

Return Address:

Andrew Ackley
9603 SE 61st PL
Mercer Island, WA 98040



20250829000303

NOTICE OF SENSITIVE AREA Rec: \$314.50
8/29/2025 9:21 AM
KING COUNTY, WA

Please print or type information **WASHINGTON STATE RECORDER'S Cover Sheet** (RCW 65.04)

Document Title(s) (or transactions contained therein): (all areas applicable to your document **must** be filled in)

- 1. Critical Area Study
- 2. _____
- 3. _____
- 4. _____

Reference Number(s) of Documents assigned or released:

Additional reference #'s on page _____ of document

Grantor(s) Exactly as name(s) appear on document

- 1. Andrew and Courtney Ackley
- 2. _____

Additional names on page _____ of document.

Grantee(s) Exactly as name(s) appear on document

- 1. City of Mercer Island
- 2. _____

Additional names on page _____ of document.

Legal description (abbreviated: i.e. lot, block, plat or section, township, range)

Lot 2 of LELAND ADDITION, as per Plat recorded in Volume 82 of Plats, Page 19,
records of King County auditor;
Situate in the City of Mercer Island, County of King, State of Washington

Additional legal is on page _____ of document.

Assessor's Property Tax Parcel/Account Number

assigned 426000-0020

Assessor Tax # not yet

The Auditor/Recorder will rely on the information provided on this form. The staff will not read the document to verify the accuracy or completeness of the indexing information provided herein.

"I am signing below and paying an additional \$50 recording fee (as provided in RCW 36.18.010 and referred to as an emergency nonstandard document), because this document does not meet margin and formatting requirements. Furthermore, I hereby understand that the recording process may cover up or otherwise obscure some part of the text of the original document as a result of this request."

Signature of Requesting Party

Note to submitter: Do not sign above nor pay additional \$50 fee if the document meets margin/formatting requirements



Eastside Environmental Pros

20 May 2025

Project: EE-577

Andrew & Courtney Ackley
Via email: Andrew@stritmatter.com

REFERENCE: King County Tax Parcel #426000-0020
SUBJECT: Critical Areas Study

Dear Andrew & Courtney Ackley,

At your request, Eastside Environmental Pros has investigated your property (hereinafter referred to as "Site") and areas within 300 feet of the property for the presence of critical areas (*i.e.* wetlands and streams). The Site and 300 feet surrounding the Site are referred to jointly as the "Study Area". This report has been prepared to satisfy the ecological reporting requirements of the City of Mercer Island outlined in MICC §19.07.110 – *Critical area study*.

PROPERTY LOCATION

The Site is comprised of a single King County parcel (TPN: 426000-0020). The parcel has an assigned address of 9603 SE 61st Place in the City of Mercer Island, Washington. The Public Land Survey System location of the Site is the southeastern quarter of Section 19, Township 24 North, Range 05 East, of the Willamette Meridian.

PROPERTY DESCRIPTION AND LAND USE

The Site is a single King County tax parcel comprising 0.43-acres. The Site is bordered to the west, east, and south by developed single family residences and to the north by SE 61st Place. Topography generally slopes downwards from the west to the east. The highest elevation is located along the western boundary of the Site at approximately 136 feet and the lowest elevation is located along the eastern boundary of the Site at approximately 110 feet.

METHODOLOGY

The Study Area was evaluated for the presence of critical areas on the 5th of March 2025 using the routine approach described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (U.S. Army Corps of Engineers, 2010) and the Washington State Department of Ecology's publication, *Determining the Ordinary High Water Mark for Shoreline Management Compliance in Washington State* (2016). Streams and their associated buffers were established in accordance with MICC §19.07.170 and §19.07.180 respectively. Offsite areas were evaluated from what could be observed visually from the boundary of the Site, public rights-of-way, and via agency databases.

