water (A1), High Water Table (A2), Saturation (A3), and Hydrogen Sulfide Odor (C1) were met.

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

Project/Site: Lockwood Meadows Subdivision City/County: La Center/Clark Sampling Date: 2/24/2021
Applicant/Owner: PLS Engeneering State: WA Sampling Point: TPBC
Investigator(s): Rendleman, Annie Jean Section, Township, Range: S2, T4N, R1E
Landform (hillslope, terrace, etc.): Terraces Local relief: (concave, convex, none): Convex Slope (%): 8-20%
Subregion (LRR): A Lat: 45.861519 Long: -122.649297 Datum: NAD83
Soil Map Unit Name: Gee silt loam, 8 to 20 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes☒ No☐ (If no, explain 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 ☐	**Is the Sampled Area within a Wetland?** **Yes☐ No☒**
Hydric Soils Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☒ No ☐	

Remarks: This test plot is located north of Wetland B. Because all three wetland indicators were not met, TP-BC was considered to be in uplands.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1. *Populus balsamifera*	15%	yes	FAC
2.	%		
3.	%		
4.	%		
50% = 8 20% = 3	15%	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft. radius)			
1. *Rubus armeniacus*	15%	yes	FAC
2.	%		
3.	%		
4.	%		
5.	%		
50% = 8 20% = 3	15%	=Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. **Poa sp.*	50%	yes	FAC
2. *Ranunculus repens*	50%	yes	FAC
3.	%		
4.	%		
5.	%		
6.	%		
7.	%		
8.	%		
9.	%		
10.	%		
11.	%		
50% = 50 20% = 20	100%	=Total Cover	
Woody Vine Stratum (Plot size: 15 ft radius)			
1.	%		
2.	%		
50% = ___ 20% = ___	%	=Total Cover	

% Bare Ground in Herb Stratum 0%

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:*Poa sp. assumed to be FAC. The hydrophytic vegetation criterion is met due to greater than 50% of the dominant vegetation within the test plot having either FAC and OBL indicator statuses.

SOIL

Sampling Point: TPBC

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
0-5	10YR 3/2	100%		%			Clay loam	
5-16	10YR 4/1	100%		%			Clay 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.)

- ☐ Histosal (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Minerals (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

- ☐ 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 indicators of hydric soil were observed in the test plot during the site visit.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (min. 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): 5

Wetland Hydrology Present? **Yes** ☒ **No** ☐

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

Remarks:The hydrology indicators High Water Table (A2) and Saturation (A3) were met within the test plot.

APPENDIX B: WETLAND RATING FORMS

Wetland name or number A

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland A Date of site visit: 9/8/2020

Rated by AJ Rendleman Trained by Ecology? Yes X No Date of training 11/2020

HGM Class used for rating Slope Wetland has multiple HGM classes? Y X N

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

Source of base aerial photo/map Google Earth

OVERALL WETLAND CATEGORY IV (based on functions X 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

x **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	5	5	4	14

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	(N/A)

Wetland name or number A

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	8A
Hydroperiods	H 1.2	8A
Plant cover of **dense** trees, shrubs, and herbaceous plants	S 1.3	8A
Plant cover of **dense, rigid** trees, shrubs, and herbaceous plants (*can be added to figure above)*	S 4.1	8A
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	8A
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	9
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	10
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	10

Wetland name or number A

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?
   x The wetland is on a slope (*slope can be very gradual*),
   x 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,
   x 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 A

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 A

SLOPE WETLANDS

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

S 1.0. Does the site have the potential to improve water quality?	
S 1.1. Characteristics of the average slope of the wetland: *(a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance*) 4 / 88 = 4.5% (See 2-ft contours on Sheet 3). Slope is 1% or less points = 3 Slope is > 1%-2% points = 2 Slope is > 2%-5% points = 1 Slope is greater than 5% points = 0	1
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic *(use NRCS definitions)*: Yes = 3 No = 0	0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. *Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in.* Dense, uncut, herbaceous plants > 90% of the wetland area points = 6 Dense, uncut, herbaceous plants > ½ of area points = 3 Dense, woody, plants > ½ of area points = 2 Dense, uncut, herbaceous plants > ¼ of area points = 1 Does not meet any of the criteria above for plants points = 0	3
Total for S 1 Add the points in the boxes above	4

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

S 2.0. Does the landscape have the potential to support the water quality function of the site?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? The tree farm is no longer in use (not sprayed or mowed). Yes = 1 No = 0	0
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources Yes = 1 No = 0	0
Total for S 2 Add the points in the boxes above	0

Rating of Landscape Potential If score is: ___**1-2 = M** **x** **0 = L** *Record the rating on the first page*

S 3.0. Is the water quality improvement provided by the site valuable to society?	
S 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
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? *At least one aquatic resource in the basin is on the 303(d) list*. Yes = 1 No = 0	1
S 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 unit is found.* Yes = 2 No = 0	2
Total for S 3 Add the points in the boxes above	3

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

Wetland name or number A

SLOPE WETLANDS

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

S 4.0. Does the site have the potential to reduce flooding and stream erosion?	
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. *Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows.* Dense, uncut, **rigid** plants cover > 90% of the area of the wetland — points = 1 All other conditions — points = 0	0

Rating of Site Potential If score is: ___**1 = M** __**x**__**0 = L** *Record the rating on the first page*

S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess surface runoff? Yes = 1 No = 0	0

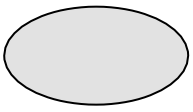
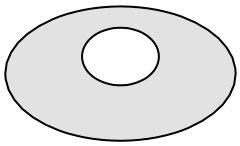
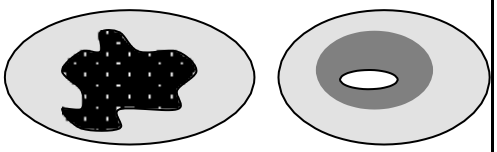
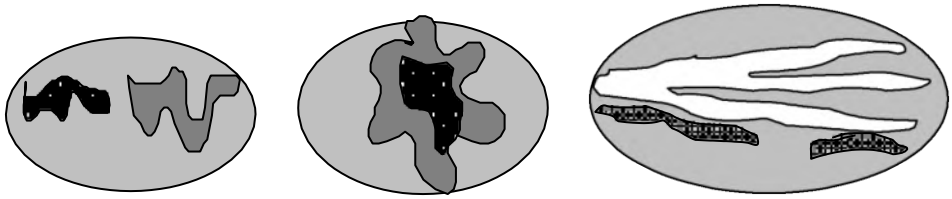
Rating of Landscape Potential If score is: ___**1 = M** __**x**__**0 = L** *Record the rating on the first page*

S 6.0. Are the hydrologic functions provided by the site valuable to society?	
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds) — points = 2 Surface flooding problems are in a sub-basin farther down-gradient — points = 1 No flooding problems anywhere downstream — points = 0	2
S 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 S 6 — Add the points in the boxes above	2

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

NOTES and FIELD OBSERVATIONS:

Wetland name or number A

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 __x__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 __x__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 A

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)* x___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	2

Rating of Site Potential If score is:___**15-18 = H** ___**7-14 = M** __**x**__**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 6 **+** [(% moderate and low intensity land uses)/2] 13 **= 19** % 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	1
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat 12 **+** [(% moderate and low intensity land uses)/2] 44 **= 47** % 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	0
Total for H 2 Add the points in the boxes above	2

Rating of Landscape Potential If score is:___**4-6 = H** __**x**__**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	0
Total for H 3 Add the points in the boxes above	0

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

Wetland name or number A

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 A

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 A

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	

This page left blank intentionally

Wetland name or number B

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland B Date of site visit: 9/8/2020

Rated by AJ Rendleman Trained by Ecology? Yes X No Date of training 11/2020

HGM Class used for rating Depressional Wetland has multiple HGM classes? Y X N

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

Source of base aerial photo/map Google Earth

OVERALL WETLAND CATEGORY IV (based on functions X 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

X **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	5	6	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	(N/A)

Wetland name or number B

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	8B
Hydroperiods	D 1.4, H 1.2	8B
Location of outlet (*can be added to map of hydroperiods)*	D 1.1, D 4.1	8B
Boundary of area within 150 ft of the wetland *(can be added to another figure)*	D 2.2, D 5.2	8B
Map of the contributing basin	D 4.3, D 5.3	9
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	9
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	10
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	10

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 B

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 B

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 B

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	0
Total for D 1 Add the points in the boxes above	5

Rating of Site Potential If score is: ___**12-16 = H** ___**6-11 = M** __**x**__**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	0
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	0

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

Wetland name or number B

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	3
Total for D 4 Add the points in the boxes above	8

Rating of Site Potential If score is: ___ **12-16 = H** __x__ **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	0
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	0
Total for D 5 Add the points in the boxes above	0

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

Wetland name or number B

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
_x_	Emergent	3 structures: points = 2
____	Scrub-shrub (areas where shrubs have > 30% cover)	2 structures: points = 1
_x_	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

2

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*).

_x_	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
_x_	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**

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft^2.

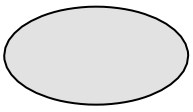
Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. ***Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle***

If you counted: > 19 species	points = 2
5 - 19 species	points = 1
< 5 species	points = 0

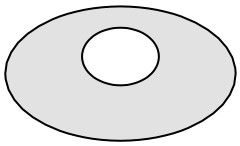
1

H 1.4. Interspersion of habitats

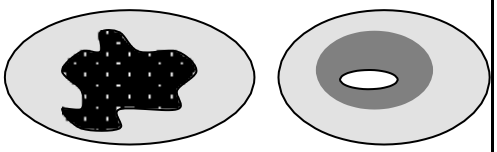
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



None = 0 points

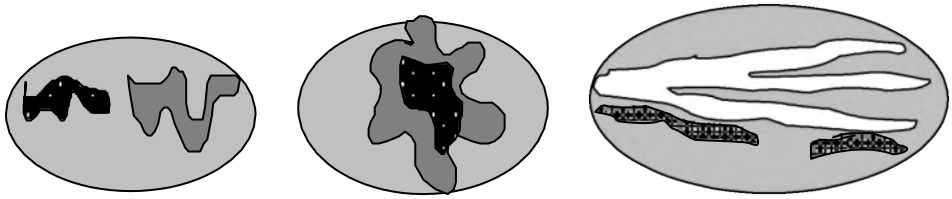


Low = 1 point



Moderate = 2 points

All three diagrams in this row are **HIGH** = 3points



1

Wetland name or number B

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)* x___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	6

Rating of Site Potential If score is:___**15-18 = H** ___**7-14 = M** __**x**__**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 6 **+** [(% moderate and low intensity land uses)/2] 13 **= 19** % 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	1
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. *Calculate:* % undisturbed habitat 12 **+** [(% moderate and low intensity land uses)/2] 44 **= 47** % 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	0
Total for H 2 Add the points in the boxes above	2

Rating of Landscape Potential If score is:___**4-6 = H** __**x**__**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	0
Total for H 3 Add the points in the boxes above	0

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

Wetland name or number B

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 B

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 B

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	

This page left blank intentionally

APPENDIX C: PRECIPITATION DATA

WETS Station: BATTLE GROUND, WA

Requested years: 1991 - 2021

Month	Temperature (°F)			Precipitation (inches)				
	Avg daily max	Avg daily min	Avg daily mean	Avg	30% chance will have		Avg number of days with 0.10 inch or more	Average total snowfall
					less than	more than		
Jan	46.4	33.0	39.7	7.31	5.70	8.45	15	1.2
Feb	50.4	32.8	41.6	5.36	3.65	6.40	13	1.1
Mar	55.0	35.6	45.3	5.59	4.26	6.50	14	0.4
Apr	59.9	38.9	49.4	4.54	3.32	5.34	12	0.0
May	66.7	44.4	55.6	3.31	2.00	4.01	9	0.0
Jun	71.4	48.4	59.9	2.31	1.61	2.75	6	0.0
Jul	78.9	51.7	65.3	0.63	0.23	0.70	2	0.0
Aug	79.9	51.2	65.6	0.80	0.37	0.94	2	0.0
Sep	74.7	46.7	60.7	2.20	1.12	2.65	5	0.0
Oct	62.7	40.9	51.8	4.81	3.29	5.74	10	0.0
Nov	51.9	36.6	44.2	7.67	5.50	9.06	14	0.1
Dec	45.3	32.8	39.1	7.98	6.33	9.18	15	0.4
Annual:					47.35	56.14		
Average	61.9	41.1	51.5	-	-	-	-	-
Total	-	-	-	52.51			118	3.3

Climatological Data for BATTLE GROUND, WA - February 2021

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2021-02-01	54	45	49.5	10	0	0.27	M	M
2021-02-02	49	43	46.0	6	0	0.46	M	M
2021-02-03	48	37	42.5	3	0	0.57	M	M
2021-02-04	42	35	38.5	0	0	0.05	M	M
2021-02-05	42	37	39.5	0	0	0.53	M	M
2021-02-06	49	37	43.0	3	0	0.18	M	M
2021-02-07	44	37	40.5	1	0	0.45	M	M
2021-02-08	46	34	40.0	0	0	0.02	M	M
2021-02-09	43	25	34.0	0	0	0.00	M	M
2021-02-10	45	25	35.0	0	0	0.00	M	M
2021-02-11	44	31	37.5	0	0	0.03	M	M
2021-02-12	36	26	31.0	0	0	0.15	M	M
2021-02-13	28	22	25.0	0	0	0.90	11.0	M
2021-02-14	31	25	28.0	0	0	0.21	1.0	M
2021-02-15	32	31	31.5	0	0	0.55	M	M
2021-02-16	43	31	37.0	0	0	0.10	M	M
2021-02-17	45	34	39.5	0	0	0.04	M	M
2021-02-18	46	31	38.5	0	0	0.03	M	M
2021-02-19	40	32	36.0	0	0	0.23	M	M
2021-02-20	47	35	41.0	1	0	0.05	M	M
2021-02-21	47	38	42.5	3	0	0.17	M	M
2021-02-22	47	40	43.5	4	0	0.22	M	M
2021-02-23	48	35	41.5	2	0	0.51	M	M
2021-02-24	46	32	39.0	0	0	0.15	M	M
2021-02-25	48	32	40.0	0	0	0.13	M	M
2021-02-26	45	37	41.0	1	0	0.54	M	M
2021-02-27	47	37	42.0	2	0	0.15	M	M
2021-02-28	49	36	42.5	3	0	0.00	M	M
Average|Sum	44.0	33.6	38.8	39	0	6.69	12.0	M

Climatological Data for BATTLE GROUND, WA - January 2021

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2021-01-01	51	44	47.5	8	0	0.15	0.0	0
2021-01-02	55	45	50.0	10	0	0.46	0.0	0
2021-01-03	49	40	44.5	5	0	1.73	0.0	0
2021-01-04	52	40	46.0	6	0	0.48	0.0	0
2021-01-05	50	41	45.5	6	0	0.54	0.0	0
2021-01-06	51	41	46.0	6	0	0.37	0.0	0
2021-01-07	47	43	45.0	5	0	0.40	0.0	0
2021-01-08	54	40	47.0	7	0	0.15	0.0	0
2021-01-09	48	30	39.0	0	0	0.19	0.0	0
2021-01-10	44	31	37.5	0	0	0.10	0.0	0
2021-01-11	45	38	41.5	2	0	0.03	0.0	0
2021-01-12	52	39	45.5	6	0	1.39	0.0	0
2021-01-13	57	44	50.5	11	1	1.50	0.0	0
2021-01-14	53	34	43.5	4	0	0.40	0.0	0
2021-01-15	54	35	44.5	5	0	0.25	0.0	0
2021-01-16	48	38	43.0	3	0	0.05	0.0	0
2021-01-17	45	38	41.5	2	0	0.10	0.0	0
2021-01-18	50	34	42.0	2	0	0.00	0.0	0
2021-01-19	51	28	39.5	0	0	0.00	0.0	0
2021-01-20	53	27	40.0	0	0	0.00	0.0	0
2021-01-21	45	27	36.0	0	0	0.19	0.0	0
2021-01-22	44	36	40.0	0	0	0.00	0.0	0
2021-01-23	51	25	38.0	0	0	0.00	0.0	0
2021-01-24	45	24	34.5	0	0	0.00	0.0	0
2021-01-25	38	34	36.0	0	0	0.42	0.0	0
2021-01-26	39	34	36.5	0	0	0.04	0.0	0
2021-01-27	41	33	37.0	0	0	0.17	0.0	0
2021-01-28	43	35	39.0	0	0	0.15	0.0	0
2021-01-29	45	39	42.0	2	0	0.04	0.0	0
2021-01-30	44	39	41.5	2	0	0.28	0.0	0
2021-01-31	51	41	46.0	6	0	0.12	0.0	0
Average|Sum	48.2	36.0	42.1	98	1	9.70	0.0	0.0

Climatological Data for BATTLE GROUND, WA - December 2020

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2020-12-01	48	28	38.0	0	0	0.27	0.0	0
2020-12-02	50	27	38.5	0	0	0.05	0.0	0
2020-12-03	56	29	42.5	3	0	0.00	0.0	0
2020-12-04	47	27	37.0	0	0	0.00	0.0	0
2020-12-05	53	26	39.5	0	0	0.00	0.0	0
2020-12-06	52	27	39.5	0	0	0.16	0.0	0
2020-12-07	46	37	41.5	2	0	0.00	0.0	0
2020-12-08	48	33	40.5	1	0	0.00	0.0	0
2020-12-09	54	33	43.5	4	0	0.34	0.0	0
2020-12-10	51	32	41.5	2	0	0.04	0.0	0
2020-12-11	41	35	38.0	0	0	0.20	0.0	0
2020-12-12	41	32	36.5	0	0	0.42	0.0	0
2020-12-13	43	32	37.5	0	0	0.15	0.0	0
2020-12-14	41	37	39.0	0	0	0.21	0.0	0
2020-12-15	45	39	42.0	2	0	0.05	0.0	0
2020-12-16	47	40	43.5	4	0	0.20	0.0	0
2020-12-17	51	39	45.0	5	0	0.47	0.0	0
2020-12-18	48	40	44.0	4	0	0.06	0.0	0
2020-12-19	51	43	47.0	7	0	0.31	0.0	0
2020-12-20	50	49	49.5	10	0	1.91	0.0	0
2020-12-21	50	44	47.0	7	0	0.51	0.0	0
2020-12-22	57	38	47.5	8	0	0.30	0.0	0
2020-12-23	46	29	37.5	0	0	0.00	0.0	0
2020-12-24	41	25	33.0	0	0	0.00	0.0	0
2020-12-25	46	23	34.5	0	0	0.08	0.0	0
2020-12-26	45	31	38.0	0	0	0.55	0.0	0
2020-12-27	49	40	44.5	5	0	0.18	0.0	0
2020-12-28	50	26	38.0	0	0	0.00	0.0	0
2020-12-29	45	25	35.0	0	0	0.00	0.0	0
2020-12-30	37	29	33.0	0	0	0.13	0.0	0
2020-12-31	45	37	41.0	1	0	0.51	0.0	0
Average|Sum	47.5	33.3	40.4	65	0	7.10	0.0	0.0

Climatological Data for BATTLE GROUND, WA - November 2020

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2020-11-01	59	30	44.5	5	0	0.00	0.0	0
2020-11-02	68	30	49.0	9	0	0.00	0.0	0
2020-11-03	65	31	48.0	8	0	0.00	0.0	0
2020-11-04	59	36	47.5	8	0	0.40	0.0	0
2020-11-05	64	57	60.5	21	11	0.01	0.0	0
2020-11-06	57	47	52.0	12	2	1.28	0.0	0
2020-11-07	48	34	41.0	1	0	0.39	0.0	0
2020-11-08	44	28	36.0	0	0	0.09	0.0	0
2020-11-09	46	25	35.5	0	0	0.00	0.0	0
2020-11-10	41	28	34.5	0	0	0.33	0.0	0
2020-11-11	47	36	41.5	2	0	0.17	0.0	0
2020-11-12	50	28	39.0	0	0	0.01	0.0	0
2020-11-13	47	30	38.5	0	0	1.30	0.0	0
2020-11-14	49	38	43.5	4	0	0.31	0.0	0
2020-11-15	47	39	43.0	3	0	1.06	0.0	0
2020-11-16	53	42	47.5	8	0	0.14	0.0	0
2020-11-17	52	40	46.0	6	0	0.20	0.0	0
2020-11-18	56	40	48.0	8	0	0.54	0.0	0
2020-11-19	46	41	43.5	4	0	0.55	0.0	0
2020-11-20	49	37	43.0	3	0	0.02	0.0	0
2020-11-21	43	31	37.0	0	0	0.01	0.0	0
2020-11-22	39	37	38.0	0	0	0.00	0.0	0
2020-11-23	42	28	35.0	0	0	0.36	0.0	0
2020-11-24	50	35	42.5	3	0	0.20	0.0	0
2020-11-25	48	38	43.0	3	0	0.60	0.0	0
2020-11-26	46	40	43.0	3	0	0.12	0.0	0
2020-11-27	47	37	42.0	2	0	0.01	0.0	0
2020-11-28	44	34	39.0	0	0	0.11	0.0	0
2020-11-29	43	35	39.0	0	0	0.04	0.0	0
2020-11-30	50	31	40.5	1	0	0.26	0.0	0
Average|Sum	50.0	35.4	42.7	114	13	8.51	0.0	0.0

Climatological Data for BATTLE GROUND, WA - October 2020

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2020-10-01	81	48	64.5	25	15	0.00	0.0	0
2020-10-02	76	52	64.0	24	14	0.01	0.0	0
2020-10-03	79	52	65.5	26	16	0.01	0.0	0
2020-10-04	76	51	63.5	24	14	0.00	0.0	0
2020-10-05	66	47	56.5	17	7	0.00	0.0	0
2020-10-06	72	47	59.5	20	10	0.00	0.0	0
2020-10-07	77	47	62.0	22	12	0.00	0.0	0
2020-10-08	73	48	60.5	21	11	0.00	0.0	0
2020-10-09	60	53	56.5	17	7	0.00	0.0	0
2020-10-10	73	53	63.0	23	13	0.84	0.0	0
2020-10-11	61	49	55.0	15	5	0.40	0.0	0
2020-10-12	56	50	53.0	13	3	0.61	0.0	0
2020-10-13	61	49	55.0	15	5	0.10	0.0	0
2020-10-14	61	45	53.0	13	3	0.39	0.0	0
2020-10-15	61	36	48.5	9	0	0.01	0.0	0
2020-10-16	63	35	49.0	9	0	0.00	0.0	0
2020-10-17	61	44	52.5	13	3	0.02	0.0	0
2020-10-18	63	49	56.0	16	6	0.00	0.0	0
2020-10-19	63	52	57.5	18	8	0.01	0.0	0
2020-10-20	61	44	52.5	13	3	0.00	0.0	0
2020-10-21	62	43	52.5	13	3	0.00	0.0	0
2020-10-22	58	30	44.0	4	0	0.00	0.0	0
2020-10-23	56	29	42.5	3	0	0.00	0.0	0
2020-10-24	51	30	40.5	1	0	0.02	0.0	0
2020-10-25	48	36	42.0	2	0	0.00	0.0	0
2020-10-26	46	25	35.5	0	0	0.00	0.0	0
2020-10-27	53	26	39.5	0	0	0.00	0.0	0
2020-10-28	57	26	41.5	2	0	0.00	0.0	0
2020-10-29	65	31	48.0	8	0	0.00	0.0	0
2020-10-30	58	36	47.0	7	0	0.00	0.0	0
2020-10-31	60	31	45.5	6	0	0.17	0.0	0
Average|Sum	63.2	41.7	52.5	399	158	2.59	0.0	0.0

Climatological Data for BATTLE GROUND, WA - September 2020

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2020-09-01	73	49	61.0	21	11	0.00	0.0	0
2020-09-02	86	48	67.0	27	17	0.00	0.0	0
2020-09-03	88	52	70.0	30	20	0.00	0.0	0
2020-09-04	93	53	73.0	33	23	0.00	0.0	0
2020-09-05	84	55	69.5	30	20	0.00	0.0	0
2020-09-06	73	49	61.0	21	11	0.00	0.0	0
2020-09-07	87	48	67.5	28	18	0.00	0.0	0
2020-09-08	89	52	70.5	31	21	0.00	0.0	0
2020-09-09	80	50	65.0	25	15	0.00	0.0	0
2020-09-10	88	49	68.5	29	19	0.00	0.0	0
2020-09-11	87	50	68.5	29	19	0.00	0.0	0
2020-09-12	62	45	53.5	14	4	0.00	0.0	0
2020-09-13	63	44	53.5	14	4	0.00	0.0	0
2020-09-14	62	43	52.5	13	3	0.00	0.0	0
2020-09-15	70	51	60.5	21	11	0.00	0.0	0
2020-09-16	74	50	62.0	22	12	0.00	0.0	0
2020-09-17	68	49	58.5	19	9	0.00	0.0	0
2020-09-18	71	49	60.0	20	10	0.21	0.0	0
2020-09-19	64	56	60.0	20	10	0.34	0.0	0
2020-09-20	68	53	60.5	21	11	0.15	0.0	0
2020-09-21	74	50	62.0	22	12	0.00	0.0	0
2020-09-22	73	49	61.0	21	11	0.04	0.0	0
2020-09-23	72	57	64.5	25	15	0.16	0.0	0
2020-09-24	63	56	59.5	20	10	1.22	0.0	0
2020-09-25	69	56	62.5	23	13	0.12	0.0	0
2020-09-26	61	48	54.5	15	5	0.44	0.0	0
2020-09-27	67	49	58.0	18	8	0.01	0.0	0
2020-09-28	72	44	58.0	18	8	0.00	0.0	0
2020-09-29	87	43	65.0	25	15	0.00	0.0	0
2020-09-30	87	45	66.0	26	16	0.00	0.0	0
Average|Sum	75.2	49.7	62.5	681	381	2.69	0.0	0.0

Climatological Data for BATTLE GROUND, WA - August 2020

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2020-08-01	86	55	70.5	31	21	0.00	0.0	0
2020-08-02	78	54	66.0	26	16	0.00	0.0	0
2020-08-03	82	54	68.0	28	18	0.00	0.0	0
2020-08-04	82	53	67.5	28	18	0.00	0.0	0
2020-08-05	84	53	68.5	29	19	0.00	0.0	0
2020-08-06	81	54	67.5	28	18	0.00	0.0	0
2020-08-07	70	47	58.5	19	9	0.20	0.0	0
2020-08-08	75	46	60.5	21	11	0.00	0.0	0
2020-08-09	75	48	61.5	22	12	0.00	0.0	0
2020-08-10	82	47	64.5	25	15	0.00	0.0	0
2020-08-11	86	46	66.0	26	16	0.00	0.0	0
2020-08-12	76	46	61.0	21	11	0.00	0.0	0
2020-08-13	70	42	56.0	16	6	0.00	0.0	0
2020-08-14	75	42	58.5	19	9	0.00	0.0	0
2020-08-15	85	46	65.5	26	16	0.00	0.0	0
2020-08-16	96	52	74.0	34	24	0.00	0.0	0
2020-08-17	93	59	76.0	36	26	0.00	0.0	0
2020-08-18	90	59	74.5	35	25	0.00	0.0	0
2020-08-19	82	53	67.5	28	18	0.00	0.0	0
2020-08-20	83	53	68.0	28	18	0.00	0.0	0
2020-08-21	81	58	69.5	30	20	0.15	0.0	0
2020-08-22	74	56	65.0	25	15	0.09	0.0	0
2020-08-23	78	51	64.5	25	15	0.00	0.0	0
2020-08-24	80	49	64.5	25	15	0.00	0.0	0
2020-08-25	77	48	62.5	23	13	0.00	0.0	0
2020-08-26	78	48	63.0	23	13	0.00	0.0	0
2020-08-27	80	47	63.5	24	14	0.00	0.0	0
2020-08-28	81	47	64.0	24	14	0.00	0.0	0
2020-08-29	81	49	65.0	25	15	0.00	0.0	0
2020-08-30	73	43	58.0	18	8	0.00	0.0	0
2020-08-31	74	42	58.0	18	8	0.00	0.0	0
Average|Sum	80.3	49.9	65.1	786	476	0.44	0.0	0.0