A Wetland Determination Datasheet was recorded within a representative location on-site (**Attachment 1**). Climatic conditions were evaluated through the Army Corps of Engineers Antecedent Precipitation Tool application (**Attachment 2**). Climatic conditions during the Site visit were **drier than normal**.

ONSITE INVESTIGATION RESULTS

One (1) watercourse was identified onsite and continues offsite to the east but within the Study Area during the 5th March 2025 Site visit (**Figure 1**). In addition, a potential landslide hazard area is depicted on the City of Mercer Island's Geospatial Hub. Therefore, **per section 19.07.160.B(1)-Geologically hazardous areas** "*When an alteration within a landslide hazard area, seismic hazard area or buffer associated with those hazards is proposed, the applicant must submit a critical area study concluding that the proposal can effectively mitigate risks of the hazard. The study shall recommend appropriate design and development measures to mitigate such hazards. The code official may waive the requirement for a critical area study and the requirements of subsections (B)(2) and (B)(3) of this section when he or she determines that the proposed development is minor in nature and will not increase the risk of landslide, erosion, or harm from seismic activity, or that the development site does not meet the definition of a geologically hazardous area.*".

Therefore, further investigations by a qualified licensed geotechnical engineer or consultant of the geologic hazard areas may be required by the City. **No other critical areas were identified within the Study Area.** Stream 1 is summarized below in **Table 1**.

Table 1. Critical Areas Summary Table.

Critical Area	Category / Type	Coward/HGM Classification	Standard Buffer and/or Setback*
Stream 1	Type Ns and Piped	N/A	60 feet/10 feet**

*All watercourses require an additional 10-foot setback for buildings and structures from the edge of the buffers.

**Piped watercourses require 10-foot setbacks measured from the centerline of piped systems per MICC §19.07.180.C.6.d, provided a qualified professional(s) determines that daylighting is not possible due to existing established roadways to meet vehicular access requirements.

STREAM 1

Stream 1 is located within an engineered rock-lined stream channel and extends offsite to the west and east (**Photo 1**). Stream 1 is primarily fed by groundwater and runoff from upslope areas and flows eastward before it outlets into Lake Washington. Stream 1 has an average bankfull width of 4-6 feet onsite. Its streambed is comprised of large, medium and small sized cobbles. Stream 1 is recorded as a Type Ns watercourse according to the Mercer Island GIS Portal. Type Ns streams require 60-foot buffers and 10-foot building setbacks per MICC §19.07.180 and MICC §19.07.180.7 respectively. Additionally, portions of Stream 1 are piped offsite to the east and west (**Figure 1**). These portions of piped watercourse qualify 10-foot buffers per MICC §19.07.180.C.6.d. which states, *“when daylighting is determined by qualified professional(s) to result in one or more of the following outcomes: ...iii. The inability of a legally established existing lot to meet the vehicular access requirements of this title.”*

These piped portions of Stream 1 are located adjacent to and directly under Southeast 61st Street which provides access to several residential lots. Daylighting this watercourse would require the removal of the road and relinquishing access to these legally established existing lots, which would be inconsistent with vehicular access requirements. Therefore, daylighting the watercourse is not a feasible option, and this portion of watercourse requires a 10-foot setback as depicted in **Figures 1 and 2**.

PROPOSED PROJECT

Per the prepared Site Plan (**Figure 2**), the applicant proposes to modify and expand the footprint of the existing legally established residence. Per § 19.07.130 - *Modifications*, additions to or reconstruction of an existing legally established structure or building within a critical area and/or buffer constructed on or before January 1, 2005, provided the specific criteria are met as described in the **“Modification Analysis”** section.

The expanded portion of the structure is located almost entirely within the original footprint of the existing patio and adjacent artificial turf grass. This patio and its adjacent “lawn” areas, composed of synthetic turf, are considered hardscape due to their impervious nature. Though this development is located entirely outside stream areas, a small portion of this addition is located within Stream 1’s buffer. Therefore, a small amount of buffer averaging is proposed as part of this modification for this project. And is described further in the following **“Buffer Averaging”** section.