Climatological Data for BATTLE GROUND, WA - July 2020

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2020-07-01	68	51	59.5	20	10	0.04	0.0	0
2020-07-02	62	51	56.5	17	7	0.06	0.0	0
2020-07-03	68	48	58.0	18	8	0.01	0.0	0
2020-07-04	68	49	58.5	19	9	0.00	0.0	0
2020-07-05	71	49	60.0	20	10	0.00	0.0	0
2020-07-06	72	49	60.5	21	11	0.00	0.0	0
2020-07-07	66	50	58.0	18	8	0.00	0.0	0
2020-07-08	64	53	58.5	19	9	0.07	0.0	0
2020-07-09	71	49	60.0	20	10	0.00	0.0	0
2020-07-10	73	50	61.5	22	12	0.00	0.0	0
2020-07-11	77	49	63.0	23	13	0.00	0.0	0
2020-07-12	73	49	61.0	21	11	0.00	0.0	0
2020-07-13	74	46	60.0	20	10	0.00	0.0	0
2020-07-14	78	46	62.0	22	12	0.00	0.0	0
2020-07-15	83	47	65.0	25	15	0.00	0.0	0
2020-07-16	83	50	66.5	27	17	0.00	0.0	0
2020-07-17	80	55	67.5	28	18	0.00	0.0	0
2020-07-18	70	46	58.0	18	8	0.00	0.0	0
2020-07-19	84	46	65.0	25	15	0.00	0.0	0
2020-07-20	87	52	69.5	30	20	0.00	0.0	0
2020-07-21	90	56	73.0	33	23	0.00	0.0	0
2020-07-22	84	57	70.5	31	21	0.00	0.0	0
2020-07-23	77	57	67.0	27	17	0.00	0.0	0
2020-07-24	72	51	61.5	22	12	0.00	0.0	0
2020-07-25	69	45	57.0	17	7	0.00	0.0	0
2020-07-26	80	45	62.5	23	13	0.00	0.0	0
2020-07-27	98	49	73.5	34	24	0.00	0.0	0
2020-07-28	96	56	76.0	36	26	0.00	0.0	0
2020-07-29	85	54	69.5	30	20	0.00	0.0	0
2020-07-30	88	53	70.5	31	21	0.00	0.0	0
2020-07-31	91	56	73.5	34	24	0.00	0.0	0
Average|Sum	77.5	50.5	64.0	751	441	0.18	0.0	0.0

Climatological Data for BATTLE GROUND, WA - June 2020

Date	Max Temperature	Min Temperature	Avg Temperature	GDD Base 40	GDD Base 50	Precipitation	Snowfall	Snow Depth
2020-06-01	62	39	50.5	11	1	0.02	0.0	0
2020-06-02	69	39	54.0	14	4	0.00	0.0	0
2020-06-03	75	42	58.5	19	9	0.00	0.0	0
2020-06-04	71	46	58.5	19	9	0.00	0.0	0
2020-06-05	70	47	58.5	19	9	0.00	0.0	0
2020-06-06	67	48	57.5	18	8	0.01	0.0	0
2020-06-07	59	46	52.5	13	3	0.61	0.0	0
2020-06-08	57	46	51.5	12	2	0.16	0.0	0
2020-06-09	62	48	55.0	15	5	0.80	0.0	0
2020-06-10	62	49	55.5	16	6	0.21	0.0	0
2020-06-11	77	55	66.0	26	16	0.00	0.0	0
2020-06-12	73	55	64.0	24	14	0.00	0.0	0
2020-06-13	57	50	53.5	14	4	0.17	0.0	0
2020-06-14	58	46	52.0	12	2	0.42	0.0	0
2020-06-15	65	46	55.5	16	6	0.45	0.0	0
2020-06-16	62	49	55.5	16	6	0.30	0.0	0
2020-06-17	63	46	54.5	15	5	0.47	0.0	0
2020-06-18	71	46	58.5	19	9	0.00	0.0	0
2020-06-19	79	50	64.5	25	15	0.00	0.0	0
2020-06-20	84	50	67.0	27	17	0.00	0.0	0
2020-06-21	68	57	62.5	23	13	0.21	0.0	0
2020-06-22	72	48	60.0	20	10	0.00	0.0	0
2020-06-23	83	48	65.5	26	16	0.00	0.0	0
2020-06-24	90	56	73.0	33	23	0.00	0.0	0
2020-06-25	76	53	64.5	25	15	0.00	0.0	0
2020-06-26	82	55	68.5	29	19	0.00	0.0	0
2020-06-27	83	55	69.0	29	19	0.00	0.0	0
2020-06-28	66	52	59.0	19	9	0.01	0.0	0
2020-06-29	66	51	58.5	19	9	0.00	0.0	0
2020-06-30	70	53	61.5	22	12	0.04	0.0	0
Average|Sum	70.0	49.0	59.5	595	295	3.88	0.0	0.0

APPENDIX D: EMAIL COMMUNICATION WITH WDFW

Annie Jean Rendleman

From: Holowatz, Isaac T (DFW) <Isaac.Holowatz@dfw.wa.gov>
Sent: Wednesday, February 17, 2021 5:03 PM
To: Annie Jean Rendleman
Subject: RE: Oregon white oak protection- La Center

Annie Jean,
It was great talking with you earlier today. Thank you for the Picture … what a beautiful Oak tree.
Yes, I think that dripline would cover the adequate amount of space to protect the Oak Tree.
If you have any further questions please let me know.
Thank you,

Isaac Holowatz
Habitat Biologist
Washington Department of Fish and Wildlife
Cell: 360.773.8943

From: Annie Jean Rendleman <AnnieJean@eco-land.com>
Sent: Tuesday, February 16, 2021 5:00 PM
To: Holowatz, Isaac T (DFW) <Isaac.Holowatz@dfw.wa.gov>
Subject: Oregon white oak protection- La Center

External Email

Hi Isaac,

I'm working on a project in the City of La Center on Clark County parcel 209113000 with a large white oak tree (40-inch DBH). The City code says to consult with WDFW on an appropriate buffer for priority oaks. I have never dealt with a buffer off of an oak, other than the dripline. Is this something you would need to make a site visit for? I plan to go out next week and could take more photos for you, if that's preferable.

Feel free to forward this on if I should be reaching out to someone else!

Thanks,

Please note: I am no longer working on Fridays. Please call our office at the number below if you need immediate assistance.

Annie-Jean Rendleman | Biologist
Port of Camas/Washougal Satellite Office
3805 Truman Road, Suite 2, Washougal, WA 98671
P: 360-835-9082 ext 1104
Longview Office
1157 3rd Avenue, Suite 220A Longview, WA 98632
P: 360-578-1371 ext 1104 | F: 360-414-9305
www.eco-land.com | AnnieJean@eco-land.com

Notice: This message (including any attachments) contains confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message, and any disclosure, copying, or distribution of this message, or the taking of any action based upon it, is prohibited.

Please consider the environment before printing this e-mail.

Committed to helping people - one square foot, one acre, one watershed at a time.®

From: Spoo, Ethan <ethan.spoo@wsp.com>
Sent: Tuesday, February 16, 2021 11:21 AM
To: Annie Jean Rendleman <AnnieJean@eco-land.com>; Sarah Dollar <sdollar@ci.lacenter.wa.us>
Cc: Anthony Cooper <acooper@ci.lacenter.wa.us>; Matt Jenkins <mjenkins@ci.lacenter.wa.us>
Subject: RE: Hung Annexation - ELS - Wetland Boundary

Hi Annie,

Please take a look at Table 18.300.090(2)(a) which requires a standard buffer of 300 feet around non-riparian PHS point sites *or as recommended in consultation with WDFW.* Assuming this is priority oak habitat we are talking about, please reach out to WDFW and come to concurrence with them about what buffer would protect the oak since I'm assuming you won't want to use 300 feet. In the past WDFW requires priority oak habitat be protected to the driplines. Once you come to an agreement with WDFW, please submit a letter or email from them stating what they require the buffer to be.

Let me know if you have any other questions.

Thanks,
Ethan

From: Annie Jean Rendleman <AnnieJean@eco-land.com>
Sent: Tuesday, February 16, 2021 9:27 AM
To: Sarah Dollar <sdollar@ci.lacenter.wa.us>
Cc: Anthony Cooper <acooper@ci.lacenter.wa.us>; Matt Jenkins <mjenkins@ci.lacenter.wa.us>; Spoo, Ethan <ethan.spoo@wsp.com>
Subject: RE: Hung Annexation - ELS - Wetland Boundary

Good morning,

I'm working on the critical areas report for the Hung parcel. In looking at the La Center code (18.300.090(2) Fish and Wildlife Conservation Areas), I noticed it mentions a buffer non-riparian priority habitat and species. I've completed many permitting projects with priority oaks, but never seen a buffer for them. I looked through the WDFW Management

Recommendations and didn't see anything regarding setbacks or buffers. Could you clarify what the City requires for oak buffers?

Thanks so much,
Annie Jean

Please note: I am no longer working on Fridays. Please call our office at the number below if you need immediate assistance.

Annie-Jean Rendleman | Biologist

Port of Camas/Washougal Satellite Office
3805 Truman Road, Suite 2, Washougal, WA 98671
P: 360-835-9082 ext 1104

Longview Office
1157 3rd Avenue, Suite 220A Longview, WA 98632
P: 360-578-1371 ext 1104 | F: 360-414-9305
www.eco-land.com | AnnieJean@eco-land.com

Notice: This message (including any attachments) contains confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message, and any disclosure, copying, or distribution of this message, or the taking of any action based upon it, is prohibited.

Please consider the environment before printing this e-mail.

Committed to helping people - one square foot, one acre, one watershed at a time.®

Attachment B

OAK MITIGATION PLAN

December 29, 2022

Lockwood Meadows Subdivision

La Center, Washington

Prepared for

Scott Clayton

Cedar Ridge Homes

1906 SW 257th Ave.

Troutdale, OR 97060

(503) 666 4240

Prepared by

Ecological Land Services

1157 3rd Avenue, Suite 220A • Longview, WA 98632

(360) 578-1371 • Project Number 2245.14

SIGNATURE PAGE

The information in this report was compiled and prepared under the supervision and direction of the undersigned.

Annie Jean Rendleman
Biologist

TABLE OF CONTENTS

INTRODUCTION **2**
PROJECT DESCRIPTION **2**
EXISTING CONDITIONS **3**
AVOIDANCE AND MINIMIZATION OF OAK IMPACTS **3**
UNAVOIDABLE IMPACTS **4**
IMPACTED FUNCTIONS **4**
ONSITE OAK MITIGATION PLAN **5**
IMPLEMENTATION PLAN **6**
GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS **8**
MONITORING, MAINTENANCE, AND CONTINGENCY MEASURES **11**
LIMITATIONS **12**
REFERENCES **13**

LIST OF TABLES

Table 1. Impact Summary. 4
Table 2. Proposed Mitigation. 6
Table 3. Oak Enhancement Plant Specifications. 6
Table 4. Wetland B Buffer Oak Mitigation Plant Specifications. 7
Table 5. Performance Standards for Vegetation by Monitored Year. 10

FIGURES AND PHOTOPLATES

Figure 1 Vicinity Map
Figure 2 Existing Conditions
Figure 3 Proposed Conditions
Figure 4 Oak Impact Detail
Figure 5 Oak Enhancement Detail
Figure 6 Wetland B Oak Mitigation Detail
Photoplates 1-5

Appendix A. WDFW Correspondence
Appendix B. Tree Survey (Planning Solutions, Inc.)

INTRODUCTION

Ecological Land Services, Inc. (ELS) has prepared this oak mitigation plan on behalf of the applicant, Cedar Ridge Homes, to address potential impacts to an Oregon white oak tree (*Quercus garryana*) due to road improvements required for the Lockwood Meadows Subdivision development located on NE Lockwood Creek Road in La Center.

ELS biologists visited the site in May and September of 2020 to map onsite critical areas. Two wetlands and one priority habitat Oregon white oak tree were mapped. A wetland boundary verification was issued by the U.S. Army Corps of Engineers on March 31, 2021, and a wetland fill permit was received on April 25, 2022.

This plan addresses 1,178 square feet of potential impacts to oak dripline due to street resurfacing and sidewalk construction. Impacts will be mitigated through (1) understory enhancement of the existing onsite oak and (2) by creating oak habitat within Wetland B's buffer. This plan has been prepared to compensate for potential impacts to oak dripline and ensure no net loss of habitat functions in accordance with the Washington Department of Fish and Wildlife's (WDFW) *Management Recommendations for Washington's Priority Habitats, Oregon White Oak Woodlands* (1998) and the *City of La Center Municipal Code (LCMC) Chapter 18.300 Critical Areas* (2022).

PROJECT DESCRIPTION

Project Location

The site consists of Clark County Tax Parcel 209113-000 located at 2000 NE Lockwood Creek Road in La Center, Washington. NE Lockwood Creek Road abuts the southwestern portion of the site and NE 24th Avenue abuts the site to the east. The site is located in the southeast portion of Section 10, Township 3 North, Range 2 East of the Willamette Meridian (Figure 1).

Proposed Development

The proposed project is for construction of the Lockwood Meadows Subdivision, consisting of 71 residential lots. Construction of the residential development will include grading, lot preparation, utility installation, construction of interior streets, and a stormwater detention facility. Existing buildings within the site will be demolished prior to work. Impacts to Wetland A will be mitigated by purchasing 0.0425 credits at East Fork Lewis Mitigation Bank (EFLMB), per the nationwide permit for wetland fill. The grading plan was designed to avoid impacting the onsite oak; however, circulation and roadway requirements could potentially impact the oak's dripline. Approximately 1,178 square feet of the dripline which extends offsite, primarily over existing impervious surface, will be disturbed from street resurfacing and sidewalk construction. To preemptively mitigate for the potential impacts to the priority oak, a ratio of greater than 6:1 will be implemented, resulting in a total of 7,091 square feet of enhancement to the existing oak dripline and oak woodland installation.

EXISTING CONDITIONS

Existing and Surrounding Land Uses

The 20-acre site is zoned Low Density Residential (LDR-7.5) with an Urban Holding (UH-10) zoning overlay. The site currently contains a single-family residence, barn, and well. The site is surrounded by high-density subdivision lots to the north and west, and low-density single-family parcels to the south. The majority of the site consists of mowed field grasses with scattered trees. The eastern portion of the site is a decommissioned Christmas tree farm. The site contains two Category IV wetlands and one priority habitat Oregon white oak (Figure 2). The property has been used as both a hobby and commercial farm operation for several decades which included agricultural activities such as livestock, hay, and Christmas tree production, as well as rental pasture and barn stalls for horses.

Landscape Position

The project site is located north of East Fork Lewis River, in the western portion of the 12-digit Hydrologic Unit Code (HUC) 170800020507 Lockwood Creek-East Fork Lewis River. The Washington State Department of Ecology's Water Quality Atlas maps the project site within the Watershed Resource Inventory Area (WRIA) 27 Lewis.

Oregon White Oak Habitat

The priority Oregon white oak is on the southwest corner of the site, and its dripline extends slightly offsite to the west and to the south over NE Lockwood Creek Road (Figure 2). The oak has a diameter at breast height (DBH) of 40 inches and a total dripline of 3,559 square feet, approximately 1,991 square feet of which are located within the subject parcel (Figure 5). The oak's understory is dominated by Himalayan blackberry (*Rubus armeniacus*), mowed grasses, or is over the existing roadway or driveway. *LCMC Table 18.300.090(2)(a)* states that non-riparian priority habitats and species require a buffer of 300 feet or a threshold based upon consultation with WDFW. Appendix A shows email correspondence with WDFW Habitat Specialist, Isaac Holowatz, stating that the dripline is adequate to protect the priority oak tree (February 17, 2021). Additionally, fifteen small oaks were observed onsite with DBHs ranging from 2 to 8 inches. These smaller trees are not considered priority habitat due to their size.

AVOIDANCE AND MINIMIZATION OF OAK IMPACTS

The grading plan was designed to avoid impacts to the priority habitat Oregon white oak. However, offsite portions of the oak dripline will be unavoidably disturbed due to road improvement requirements. The following avoidance and minimization measures were considered for the project:

- Proposed roadways, utilities, and lots onsite are outside of the priority oak dripline.
- All grading, aside from that associated with road improvements, will avoid the oak's dripline.
- The entire onsite portion of the oak's dripline will be enhanced through native shrub installation and invasive species removal.

- The only proposed grading within the oak's dripline is required by *LCMC* for sufficient ingress and egress.
- Construction fencing will be placed along the onsite portion of the oak's dripline to protect it from disturbance during construction and site grading.
- Habitat signs will be installed around the existing oak dripline to deter any human or pet activity which may harm the tree.

UNAVOIDABLE IMPACTS

The street resurfacing will require digging beneath the existing subgrade depth by approximately 0.35 feet to meet the base rock and required asphalt thickness. Digging below the existing subgrade will impact 385 square feet of oak dripline. Sidewalk construction on the north side of Lockwood Creek Road will impact 793 square feet of oak dripline.

Table 1. Impact Summary.

Identifier	Cause of Impact	Location	Impact Area (sq. ft.)	Mitigation Ratio	Required Enhancement (sq. ft.)
Oak Dripline	Sidewalk extension	Pervious soil	385	6:1	2,310
	Street resurfacing and excavation	Existing roadway	793	6:1	4,758
Total					**7,068**

IMPACTED FUNCTIONS

Functions provided by the onsite oak tree were assessed during a site visit on September 8, 2020 based on WDFW's *Management Recommendations for Washington's Priority Habitats, Oregon White Oak Woodlands* (Guidance) (Larsen *et al.,* 1998).

Habitat Functions

Oregon white oaks are used by a variety of wildlife species, including multiple insects exclusively associated with this species and many birds which have high breeding densities in Oregon white oaks. Oak and oak woodlands can provide contiguous aerial pathways for small animals. Snags and dead portions of live trees can harbor insect populations and provide nesting, resting, and refuge from inclement weather or predators for birds and small mammals. Oak acorns, leaves, fungi, and insects inhabiting the oaks provide an important food source for birds and mammals. Open-canopy stands of oak generally have more complex plant understories than closed-canopy stands and can support more wildlife species.

According to *LCMC 18.300.090(2)(a)*, Oregon white oaks are considered a priority habitat by WDFW and locally by the City of La Center. In urban or urbanizing areas west of the Cascades, WDFW defines priority oak habitat as single oaks, or stands of pure oak, or oak/conifer associations, 1 acre or greater in size. WDFW may also consider individual Oregon white oak trees a priority habitat when found to be particularly valuable to wildlife (i.e., contains many cavities, has a large DBH, is used by priority species, or has a large canopy) (Larsen and Morgan, 1998). The site boundary is within an urban area, as it is within the City of La Center. The WDFW recommendation is that in urban and urbanizing areas, single trees should be maintained if they are deemed important to species highly associated with Oregon white oak. Oaks and their associated floras comprise distinct woodland ecosystems with various plant communities providing valuable habitat that contributes to wildlife diversity; Oak woodlands provide a mix of feeding, resting, and breeding habitat for many wildlife species (Larsen and Morgan, 1998).

According to the WDFW, medium-to-large or old oak trees are considered priority habitat (Larsen and Morgan 1998). WDFW considers oak trees with a DBH of greater than 12 inches to be medium and greater than 20 inches to be large. Due to the site being west of the Cascades, in an urban area, and the size of the tree, the oak is considered a priority oak. However, it is not as valuable for habitat functions as a contiguous patch of mature oaks or a mix of oaks and coniferous species. The non-priority oaks proposed for removal have minimal canopy coverage and are too young and small to harbor cavities for small cavity-nesting animals. They also possess no snags or dead portions that may harbor insect populations or perches for birds and mammals and are not part of contiguous forested habitat.

ONSITE OAK MITIGATION PLAN

Oak Understory Enhancement

The proposed oak dripline impacts will be mitigated through enhancement of the existing oak understory as well as creating oak habitat within Wetland B's buffer. Although the majority of the dripline impact area currently contains existing road, the disturbance from resurfacing the street could impact the tree. This mitigation plan was designed to compensate for all potential impacts to ensure no net loss of function, using a mitigation ratio greater than 6:1.

The onsite oak understory is heavily dominated by invasive Himalayan blackberry (see photoplates). Removing invasive species and installing native shrubs beneath the oak will increase the habitat functions of the existing understory by improving habitat structure and complexity, increasing soil nutrition from the decomposition of organic material from deciduous species, and providing additional food and refuges sources for wildlife.

Reproductive Potential

Acorn production varies widely among oak and the success of regeneration depends largely on the availability of fruits that mature and escape predation. Oaks that grow in an open environment, such as the onsite oak, generally produce more acorns than trees suppressed by other overstory trees (Olympia Forestry Sciences Laboratory 2004; Beck 1992). Beck (1992) describes oak reproduction as sporadic even under ideal circumstances because of predation, the limited seed viability, the precise germination requirements (≥30% moisture and cool conditions), and the low survival rate of seedlings if they do germinate. Once a mature fruit falls to the ground, it must have

adequate moisture and soil or leaf litter to germinate as a seedling. With the correct environmental conditions, the slow growing seedlings typically emerge in the spring. Enhancing the existing onsite understory will increase the likelihood of oak propagation.

Oak Habitat Creation in Wetland B Buffer

All of the available oak understory is proposed for enhancement (1,991 square feet); however, it will not meet the required 7,068 square feet of mitigation. Therefore, additional onsite enhancement is proposed within Wetland B's buffer (5,100 square feet). Oregon white oak trees will be planted in the northern outer portion of the buffer to establish oak habitat. Native woody shrubs will also be planted amongst the oaks, and invasive species will be removed. The proposed planting area currently contains emergent grasses, with some Himalayan blackberry and thistle species (*Cirsium* sp.). The attached tree survey shows that only the innermost portion of Wetland B's buffer contains trees (Appendix B). This plan utilizes the onsite wetland buffer with degraded functions to create oak woodland and improve the buffer's screening functions and habitat structure.

Table 2. Proposed Mitigation.

Mitigation Location	Mitigation Ratio	Proposed Enhancement (sq. ft.)
Existing Oak Dripline	6:1	1,991
Wetland B Buffer	> 6:1	5,100
Total		**7,091**

IMPLEMENTATION PLAN

Planting Schedule and Equipment

The native trees and shrubs will be installed in the mitigation areas during the late fall or early spring when the plants are dormant, and the soil moisture conditions are favorable for planting. The plant species may be changed, depending on availability. The following equipment may be used to prepare and install plants within the enhancement area: brush hog, weed eater, tractor, rototiller, tree shovel, garden shovel, and power auger. Plant species are listed below in Tables 3 and 4.

Table 3. Oak Enhancement Plant Specifications.

Species	Spacing	Size	Amount
Nootka Rose (*Rosa nutkana*)	6' center	1 gallon	20

Species	Spacing	Size	Amount
Snowberry (*Symphoricarpos albus*)	6' center	1 gallon	20
Oregon grape (*Mahonia aquifolium*)	6' center	1 gallon	20
Salal (*Gaultheria shallon*)	6' center	1 gallon	20
Total			**80**

Table 4. Wetland B Buffer Oak Mitigation Plant Specifications.

Species	Spacing	Size	Amount
Tree Stratum			
Oregon White Oak (*Quercus garryana*)	15’ center	2-inch caliper (if available)	15
Shrub Stratum			
Nootka Rose (*Rosa nutkana*)	6' center	1 gallon	18
Snowberry (*Symphoricarpos albus*)	6' center	1 gallon	18
Oregon Grape (*Mahonia aquifolium*)	6' center	1 gallon	18
Salal (*Gaultheria shallon*)	6' center	1 gallon	18
Total			**87**

Prepare Planting Area

- Install silt fencing where necessary to control runoff.
- Manually remove invasive species, then selectively apply herbicide by hand as necessary to control regrowth of invasive plants.
- Install native woody plants according to plant specifications.
- Install a minimum of 3-inch depth by 4-foot diameter mulch layer around the base of planted species.
- Affix biodegradable protector tubes around tall shrubs to protect from rodent predation and weed eating, as needed.
- Remove silt fencing following construction.

Vegetation Container Stock Specifications

- Dig the receiving hole larger than the root system and the same width at the top and the bottom.
- Roughen the sides of the receiving hole and remove any rocks or debris.
- Backfill the hole with soil about one-half full, lightly tamping to remove any air pockets.
- Water slowly to saturate the soil and remove any remaining air pockets.
- Finish filling the hole with soil. Remove any extra soil rather than mounding it around the base of the plant.

Install Habitat Signs

- The existing oak's dripline and Wetland B's buffer will be demarcated with permanent fencing with signs stating, "*Habitat Buffer – Please Retain in a Natural State*."
- Signs will be posted at an interval of one per lot or every 100 feet, whichever is less.
- Signs will be a minimum size one foot by one foot and posted three and one-half feet above grade.

GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS

The goal of the mitigation plan is to compensate for 1,178 square feet of priority Oregon white oak dripline impacts caused by improvements to NE Lockwood Creek Road. To accomplish this, the following objectives and performance standards are appropriate to ensure no net loss of functions as well as the overall success of onsite mitigation.

Vegetative Structure

Objective 1. Enhance the entire 1,991 square feet of onsite Oregon white oak dripline through the removal of invasive species and native plant installation.

- *Performance Standard 1a.* Planted native shrubs in the understory enhancement area will achieve at least 90 percent survival in Year 1. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1b.* Non-native, invasive plant species will not exceed 20 percent aerial cover in the understory enhancement area in Year 1.

- *Performance Standard 1c.* Native shrubs in the understory enhancement area will achieve at least 80 percent survival in Year 2. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1d.* Non-native, invasive plant species will not exceed 15 percent aerial cover in the understory enhancement area in Year 2.

- *Performance Standard 1e.* Native shrubs in the understory enhancement area will achieve at least 75 percent survival in Year 3. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1f.* Non-native, invasive plant species will not exceed 15 percent aerial cover in the understory enhancement area in Year 3.

- *Performance Standard 1g.* Native shrubs in the understory enhancement area will achieve at least 10 percent native cover in Year 5. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1h.* Native shrubs in the understory enhancement area will achieve at least 15 percent native cover in Year 7. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1i.* Native shrubs in the understory enhancement area will achieve at least 30 percent native cover in Year 10. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1j:* During Years 5, 7, and 10, non-native, invasive plant species will not exceed 10 percent aerial cover in the understory enhancement area.