Additionally, this development proposes installing a 198 square foot shed in the southeastern portion of the property as depicted in the Site Plan (**Figure 2**). This construction will result in a minor increase in impervious surfaces but has been situated entirely outside of critical areas and their associated buffers, resulting in no direct or indirect impacts. **Therefore, the proposed single-family residence expansion and shed will not result in critical areas impacts and require no mitigation measures.**

BUFFER AVERAGING

Stream 1's open channel areas require a 60-foot buffer and a 10-foot setback. However, its piped portions located to the west and east of the Site boundaries require a 10-foot setback per MICC §19.07.180 and MICC §19.07.180.7. Per MICC §19.07.130 under (A)(2)(d), this project proposes minor buffer averaging to accommodate this development for the SFR expansion. As outlined in the previous section, this proposed project has been situated and designed to avoid and minimize any potential direct and/or indirect impacts to the critical areas and their associated buffers to the maximum extent possible. This proposed SFR expansion has been proposed to be within legally established impervious surfaces and hardscapes of the patio and synthetic turf and almost entirely outside of the Stream 1's buffer area.

This project proposes reducing 32 square feet of Stream 1's buffer and replacing 32 square feet within more in-tact native vegetation areas located adjacent and contiguous with Stream 1's buffer (**Figure 2**). This buffer replacement area is comprised of mature Douglas fir (*Pseudotsuga menziesii*), native vegetation, and some ornamental gardening areas and provides higher habitat, water quality, and hydrologic functions in comparison to the proposed buffer reduction areas. Additionally, the narrowest point of Stream 1's buffer is 57-feet wide and represents a 95% retention of the standard buffer width and does not exceed the 75% minimum retention requirement. This project has been designed to increase functional buffer areas, ensure no net loss of overall buffer function areas, and is aligned with MICC §19.07.180.C.4.

MODIFICATION ANALYSIS

Hardscaping within critical area setbacks is permitted per MICC §19.07.180.C.8 and additions to or reconstruction of an existing legally established structure or building is allowed per MICC §19.07.130 - *Modifications*. The criteria for this provision are listed below in *italicized* text and the response of how the proposed project meets each criteria is listed in plain text.

A.1. The seasonal limitations on land clearing, grading, filling, and foundation work described in section 19.07.160(F)(2) shall apply.

Pursuant to MICC §19.07.160(F)(2), land clearing, grading, filling, and foundation work within: (a) an erosion hazard area, when 2,000 square feet or more of Site disturbance is proposed, and/or (b) a landslide hazard area are not permitted between October 1 and April 1. This project does not propose 2,000 square feet or more of impact within erosion hazard areas and the proposed development will occur outside of the October 1 and April 1 timeframe.

A.2.a. The structure is enlarged not more than a cumulative total of 200 square feet larger than its footprint as of January 1, 2005;

This proposed expansion will result in a 171.5 square foot cumulative increase to the original footprint of the single-family residence and therefore meets this criterion.

A.2.b. If the existing, legally established structure is located over or within a wetland or watercourse, no further expansion within the wetland or watercourse is allowed;

The project is not located over or within a wetland or watercourse and is not being expanded any closer to the watercourse than the existing single-family residence.

A.2.c. If the existing legally established structure is located within a wetland or watercourse buffer, the addition may be no closer to the wetland or watercourse than a distance equal to 75 percent of the applicable standard buffer and must also be no closer to the watercourse or wetland than the existing structure.

The proposed expansion is located almost entirely in the existing patio and no closer than 57 feet to the OHWM of Stream 1. This represents a 5% reduction of the standard stream buffer width and maintains the minimum 75% retention of the standard buffer width requirement.

A.2.d. A critical area study approved by the city demonstrates that impacts have been avoided or minimized and mitigated consistent with section 19.07.100, mitigation sequencing;

The proposed project has been situated almost entirely outside of critical areas and their buffers. This project has been sited within the original footprints of existing impervious surface areas, i.e. the patio and synthetic turf areas. Impacts to the adjacent stream buffer areas have been avoided and minimized to the maximum extent practicable through design and location and have been mitigated for through buffer averaging by reducing existing degraded buffer areas and replacing buffer within more in-tact native areas.

A.2.e. If the modification or addition is proposed within a geologically hazardous area or associated buffer, a qualified professional provides a statement of risk consistent with section 19.07.160(B)(3).

Geologically hazardous areas or associated buffers are known to be located on the property. Therefore, per section 19.07.160.B(1)-Geologically hazardous areas "When an alteration within a landslide hazard area, seismic hazard area or buffer associated with those hazards is proposed, the applicant must submit a critical area study concluding that the proposal can effectively mitigate risks of the hazard. The study shall recommend appropriate design and development measures to mitigate such hazards. The code official may waive the requirement for a critical area study and the requirements of subsections (B)(2) and (B)(3) of this section when he or she determines that the proposed development is minor in nature and will not increase the risk of landslide, erosion, or harm from seismic activity, or

that the development site does not meet the definition of a geologically hazardous area.”. In summary, a geotechnical consultant will likely be required to provide a statement of risk separately for this project.

3. Reconstruction of legally established nonconforming structures shall meet the standards in section 19.01.050. The code official may require a critical area study and mitigation plan addressing temporary impacts to critical areas and buffers.

Alteration calculations have been included in the architectural and Site plans. The project components result in a minor net increase in impervious located almost entirely outside of the critical areas and their buffers. A minor amount of buffer averaging is proposed to accommodate this project and is anticipated to result in an overall increase in overall stream buffer functions. Therefore, no additional mitigation measures are required.

4. Demolition. Removal of structures in watercourse and wetland buffers and geologically hazardous areas, provided:

4.a. Site disturbance is limited to the existing access and building footprint;

The proposed modifications are almost entirely within the footprint of the existing impervious surfaces and hardscapes and no additional access areas area required.

4.b. There is no site disturbance within or to wetlands or watercourses;

The Site disturbance is proposed to occur entirely outside of Stream 1 and will not result impacts.

4.c. All soils are stabilized and the area is revegetated with appropriate native vegetation; and

The proposed work limits occur entirely within non-vegetated, synthetic turf grass areas and are located outside of critical areas. These development areas are not anticipated to require additional stabilization measures unless deemed necessary by a qualified Geotech.

4.d. Necessary building permits are obtained.

This report is required to meet the necessary criteria for obtaining building permits. Any future additional required building permits will be obtained for this project following the submission of this Critical Areas Study.


SUMMARY

One (1) watercourse (Stream 1) was identified during the onsite the 5 March 2025 Site visit (**Figure 1**). Stream 1 is located within the central portion of the Site and continues offsite to the east and west via underground piping. In addition, a potential landslide hazard area is depicted on the City of Mercer Island's Geospatial Hub. Therefore, additional investigation

Stream 1 contains a combination of piped and open channels. Stream 1's portion of open channels qualify it as a Type Ns watercourse and requires a **60-foot buffer** with a **10-foot setback**. Stream 1's piped portions offsite to the east and west requires a **10-foot setback** per MICC §19.07.180.C.6.d. The proposed project is located entirely outside of critical areas; however, minor buffer averaging is required to accommodate this project and is described in the above sections.

We trust that the information presented here sufficiently describes and documents critical areas on your property. Should you have questions or wish to discuss any of the information in this report, please contact me at (425) 864-6025.

Sincerely,
Eastside Environmental Pros, Inc.