Objective 2. Create 5,100 square feet of onsite Oregon white oak habitat within Wetland B's buffer.

- *Performance Standard 2a.* Planted native woody species in the mitigation area will achieve at least 90 percent survival in Year 1. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1b.* Non-native, invasive plant species will not exceed 20 percent aerial cover in the mitigation area in Year 1.

- *Performance Standard 2c.* Native woody species in the mitigation area will achieve at least 80 percent survival in Year 2. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1d.* Non-native, invasive plant species will not exceed 15 percent aerial cover in the mitigation area in Year 2.

- *Performance Standard 2e.* Native woody species in the mitigation area will achieve at least 75 percent survival in Year 3. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1f.* Non-native, invasive plant species will not exceed 15 percent aerial cover in the mitigation area in Year 3.

- *Performance Standard 2g.* Oregon white oaks will achieve at least 25 percent cover throughout the entire Wetland B buffer enhancement area in Year 5. Native woody shrubs

will achieve at least 10 percent cover based on monitoring plot data in Year 5. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 2h.* Oregon white oaks will achieve at least 35 percent cover throughout the entire Wetland B buffer enhancement area in Year 5. Native woody shrubs will achieve at least 15 percent cover based on monitoring plot data in Year 7. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 2i.* Oregon white oaks will achieve at least 50 percent cover throughout the entire Wetland B buffer enhancement area in Year 5. Native woody shrubs will achieve at least 30 percent cover based on monitoring plot data in Year 10. Dead plants will be replaced if this performance standard is not met.

- *Performance Standard 1j:* During Years 5, 7, and 10, non-native, invasive plant species will not exceed 10 percent aerial cover in the understory enhancement area.

Table 5. Performance Standards for Vegetation by Monitored Year.

	Year 1	Year 2	Year 3	Year 5	Year 7	Year 10
Shrubs						
Survival	≥90%	≥80%	≥75%	-	-	-
Cover	-	-	-	≥10%	≥15%	≥30%
Oregon white oaks[1]						
Survival	≥90%	≥80%	≥75%	-	-	-
Cover	-	-	-	≥25%	≥35%	≥50%
Invasive plants						
Cover of non-native, invasive plants	<20%	<15%	<15%	<10%	<10%	<10%

[1] Oregon white oak percent cover will be estimated based on the entire Wetland B buffer enhancement area, rather than per monitoring plot.

Long-term Protection

Objective 3. Provide legally binding protection for the priority Oregon white oak onsite dripline and the Wetland B buffer.

- *Performance Standard 3a.* A conservation covenant or similar legal mechanism will be executed and recorded for the oak understory enhancement area and the entire Wetland B buffer. The covenant, absent amendment by mutual agreement between the grantor and the County, will prohibit development of the area identified in the covenant, but will allow for maintenance and further mitigation opportunities. This performance standard shall be

considered satisfied upon administrative approval of the covenant by the City, execution of the covenant by the grantor, and the covenant's recording in Clark County.

MONITORING, MAINTENANCE, AND CONTINGENCY MEASURES

Monitoring of the oak understory enhancement area and Wetland B oak mitigation area will occur for a 10-year period in Years 1, 2, 3, 5, 7, and 10. Following plant installation, monitoring plots will be established throughout the enhancement areas and a plant count will be taken to determine baseline conditions. Plot locations will be documented in the As-Built (Year 0) report. Additionally, permanent photo stations will be established throughout the mitigation site to photo-document vegetation establishment. Photo station location and the direction in which the picture is taken will also be recorded in the monitoring reports.

The goal of monitoring will be to determine if the previously stated performance standards are met. Monitoring reports will be submitted to the City by December 31st of each monitoring year. At minimum, the following items will be included in the report:

- Location map and as-built drawing, including any changes
- Historic description of project, including dates of plant installation, current year of monitoring, and remedial actions taken (if any)
- Description of monitoring methods
- Documentation of vegetative performance standards and overall development of plant communities
- Assessment of non-native, invasive plant species and recommendations for management.
- Photographs from established photopoints
- Observations of wildlife, including, amphibians, invertebrates, reptiles, birds, and mammals (photographs will be included if taken)
- Summary of maintenance and contingency measures completed for the past year and proposed for the next year

Vegetation Monitoring

Monitoring will occur each monitoring year during the growing season, preferably during the same two-week period to better compare data. The following information will be gathered within the established monitoring plots:

- Percent survival of woody species
- Percent cover of woody species in Year 5 and subsequent monitoring years
- Percent cover of non-native, invasive species in all monitoring years
- General health of plants, noting specific problems and potential causes
- Photographic documentation of vegetative changes over time from established photopoints
- Overall vegetative conditions outside monitoring plots

Maintenance

Maintenance will occur during the growing season for the duration of monitoring and will include the following:

- If temporary irrigation is not installed, irrigate planting areas every other week or as needed in the dry season of the planting year and Year 1
- If temporary irrigation is not installed, taper watering in Years 2 and 3, watering approximately every 3 to 4 weeks in the dry season, or as needed
- Remove competing herbaceous species at least twice yearly within a 3-foot radius of planted trees and shrubs as needed
- Weed-eat, spray, or mow invasive species as needed during the growing season
- Replace dead or failed plants as described for the original installation to meet the minimum performance standards

Contingency Plan

If the performance criteria are not met, steps will be taken to correct the situation in a timely manner. The following steps will be implemented when an area is identified as failing or potentially failing:

- Identify the cause(s) of the failure or potential failure
- Identify the extent of the failure or potential failure
- Implement corrective actions such as irrigating, fertilizing, and replanting
- Document the activities and include these data in the monitoring reports
- If a routine corrective action will not correct the problem, immediately consult with the appropriate agencies
- Evaluate recommendations from resource agency staff and implement recommendations in a timely manner

LIMITATIONS

ELS bases this report's determinations on standard scientific methodology and best professional judgment. In our opinion, local, state, and federal regulatory agencies should agree with our determinations. However, the information contained in this report should be considered preliminary and used at your own risk until it has been approved in writing by the appropriate regulatory agencies. ELS is not responsible for the impacts of any changes in environmental standards, practices, or regulations after the date of this report.

REFERENCES

Beck, D.E. 1992. Acorns and Oak Regeneration. *In Oak Regeneration: Serious Problems and Practical Recommendations*. GTR SE-84. Southeastern Forest Experiment Station, U.S. Department of Agriculture, Asheville, North Carolina.

La Center Municipal Code (*LCMC*). 2022. *Chapter 18.300 Critical Areas*. La Center, Washington. September 14, 2022.

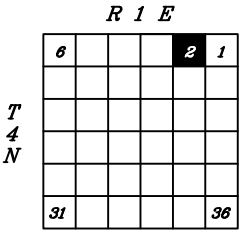
Larsen, E.M. and J.T. Morgan. 1998. *Management recommendations for Washington's priority habitats: Oregon white oak woodlands.* Washington Department of Fish and Wildlife, Olympia, Washington.

Olympia Forestry Sciences Laboratory. 2004. Oak Studies: *Acorn Survey Results*. Online document <https://www.fs.fed.us/pnw/olympia/silv/oak-studies/acorn_survey/survey.shtml>. Accessed November 2022.

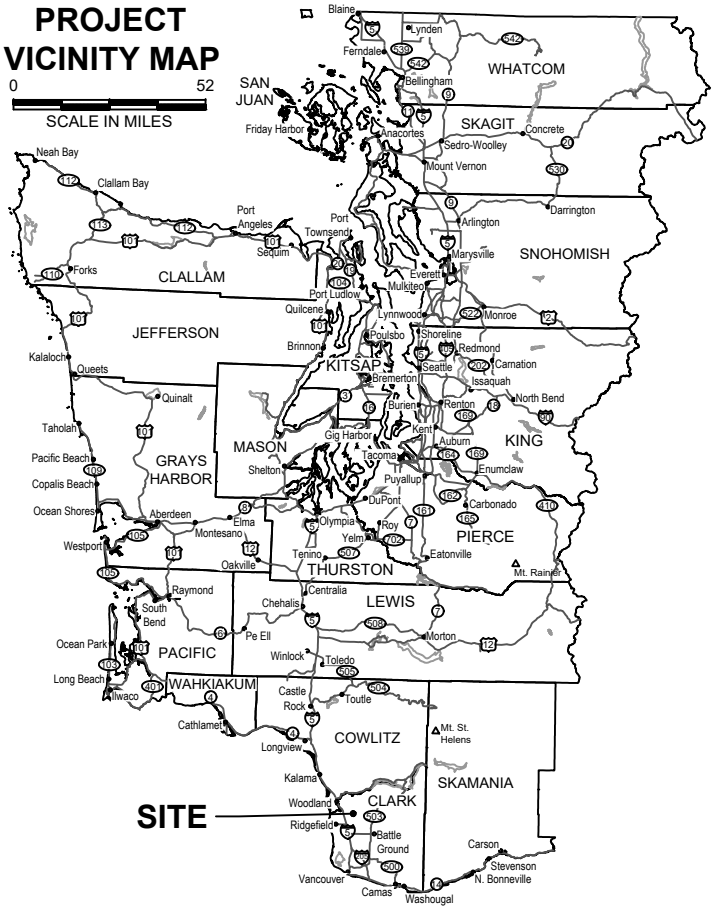
FIGURES & PHOTOPLATES

Latitude: 45.8620°
Longitude: -122.6487°

LOCATION MAP



PROJECT VICINITY MAP



NOTE:
Quadrangle topographic map from USGS.

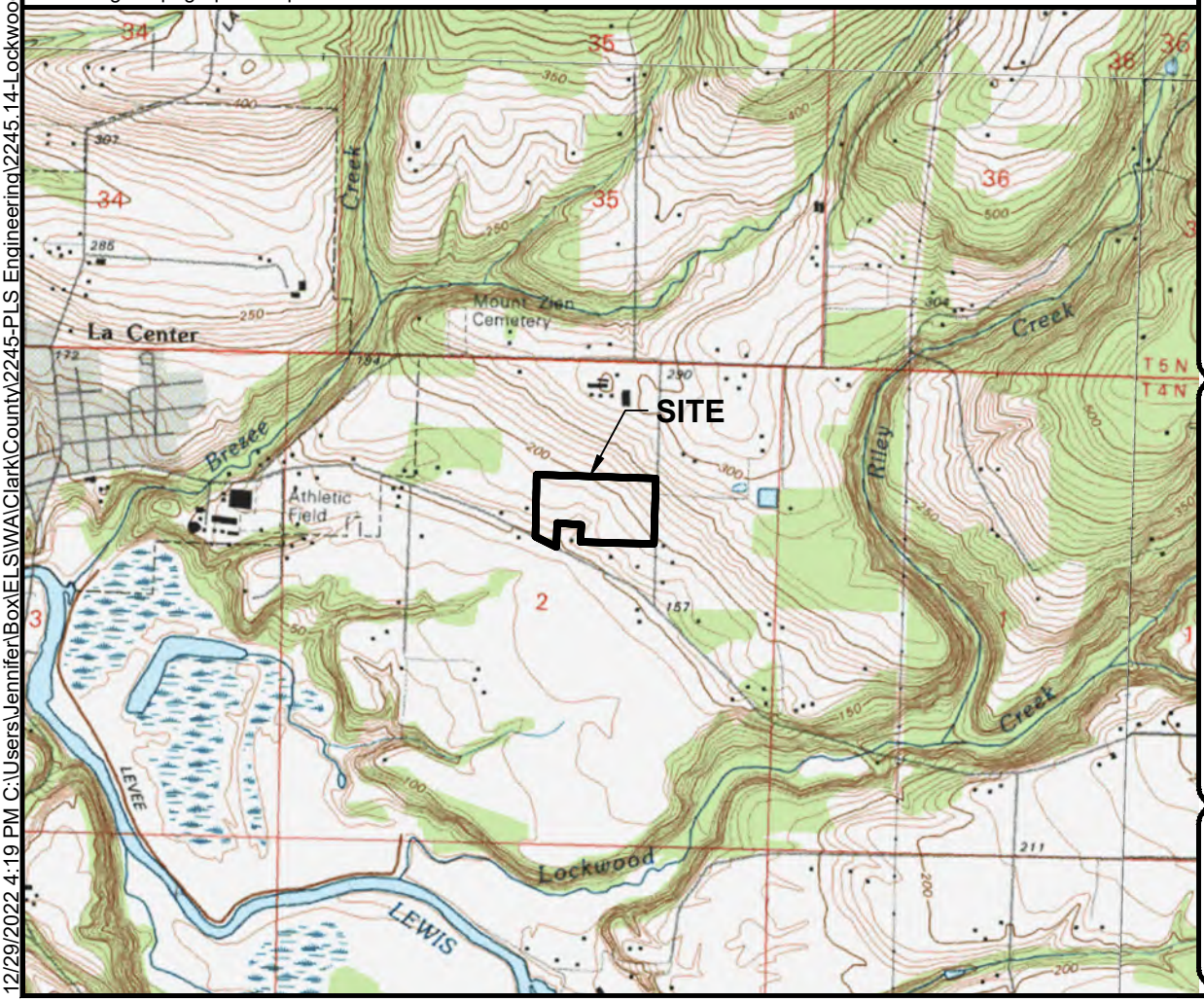


Figure 1
VICINITY MAP
Lockwood Meadows Subdivision Oak Mitigation
Cedar Ridge Homes
Clark County, Washington
Section 2, Township 4N, Range 1E, W.M.

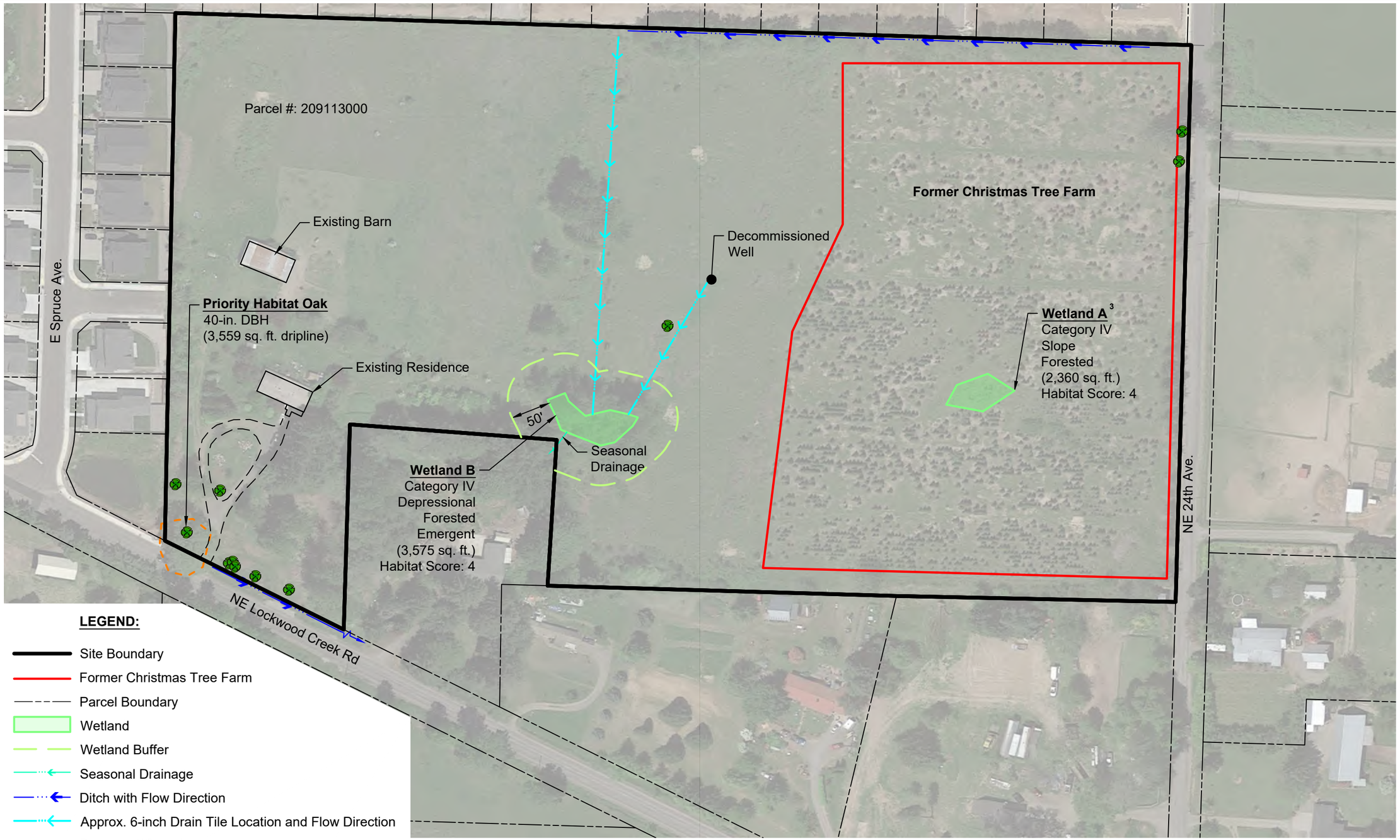
DATE: 12/29/22
DWN: EF
REQ. BY: AJR
PRJ. MGR: AJR
CHK: AJR
PROJECT NO: 2245.14

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com
Ecological Land Services

SCALE IN FEET
0
2000
4000

N
W
E
S

12/29/2022 4:19 PM C:\Users\Jennifer\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14-BUP.dwg Jennifer



LEGEND:

- Site Boundary
- Former Christmas Tree Farm
- Parcel Boundary
- Wetland
- Wetland Buffer
- Seasonal Drainage
- Ditch with Flow Direction
- Approx. 6-inch Drain Tile Location and Flow Direction
- Pavement/Gravel
- Oak Tree
- Oak Tree Dripline (3,559 sq. ft.)
- TP-1 Test Plot Location
- Continues Offsite

NOTE(S):

1. Aerial from May 2019 Google Earth™.
2. Wetlands, test plots, and oak trees were mapped by an ELS Biologist using a hand-held GPS unit with submeter accuracy.
3. Wetland A is exempted from La Center buffers per LCMC 18.300.090(5)(d) Exempted Wetlands.

Figure 2
Existing Conditions
Lockwood Meadows Subdivision Oak Mitigation
Cedar Ridge Homes
Clark County, Washington
Section 2, Township 4N, Range 1E, W.M.

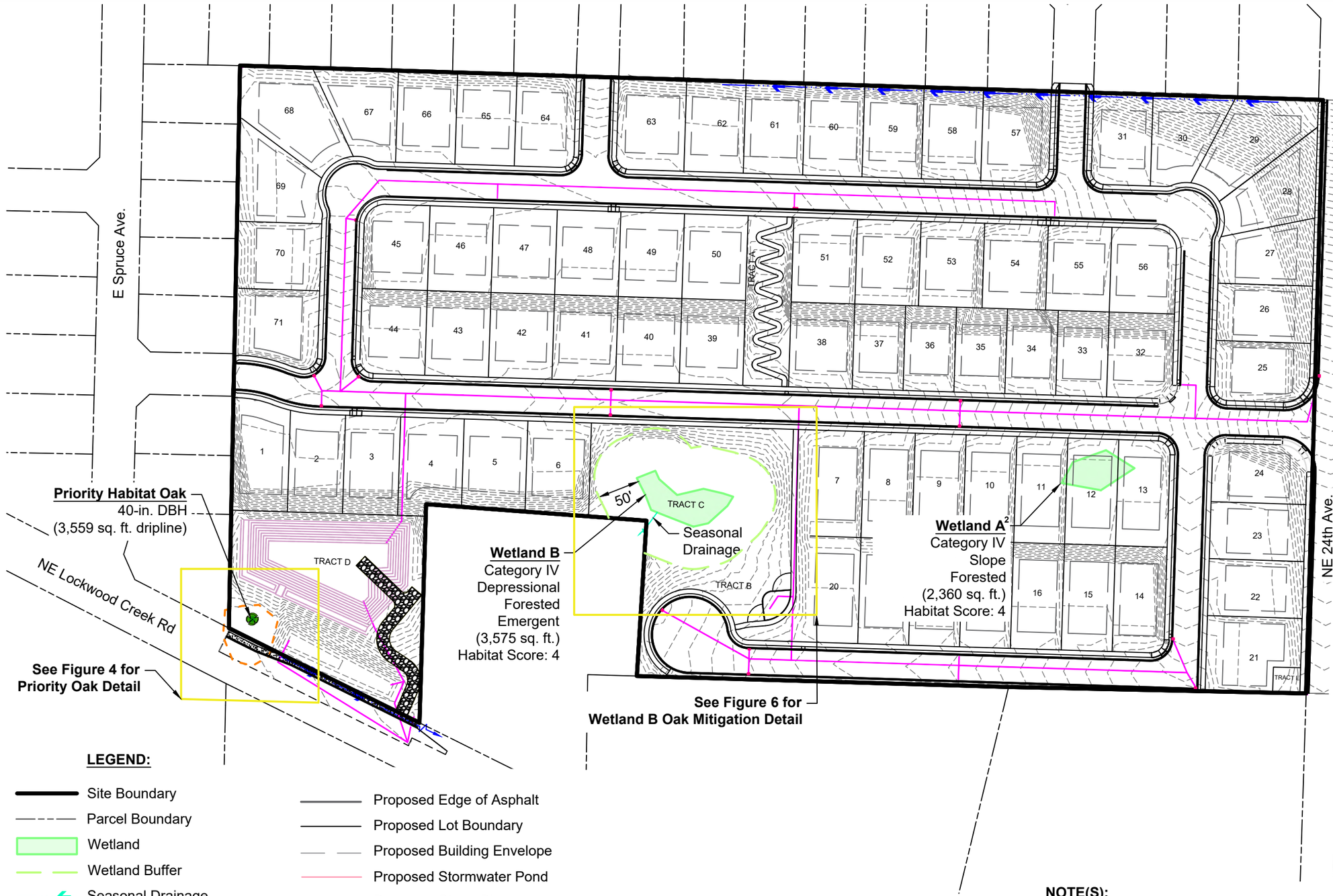
DATE: 12/29/22
DWN: EF
REQ. BY: AJR
PRJ. MGR: AJR
CHK: AJR
PROJECT NO: 2245.14

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com
Ecological Land Services

SCALE IN FEET
0
120
240

N
W
E
S

12/29/2022 4:19 PM C:\Users\Jennifer\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14-BUP.dwg Jennifer



LEGEND:

- Site Boundary
- Parcel Boundary
- Wetland
- Wetland Buffer
- Seasonal Drainage
- Ditch with Flow Direction
- Oak Tree
- Oak Tree Dripline (3,559 sq. ft. dripline)
- Continues Offsite
- Proposed Edge of Asphalt
- Proposed Lot Boundary
- Proposed Building Envelope
- Proposed Stormwater Pond
- Proposed Storm Pipe
- Proposed Gravel Access Road
- Proposed 1' Contours

NOTE(S):

1. Wetlands, test plots, and oak trees were mapped by an ELS Biologist using a hand-held GPS unit with submeter accuracy.
2. Wetland A is exempted from La Center buffers per LCMC 18.300.090(5)(d) Exempted Wetlands.
3. Site plan provided by PLS Engineering.

Figure 3
Proposed Conditions
Lockwood Meadows Subdivision Oak Mitigation
Cedar Ridge Homes
Clark County, Washington
Section 2, Township 4N, Range 1E, W.M.

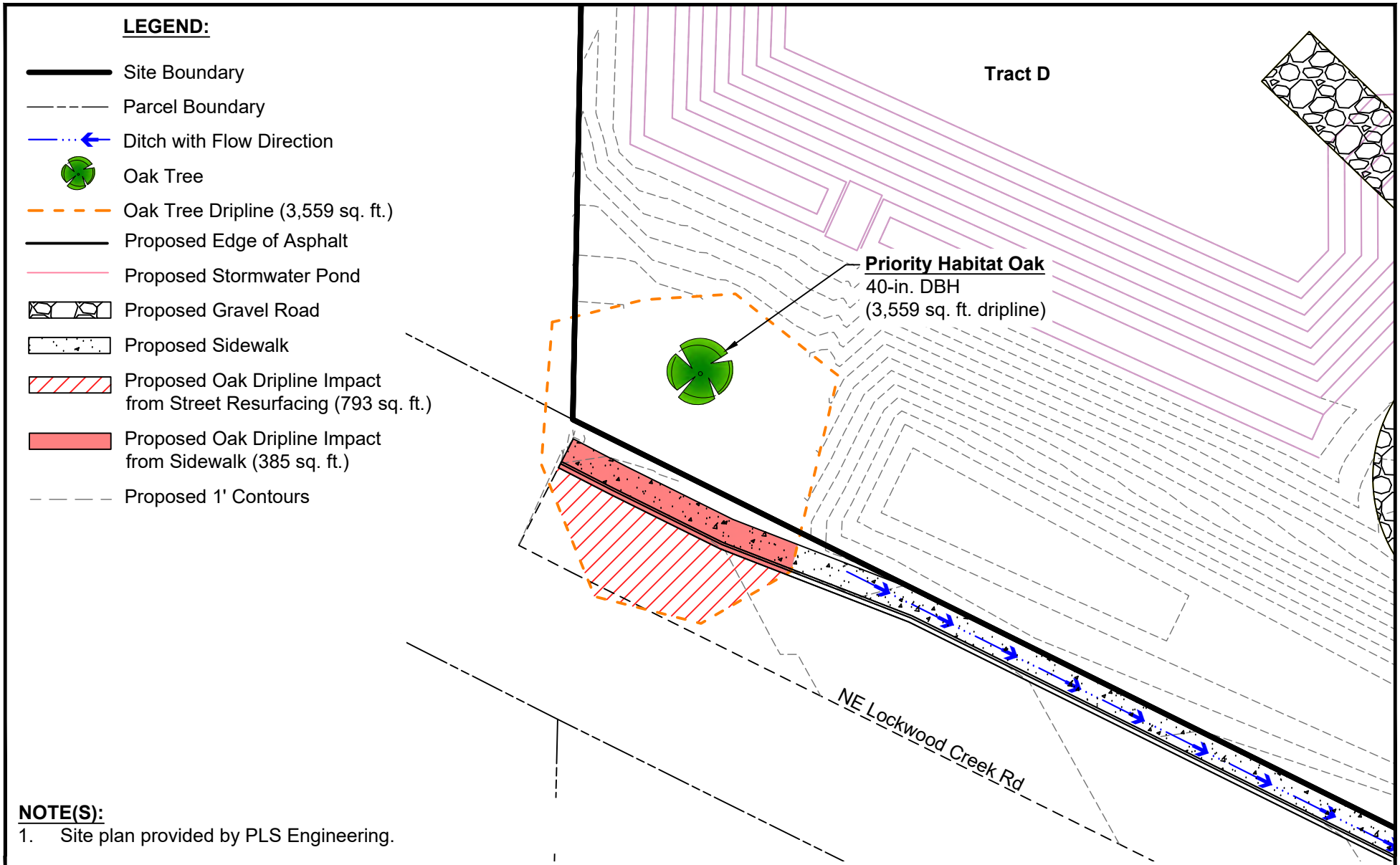
DATE: 12/29/22
DWN: EF
REQ. BY: AJR
PRJ. MGR: AJR
CHK: AJR
PROJECT NO: 2245.14

11157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com
Ecological Land Services

SCALE IN FEET
0
120
240

N
W
E
S

12/29/2022 4:19 PM C:\Users\Jennifer\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14-BUP.dwg Jennifer



NOTE(S):

1. Site plan provided by PLS Engineering.

N W E S

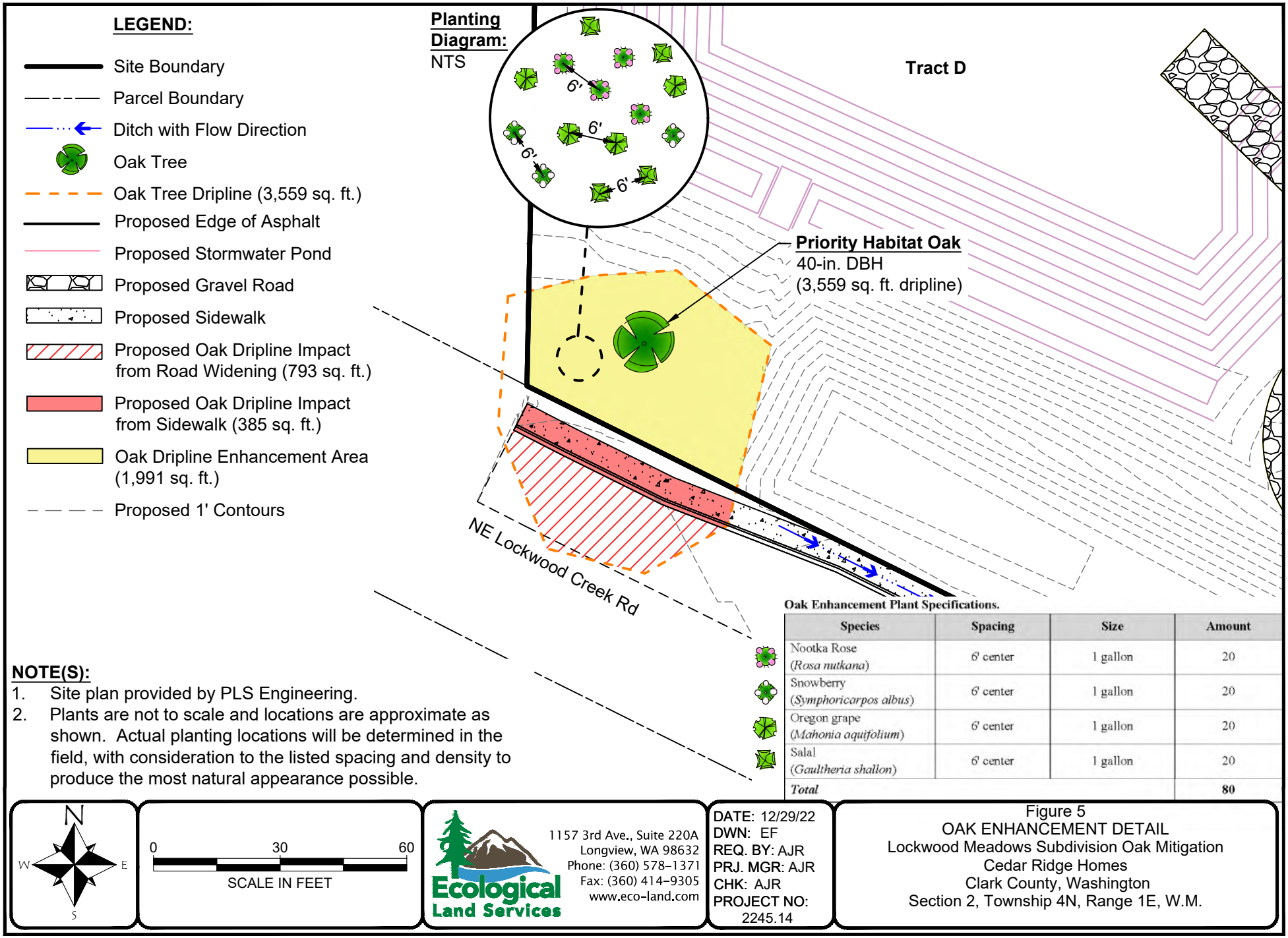
0 30 60

SCALE IN FEET

Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com

DATE: 12/29/22
DWN: EF
REQ. BY: AJR
PRJ. MGR: AJR
CHK: AJR
PROJECT NO: 2245.14

Figure 4
OAK IMPACT DETAIL
Lockwood Meadows Subdivision Oak Mitigation
Cedar Ridge Homes
Clark County, Washington
Section 2, Township 4N, Range 1E, W.M.



Oak Enhancement Plant Specifications.

Species	Spacing	Size	Amount
Nootka Rose (*Rosa nutkana*)	6' center	1 gallon	20
Snowberry (*Symphoricarpos albus*)	6' center	1 gallon	20
Oregon grape (*Mahonia aquifolium*)	6' center	1 gallon	20
Salal (*Gaultheria shallon*)	6' center	1 gallon	20
Total			**80**

NOTE(S):

1. Site plan provided by PLS Engineering.
2. Plants are not to scale and locations are approximate as shown. Actual planting locations will be determined in the field, with consideration to the listed spacing and density to produce the most natural appearance possible.

N W E S

0 30 60
SCALE IN FEET

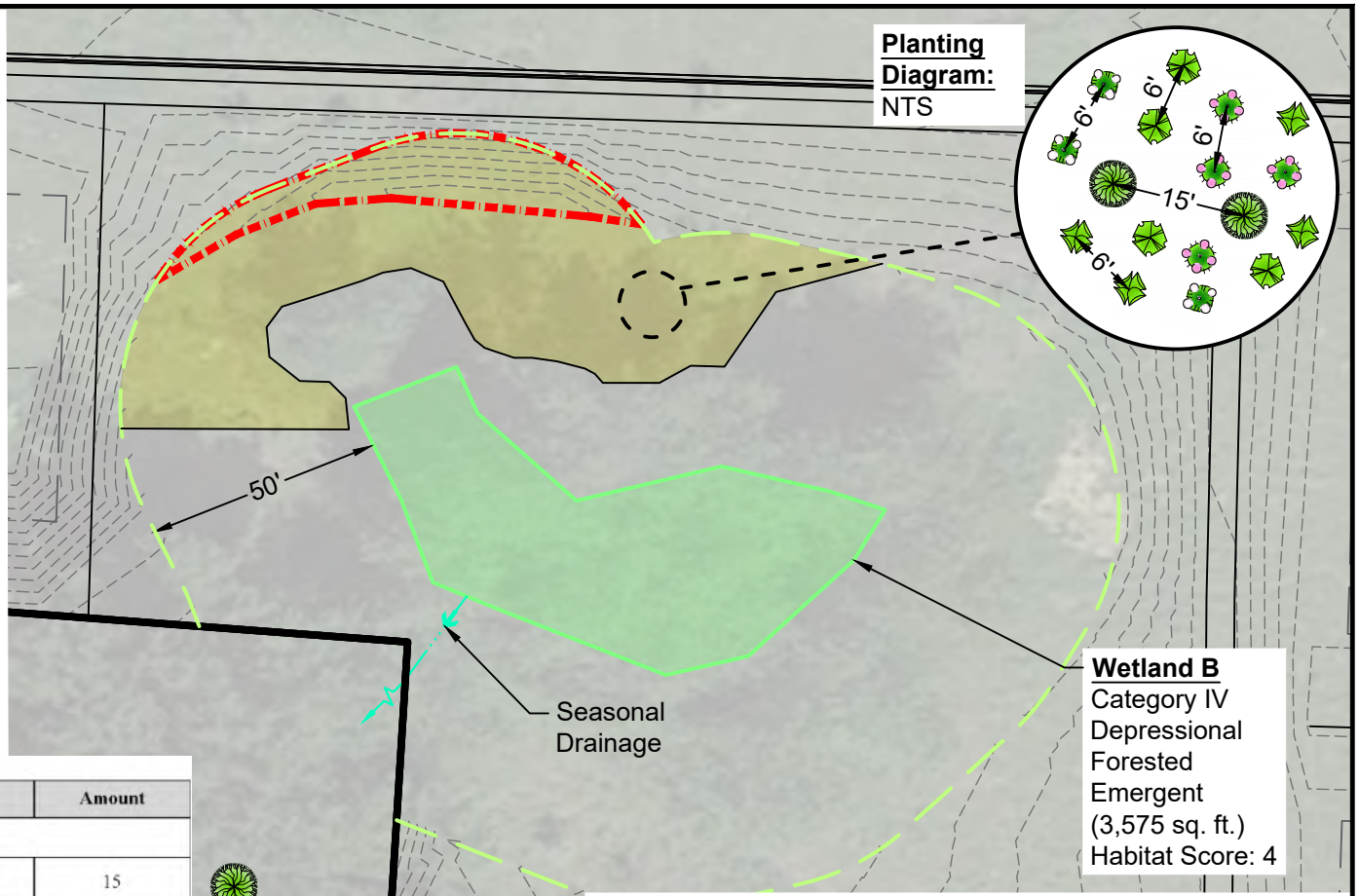
Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com

DATE: 12/29/22
DWN: EF
REQ. BY: AJR
PRJ. MGR: AJR
CHK: AJR
PROJECT NO: 2245.14

Figure 5
OAK ENHANCEMENT DETAIL
Lockwood Meadows Subdivision Oak Mitigation
Cedar Ridge Homes
Clark County, Washington
Section 2, Township 4N, Range 1E, W.M.

LEGEND:

- Site Boundary
- Ditch with Flow Direction
- Wetland Boundary
- Wetland Buffer
- Proposed Edge of Asphalt
- Proposed Lot Boundary
- Proposed Building Envelope
- Proposed 1' Contours
- Proposed 5' Contours
- Oak Dripline Enhancement Area (5,100 sq. ft.)
- Proposed Grading within Enhancement Area (978 sf.)



Wetland B Oak Mitigation Plant Specifications.

Species	Spacing	Size	Amount
Tree Stratum			
Oregon white oak (*Quercus garryana*)	15' center	2-inch caliper (if available)	15
Shrub Stratum			
Nootka Rose (*Rosa nutkana*)	6' center	1 gallon	18
Snowberry (*Symphoricarpos albus*)	6' center	1 gallon	18
Oregon grape (*Mahonia aquifolium*)	6' center	1 gallon	18
Salal (*Gaultheria shallon*)	6' center	1 gallon	18
Total			**87**

NOTE(S):

1. Wetland mapped by an ELS Biologist using a hand-held GPS unit with submeter accuracy.
2. Site plan provided by PLS Engineering.
3. Plants are not to scale and locations are approximate as shown. Actual planting locations will be determined in the field, with consideration to the listed spacing and density to produce the most natural appearance possible.
4. Aerial fromGoogle Earth™ (May 2019).

N W E S

0 40 80
SCALE IN FEET

Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com

DATE: 12/29/22
DWN: EF
REQ. BY: AJR
PRJ. MGR: AJR
CHK: AJR
PROJECT NO: 2245.14

Figure 6
WETLAND B OAK MITIGATION DETAIL
Lockwood Meadows Subdivision Oak Mitigation
Cedar Ridge Homes
Clark County, Washington
Section 2, Township 4N, Range 1E, W.M.

Photo 1. Priority Oregon white oak from NE Lockwood Creek Rd. View facing east. Photo was taken Feb 2021.

Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305

DATE: 12/28/22
DWN: AJR
PRJ. MGR: AJR

Photoplate 1
Site Photos
Lockwood Meadows Subdivision
Oak Mitigation Plan
La Center, Washington

Photo 2. View of priority Oregon white oak from onsite, facing southwest. Himalayan blackberry dominates the oak's understory. Photo was taken Sept 2020.

Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305

DATE: 12/28/22
DWN: AJR
PRJ. MGR: AJR

Photoplate 2
Site Photos
Lockwood Meadows Subdivision
Oak Mitigation Plan
La Center, Washington

Photo 3. Current Google Street View image from NE Lockwood Creek Rd facing east. The oak's dripline extends over existing road.

Ecological Land Services	1157 3rd Ave., Suite 220A Longview, WA 98632 Phone: (360) 578-1371 Fax: (360) 414-9305	DATE: 12/28/22 DWN: AJR PRJ. MGR: AJR	**Photoplate 3** **Site Photos** Lockwood Meadows Subdivision Oak Mitigation Plan La Center, Washington

Photo 4. Current Google Street View image from NE Lockwood Creek Rd facing east. The oak's dripline extends over existing road.

Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305

DATE: 12/28/22
DWN: AJR
PRJ. MGR: AJR

Photoplate 4
Site Photos
Lockwood Meadows Subdivision
Oak Mitigation Plan
La Center, Washington

Photo 5. Current Google Street View image from NE Lockwood Creek Rd facing west/northwest. The oak's dripline extends over existing road and Himalayan blackberry dominates the tree's understory onsite.

Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305

DATE: 12/28/22
DWN: AJR
PRJ. MGR: AJR

Photoplate 5
Site Photos
Lockwood Meadows Subdivision
Oak Mitigation Plan
La Center, Washington

APPENDIX A: WDFW CORRESPONDENCE

Annie Jean Rendleman

From: Holowatz, Isaac T (DFW) <Isaac.Holowatz@dfw.wa.gov>
Sent: Wednesday, February 17, 2021 5:03 PM
To: Annie Jean Rendleman
Subject: RE: Oregon white oak protection- La Center

Annie Jean,
It was great talking with you earlier today. Thank you for the Picture … what a beautiful Oak tree.
Yes, I think that dripline would cover the adequate amount of space to protect the Oak Tree.
If you have any further questions please let me know.
Thank you,

Isaac Holowatz
Habitat Biologist
Washington Department of Fish and Wildlife
Cell: 360.773.8943

From: Annie Jean Rendleman <AnnieJean@eco-land.com>
Sent: Tuesday, February 16, 2021 5:00 PM
To: Holowatz, Isaac T (DFW) <Isaac.Holowatz@dfw.wa.gov>
Subject: Oregon white oak protection- La Center

External Email

Hi Isaac,

I'm working on a project in the City of La Center on Clark County parcel 209113000 with a large white oak tree (40-inch DBH). The City code says to consult with WDFW on an appropriate buffer for priority oaks. I have never dealt with a buffer off of an oak, other than the dripline. Is this something you would need to make a site visit for? I plan to go out next week and could take more photos for you, if that's preferable.

Feel free to forward this on if I should be reaching out to someone else!

Thanks,

Please note: I am no longer working on Fridays. Please call our office at the number below if you need immediate assistance.

Annie-Jean Rendleman | Biologist
Port of Camas/Washougal Satellite Office
3805 Truman Road, Suite 2, Washougal, WA 98671
P: 360-835-9082 ext 1104
Longview Office
1157 3rd Avenue, Suite 220A Longview, WA 98632
P: 360-578-1371 ext 1104 | F: 360-414-9305
www.eco-land.com | AnnieJean@eco-land.com

Notice: This message (including any attachments) contains confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message, and any disclosure, copying, or distribution of this message, or the taking of any action based upon it, is prohibited.

Please consider the environment before printing this e-mail.

Committed to helping people - one square foot, one acre, one watershed at a time.®

From: Spoo, Ethan <ethan.spoo@wsp.com>
Sent: Tuesday, February 16, 2021 11:21 AM
To: Annie Jean Rendleman <AnnieJean@eco-land.com>; Sarah Dollar <sdollar@ci.lacenter.wa.us>
Cc: Anthony Cooper <acooper@ci.lacenter.wa.us>; Matt Jenkins <mjenkins@ci.lacenter.wa.us>
Subject: RE: Hung Annexation - ELS - Wetland Boundary

Hi Annie,

Please take a look at Table 18.300.090(2)(a) which requires a standard buffer of 300 feet around non-riparian PHS point sites *or as recommended in consultation with WDFW.* Assuming this is priority oak habitat we are talking about, please reach out to WDFW and come to concurrence with them about what buffer would protect the oak since I'm assuming you won't want to use 300 feet. In the past WDFW requires priority oak habitat be protected to the driplines. Once you come to an agreement with WDFW, please submit a letter or email from them stating what they require the buffer to be.

Let me know if you have any other questions.

Thanks,
Ethan

From: Annie Jean Rendleman <AnnieJean@eco-land.com>
Sent: Tuesday, February 16, 2021 9:27 AM
To: Sarah Dollar <sdollar@ci.lacenter.wa.us>
Cc: Anthony Cooper <acooper@ci.lacenter.wa.us>; Matt Jenkins <mjenkins@ci.lacenter.wa.us>; Spoo, Ethan <ethan.spoo@wsp.com>
Subject: RE: Hung Annexation - ELS - Wetland Boundary

Good morning,

I'm working on the critical areas report for the Hung parcel. In looking at the La Center code (18.300.090(2) Fish and Wildlife Conservation Areas), I noticed it mentions a buffer non-riparian priority habitat and species. I've completed many permitting projects with priority oaks, but never seen a buffer for them. I looked through the WDFW Management

Recommendations and didn't see anything regarding setbacks or buffers. Could you clarify what the City requires for oak buffers?

Thanks so much,
Annie Jean

Please note: I am no longer working on Fridays. Please call our office at the number below if you need immediate assistance.

Annie-Jean Rendleman | Biologist

Port of Camas/Washougal Satellite Office
3805 Truman Road, Suite 2, Washougal, WA 98671
P: 360-835-9082 ext 1104

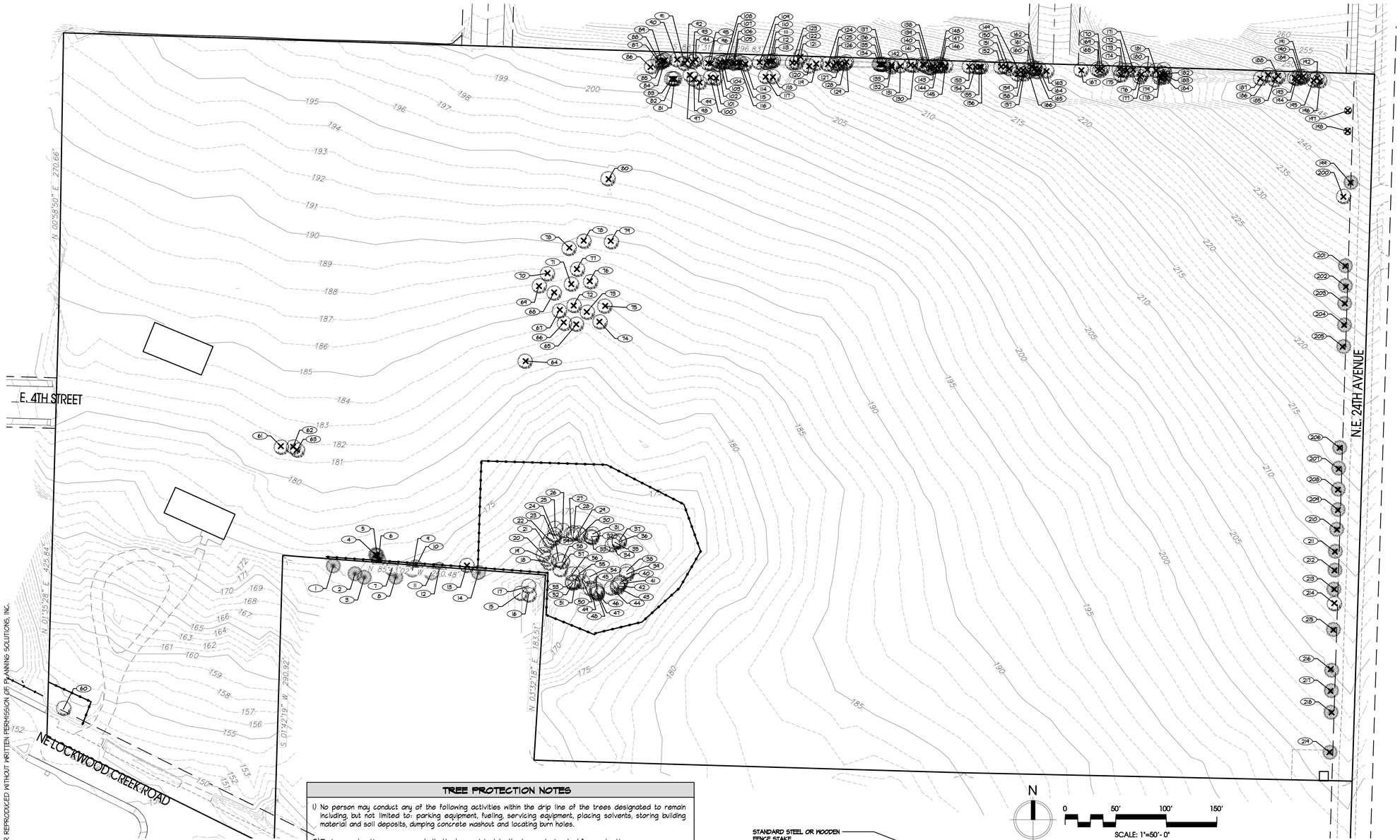
Longview Office
1157 3rd Avenue, Suite 220A Longview, WA 98632
P: 360-578-1371 ext 1104 | F: 360-414-9305
www.eco-land.com | AnnieJean@eco-land.com

Notice: This message (including any attachments) contains confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message, and any disclosure, copying, or distribution of this message, or the taking of any action based upon it, is prohibited.

Please consider the environment before printing this e-mail.

Committed to helping people - one square foot, one acre, one watershed at a time.®

APPENDIX B: TREE SURVEY (PLANNING SOLUTIONS, INC.)



TREE PROTECTION NOTES

1) No person may conduct any of the following activities within the drip line of the trees designated to remain including, but not limited to: parking equipment, fueling, servicing equipment, placing solvents, storing building material and soil deposits, dumping concrete washout and locating burn holes.

2) During construction, no person shall attach any object to the trees designated for protection.

3) The contractor shall follow the grading plan provided by the project civil engineer. Grading activities shall be conducted in a manner to minimize the impacts to the trees marked for preservation.

4) The excavator shall keep a sharp pair of loppers and a sharp 12" pruning saw accessible on-site during grading operations. Any roots larger than 1½" shall be pruned to the face of the cut (using a sharp pair of loppers or a sharp 12" pruning saw) and shall not be torn from the ground by mechanical excavation.

5) Special care shall be exercised in working within 20 feet of the trees to be retained. This includes hand excavating the roots at the edge of the excavation and cutting roots with a lopper or pruning saw. Pruning the roots at the edge of excavation will minimize breakage of healthy roots beyond the edge of the proposed excavation.

6) Except for the proposed improvements shown within the drip lines of the trees noted to be retained the grade shall not be elevated or reduced from existing grade.

7) If the grade adjacent to a preserved tree is raised such that it could slough or erode into the tree's drip line, it shall be permanently stabilized.

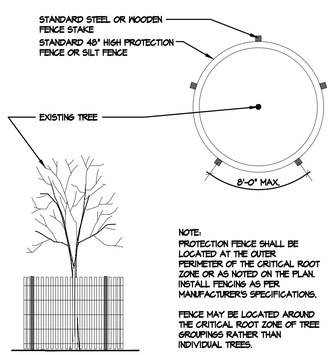
8) The trees noted to retained shall be protected from erosion and sedimentation. Clearing operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. Refer to the project's erosion control plan for more information.

9) The project shall not install an impervious surface other than those specifically shown on the plans within the drip line of the trees to be retained.

10) Utility trenches shall be located outside of the drip line of the trees to be retained.

11) Ongoing Tree Maintenance shall be the responsibility of the land owner. Trees shall be maintained in accordance with ANSI American National Standards Institute's as well as other applicable Federal, State and Local standards pertaining to Tree Care Operations.

- ANSI Z133 Arboricultural Operations: Safety Requirements
- ANSI A300 Part 1 Pruning



A Tree Protection Fencing Detail
Not To Scale — SECTION / PLAN VIEW

SITE STATISTICS	
20+/- AC	SITE AREA
161	NUMBER OF JURISDICTIONAL TREES TO BE REMOVED
204	NUMBER OF JURISDICTIONAL TREES ON SITE

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	EXISTING TREE REFER TO SHEET T2 FOR EXISTING TREE MATRIX
×	EXISTING TREE TO BE REMOVED
	TREE PROTECTION FENCE LOCATION (4' CHAIN LINK, ORANGE PVC FENCE OR SILT FENCE) (ALSO DENOTES AREA WHERE NO IMPACTS TO CRITICAL ROOT ZONE SHALL OCCUR)

© COPYRIGHT 2022, PLANNING SOLUTIONS, INC. NO PART OF THIS DRAWING MAY BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF PLANNING SOLUTIONS, INC.

D:\OneDrive - Planning Solutions Inc\Project Folder\2021 Projects\1683 Lockwood Meadows Sub\2.0 LU\2.04 FLR (Current)\SS1 R1L_1683 FLR S1 T1 R1.dwg, 8/11/2022 4:43:02 PM

Planning Solutions, Inc
Creating Solution to Complex Issue
4400 NE 77th Avenue
Suite 275
VANCOUVER, WA 9866
VOICE: 360-750-9000 FAX: 360-713-61
www.planningsolutionsinc.co

STATE OF WASHINGTON
CHRISTOPHER A BAUMANN
NO. 635 EXP. 02-20-2023
LICENSED LANDSCAPE ARCHITECT

LOCKWOOD MEADOWS SUBDIVISION

2000 NE Lockwood Creek Road
La Center, Washington

DRAWN: CB	CHECKED: CB
SCALE: 1" = 50'-0"	DATE: 08.11.22
JOB #: 21-1683	
ISSUED FOR: FLR	
REVISIONS:	
1	
2	
3	
4	
5	
6	

SHEET NAME:
TREE PROTECTIO PLAN

SHEET #:
T1
SHEET 1 OF 2

Attachment C

Ecological Land Services

December 29, 2022

La Center Community Development
210 East 4th Street
La Center, WA 98629

Re: Lockwood Meadows Buffer Grading Memorandum (NWS-2020-1015) | La Center, Washington

To Whom It May Concern,

Ecological Land Services, Inc. (ELS) has prepared this memorandum regarding the Lockwood Meadows Subdivision project located on NE Lockwood Creek Road. The subject site consists of Clark County Tax Parcel 209113000 in La Center, Washington. The site is located within Section 2, Township 4 North, Range 1 East of the Willamette Meridian (Figure 1). Due to the existing grade and the groundwork required for utility and lot construction, approximately 978 square feet of the outer portion of an onsite wetland's buffer (Wetland B) will be temporarily impacted from grading activities. This memorandum describes the nature of the grading activity and the proposed temporary disturbance.

Temporary Grading Impact

Wetland B's outer buffer will be temporarily impacted from the grading required to achieve finished grades of less than 50% between the back of the sidewalk along the south side of E 4th Street and the north boundary of the wetland's buffer. Approximately 978 square feet of Wetland B's buffer will be graded during construction (Figure 2).