Kellen Maloney, PWS
Senior Ecologist





Tarek Akkari,
Ecologist

Attachments:

- Photos
- Figures
- 1. Wetland Determination Datasheets
- 2. Corps Antecedent Precipitation Tool

REFERENCES

- Anderson, P. S., Meyer, S., Olson, P., & Stockdale, E. (2016). *Determining the Ordinary High Water Mark for Shoreline Management Act compliance in Washington State* (Publication No. 16-06-029). Washington State Department of Ecology.
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- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. *Classification of Wetlands and Deepwater Habitats of the United States*. FWSOBS-70/31, U.S. Fish and Wildlife Service, Department of the Interior, 1979.
- Environmental Laboratory. *US Army Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, Vicksburg, Miss.: US Army Corps of Engineers Waterways Experiment Station, 1987.
- Hitchcock, C. Leo, Arthur Cronquist, Marion Owensby, and J. W. Thompson. *Vascular Plants of the Pacific Northwest*. Seattle: University of Washington Press, 2018 update.
- Hruby, T. & Yahnke, A. (2023). *Washington State Wetland Rating System for Western Washington: 2014 Update (Version 2)*. Publication #23-06-009. Washington Department of Ecology.
- Lichvar, R.W. *National Wetland Plant List*. ERCD/CRREL TR-12-11, Hanover, NH: U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory, 2016.
- Munsell Color (Firm). *Munsell Soil Color Charts : with Genuine Munsell Color Chips*. Grand Rapids, MI :Munsell Color, 2010.
- Sprecher, S. W; Warne, A. G. *Accessing and Using Meteorological Data to Evaluate Wetland Hydrology*. Army Engineer Waterways Experiment Station, Vicksburg, MS. Environmental Lab. 2000.
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- U.S. Fish and Wildlife Service. *National Wetlands Inventory, Wetlands Online Mapper*. 2025. <http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>.
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- Washington State Department of Natural Resources. (2025). *Natural Heritage Information System*. Retrieved from <http://www1.dnr.wa.gov/nhp/refdesk/datasearch/>
- Wetlands Subcommittee, Federal Geographic Data Committee. *Classification of Wetlands and Deepwater Habitats of the United States*. Adapted from Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe (1979). Federal Geographic Data Committee, August 2013.

ATTACHMENT 1

Wetland Determination Datasheets.

Eastside Environmental Pros, Inc.

5 March 2025

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

Project/Site: EE-577 City/County: City of Mercer Island Sampling Date: 2025-03-05
 Applicant/Owner: Andrew & Courtney Ackley State: WA Sampling Point: SP-1
 Investigator(s): TA Section, Township, Range: S19T24R05
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 15%
 Subregion (LRR): A Lat: 47.74383239581532 Long: -122.14190263204382 Datum: NAD83
 Soil Map Unit Name: Kitsap silt loam, 15 to 30 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Sample Point taken within lowest area to the east undeveloped area close to stream, most of site is developed areas, Climatic Conditions were drier than normal, Wetland criteria not met. Areas seems to be highly maintained and manicured	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: 30 ft)				
1. <u><i>Pseudotsuga menziesii</i></u>	20%	YES	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____	_____	_____	_____	
20% = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft)				
1. <u><i>Buxus sempervirens</i></u>	5%	YES	NL/UPL	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 = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____	_____	_____	_____	
_____	_____	_____	_____	
_____	_____	_____	_____	
_____	_____	_____	_____	
_____	_____	_____	_____	
5% = Total Cover				
Herb Stratum (Plot size: 5 ft)				
1. <u><i>Arctostaphylos uva-ursi</i></u>	10%	YES	FACU	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____	_____	_____	_____	
_____	_____	_____	_____	
10% = Total Cover				
Woody Vine Stratum (Plot size: 15 ft)				
1. <u>None</u>	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>90%</u> % Cover of Biotic Crust <u>0%</u>				
Remarks: Hydrophytic vegetation criteria not met. Area is compromised of primarily bare ground and ornamental plants				