Wetland buffers can reduce adverse impacts to wetland functions and values from adjacent development by moderating the effects of stormwater runoff including stabilizing soil to prevent erosion, filtering runoff, and moderating water level fluctuations. Buffers also provide habitat opportunity for forage, refuge, mobility, and thermal protection. Buffers can also help to screen wetlands from adjacent developments by blocking noise, providing visual separation, and providing protection from other human or pet disturbances (Castelle et al 1992). However, the portion of Wetland B's buffer proposed for grading does not provide these functions and values for the wetland, as it primarily consists of herbaceous vegetation that has been historically mowed or grazed. The proposed grading area also contains non-native, invasive Himalayan blackberry (*Rubus armeniacus*) and thistle species (*Cirsium* sp.), which can be seen in the attached figure.

It is ELS's opinion that the proposed grading within Wetland B's buffer will not permanently impact the wetland for the following reasons:

- Native trees or shrubs will not be removed. The grading will only occur in areas with grasses and weedy forbs, including invasive Himalayan blackberry and thistle.

- The disturbed portion of the wetland buffer will be reseeded with a native seed mix immediately after grading is complete. The graded area will also be planted with Oregon white oaks (*Quercus garryana*) and native shrubs as a part of the Oak Mitigation Plan (ELS 2022). This will result in an improved composition of native species compared to what is currently present.

- The grading activity will not result in a permanent structure in or under the wetland buffer. Rather, the area will consist of pervious organic topsoil. Graded areas will be immediately reseeded in order to quickly revegetate and deter runoff or sedimentation. Additional topsoil placed in the buffer is anticipated to increase infiltration on the soil surface and water holding capacity below the soil surface.

- Placement of soil will not result in a reduction of buffer acreage or function. The existing vegetation consists of grasses, weedy forbs, and invasive blackberry, which currently provide a low level of buffer habitat functions. This vegetation will be temporarily impacted with the placement of soil but will be immediately revegetated through the seeding of all exposed soil areas with a native seed mix. This seed mix will include a mix of species and provide a more diverse mix of native herbaceous vegetation than is currently found onsite. The proposed planting plan in this area will greatly improve habitat functions and will serve to better screen the wetland from the development (see Oak Mitigation Plan).

- Soil placement will not result in negative hydrologic changes in the buffer area or adjacent wetland, as the areas will remain permeable, will not consist of any permanent structures, and will be gently sloped from the finished grade of the sidewalk and street to the wetland buffer. Placement of soil can also improve hydrological flow through the buffer by the addition of organic topsoil, increasing infiltration at the soil surface and increasing water holding capacity within the soils below the soil surface.

- Grading through the placement of soil in the buffer will not result in a reduction of wetland acreage or function. Grading will take place in the wetland buffer only and outside of the wetland boundary. Wetland boundary/limits of grading will be marked in the field with silt fencing prior to any grading work to prevent sedimentation into the wetland. Grading will slope gradually down to existing grade in the wetland buffer. Wetland functions will not be altered as the activity will take place entirely outside of the boundaries of the wetland, and buffer vegetation will be restored to better than pre-project conditions.

Conclusion

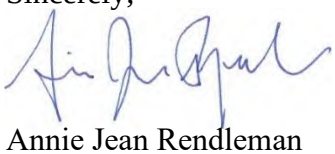
The proposed grading will temporarily impact the wetland buffer, which will be mitigated by immediately reseeding the disturbed area with a native seed mix. The addition of soil will improve the infiltration capacity upslope of the wetland. No trees or other woody native vegetation is anticipated to be removed or damaged.

References

Castelle, A.J., C. Conolkly, M. Emers, E.D. Metz, S. Meyer, M. Witter, S. Mauermann, T. Erickson, and S.S. Cooke. 1992. *Wetland Buffers: Use and Effectiveness*. Publ. 92-10. Adolfson Assoc., for Shorelands and Coastal Zone Manage. Program, Washington Department of Ecology, Olympia, WA.

Ecological Land Services, Inc. (ELS). 2022. *Oak Mitigation Plan for Lockwood Meadows Subdivision*. La Center, Washington. December 29, 2022.

Sincerely,



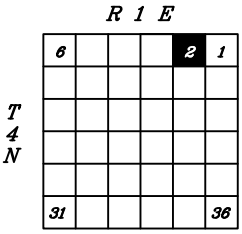
Annie Jean Rendleman
Environmental Biologist

Attachments:

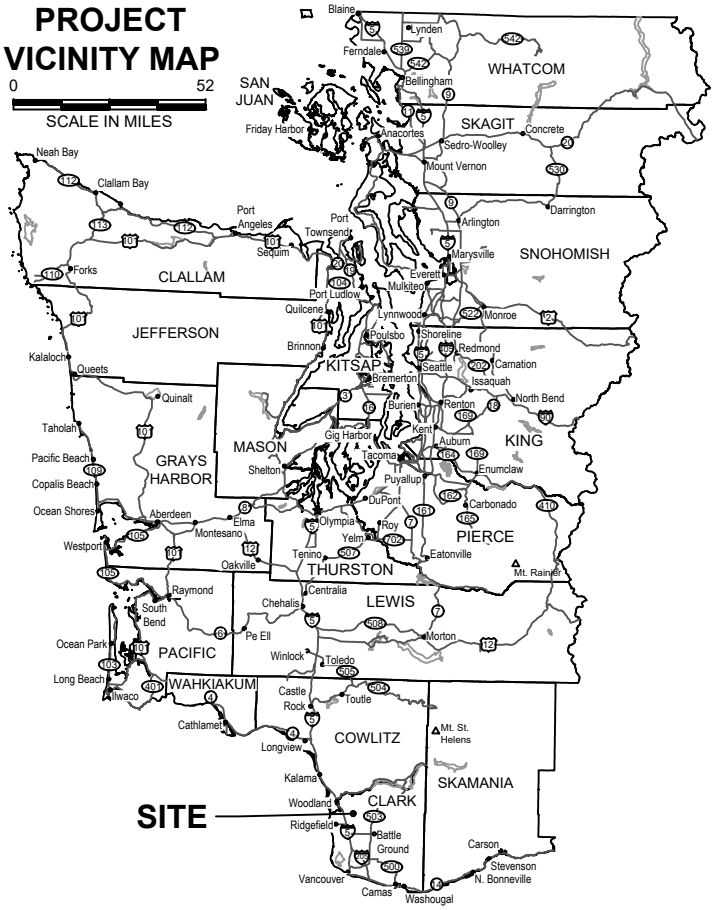
Figure 1 Vicinity Map
Figure 2 Wetland B Detail
Photo of Grading Area Buffer Vegetation (September 2020)

Latitude: 45.8620°
Longitude: -122.6487°

LOCATION MAP



PROJECT VICINITY MAP



NOTE:
Quadrangle topographic map from USGS.

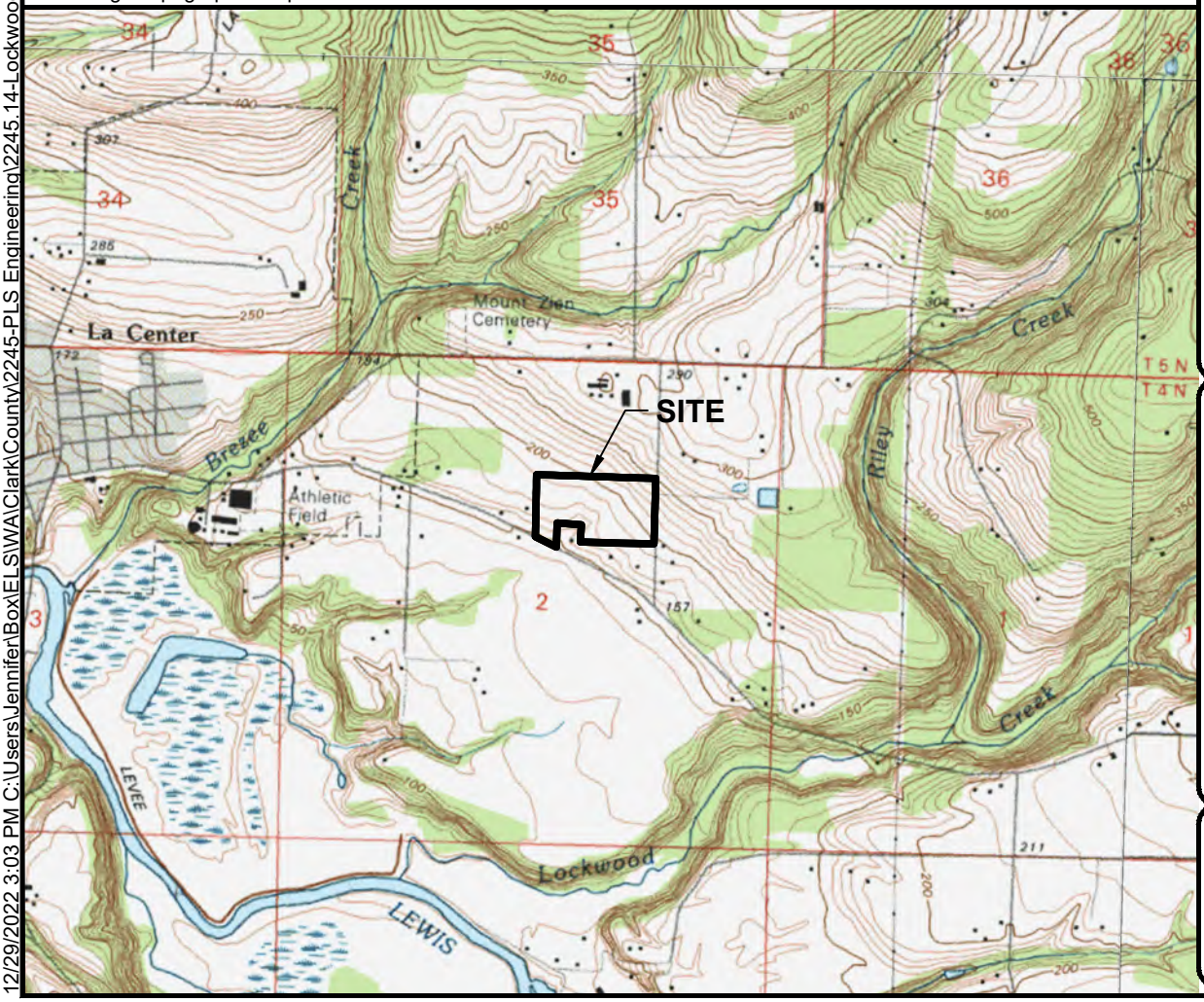


Figure 1
VICINITY MAP
Lockwood Meadows Buffer Grading Memo
Cedar Ridge Homes
Clark County, Washington
Section 2, Township 4N, Range 1E, W.M.

DATE: 12/29/22
DWN: EF
REQ. BY: AJR
PRJ. MGR: AJR
CHK: AJR
PROJECT NO: 2245.14

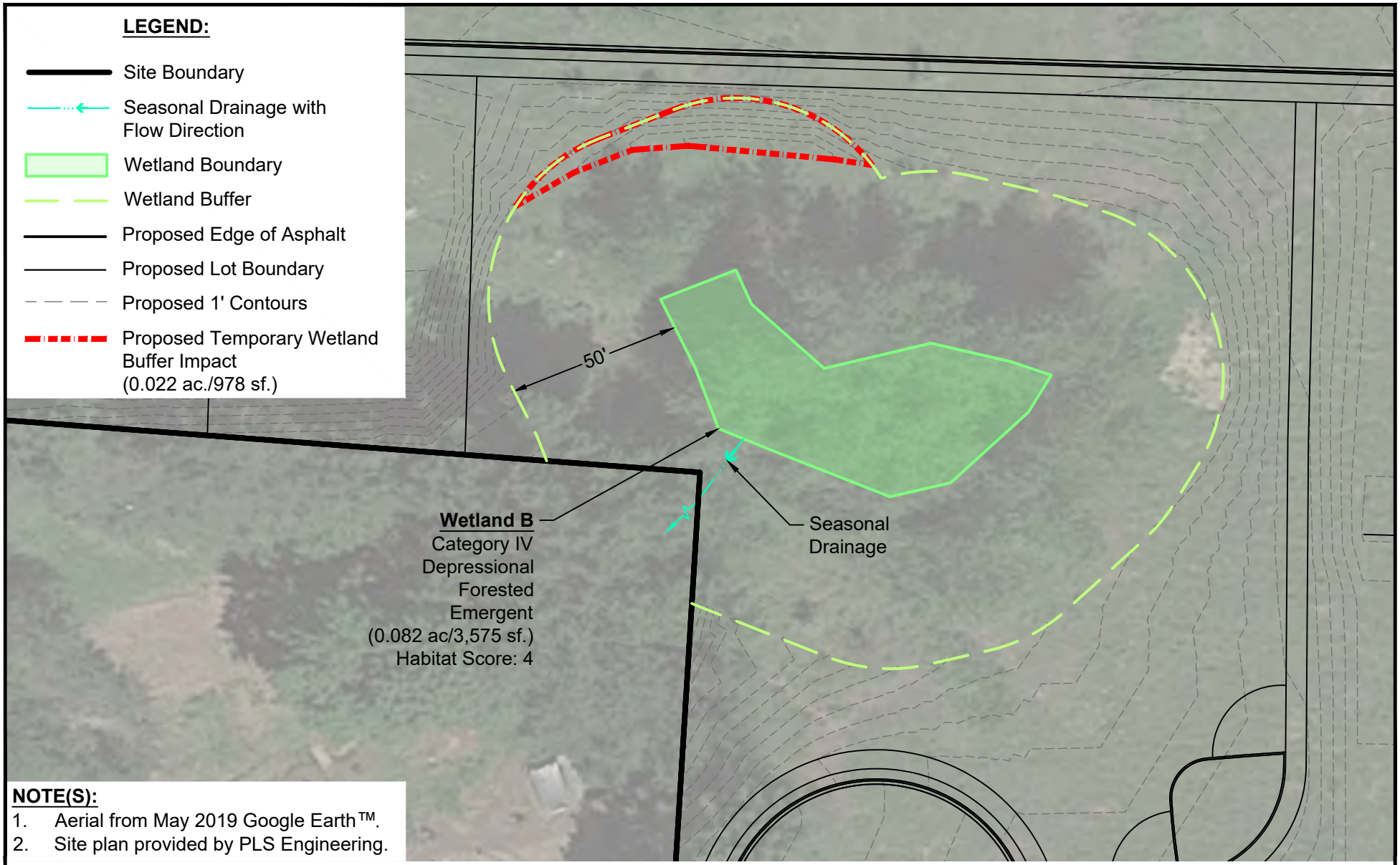
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com
Ecological Land Services

SCALE IN FEET
0
2000
4000

N
W
E
S

12/29/2022 3:03 PM C:\Users\Jennifer\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14-BUP.dwg Jennifer

12/29/2022 3:03 PM C:\Users\Jennifer\Box\ELS\WA\Clark\County\2245-PLS Engineering\2245.14-Lockwood Meadows Subdivision\2245.14-Figures\2245.14-BUP.dwg Jennifer



Ecological Land Services
1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com

DATE: 12/29/22
DWN: EF
REQ. BY: AJR
PRJ. MGR: AJR
CHK: AJR
PROJECT NO: 2245.14

Figure 2
WETLAND B DETAIL
Lockwood Meadows Buffer Grading Memo
Cedar Ridge Homes
Clark County, Washington
Section 2, Township 4N, Range 1E, W.M.

View facing south of northern portion of Wetland B's buffer. Vegetation is herbaceous with weeds and invasive Himalayan blackberry.

Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305

DATE: 12/29/22
PRJ. MGR: AJR

Site Photo
Lockwood Meadows Subdivision
Buffer Grading Memo
La Center, Washington

Attachment D

Environmental Checklist

Purpose of checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for non-project proposals:

Complete the checklist for non-project proposals, even though questions may be answered "does not apply." In addition, complete the supplemental sheet for Non-project Actions (part D).

For non-project actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. Background

1. Name of proposed project, if applicable:

   Lockwood Meadows Subdivision

2. Name of applicant:

   Cedar Ridge Homes – G2 Investment Group

3. Address and phone number of applicant and contact person:

   Applicant:
   Scott Clayton
   1905 SW 257th Avenue, Troutdale, OR 97060
   503-666-4240

   Contact:
   PLS Engineering, Travis Johnson
   604 W Evergreen Blvd.
   Vancouver, WA 98660
   360-944-6519

4. Date checklist prepared:

   March 16, 2023

5. Agency requesting checklist:

   La Center, Washington

6. Proposed timing or schedule (including phasing, if applicable):

   Development is expected to start at the time of final construction drawing approval. No phasing is proposed.

7. Do you have any plans for future additions, expansion, or further activity related to this proposal? If yes, explain.

   No, not at this time.

8. List any environmental information that has been or will be prepared related to this proposal.

   A Critical Areas Report, Oregon White Oak Mitigation Plan, Wetland Buffer Mitigation Plan, Tree Plan, Geotechnical Report and Archaeological Predetermination have been prepared for this site.

9. Are other applications pending for governmental approvals affecting the property covered by your proposal? If yes, please explain.

- *Preliminary Type III Subdivision Review*
- *Public notification and staff report publications*
- *Public Hearing and Land Use Hearing Decision*
- *Final engineering plan review and approval*
- *Final Plat approval*
- *Removal of Urban Hold Designation*

10. List any government approvals or permits needed for your proposal:

    No other permits or approvals are needed for the project.

11. Give a brief, complete description of your proposal, including the proposed uses and size of the project and site. There are several questions addressed later in this checklist asking you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

    The applicant is proposing a 71-lot subdivision on 20 acres in the LDR-7.5 zone.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including street address, section, township, and range. If this proposal occurs over a wide area, please provide the range or boundaries of the site. Also, give a legal description, site plan, vicinity map, and topographic map. You are required to submit any plans required by the agency, but not required to submit duplicate maps or plans submitted with permit applications related to this checklist.

    The site is located in La Center, WA at 2000 NW Lockwood Creek Road. The parcel is identified as Clark County Parcel number 209113000. The site is located within the NE ¼ of Section 2, Township 4 North, Range 1 East, Willamette Meridian.

B. Environmental Elements

1. Earth

a. General description of the site (circle one): Flat, ***rolling***, hilly, ***steep slopes***, mountainous, other _____.

   The property would be considered rolling with some areas of steep slopes.

b. What is the steepest slope on the site and the approximate percentage of the slope?

   Approximately 25% per the Geotechnical Report for the site.

c. What general types of soils are found on the site (e.g., clay, sand, gravel, peat, muck)? Please specify the classification of agricultural soils and note any prime farmland.

Clark County GIS identifies the site as having the following soils:
GeB – Gee Silt Loam, 0-8% slopes
GeD – Gee Silt Loam, 8-20% slopes
HoA – Hillsboro Silt Loam, 0-3% slopes
HoC - Hillsboro Silt Loam, 8-15% slopes
OdB – Odne Silt Loam, 0-5% slopes

The site has historically been used for agricultural purposes.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, please describe.

The applicant has no knowledge of any unstable soils in the immediate area. A Geotechnical Report is provided for the site that addresses soil stability.

e. Describe the purpose, type, and approximate quantities of any filling or proposed grading. Also, indicate the source of fill.

There will be grading for the construction of roads, driveways, the installation of utilities, and the preparation of the site for single family residential housing. Surplus material may be required to be hauled from the site to an approved dump site or offsite fill may be required. Cut quantities are approximately 45,000 cy while fill quantities are approximately 46,000 cy. These quantities may adjust slightly during final design.

f. Could erosion occur as a result of clearing, construction, or use? If so, please describe.

Standard erosion control measures will be followed during grading construction on the site. A final erosion control plan will be reviewed and approved by City of La Center Public Works prior to construction on the site. A copy of that final erosion control plan will be filed with the final construction plans with City of La Center Public Works.

g. What percentage of the site will be covered with impervious surfaces after the project construction (e.g., asphalt or buildings)?

Approximately 50%

h. Proposed measures to reduce or control erosion, or other impacts to the earth include:

Proposed measures to reduce and control erosion include providing an erosion control plan for review and approval prior to starting construction on the site

and following the conditions of the approved grading and erosion control plan during all phases of construction.

2. Air

a. What types of emissions to the air would result from this proposal (e.g., dust, automobile, odors, industrial wood smoke) during construction and after completion? Please describe and give approximate quantities.

Construction equipment emissions and dust on the short term. Long-term emissions will be produced by automobile traffic and normal household activities, possibly including wood burning stoves and fireplaces.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, please describe.

There are existing car emissions from traffic, and there may be emissions from nearby farming and agricultural uses, however no off-site sources of emission or odor will affect the proposal.

c. Proposed measures to reduce or control emissions or other impacts to air:

Dust from construction can be mitigated by sprinkling the site with water during construction as needed.

3. Water

a. Surface:

1) Is there any surface water body on or in the vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, and wetlands)? If yes, describe the type and provide names and into which stream or river it flows into.

There are two Type IV wetlands located onsite per the Critical Areas Report for the site.

2) Will the project require any work within 200 feet of the described waters? If yes, please describe and attach available plans.

Yes, one wetland will be filled entirely. There will be work within 200 feet of the other wetland to remain.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Wetland A on the existing conditions plan will be filled. This wetland is 0.05 acres in size. Approximately 149 cy of fill will be placed into wetland A. Due to the existing grade and the groundwork required for utility and lot construction, approximately 978 square feet of the outer portion of an onsite wetland's buffer (Wetland B) will be temporarily impacted from grading activities. Approximately 54 cy of fill will be placed in the buffer of wetland B, less than estimated in the original SEPA. Onsite material will be used for fill material.

4) Will the proposal require surface water withdrawals or diversions? Please provide description, purpose, and approximate quantities:

   No, this proposal will not require surface water withdrawls or diversions.

5) Does the proposal lie within a 100-year floodplain? If so, please note the location on the site plan.

   No, the site does not lie within a 100-year floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

   No, the proposal does not involve any discharges of waste materials to surface waters.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Please give description, purpose, and approximate quantities.

   No ground water will be withdrawn with this proposal.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources; (e.g., domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the size and number of the systems, houses to be served; or, the number of animals or humans the systems are expected to serve.

   No waste material is proposed to be discharged into the ground.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal. Include quantities, if known. Describe where water will flow, and if it will flow into other water.

The main source of runoff is from stormwater. There will be runoff from impervious roof area, driveways, roadways, and landscaped areas. Street catch basins, yard drains, and roof drains will connect to a pipe network that leads to the stormwater facility within Tract D.

2) Could waste materials enter ground or surface waters? If so, please describe.

Yes, if waste materials were somehow released or dumped into surface runoff flows, substances associated with the source material could enter the ground or other surface waters. There is no proposal to release waste material to the ground or to surface waters.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

The use of approved erosion control measures during all phases of development will help to reduce or control surface, ground and runoff water impacts. Impacts to Wetland A are proposed to be mitigated at the East Fork Lewis Mitigation Bank. A Bank Use Plan prepared by ELS is included with this application to address the impacts to Wetland A.

4. Plants

a. Check or circle types of vegetation found on the site
- Deciduous tree: ***alder***, ***maple***, aspen, ***other***: ***Oregon White Oak, black cottonwood,***
- Evergreen tree: ***fir***, cedar, pine, other
- ***Shrubs***
- ***Grass***
- ***Pasture***
- Crop or grain
- Wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- Water plants: water lily, eelgrass, milfoil, other
- Other types of vegetation: ***blackberry***

b. What kind and amount of vegetation will be removed or altered?

Approximately 90% of the site vegetation will be stripped for site preparation. 161 of the onsite jurisdictional trees will be removed. See 4.d. below for more detail.

c. List threatened or endangered species on or near the site.

There is one priority habitat Oregon white oak in the southwest corner of the site.

d. List proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site:

The project will retain the priority habitat Oregon white oak. 1,178 square feet of potential impacts to the oak dripline due to street resurfacing and sidewalk construction. Impacts will be mitigated through (1) understory enhancement of the existing onsite oak and (2) by creating oak habitat within Wetland B's buffer. A Critical Areas Report and Oak Mitigation Plan have been submitted to the City of La Center detailing this proposal.

There are 204 jurisdictional trees on site. Of those, 161 are proposed to be removed for grading and construction of the approved subdivision and/or because the tree is dead. The Tree Protection Plans list each tree and whether it will be removed or retained, and why it is proposed to be removed. Final Landscape Plans for the site demonstrate that up to 290 new trees are proposed along streets and within open space areas to mitigate for the trees removed. The exact number of street trees may vary due to driveway locations and will be determined at time of building permit, however the number of new plantings exceeds the number of trees proposed for removal.

5. Animals

a. Circle any birds and animals which have been observed on or near the site:

- Birds: ***hawk***, heron, eagle, ***songbirds***, other;
- Mammals: ***deer***, bear, elk, beaver, other; and,
- Fish: bass, salmon, trout, herring, shellfish, and other:

Small mammals such as mice, rabbits, squirrels, raccoons and other rodents likely live on or near the site. It is also quite possible that some larger mammals such as coyote may periodically pass through the site.

b. List any threatened or endangered species known to be on or near the site.

None known.

c. Is the site part of a migration route? If so, please explain.

The site is located within the Pacific Flyway for migratory waterfowl.

d. List proposed measures to preserve or enhance wildlife:

Landscaping will be planted within the open space tract, park area and the future yards. The retained wetland and buffer area will also help to preserve and enhance wildlife in the area.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The new homes on the site will be served primarily by electricity and natural gas. Wood stoves might be used for heating. Other forms of energy will depend on homeowners.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, please describe.

No, by meeting setbacks and adhering to the City of La Center development standards this project will not affect the potential use of solar energy by adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts:

The new homes will have energy efficient windows and comply with the state building codes which includes conservation measures.

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, please describe.

There are no known environmental health hazards that could occur as a result of this proposal.

1) Describe special emergency services that might be required.

No special emergency services outside those normally expected in a residential area are anticipated to be required in association with this proposal.

2) Proposed measures to reduce or control environmental health hazards, if any:

None proposed.

b. Noise

1) What types of noise exist in the area which may affect your project (e.g., traffic, equipment, operation, other)?

Light traffic noise from surrounding areas/roads along with typical home use noises. None of these will affect the proposal.

2) What types and levels of noise are associated with the project on a short-term or a long-term basis (e.g., traffic, construction, operation, other)? Indicate what hours the noise would come from the site.

Short term noises would include construction noises which would occur during approved hours as mandated by City of La Center and Washington State. Long term noises could include slight increase in traffic noise and normal household noises.

3) Proposed measures to reduce or control noise impacts:

Construction on the site will take place during normal working hours as allowed by the City of La Center Noise Ordinance.

8. Land and shoreline use

a. What is the current use of the site and adjacent properties?

The site contains an existing residence, barn and well and is used as a single-family residence. Heritage Country Estates Subdivision is located to the north and west and is partially constructed. Immediately to the south are single-family residential uses on large lots. To the south across Lockwood Creek Road is the new middle school. The properties to the east across NE 24th Avenue are single-family residences on large lots.

b. Has the site been used for agriculture? If so, please describe.

Yes, the site has historically been used as a tree farm.

c. Describe any structures on the site.

There is an existing residence, barn and well on site

d. Will any structures be demolished? If so, please describe.

Yes, all structures will be demolished.

e. What is the current zoning classification of the site?

R1-7.5 Single Family Residential, UH – Urban Hold

f. What is the current comprehensive plan designation of the site?

UL, Urban Low Density Residential designation.

g. What is the current shoreline master program designation of the site?

None.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, please specify.

Yes, there are two delineated wetlands on site and the parcel is within an archaeological site buffer with a moderate - high archaeological probability. Additionally, areas of steep slopes and potential instability are shown on GIS mapping. There is one Oregon white oak tree that is considered priority habitat on site.

i. How many people would reside or work in the completed project?

It is currently planned that this development will contain 71 lots/homes. At 2.8 people per household there would be a total of approximately 199 people residing within this development at the time of full buildout.

j. How many people would the completed project displace?

This project could potentially displace up to 3 people.

k. Please list proposed measures to avoid or reduce displacement impacts:

The construction of 71 new homes will compensate for the displacement impacts.

l. List proposed measures to ensure the proposal is compatible with existing and projected land uses and plans:

By complying with the zoning designation, the comprehensive plan, and the La Center Municipal Code, the proposal will be compatible with the existing and projected land uses.

9. Housing

a. Approximately how many units would be provided? Indicate whether it's high, middle, or low-income housing.

71 new housing units are proposed. It is unknown at this time whether they will be high, middle or low-income housing.

b. Approximately how many units, if any, would be eliminated? Indicate whether it's high, middle, or low-income housing.

This development will eliminate one existing home that is considered middle income housing.

c. List proposed measures to reduce or control housing impacts:

The applicant will pay all impact fees associated with the development at the time of building permit.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas? What is proposed as the principal exterior building materials?

All new home construction will meet City of La Center building codes for residential housing development and not exceed height limits of 35'. Exterior building materials are unknown at this time.

b. What views in the immediate vicinity would be altered or obstructed?

Approximately 20 acres of land will be converted into a residential subdivision.

c. Proposed measures to reduce or control aesthetic impacts:

The single-family homes will be landscaped with grass lawns and other appealing landscaping. The open space tract and park area will add additional attractive landscape.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

When homes are constructed on the proposed lots, there will most likely be light produced from houses, yards, and porch lights during evenings and early mornings.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No*, light or glare from the finished project will not be a safety hazard or interfere with views.*

c. What existing off-site sources of light or glare may affect your proposal?

There are existing off-site sources of light from adjacent homes and roadways, but they should not affect the proposal.

d. Proposed measures to reduce or control light and glare impacts:

The project proposes shielding of porch lights and streetlights to reduce light and glare impacts offsite.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Holley Park is a community park that is approximately 1,640 feet to the west of the site.

b. Would the project displace any existing recreational uses? If so, please describe.

There will be no recreational uses displaced with this proposal.

c. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant:

The development proposes to construct a neighborhood park and trail areas that will include a play structure, picnic tables, benches and bike racks.

13. Historic and cultural preservation

a. Are there any places or objects on or near the site which are listed or proposed for national, state, or local preservation registers? If so, please describe.

There are no known places or objects on or near the site that are listed or proposed for national, state or local preservation registers.

b. Please describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

One isolated flake fragment was found during the field study performed by Archaeological Services, LLC on 8/23/21 and 8/24/21.

c. Proposed measures to reduce or control impacts:

None proposed as the Archaeological Predetermination for the site recommended no further work. If during the course of construction any artifacts are discovered, all work will cease, and proper notification shall be given to City of La Center and DAHP.

14. Transportation

a. Identify the public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Access to the site is provided by Lockwood Creek Road and NE 24th Avenue, both public roadways.

b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The site is not currently served by public transit. C-Tran operates The Connector to serve outlying communities. A stop exists in La Center approximately 1,600 feet to the west across from Holley Park.

c. How many parking spaces would the completed project have? How many would the project eliminate?

Approximately 2-3 parking spaces per single-family home are proposed. This project will eliminate 2-4 existing parking spaces.

d. Will the proposal require new roads or streets, or improvements to existing roads or streets, not including driveways? If so, please describe and indicate whether it's public or private.

Yes. East 3rd Court, East 4th Street, East 5th Street, NE 21st Avenue, NE 23rd Avenue, East Upland Avenue and East White Oak Avenue are proposed public Local Access roadways. Frontage improvements will be provided to NE 24th Avenue and NE Lockwood Creek Road, both of which are public roads.

e. Will the project use water, rail, or air transportation? If so, please describe.

The site will not use water, rail or air transportation and is not located in the immediate vicinity of those types of transportation facilities.

f. How many vehicular trips per day would be generated by the completed project? Indicate when peak traffic volumes would occur.

The development of this project is expected to generate 670 new daily trips. Peak volumes are expected to occur in the PM peak hour (4:00 – 6:00). Per the Traffic Analysis Report and Trip Generation Update and Assessment prepared by Charbonneau Engineering for the project, trip rates presented in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition (year 2017) were utilized to estimate the site's trip generation for 71 homes. ITE land use code #210 (Single-Family) was applied.

g. Proposed measures to reduce or control transportation impacts:

The applicant will pay transportation impact fees.

15. Public services

a. Would the project result in an increased need for public services (e.g., fire protection, police protection, health care, schools, other)? If so, please describe.

Yes. The completion of this development and the construction of new homes will increase the need for public services in the area.

b. Proposed measures to reduce or control direct impacts on public services:

This project will pay impact fees for schools and traffic at the time of building permit.

16. Utilities

a. Circle the utilities currently available at the site: ***electricity, natural gas***, ***water, refuse service, telephone, sanitary sewer***, ***septic system***, other.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on or near the site:

- *Sanitary sewer-La Center*
- *Water-Clark Public Utilities*
- *Electricity-Clark PUD*
- *Natural Gas-Northwest Natural*

- *Telephone- Comcast, TDS*
- *Garbage/Recycling-Waste Connections*

DocuSign Envelope ID: C57A7716-A22E-4350-8EC7-A765C312A149

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: DocuSigned by: _____ 2A98B1EB2D6A423... Date Submitted: 3/20/2023

STATE ENVIRONMENTAL POLICY ACT (SEPA) MITIGATED DETERMINATION OF NON-SIGNIFICANCE
Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Removal Permit, and Amended SEPA
(File # 2023-008-CAR/TREE/SEPA)

Description of proposal: The applicant proposes to temporarily impact approximately 978 square feet of the buffer of another Type IV wetland (Wetland B). The applicant also proposes to impact approximately 1,178 square feet of area within the dripline of an Oregon white oak in the southwest corner of the project site and to remove 161 trees that would be mitigated by planting approximately 290 new trees. The applicant is proposing approximately 7,091 square feet of enhancement to existing oak dripline and oak woodland installation for the impacts to the oak tree dripline at a ratio of greater than 6:1.

SEPA Determination: NOTICE IS HEREBY GIVEN that the City makes the following findings and conclusions based upon a review of the environmental checklist; other information on file with the City of La Center and other public agencies; and the policies, and regulations designated by the City as a basis for the exercise of substantive authority under the Washington State Environmental Policy ACT (SEPA) pursuant to Chapter 43.21C WAC. Based on a review of the code, the City of La Center hereby issues a **Mitigated Determination of Non-Significance (MDNS)** for this proposal pursuant to WAC 197-11-350 and the La Center Municipal Code (LCMC 18.310). An Environmental Impact Statement is not required under RCW 43.21c.031(1).

A combined notice of application and public comment period was held under the optional MDNS procedures specified in WAC 197-11-355. This MDNS is hereby final and there is no further opportunity for comment.

Application: Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Removal Permit and Amended SEPA (File # 2023-008-CAR/TREE/SEPA)

Application date: February 9, 2023

Technically Complete: April 5, 2023

Proponent: Representative: Travis Johnson, PLS Engineering, 604 W Evergreen Blvd, Vancouver, WA 98660. Applicant: Scott Clayton, Cedar Ridge Homes, 1905 SW 257th Avenue, Troutdale, OR 97060.

Applicant/Property Owner: Scott Clayton, Cedar Ridge Homes, 1905 SW 257th Avenue, Troutdale, OR 97060.

Location of proposal: 2000 NE Lockwood Creek

Public Hearing: A public hearing is not required.

Existing Environmental Documents relied upon: The State Environmental Policy Act (SEPA) requires that a review of the potential environmental impacts be conducted. City staff reviewed the proposal for compliance with applicable state requirements and city codes.

The following environmental documents were relied upon in the City's assessment of a likely determination of non-significance: SEPA Environmental Checklist dated, October 28, 2021;Revised SEPA Environmental Checklist, March 16, 2023; Critical Areas Report (Ecological Land Services, March 24, 2021); Landscape Plans (Planning Solutions, Inc, January 5, 2023); Revised Tree Protection Plan (Planning Solutions, Inc May 4, 2023); Conservation Covenant; Wetland Buffer Mitigation Plan (Ecological Land Services, December 29, 2022); Oak Mitigation Plan (Ecological Land Services, December 29, 2022); Lockwood Meadows Project Narrative (PLS Engineering, May 2023).

Statement of Determination: As lead agency under the State Environmental Policy Act (SEPA) rules [Chapter 197-11, Washington Administrative Code] the City of La Center must determine if there are potential significant adverse environmental impacts associated with this proposal. The options include the following:

- Determination of Significance – (DS) The impact cannot be mitigated and therefore requires the preparation of an Environmental Impact Statement (EIS).
- Mitigated Determination of Nonsignificance – (MDNS) The impact can be mitigated through conditions of approval, or;
- Determination of Nonsignificance – (DNS) The impacts can be addressed by applying the city codes.

Approval Standards/Applicable Laws: The following standards will apply to the application: 18.30 Procedures; 18.300 Critical Areas; 18.310 Environmental Policy; 18.340 Native Plant List; 18.350 Tree Protection.

Mitigation Measures: The previously issued SEPA MDNS included required mitigation measures for 2020-004-SUB/VAR/CAR/SEPA which remain in effect and are amended to include new mitigation measures, as follows:

- General: The applicant shall comply with Ecology's requirements in the letter dated April 25, 2023.
- Water: The applicant or homeowners association must comply with the recommendations of the Wetland Buffer Mitigation Plan (ELS, December 29, 2023).
- Plants: The applicant or homeowners association must comply with the recommendations of the Oak Mitigation Plan (ELS, December 29, 2023).

Date: May 30, 2023 **Signature:** Bram Kast

Issued: May 30, 2023

Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Removal Permit, and Amended SEPA(File # 2023-008- CAR/TREE/SEPA)

Date Published: May 30, 2023

Attached is a Mitigated Determination of Non-Significance (MDNS) and associated environmental checklist issued pursuant to the State Environmental Policy Act (SEPA) rules (WAC 197-11). The City (lead agency) completed evaluation of the environmental checklist as required by WAC 197-11. The City issued a SEPA MDNS under the optional DNS procedures in WAC 197-11-355. There is no additional comment period for this determination.

Please address any correspondence to: Jessica Nash, Administrative Specialist
ATTN: SEPA COMMENTS – Lockwood Meadows Subdivision
210 East 4th Street
La Center, WA 98629

DISTRIBUTION:

Federal Agencies:
National Marine Fisheries, PRD Division (Mail)
Forest Service, US Department of Agriculture, WA (Email)
US Army Corps of Engineers, Regulatory Functions Branch (Mail)

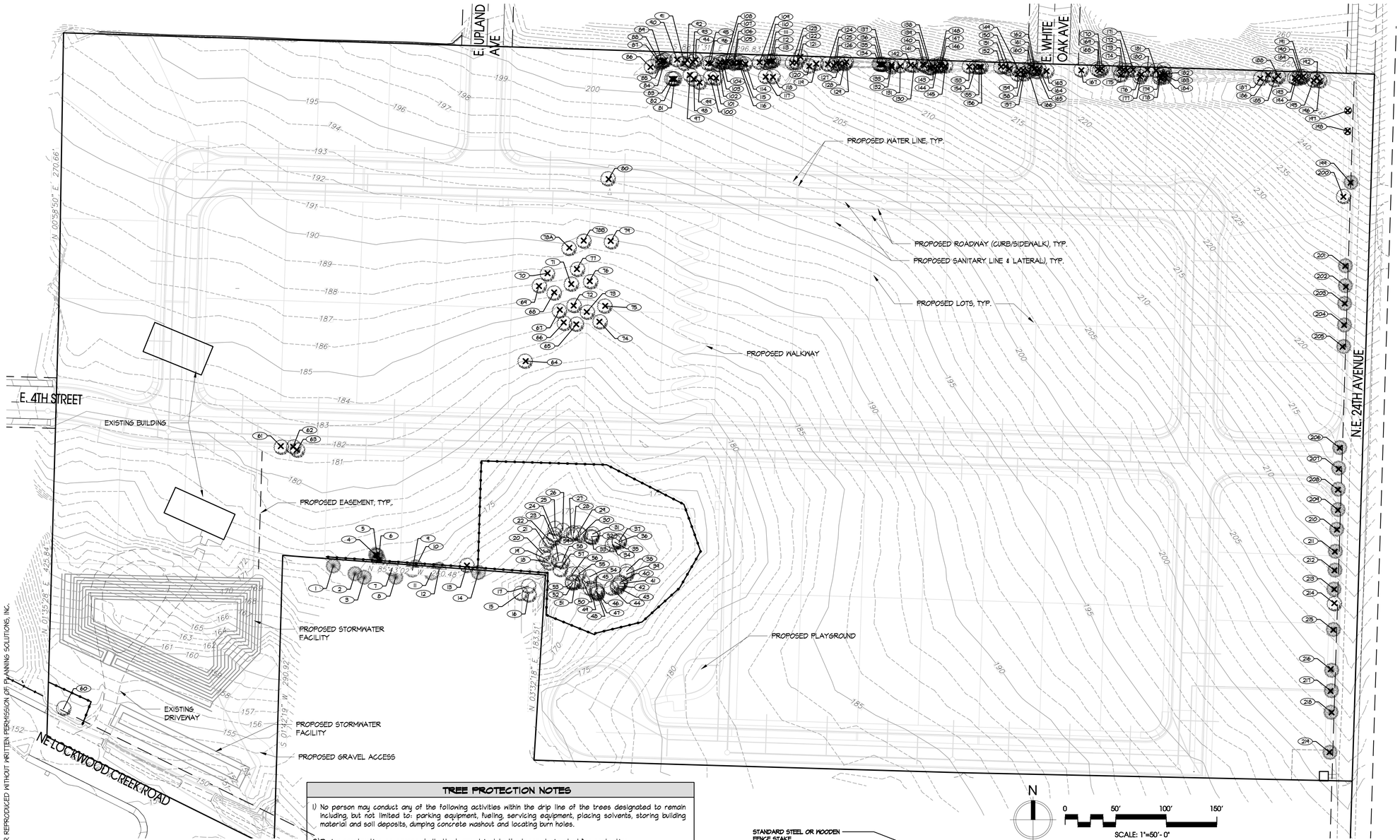
Native American Interests:
Confederated Tribes of the Grande Ronde (Mail)
Cowlitz Tribe, Natural Resources Department (Mail).
Yakama Nation (Email)

State Agencies:
Dept of Ecology (Email)
Dept of Health, Office of Drinking Water (Email)
Dept of Commerce (Email)
Dept of Fish & Wildlife, Region 5 (Email)
Dept of Natural Resources, SEPA Center (Email)
Dept of Transportation, Environmental Services (Email)
Dept of Transportation, SW Region (Email)
Department of Archaeology & Historic Preservation (Email)
Washington Parks & Recreation Commission (Email)

Local Agencies:
Clark County, Dept of Community Development (Email)
Clark County, Dept of Health (Email)
Clark County, Dept of Parks & Recreation (Mail)
Clark County, Dept of Public Works (Email)
Clark County Sheriff (Email)
Clark County Fire and Rescue (Email)
City of Vancouver, Dept of Parks & Recreation (Email)
City of Vancouver
City of Camas, Community Development (Email)
Town of Yacolt (Email)
City of Ridgefield (Email)
La Center Community Library (Mail)
La Center Police Department (Email)

School Districts:	La Center (WA) School District (Mail)
Special Purpose Agencies:	Clark Public Utilities (Email) Columbia River Economic Development Council (Email) Lower Columbia Fish Recovery Board (Email) C-TRAN (Email) Southwest Clean Air Agency (Email) Southwest Washington Regional Transportation Council (Email) Council Clark Regional Wastewater District (Email) Vancouver Wildlife League (Mail) NW Natural (Mail) TDS Telecom (Mail) CenturyLink (Email) Washington State Department of Corrections (Email)

Attachment E



TREE PROTECTION NOTES

1) No person may conduct any of the following activities within the drip line of the trees designated to remain including, but not limited to: parking equipment, fueling, servicing equipment, placing solvents, storing building material and soil deposits, dumping concrete washout and locating burn holes.

2) During construction, no person shall attach any object to the trees designated for protection.

3) The contractor shall follow the grading plan provided by the project civil engineer. Grading activities shall be conducted in a manner to minimize the impacts to the trees marked for preservation.

4) The excavator shall keep a sharp pair of loppers and a sharp 12" pruning saw accessible on-site during grading operations. Any roots larger than 1½" shall be pruned to the face of the cut (using a sharp pair of loppers or a sharp 12" pruning saw) and shall not be torn from the ground by mechanical excavation.

5) Special care shall be exercised in working within 20 feet of the trees to be retained. This includes hand excavating the roots at the edge of the excavation and cutting roots with a lopper or pruning saw. Pruning the roots at the edge of excavation will minimize breakage of healthy roots beyond the edge of the proposed excavation.

6) Except for the proposed improvements shown within the drip lines of the trees noted to be retained the grade shall not be elevated or reduced from existing grade.

7) If the grade adjacent to a preserved tree is raised such that it could slough or erode into the tree's drip line, it shall be permanently stabilized.

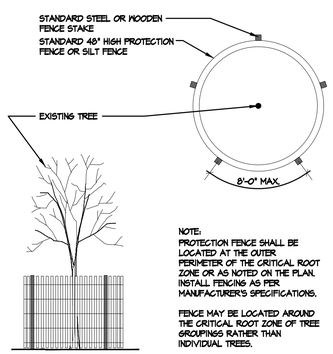
8) The trees noted to retained shall be protected from erosion and sedimentation. Clearing operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. Refer to the project's erosion control plan for more information.

9) The project shall not install an impervious surface other than those specifically shown on the plans within the drip line of the trees to be retained.

10) Utility trenches shall be located outside of the drip line of the trees to be retained.

11) Ongoing Tree Maintenance shall be the responsibility of the land owner. Trees shall be maintained in accordance with ANSI American National Standards Institute's as well as other applicable Federal, State and Local standards pertaining to Tree Care Operations.

- ANSI Z133 Arboricultural Operations: Safety Requirements
- ANSI A300 Part 1 Pruning



NOTE:
PROTECTION FENCE SHALL BE LOCATED AT THE OUTER PERIMETER OF THE CRITICAL ROOT ZONE OR AS NOTED ON THE PLAN. INSTALL FENCING AS PER MANUFACTURER'S SPECIFICATIONS.

FENCE MAY BE LOCATED AROUND THE CRITICAL ROOT ZONE OF TREE GROUPINGS RATHER THAN INDIVIDUAL TREES.

A Tree Protection Fencing Detail
Not To Scale — SECTION / PLAN VIEW

SITE STATISTICS	
20+/- AC	SITE AREA
162	NUMBER OF JURISDICTIONAL TREES TO BE REMOVED
205	NUMBER OF JURISDICTIONAL TREES ON SITE

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	EXISTING TREE REFER TO SHEET T2 FOR EXISTING TREE MATRIX
×	EXISTING TREE TO BE REMOVED
	TREE PROTECTION FENCE LOCATION (4' CHAIN LINK, ORANGE PVC FENCE OR SILT FENCE) (ALSO DENOTES AREA WHERE NO IMPACTS TO CRITICAL ROOT ZONE SHALL OCCUR)

© COPYRIGHT 2023, PLANNING SOLUTIONS, INC. NO PART OF THIS DRAWING MAY BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF PLANNING SOLUTIONS, INC.

Planning Solutions, Inc
Creating Solution to Complex Issue
4400 NE 77th Avenue
Suite 275
VANCOUVER, WA 9866
VOICE: 360-750-9000 FAX: 360-713-61
www.planningsolutionsinc.co

STATE OF WASHINGTON
CHRISTOPHER A BAUMANN
NO. 635 EXP. 02-20-2025
LICENSED LANDSCAPE ARCHITECT

LOCKWOOD MEADOWS SUBDIVISION

2000 NE Lockwood Creek Road
La Center, Washington

DRAWN: CB	CHECKED: CB
SCALE: 1" = 50'-0"	DATE: 01-05-23
JOB #: 21-1683	
ISSUED FOR: FLR	

REVISIONS:
1 City Comments 03-10-23
2 City Comments 03-15-23
3 Tree #78 05-03-23
4
5
6

SHEET NAME:
TREE PROTECTION PLAN

SHEET #:
T1

SHEET 1 OF 5

EXISTING TREE MATRIX								
#	TYPE	COMMENTS			SIZE (dbh inches)	RECOMMENDATIONS		
1	Fir	off-site			10	R		
2	Fir	off-site			8	R		
3	Fir	off-site			8	R		
4	Fir	CGD			8	X		
5	Fir	CGD			8	X		
6	Fir	CGD			8	X		
7	Fir	off-site			12	R		
8	Fir	off-site			6	R		
9	Fir	off-site			10	R		
10	Fir	off-site			8	R		
11	Fir	off-site			10	R		
12	Fir	off-site			6	R		
13	Cottonwood	CGD			10	X		
14	Fir	off-site			10	R		
15	Cottonwood	off-site			6	R		
16	Cottonwood	off-site			6	R		
17	Cottonwood	off-site			6	R		
18	Cottonwood				14	R		
19	Cottonwood				8	R		
20	Cottonwood				12	R		
21	Cottonwood				19	R		
22	Cottonwood				6	R		
23	Cottonwood				8	R		
24	Cottonwood				8	R		
25	Cottonwood				16	R		
26	Cottonwood				16	R		
27	Cottonwood				8	R		
28	Cottonwood				8	R		
29	Cottonwood				10	R		
30	Cottonwood				6	R		
31	Cottonwood				6	R		
32	Cottonwood				6	R		
33	Cottonwood				8	R		
34	Cottonwood				6	R		
35	Cottonwood				10	R		
36	Cottonwood				10	R		
37	Cottonwood				12	R		
38	Cottonwood				14	R		
39	Cottonwood				12	R		
40	Cottonwood				8	R		
41	Cottonwood				10	R		
42	Cottonwood				10	R		
43	Cottonwood				12	R		
44	Cottonwood				8	R		
45	Cottonwood				16	R		
46	Cottonwood				16	R		
47	Cottonwood				16	R		
48	Cottonwood				16	R		
49	Cottonwood				16	R		
50	Cottonwood				16	R		
51	Cottonwood				10	R		
52	Cottonwood				12	R		
53	Cottonwood				8	R		
54	Cottonwood				16	R		
55	Cottonwood				16	R		
56	Cottonwood				8	R		
57	Cottonwood				9	R		
58	Cottonwood				9	R		
59	Cottonwood				9	R		
60	Oak				52	R		
61	Cherry	CGD			14	X		
62	Alder	CGD			10	X		
63	Cottonwood	CGD			14	X		
64	Cottonwood	CGD			16	X		
65	Cottonwood	CGD			6	X		
66	Cottonwood	CGD			6	X		
67	Cottonwood	CGD			6	X		
68	Cottonwood	CGD			12	X		
69	Cottonwood	CGD			6	X		
70	Cottonwood	CGD			18	X		
71	Cottonwood	CGD			12	X		
72	Cottonwood	CGD			6	X		
73	Cottonwood	CGD			12	X		
74	Cottonwood	CGD			12	X		
75	Cottonwood	CGD			12	X		
76	Cottonwood	CGD			24	X		
77	Cottonwood	CGD			30	X		
78A	Cottonwood	CGD			24	X		
78B	Cottonwood	CGD			24	X		
79	Oak	CGD			8	X		
80	Unknown	CGD			6	X		
81	Cottonwood	CGD			5	X		
82	Cottonwood	CGD			5	X		
83	Cottonwood	CGD			5	X		
84	Cottonwood	CGD			5	X		
85	Cottonwood	CGD			5	X		
86	Cottonwood	CGD			7	X		
87	Cottonwood	CGD			5	X		
88	Cottonwood	CGD			6	X		
89	Cottonwood	CGD			5	X		
90	Cottonwood	CGD			5	X		
91	Cottonwood	CGD			8	X		
92	Cottonwood	CGD			8	X		
93	Cottonwood	CGD			6	X		
94	Cottonwood	CGD			6	X		
95	Cottonwood	CGD			6	X		
96	Cottonwood	CGD			6	X		
97	Cottonwood	CGD			10	X		
98	Cottonwood	CGD			6	X		
99	Cottonwood	CGD			6	X		
100	Cottonwood	CGD			12	X		
101	Cottonwood	CGD			10	X		
102	Cottonwood	CGD			6	X		
103	Cottonwood	CGD			6	X		
104	Cottonwood	CGD			6	X		
105	Cottonwood	CGD			6	X		
106	Cottonwood	CGD			6	X		
107	Cottonwood	CGD			6	X		
108	Cottonwood	CGD			5	X		
109	Cottonwood	CGD			6	X		
110	Cottonwood	CGD			8	X		
111	Cottonwood	CGD			6	X		
112	Cottonwood	CGD			6	X		
113	Cottonwood	CGD			6	X		
114	Cottonwood	CGD			8	X		
115	Cottonwood	CGD			8	X		
116	Cottonwood	CGD			8	X		
117	Cottonwood	CGD			5	X		
118	Cottonwood	CGD			7	X		
119	Cottonwood	CGD			6	X		
120	Cottonwood	CGD			6	X		

EXISTING TREE MATRIX								
121	Cottonwood	CGD			5	X		
122	Cottonwood	CGD			10	X		
123	Cottonwood	CGD			12	X		
124	Cottonwood	CGD			6	X		
125	Cottonwood	CGD			8	X		
126	Cottonwood	CGD			8	X		
127	Cottonwood	CGD			6	X		
128	Cottonwood	CGD			5	X		
129	Cottonwood	CGD			8	X		
130	Cottonwood	CGD			8	X		
131	Cottonwood	CGD			8	X		
132	Cottonwood	CGD			6	X		
133	Cottonwood	CGD			6	X		
134	Cottonwood	CGD			8	X		
135	Cottonwood	CGD			8	X		
136	Cottonwood	CGD			10	X		
137	Cottonwood	CGD			10	X		
138	Cottonwood	CGD			8	X		
139	Cottonwood	CGD			8	X		
140	Cottonwood	CGD			10	X		
141	Cottonwood	CGD			8	X		
142	Cottonwood	CGD			8	X		
143	Cottonwood	CGD			5	X		
144	Cottonwood	CGD			6	X		
145	Cottonwood	CGD			8	X		
146	Cottonwood	CGD			6	X		
147	Cottonwood	CGD			6	X		
148	Cottonwood	CGD			6	X		
149	Cottonwood	CGD			10	X		
150	Cottonwood	CGD			6	X		
151	Cottonwood	CGD			7	X		
152	Cottonwood	CGD			8	X		
153	Cottonwood	CGD			8	X		
154	Cottonwood	CGD			8	X		
155	Cottonwood	CGD			5	X		
156	Cottonwood	CGD			5	X		
157	Cottonwood	CGD			8	X		
158	Cottonwood	CGD			6	X		
159	Cottonwood	CGD			6	X		
160	Cottonwood	CGD			8	X		
161	Cottonwood	CGD			6	X		
162	Cottonwood	CGD			6	X		
163	Cottonwood	CGD			7	X		
164	Cottonwood	CGD			7	X		
165	Cottonwood	CGD			8	X		
166	Cottonwood	CGD			5	X		
167	Cottonwood	CGD			6	X		
168	Cottonwood	CGD			10	X		
169	Cottonwood	CGD			5	X		
170	Cottonwood	CGD			10	X		
171	Cottonwood	CGD			5	X		
172	Cottonwood	CGD			10	X		
173	Cottonwood	CGD			5	X		
174	Cottonwood	CGD			5	X		
175	Cottonwood	CGD			5	X		
176	Cottonwood	CGD			6	X		
177	Cottonwood	CGD			6	X		
178	Cottonwood	CGD			8	X		
179	Cottonwood	CGD			8	X		
180	Cottonwood	CGD			12	X		
181	Cottonwood	CGD			8	X		
182	Cottonwood	CGD			7	X		
183	Cottonwood	CGD			5	X		
184	Cottonwood	CGD			6	X		
185	Cottonwood	CGD			11	X		
186	Cottonwood	CGD			10	X		
187	Cottonwood	CGD			5	X		
188	Cottonwood	CGD			10	X		
189	Cottonwood	CGD			6	X		
190	Cottonwood	CGD			5	X		
191	Cottonwood	CGD			5	X		
192	Cottonwood	CGD			11	X		
193	Cottonwood	CGD			10	X		
194	Cottonwood	CGD			9	X		
195	Cottonwood	CGD			8	X		
196	Cottonwood	CGD			9	X		
197	Oak	CGD			2	X		
198	Oak	CGD			2	X		
199	Fir	CGD			51	X		
200	Oak	CGD			6	X		
201	Fir	CGD			34	X		
202	Fir	CGD			14	X		
203	Fir	CGD			14	X		
204	Fir	CGD			12	X		
205	Fir	CGD			14	X		
206	Fir	CGD			14	X		
207	Fir	CGD			17	X		
208	p	CGD			16	X		
209	Fir	CGD			17	X		
210	Fir	CGD			15	X		
211	Fir	CGD			10	X		
212	Fir	CGD	Dead		14	X		
213	Fir	CGD	Dead		9	X		
214	Cottonwood	CGD			12	X		
215	Fir	CGD	Dead		7	X		
216	Fir	CGD	Dead		12	X		
217	Fir	CGD	Dead		10	X		
218	Fir	CGD	Dead		10	X		
219	Fir	CGD			13	X		

TREE RECOMMENDATIONS	
R	TREE DESIGNATED FOR RETENTION (RETAIN & PROTECT DURING CONSTRUCTION)
X	TREE DESIGNATED FOR REMOVAL
TREE CONFLICTS WITH CONSTRUCTION	
CRC	CONFLICT WITH ROAD CONSTRUCTION
CGD	CONFLICT WITH SITE GRADING / DRAINAGE
CSW	CONFLICT WITH STORMWATER FACILITY
CBE	CONFLICT WITH BUILDING ENVELOPE
CUT	CONFLICT WITH UTILITY TRENCH
CDR	CONFLICT WITH DRIVE AND PATIO LOCATION
TREE CONDITION / DEFECTS	
DT	DEAD TREE

© COPYRIGHT 2023, PLANNING SOLUTIONS, INC. NO PART OF THIS DRAWING MAY BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF PLANNING SOLUTIONS, INC.

Planning Solutions, Inc
Creating Solution to Complex Issue
4400 NE 77th Avenue
Suite 275
VANCOUVER, WA 9866
VOICE: 360-750-9000 FAX: 360-713-61
www.planningsolutionsinc.co

STATE OF WASHINGTON
CHRISTOPHER A BAUMANN
NO. 635 EXP. 02-20-2025
LICENSED LANDSCAPE ARCHITECT

LOCKWOOD MEADOWS SUBDIVISION

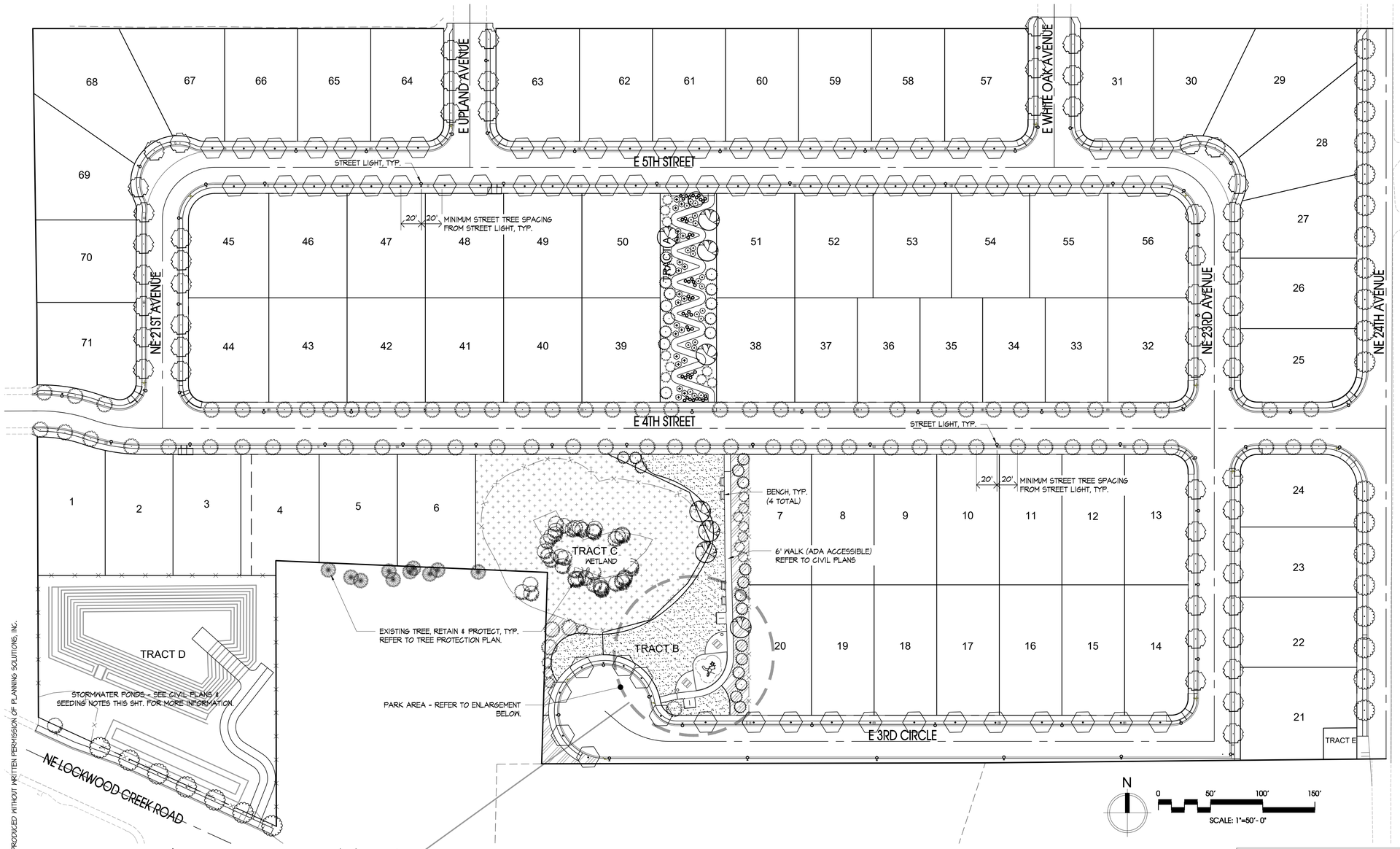
2000 NE Lockwood Creek Road
La Center, Washington

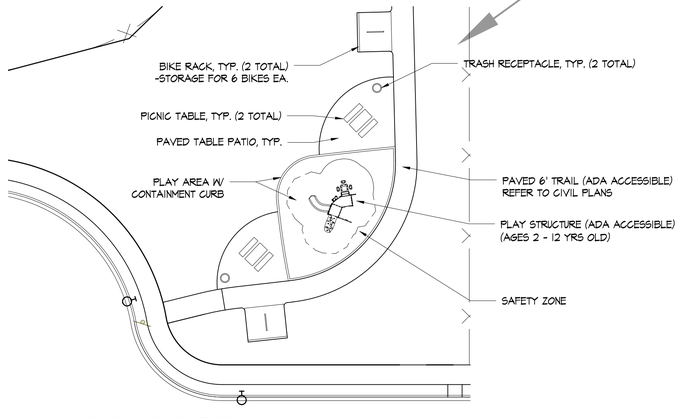
DRAWN: CB | CHECKED: CB
SCALE: n/a | DATE: 01-05-23
JOB #: 21-1683
ISSUED FOR: FLR
REVISIONS:
1 City Comments 03-10-23
2 City Comments 03-15-23
3 Tree #TB 05-03-23
4
5
6

SHEET NAME:
TREE PROTECTION PLAN

SHEET #:
T2
SHEET 2 OF 5

Attachment F





PARK AREA ENLARGEMENT - 1"=20'

PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	QTY
TREES			
	ACER RUBRUM 'ARMSTRONG' / ARMSTRONG MAPLE	2" Cal. Min.	56*
	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	2" Cal. Min.	26
	CALOCEDRUS DECURRENS INCENSE CEDAR	6' ht. Min.	30
	CUPRESSUS NOOTKATENSIS ALASKAN CEDAR	6' ht. Min.	20
	PARROTIA PERSICA PERSIAN PARROTIA	2" Cal. Min.	78*
	TILIA CORDATA 'GREENSPIRE' GREENSPIRE LINDEN	2" Cal. Min.	8
	ZELKOVA SERRATA / VILLAGE GREEN SELKOVA	2" Cal. Min.	72*
SHRUBS			
	ILEX X MESERVEAE 'BLUE BOY' BLUE BOY HOLLY	5 GAL.	21
	MAHONIA AQUIFOLIUM 'COMPACTA' COMPACT OREGON GRAPE	5 GAL.	46
	MYRICA CALIFORNICA PACIFIC WAX MYRTLE	5 GAL.	21
GROUNDCOVER			
NO SYMBOL	ARCTOSTAPHYLOS UVA-URSI / KINNIKINNICK (ALL PLANTER STRIPS)	1 GAL. Min.	36" O.C.
	ARCTOSTAPHYLOS UVA-URSI / KINNIKINNICK	1 GAL. Min.	48" O.C.
	TURF, DROUGHT RESISTANT, SUN & SHADE MIX (SEED OR SOD)		
	NATIVE COVER		

*FINAL QUANTITY PER DRIVEWAY LOCATIONS TO BE DETERMINED AT BUILDING PERMIT

REFER TO SHEET L2 & L3 FOR NOTES & DETAILS.

TREES AND SHRUBS IN SIGHT DISTANCE TRIANGLE, TYP. ALL SHRUBS WITHIN SIGHT DISTANCE TRIANGLES SHALL BE MAINTAINED SO THAT FOLIAGE HEIGHT ABOVE PAVEMENT DOES NOT EXCEED 2.5 FEET. STREET TREES WITHIN SIGHT DISTANCE TRIANGLES SHALL BE LIMBED UP TO A HEIGHT OF 10 FEET CONSISTENT WITH ANSI A300 STANDARDS TO PROVIDE FOR SIGHT DISTANCE VISIBILITY.

IRRIGATION NOTE

ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH A DRIP, SPRAY, HOSE BIB IRRIGATION SYSTEM OR HAND WATERED AS REQUIRED. REFER TO CIVIL ENGINEERING PLANS FOR WATER SOURCE.

LANDSCAPE PLAN NOTES

1) STREET TREE LOCATIONS & QUANTITIES SUBJECT TO CHANGE PER FINAL DRIVEWAY, UTILITY AND STREET LIGHTING LOCATIONS.
2) LANDSCAPE WITHIN ALL TRACTS TO BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
3) ALL LANDSCAPE SHALL BE IRRIGATED VIA AN AUTOMATIC UNDERGROUND SYSTEM OR HAND WATERING TO INSURE LONG-TERM SURVIVABILITY.
4) BMP's 1.15 AND 1.35 OF THE STORMWATER MANAGEMENT MANUAL FOR THE PUGET SOUND BASIN SHALL BE IMPLEMENTED AS PART OF THIS LANDSCAPE PLAN'S INSTALLATION.

STORMWATER POND SEEDING NOTES

Exposed earth on the pond bottom and side slopes shall be sodded or seeded with the appropriate seed mixture as soon as is practicable (see Erosion and Sediment Control BMP E1.35 in Volume II). Establishment of protective vegetative cover shall be ensured with jute mesh or other protection and reseeded as necessary (see Erosion and Sediment Control BMPs E1.15 and E1.35 in Volume II).

Rural Application:

Kentucky Bluegrass (Poa pratensis)	15%	85	80
Tall Fescue (Festuca arundinea)	40%	95	90
Perennial Rye (Lolium perenne)	30%	95	90
Chewings Fescue	15%	95	90

Cover the seed with topsoil or mulch no deeper than ¼ inch. It is better to work topsoil into the upper soil layer rather than spread a layer of it directly onto the top of the native soil.

"Hydro-seeding" applications with approved seed-mulch-fertilizer mixtures may also be used.

© COPYRIGHT 2023, PLANNING SOLUTIONS, INC. NO PART OF THIS DRAWING MAY BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF PLANNING SOLUTIONS, INC.

Planning Solutions, Inc
Creating Solution to Complex Issue
4400 NE 77th Avenue
Suite 275
VANCOUVER, WA 9866
VOICE: 360-750-9000 FAX: 360-713-61
www.planningsolutionsinc.co

STATE OF WASHINGTON · CHRISTOPHER A BAUMANN · NO. 635 EXP. 02-20-2025 · LICENSED LANDSCAPE ARCHITECT

LOCKWOOD MEADOWS SUBDIVISION

2000 NE Lockwood Creek Road
La Center, Washington

DRAWN: CB | CHECKED: CB
SCALE: 1" = 50'-0" | DATE: 01-05-23
JOB #: 21-1683
ISSUED FOR: FLR
REVISIONS:
1 City Comments 03-10-23
2 City Comments 03-15-23
3
4
5
6

SHEET NAME: **FINAL LANDSCAPE & PARK PLAN**

SHEET #: L1

PLANTING NOTES

1. ALL BOUNDARIES, EASEMENTS, UTILITIES AND LEGAL ENCUMBRANCES TO BE CONFIRMED WITH OWNER PRIOR TO BEGINNING WORK. PROPERTY LINES AND SURVEY INFORMATION PROVIDED BY PLS ENGINEERING, INC.

2. IN NO WAY IS THIS PLAN TO BE INTERPRETED TO EXCEED THE LEGAL BOUNDARIES OF THE OWNER'S REAL PROPERTY.

3. THE LANDSCAPE DESIGNER ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF BOUNDARIES, UTILITIES AND WETLANDS.

4. THIS PLAN SHALL BE INSTALLED TO MEET ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL CODES.

5. THIS PLAN SHALL BE CONSIDERED PRELIMINARY UNTIL APPROVED BY ALL GOVERNING AGENCIES. IMPLEMENTATION OF THIS PLAN SHALL NOT PROCEED UNTIL ISSUANCE OF ALL RELATED PERMITS.

6. PLANT QUANTITIES ARE FOR INFORMATION ONLY. IN CASE OF ANY DISCREPANCY, THE PLAN SHALL GOVERN.

7. ALL WORK IS TO BE PERFORMED BY LICENSED CONTRACTORS AND EXPERIENCED WORKERS.

8. THE CONTRACTOR IS TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO PERFORMING ANY EXCAVATION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S WORK, AT NO ADDITIONAL COST TO THE OWNER. CONTACT ALL UTILITY PROVIDERS SERVING THE SITE AREA 48 HOURS PRIOR TO ANY EXCAVATION.

9. ALL PLANT MATERIALS SHALL MATCH SPECIFICATIONS PER SPECIES AND SHALL COMPLY WITH ANSI Z60.1 'STANDARD FOR NURSERY STOCK'.

10. THE CONTRACTOR SHALL ADHERE TO THE WASHINGTON ASSOCIATION OF NURSERYMEN'S GUIDELINES FOR PLANTING PRACTICES.

11. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING ELEMENTS ON AND OFF SITE, RESULTING FROM THE CONTRACTOR'S WORK.

12. THE CONTRACTOR IS RESPONSIBLE FOR THE VIABILITY OF ALL PLANT MATERIAL FOR 2 YEARS AFTER COMPLETION OF PLANTING. DISEASED, DYING, OR DEAD PLANT MATERIAL SHALL BE REPLACED BY THE CONTRACTOR DURING THE TWO YEAR PERIOD AND MAINTAINED FOR AN ADDITIONAL 2 YEAR PERIOD.

13. IMMEDIATELY UPON BID AWARD, CONTRACTOR SHALL SECURE THE PLANT MATERIALS AS SPECIFIED FROM AVAILABLE SOURCES. IN THE EVENT THAT PLANT MATERIALS ARE NOT AVAILABLE, CONTACT THE CITY OF LACENTER & THE LANDSCAPE ARCHITECT FOR APPROVED SUBSTITUTIONS. NO SUBSTITUTION FOR PLANT MATERIAL WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.

14. TOP DRESS ALL SHRUB AND GROUND COVER AREAS (NOT LAWN) WITH 2" OF FIR BARK MULCH. SUBMIT SAMPLE TO THE CITY OF LACENTER & THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO CONSTRUCTION.

15. TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT SITE REQUIREMENTS AS DIRECTED BY THE LANDSCAPE ARCHITECT.

16. THE CONTRACTOR SHALL ENSURE THAT ALL EXCAVATED PLANTING PITS HAVE POSITIVE DRAINAGE. PLANT PITS FULLY FLOODED WITH WATER SHALL DRAIN WITHIN (12) HOURS OF FILLING.

17. FINISH GRADE SHALL BE SET TO ALLOW POSITIVE DRAINAGE

18. ROTOTILL 2" OF COMPOST INTO ALL PLANTED AREAS.

19. INCORPORATE PEAT INTO THE ROOT ZONE OF RHODODENDRONS, AZALEAS AND OTHER ACID LOVING PLANTS.

20. INCORPORATE 10-20-20 FERTILIZER INTO THE ROOT ZONE OF ALL NEW PLANTINGS.

21. RONSTAR, OR APPROVED EQUAL, PREEMERGENT HERBICIDE TO BE APPLIED TO ALL PLANTED AREAS PER MANUFACTURERS INSTRUCTIONS.

22. EXISTING VEGETATION TO BE SPRAYED WITH ROUNDUP, OR APPROVED EQUAL, PER MANUFACTURERS INSTRUCTIONS. SUFFICIENT TIME SHALL BE GIVEN TO ALLOW EXISTING MATERIAL TO DIE. REMOVE EXISTING VEGETATION MAT AND ROTOTILL OR SCARIFY EXISTING SOIL.

23. CROWN LAWN AREAS AND GRADE TO PROVIDE POSITIVE DRAINAGE.

24. ROLL LAWN AREA TO INSURE PROPER COMPACTION TO MINIMIZE SETTLING.

25. AMEND SOIL IN LAWN AREAS WITH 80 LBS. OF DOLOMITE LIME AND 40 LBS. OF 10-20-20 SLOW RELEASE FERTILIZER OR EQUIVALENT. PROVIDE A 3" LAYER OF SANDY LOAM TOPSOIL FOR LAWN AND BED AREA.

26. SEED LAWN AREAS WITH GRASS SEED MANUFACTURER'S RECOMMENDATIONS. COVER SEED WITH FINE MULCH APPLIED WITH ROLLER OR HYDROSEED.

27. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING TURF PLANTED WITHIN THE RIGHT OF WAY.

28. PLANT MATERIAL SHALL BE PLANTED W/ ROOT CROWN 1" ABOVE FINISHED GRADE TO ALLOW POSITIVE DRAINAGE AWAY FROM CROWN.

29. STAKE ALL TREES OVER 6 FT. IN HEIGHT PER DETAIL 'A' AND 'B' ON THIS SHEET.

30. REFER TO DETAILS FOR ADDITIONAL INFORMATION.

31. ALL PLANTING SHALL BE IRRIGATED BY AN AUTOMATIC UNDERGROUND SPRINKLER SYSTEM OR HAND WATERED AS REQUIRED.

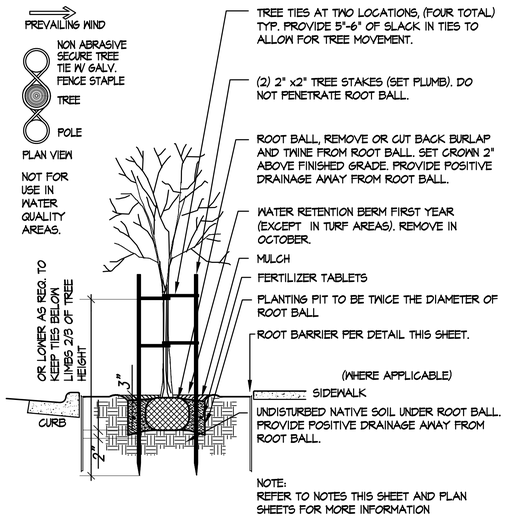
32. ALL PLANT MATERIALS FURNISHED ARE TO BE HEALTHY, UNIFORMLY BRANCHED AND WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS.

33. ALL PLANT MATERIALS FURNISHED ARE TO BE FREE FROM DEAD OR BROKEN BRANCHES, LICHENS, SCARS, BROKEN BARK OR WOUNDS. ALL PLANT MATERIALS WILL BE INSECT, WEED, AND DISEASE FREE ACCORDING TO THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF AGRICULTURE FOR NURSERY PLANT MATERIALS SOLD FOR WHOLESALE OR RETAIL. ALL PRUNING WOUNDS MUST BE WELL HEALED WITH NO EVIDENCE OF DECAY.

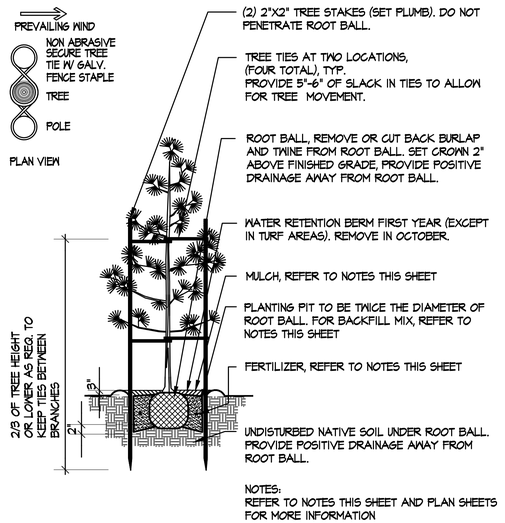
34. SIX (6) MONTHS PRIOR TO THE FINAL CITY OF LACENTER ACCEPTANCE & AT FINAL CITY OF LACENTER ACCEPTANCE ALL LANDSCAPING SHALL BE WEED FREE. LAWN AREAS WITH CLOVER WILL NOT BE ACCEPTED.

35. HYDROSEEDED LAWN AREAS MUST BE ACTIVELY GROWING FOR LONGER THAN 4 FOUR (4) MONTHS PRIOR TO FINAL CITY OF LACENTER ACCEPTANCE.

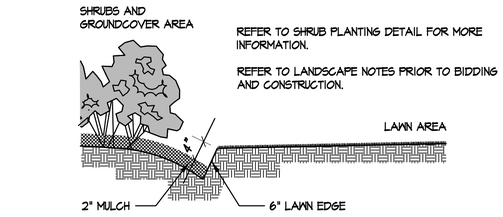
© COPYRIGHT 2023, PLANNING SOLUTIONS, INC. NO PART OF THIS DRAWING MAY BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF PLANNING SOLUTIONS, INC.



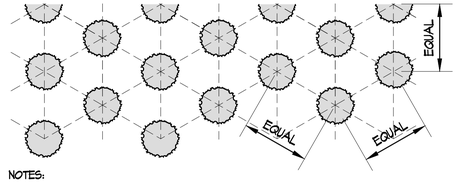
A B & B Tree Planting Detail
Not To Scale — SECTION / PLAN VIEW



B B & B Tree Planting Detail: Evergreen under 8' Height
Not To Scale — SECTION / PLAN VIEW



C Lawn Edge Detail
Not To Scale — SECTION



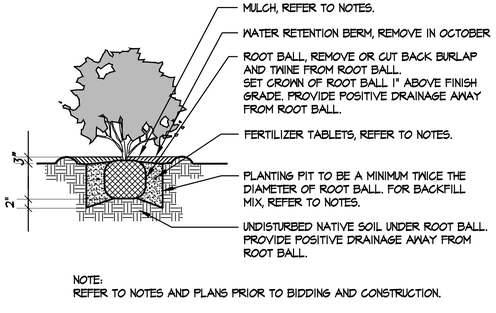
NOTES:

ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING AS SPECIFIED IN PLANTING LEGEND.

GROUND COVER TO BE LOCATED ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY HARD SURFACE, UNLESS OTHERWISE SPECIFIED.

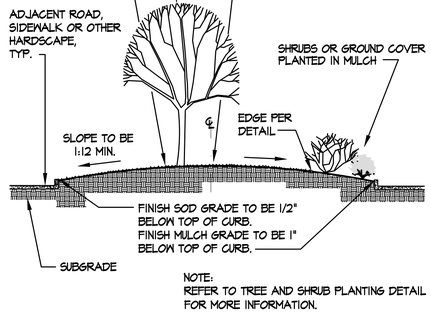
D Ground Cover Planting Detail
Not To Scale — PLAN VIEW

ALL DETAILS SHOWN MAY NOT BE REQUIRED FOR THIS PROJECT.



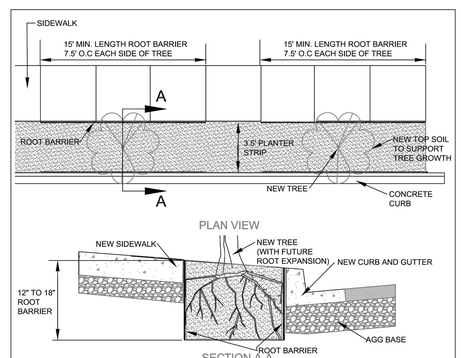
NOTE:
REFER TO NOTES AND PLANS PRIOR TO BIDDING AND CONSTRUCTION.

E B & B Shrub Planting Detail
Not To Scale — SECTION



NOTE:
REFER TO TREE AND SHRUB PLANTING DETAIL FOR MORE INFORMATION.

F Typical Curbed Planter Area
Not To Scale — SECTION A-A



CONSTRUCTION NOTES:

1. ROOT BARRIER SHALL BE BLACK, INJECTION MOLDED PANELS OR LINEAR ROLL WITH 90-DEGREE DEFLECTING RIBS.
2. AT A MINIMUM 12" TO MAXIMUM 18" HIGH ROOT BARRIER.
3. ROOT BARRIER SHALL HAVE A MINIMUM WALL THICKNESS OF 0.06" (60 mil) & RIB THICKNESS OF 0.08" (80mil)-THE CONTRACTOR SHALL SUBMIT MANUFACTURER SPECIFICATIONS FOR COMPLIANCE.
4. ROOT BARRIER SHALL BE 15' LONG: 7.5' O.C. FROM THE TREE UNLESS APPROVED BY THE CITY.
5. ROOT BARRIER SHALL BE INSTALLED VERTICAL ADJACENT TO THE SIDEWALK AND CURB.

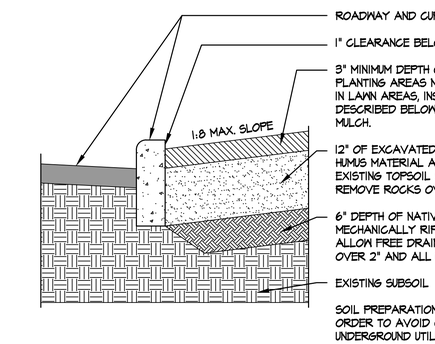
TREE ROOT BARRIER INSTALLATION — PLAN #

CITY OF LA CENTER APPROVED

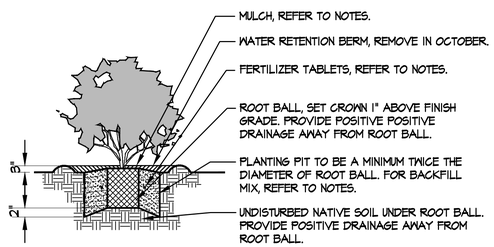
TONY COOPER 1/29/19
CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:

ST-31



I Soil Section at Curb within Planting Strips & Finger Islands
Not To Scale — SECTION



H Container Ground Cover Planting Detail
Not To Scale — SECTION

Planning Solutions, Inc
Creating Solution to Complex Issue
4400 NE 77th Avenue
Suite 275
VANCOUVER, WA 9866
VOICE: 360-750-9000 FAX: 360-713-61
www.planningsolutionsinc.co

STATE OF WASHINGTON
CHRISTOPHER A BAUMANN
NO. 635 EXP. 02-20-2025
LICENSED LANDSCAPE ARCHITECT

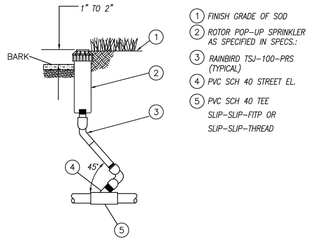
LOCKWOOD MEADOWS SUBDIVISION
2000 NE Lockwood Creek Road
La Center, Washington

DRAWN:	CHECKED:
BOP	CB
SCALE: AS SHOWN	DATE: 01-05-23
JOB #: 21-1683	
ISSUED FOR: FLR	

REVISIONS:
1 City Comments 03-10-23
2 City Comments 03-15-23
3
4
5
6

SHEET NAME:
LANDSCAPE DETAILS

SHEET #:
L2



1. FINISH GRADE OF SOD
2. ROTOR POP-UP SPRINKLER AS SPECIFIED IN SPECS.:
3. RAINBIRD TSJ-100-PRS (TYPICAL)
4. PVC SCH 40 STREET EL.
5. PVC SCH 40 TEE SLIP-SLIP-FITP OR SLIP-SLIP-THREAD

ROTOR POP-UP SPRINKLER ASSEMBLY WITH PRE-MADE SWING FITTINGS

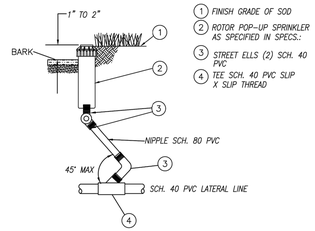
PLAN #: IRR-1

CITY OF LA CENTER APPROVED

4/3/19

CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:



1. FINISH GRADE OF SOD
2. ROTOR POP-UP SPRINKLER AS SPECIFIED IN SPECS.:
3. STREET ELLS (2) SCH. 40 PVC
4. TEE SCH. 40 PVC SLIP X SLIP THREAD

ROTOR POP-UP SPRINKLER

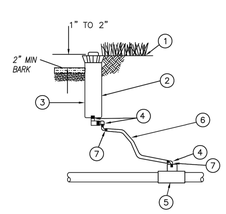
PLAN #: IRR-2

CITY OF LA CENTER APPROVED

4/3/19

CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:



1. FINISH GRADE OF SOD
2. ROTOR POP-UP SPRINKLER: (IN SOD AREAS)
   RAIN BIRD 1806
   1806 SAM
   1806 SAM-P45
   1806 SAM-PRS
3. ROTOR POP-UP SPRINKLER: (IN BED AREAS)
   RAIN BIRD
   1812,1812 SAM
   1812 SAM-P45
   1812 SAM-PRS
4. MARLEX STREET ELBOWS.
5. PVC SCH 40 TEE SLIP-SLIP-THREAD
6. FLEX PIPE-NO MORE THAN 5'
7. ¾" BARB X ¾" MALE THREAD ELBOW (MARLEX)

POP-UP SPRINKLER

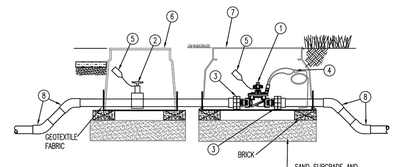
PLAN #: IRR-3

CITY OF LA CENTER APPROVED

4/3/19

CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:



1. RAINBIRD PEB AUTOMATIC VALVE
2. PVC BALL VALVE FEMALE
3. PVC UNION SLIP X (M) THREAD
4. WATERPROOF CONNECTORS WITH EXPANSION LOOP
5. VALVE ID TAG
6. 10-INCH ROUND VALVE BOX
7. STANDARD VALVE BOX
8. 45° SCHEDULE 40 PVC ELBOW

AUTOMATIC VALVE ASSEMBLY

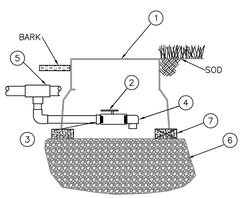
PLAN #: IRR-4

CITY OF LA CENTER APPROVED

4/3/19

CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:



1. STANDARD VALVE BOX PLUS EXTENSION
2. BRASS BALL VALVE
3. MALE ADAPTER
4. PVC SCH. 40 STREET ELBOW
5. DOWNWARD FACING SCH. 40 PVC TEE OR ELBOW
6. 3 CUBIC FEET OF WASHED DRAIN ROCK
7. BRICKS SUPPORTING VALVE BOX

BALL VALVE DRAIN

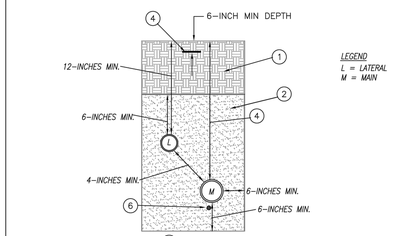
PLAN #: IRR-5

CITY OF LA CENTER APPROVED

4/3/19

CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:



1. COMPACTED SOIL FOR LANDSCAPING. FOR OTHER SURFACE SEE PLANS FOR STANDARD DETAILS FOR CONSTRUCTION STANDARDS.
2. TOP SOIL AND BACKFILL. THE CONTRACTOR SHALL FOLLOW WSDOT SECTION 80-3.3(2) FOR EXCAVATION, SAND BACKFILL.
3. THE MAIN IRRIGATION PIPING SHALL HAVE A MINIMUM OF 18-INCHES OF COVER AND LATERALS SHALL HAVE A MIN. 12-INCHES OF COVER
4. FOR IRRIGATION PIPING UNDER HARDSCAPE, A SCHEDULE 40 PVC SLEEVE SHALL BE USED PER THE LANDSCAPING SPECIFICATIONS IN THE ENGINEERING STANDARDS
5. IRRIGATION CONTROL WIRE SHALL BE PLACED A MINIMUM OF 2-INCHES BELOW THE IRRIGATION PIPING. FOR CONTROL WIRE THAT DOES NOT FOLLOW THE IRRIGATION PIPE, A SEPARATE CONDUIT SHALL BE USED FOR THE CONTROL WIRE.

IRRIGATION TRENCH DETAIL IN LANDSCAPE AREA

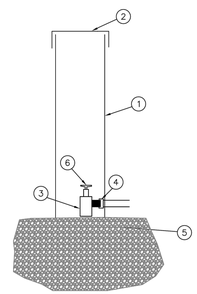
PLAN #: IRR-6

CITY OF LA CENTER APPROVED

4/3/19

CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:



1. PVC PIPE/VALVE CAN (10" ROUND)
2. VALVE COVER
3. BALL VALVE
4. PVC SCHEDULE 40 MALE ADAPTER
5. 3 CUBIC FEET OF WASHED DRAIN ROCK
6. BRASS GATE VALVE WITH KEY

DRAIN VALVE ASSEMBLY

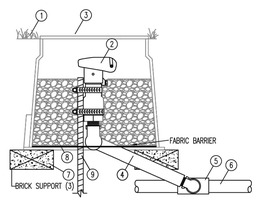
PLAN #: IRR-7

CITY OF LA CENTER APPROVED

4/3/19

CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:



1. FINISH GRADE
2. MODEL RAINBIRD 44RC QUICK COUPLER VALVE
3. 10" ROUND VALVE BOX
4. PREFABRICATED SWING JOINT
5. MAIN LINE TEE OR ELL
6. MAIN LINE PIPE
7. BRICK SUPPORT (3)
8. 3/4" MINUS GRAVEL
9. #4 REBAR W/SS HOSE CLAMPS (36-INCH DEPTH MIN)

QUICK COUPLER VALVE

PLAN #: IRR-8

CITY OF LA CENTER APPROVED

4/3/19

CITY ENGINEER DATE

REVISIONS:	DATE:	DRAWN:	DESIGNED:

© COPYRIGHT 2023, PLANNING SOLUTIONS, INC. NO PART OF THIS DRAWING MAY BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF PLANNING SOLUTIONS, INC.

Planning Solutions, Inc
Creating Solution to Complex Issue
4400 NE 77th Avenue
Suite 275
VANCOUVER, WA 9866
VOICE: 360-750-9000 FAX: 360-713-61
www.planningsolutionsinc.co

STATE OF WASHINGTON
CHRISTOPHER A BAUMANN
NO. 635 EXP. 02-20-2025
LICENSED LANDSCAPE ARCHITECT

LOCKWOOD MEADOWS SUBDIVISION

2000 NE Lockwood Creek Road
La Center, Washington

DRAWN: BOP | CHECKED: CB
SCALE: AS SHOWN | DATE: 01-05-23
JOB #: 21-1683
ISSUED FOR: FLR
REVISIONS:
1. City Comments 03-10-23
2. City Comments 03-15-23
3.
4.
5.
6.

SHEET NAME:
IRRIGATION DETAILS

SHEET #: L3

SHEET 5 OF 5

Attachment G

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

509 E Spruce Ave – La Center, 98629

Heritage Country Estates HOA
Address

Scott & Prairie Hedges

Print Name

Scott / Prairie Hedges

Signature

Heritage County Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website ( ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

RECEIVED
APR 24 2023
By

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely, AK

2308 E. 6th St. La Center
Heritage Country Estates HOA
Address 98629

Print Name Ann Kirkendall

Signature Richard Kirkendall

4-22-23

Ann Kirkdall

Richard Kirkdall

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2108 E 6th St, La Center
Heritage Country Estates HOA
Address

Anne Hafer
Print Name

Signature

Breannah Williams
628 E Upland Ave
La Center, WA 98629

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

628 E Upland Ave La Center, WA 98629

Heritage Country Estates HOA
Address

Breaunah Williams
Print Name

Breaunah Williams
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

---

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

618 E. Tanoak Ave. La Center, WA 98629

Heritage Country Estates HOA
Address

Brianna Lamb
Print Name

Brianna Lamb
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

---

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

Catherine Black

Heritage Country Estates HOA
Address

726 E. Vine Maple Ave.

Print Name

Catherine Black

Signature

Catherine Black

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2311 E. 7th Circle
La Center, WA 98629

Heritage Country Estates HOA
Address

Christopher Tompkins

Print Name

Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

682 E. White Oak ave

Heritage Country Estates HOA
Address

Corey Schafer

Print Name

Signature

4-24-23

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2208 E 6th St La Center, WA 98629
Heritage Country Estates HOA
Address

Donna L. Graham
Print Name

Donna L Graham
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

614 East Tanoak Avenue LaCenter WA 98629

Heritage Country Estates HOA
Address

Doug and Gina Lange
Print Name

Signature

Gina L Lange

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

---

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2100 E 6th St, La Center
Heritage Country Estates HOA
Address

Elizabeth Dehlbom
Print Name

Elizabeth Dehlbom
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

---

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

710 E Upland Ave. La Center
Heritage Country Estates HOA
Address

Eric L. Johnson
Print Name

Eric L. Johnson
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2301 E 6th St La Center WA 98629

Heritage Country Estates HOA
Address

Gary L Lindland
Print Name

Gary S Lindland
Signature 4/24/23

Heritage Country Estates Homeowners Association

c/o Association Management Services NW

7710 NE Vancouver Mall Drive
Vancouver, Washington 98662
Phone (360) 891-8060
Fax (360) 891-8829

April 25, 2023

Companion Letter

To Whom it May Concern,

The Board of Directors have reviewed the Notice of Application and Likely SEPA Determination of Non-Significance that was sent out to the homeowners of Heritage Country Estates regarding Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit and Amended SEPA and would like to make the following request recommended by the Association's Legal Counsel's Land Use Attorney.

The Heritage Country Estates Board of Directors would like the City of La Center to accommodate their request to be a "Party of Record" designating the Board of Directors the permission to represent the Homeowners within the Association and speak on their behalf with further communication or action needed moving forward with the process, planning, and approval of the new development of Lockwood Meadows Subdivision.

If you have any questions regarding this request or any other Association related matters, please feel free to contact AMS, NW at Samantha.linam@ams-nw.com or at the phone number above to be put in touch with the Board of Directors.

Sincerely,

Gina Lange – Board Secretary
Heritage Country Estates Board of Directors

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

614 East Tanoak Avenue
Heritage Country Estates HOA
Address

Gina Lange
Print Name

Gina Lange
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

725 E. Vine Maple Ave La Center, WA 98629
Heritage Country Estates HOA
Address

Jake Parmer
Print Name

Jake Parmer
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

---

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

1908 E 6th St.

Heritage Country Estates HOA
Address

Jeff Cosmi

Print Name

Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2031 E. 9th Street, La Center, WA 98629

Heritage Country Estates HOA
Address

Joseph MacKay

Print Name

Joseph MacKay

Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

Heritage Country Estates HOA
Address 2303 E 6th St
La Center WA 98629

Print Name
Keith Seal

Signature
Keith Seal

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

Kenneth L Johnson

Heritage Country Estates HOA
Address

726 E Vine Maple Ave La Center

Print Name

Kenneth L. Johnson

Signature

Kenneth L Johnson

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

700 E Tanoak Ave, La Center, WA 98629
Heritage Country Estates HOA
Address

Larry R Pitzer
Print Name

Larry R Pitzer
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

638 E Upland Ave, La Center WA 98629

Heritage Country Estates HOA
Address

Meachel Hill

Print Name

Meachel Hill

Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2004 E 6th St. La Center, WA 98629

Heritage Country Estates HOA
Address

Nicole Miller

Print Name

Nicole Miller

Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely, Paul Huskey

Heritage Country Estates HOA
President
Care of Association Management Services NW

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2300 E 6th ST, LA CENTER
Heritage Country Estates HOA
Address

PAUL B. JONES / MARY R. JONES
Print Name

Paul B Jones Mary R Jones
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

---

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.
- Prefer construction Access through NE 24th AVE ONLY.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

610 E. TANOAK AVE, LA CENTER

Heritage Country Estates HOA
Address

PHILIP ST JOHN, MD

Print Name

Phil St John 4/23/23

Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2204 E 6th St
Heritage Country Estates HOA
Address

Rachael Davis
Print Name

Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

1908 E 16th St.

Heritage Country Estates HOA
Address

Sara Cosmi

Print Name

Sara Cosmi

Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

Scott Arnett 676 E. White Oak Ave. La Center, WA 98629

Heritage Country Estates HOA
Address

Scott Arnett

Print Name

Scott Arnett

Signature

4-24-23

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

2004 E. 6th St. La Center, WA 98629

Heritage Country Estates HOA
Address

Sean Miller

Print Name

Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

---

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

1900 E 6th St
Heritage Country Estates HOA
Address

Terry L Havens
Print Name

4-21-2023
Signature

Heritage Country Estates HOA

La Center, WA 98629
Phone: 360-891-8060

City of La Center – Jessica Nash,
Administrative Assistant
ATTN: SEPA COMMENTS – LOCKWOOD MEADOWS

210 East 4th St
La Center, WA 98629

To whom it may concern:

We have reviewed the NOTICE OF APPLICATION AND LIKELY SEPA DETERMINATION OF NON-SIGNIFICANCE - Lockwood Meadows Subdivision Type II Critical Areas Permit, Tree Cutting Permit, and Amended SEPA and would like to express our concerns about the project and tentative MDNS approval.

As you are aware, we are the housing development located directly next to the proposed project location. We are a community of 120 homes total with 25 of those homes being located directly adjacent to the proposed project site on the north and west sides. As a result of our proximity to the proposed project site, will be the most directly impacted by this project both in the immediate and long-term future.

We recently held our annual HOA meeting and one of the most urgent and pressing topics discussed is the significant drainage issues that are community is facing as a result of the high clay content the in soil and the insufficient mitigation efforts made by the original developers and builders of our community (which were somehow signed off and approved by the City of La Center). Many homes in our neighborhood experience standing water in their yards for several months of the year (from early Winter to late Spring) and we have had many homeowners who have spent thousands of dollars out-of-pocket since purchasing their homes to attempt to mitigate this issue, often items with limited success. We are also aware that these types of drainage issues are not uncommon throughout all of La Center and should certainly not be of any surprise to the City or it's planning, development and building department.

While we are fully aware that existing drainage issues are something we need to take up with the developers of our own community (and that is currently on-going with several owners and properties in the neighborhood) the approval of this future project under an MDNS designation would only serve to exacerbate these issues.

The WA State Department of Ecology defines Mitigated Determination of Non-significance (MDNS) on their website (https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-FAQ) as projects who undergo greater scrutiny because the proposal has "likely significant adverse impacts." It continues stating "The lead agency issues a mitigated DNS in lieu of preparing an EIS when there is assurance that specific enforceable mitigation will successfully reduce impacts to a nonsignificant level." From our review of the notice, it

would appear that the proposed mitigation efforts would NOT "successfully reduce impacts to a nonsignificant level" and thus, this project should not be eligible for an MDNS.

The notice states that the mitigation efforts entail replacing a patch of 161 MATURE trees with the planting of 203 new trees (presumably saplings) around Wetland B, but fails to acknowledge that it will take at least a decade before these baby trees will require and absorb the same amount of water as the mature trees they will be replacing. In regards to the filling in of Wetland A, the only mitigation effort proposed would be to buy credits into the East Fork Lewis Mitigation Bank, which should offset the impact to the wildlife in general terms, but will do nothing to address the property values and quality of life to the people living next to this area.

In light of this information, we feel that an MDNS is the wrong course of action in this case, especially utilizing the Optional DNS process, which only seeks to further "fast track" this application through without the proper scrutiny. We hereby respectfully request the following be considered in lieu of the tentative MDNS approval via Optional DNS process:

- A full Environmental Impact Study (EIS) to include not just the "bare minimum" mitigation efforts to comply with WA state law, but to ensure no adverse impacts to the properties surrounding the project site.
- Additional access to the checklist and materials used by the City of La Center to make their assessment
- Detailed contact and insurance information for the developer in the event action needs to be taken against them for damage to any Heritage Country Estates HOA property including individual homes and any common areas.
- Additional details about how, when, and what times the developer intends to access the property to conduct this work once the application is formally approved.

We understand that the City of La Center is growing and that these 20 acres will eventually become new homes at some point in the future and when they do, we plan to welcome those neighbors with open arms. However, we do want to ensure that the growth and prosperity that will be happening is not at the expense of others within the community.

Sincerely,

505 E. Spruce Ave, La Center
Heritage Country Estates HOA
Address

Todd + Jill Schilter
Print Name

Signature

Attachment H

May 10, 2023

Heritage Country Estates HOA and Its Members
Via: Post to City of La Center Website

Re: Response to Letters Received During Public Comment Period

To the Heritage Country Estates and Its Members:

Thank you for submitting letters to the City of La Center (City) in response to the notice of application and likely SEPA determination of non-significance. The City appreciates the input and is committed to considering your comments in our review of the Type II Critical Areas Permit and Tree Cutting Permit. Below we address each of the issues you raise. Please note that the Critical Areas and Tree Cutting permit reviews are limited in scope to address the impacts to the oak tree habitat at the southwest side of the site, the temporary wetland buffer impacts for Wetland B, and the applicant's request to remove 161 trees on the site.

Drainage impacts from the proposed Lockwood Meadows Subdivision and impacts to Wetland A that will be filled as a result of the development were already reviewed and considered as part of the Type III Preliminary Plat/Variance/Critical Areas Permit (File No. 2022-004) for which there was a public hearing conducted on May 16, 2022 noticed to all property owners within 300 feet. Although the City's review of the Lockwood Meadows Preliminary Plat application already reviewed drainage issues and impacts from filling Wetland A, the City is addressing them here again for your convenience.

Drainage

A majority of Lockwood Meadows development will be located downhill from Heritage Country Estates. Stormwater runoff from impervious surfaces (rooftops, driveways, and streets) within the Lockwood Meadows development will be collected in a series of catch basins located in the public streets and piped downhill to the proposed stormwater facility located in Tract D at the far southwestern side of the development. Roof downspouts from the homes will be connected to storm laterals that will drain to the public storm draining to tract D. Stormwater from Lockwood Meadows is not proposed to flow onto the Heritage Country Estates development and would not impact or exacerbate any existing drainage problems experienced by the Heritage Country Estates property owners by virtue of the fact that nearly all of Lockwood Meadows will be located downhill from Heritage Country Estates.

Tree Cutting and Mitigation

La Center's Tree Protection code (LCMC 18.350) establishes a process for protecting trees on a development site and removing and mitigating trees which cannot be protected for a variety of factors including from proposed development. During the preliminary plat review, the City evaluated the Lockwood Meadows development proposal against its Tree Protection code. The applicant proposed to remove a total of four trees out of 47 "jurisdictional" trees on the site.

When the applicant filed their Critical Areas and Tree Cutting permit on February 27, 2023, their new application materials stated that there are 204 jurisdictional trees on the site, 161 of which would be removed, an increase of 157 trees that would be removed. Due to this increase in the number of trees removed that was not previously reviewed, the City required the applicant to update the State Environmental Policy Act (SEPA) checklist and reissued the SEPA determination for public comment. The trees to be removed are primarily located in the west-central area of the site within proposed lots 39-40 and 49-50, along the northern boundary of the site bordering Heritage Country Estates Subdivision and along the eastern boundary of the site bordering NE 24th Avenue.

The City's tree protection code removal criteria (LCMC 18.350.080) allows for trees to be removed for "landscaping purposes or in order to construct development approved or allowed pursuant to the La Center Municipal Code." The applicant is proposing to create lots for single-family detached residences, which are a permitted use in the zone. The City's code requires that replanting occur for trees that are removed that are 10 inches or greater in size. The required mitigation is providing one two-inch caliper diameter deciduous tree or a six-to eight-foot tall evergreen tree for each tree removed. The applicant is proposing to remove 32 trees that are larger than 10 inches and are required to be mitigated. The applicant is proposing to plant 204 trees, more than six times the amount of trees required by the City's code and more than the total of 161 trees removed. Although it will take some time for the newly planted trees to mature, the City must comply with its code and cannot require that the applicant plant more trees than the code requires, but the applicant is voluntarily doing so.

The tree removal permit criteria in LCMC 18.350.080 allow the City to condition the applicant "if the condition is reasonably related to preventing, eliminating, or mitigating a negative potential impact…on the built environment of the neighborhood which is as created or contributed to by the approved tree removal." In recognition of the fact that the trees along the project's northern property line (southern property line of Heritage Country Estates) provide aesthetic value and screening for your development, the City will be requiring the applicant revise their landscape plan to include newly planted trees along this property line.

Mitigation for Wetland A

As you noted, the applicant proposes to fill Wetland A and compensate for this impact by purchasing credits at the East Fork Lewis River Mitigation Bank. Wetland A is a small, low-quality wetland which is exempt from the City's critical areas avoidance requirements under LCMC 18.300.090(5)(d) as long as the impacts are mitigated. The applicant is not required to avoid impacts to Wetland A. The applicant is meeting mitigation requirements as discussed below.

You commented that the purchase of credits at the mitigation bank would do nothing to address the property values and quality of life to the people living next to this area. The filling of Wetland A under a critical areas permit was reviewed and approved by the City during the preliminary plat review. The City can approve offsite mitigation at wetland mitigation banks provided the applicant demonstrates that offsite mitigation is ecologically preferable (see LCMC 18.300.090(5)(o)). The applicant filed a "bank use plan" showing that purchase of credits for the wetland impacts would provide an ecological lift and more than offset the impacts to the wetlands, thereby providing an ecological advantage for this offsite mitigation. Mitigation at a wetland bank is now the Washington Department of Ecology's preferred

method in their 2022 Guidance for Critical Areas Ordinance (CAO) Updates: Western and Eastern Washington.

Need for an Environmental Impact Statement

You commented that the project should require an environmental impact statement (EIS). EISs are typically required for very large projects such as new energy facilities (e.g. a new coal export terminal on the Columbia River), new subarea plans, updates to comprehensive plans, or expansions of the City's urban growth area boundary. For projects where impacts were already identified and accounted for, impacts are not significant and EISs are not required. This is especially true for new subdivisions within the City's boundaries zoned for residential development and that are not proposing to increase density beyond what was already anticipated under zoning standards and where the subdivision is proposing to comply with the City's code. Not just any impact is significant where vacant land is converted to a new use. The City recognizes development of the new Lockwood Meadows Subdivision will be a change for the residents of Heritage Country Estates, but nevertheless, is one that was anticipated by the City's comprehensive plan and zoning standards.

Significance is a very context-specific determination and includes considering whether the impacts have been previously identified. The impacts of the development of the Lockwood Creek Subdivision and development of all land within La Center were considered in Clark County's 2016 EIS for the update of their Growth Management Comprehensive Plan. The Lockwood Meadows Subdivision does not include any unusual or special impacts as compared with other subdivisions and all impacts can be mitigated by applying the City's code or by mitigations through the SEPA determination. As previously mentioned, the City will require that the applicant update their landscape plan to include tree plantings along the northern boundary of the subdivision (southern boundary of the Heritage Country Estates Subdivision) to replace trees removed in that area and to provide screening between the two developments.

Thank you again for commenting. Please reach out to City staff if you have further questions.

Sincerely,

Bryan Kast, P.E.
Public Works Director

Tony Cooper, P.E.
City Engineer