



Eastside Environmental Pros

23 July 2025

EE-577

Andrew & Courtney Ackley
9603 SE 61st Pl,
Mercer Island, WA 98040

REFERENCE: King County Parcel 426000-0020 (CAO 25-015)

SUBJECT: Criteria Compliance & Project Narrative

Project Narrative:

The applicant proposes a small expansion of an 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.

The expanded portion of the structure is located almost entirely within the footprint of an existing impervious patio and artificial turf grass. 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.

Additionally, this development proposes installing a 198 square foot shed in the southeastern portion of the property as depicted in the Site Plan. This construction will result in a minor increase in impervious surfaces overall, but has been situated entirely outside of critical areas and their associated buffers, resulting in no direct or indirect impacts.

This narrative describes how the application meets the review criteria for Critical Area Review 2 in MICC 19.07.090, MICC 19.07.160, MICC 19.07.170, MICC 19.07.180 and/or MICC 19.07.190.

MICC 19.07.090 – Critical Area Review Process

The application meets the requirements for Critical Area Review 2, as it involves proposed development partially within a stream buffer and within a mapped geologically hazardous area.

- **Studies Include:** *Critical Areas Study* prepared by Eastside Environmental Pros, Inc. and a *Geotechnical Study and Critical Area Study* prepared by Geotech Consultants, Inc. in accordance with MICC 19.07.110. No additional information has been requested by the City to date.
- **Application Completeness:** A complete development application was submitted, including a Site Plan accurately delineating the location and boundaries of Critical Areas onsite including their required buffers, setbacks.

MICC 19.07.160 – Geologically Hazardous Areas

1. Identification of Geologically Hazardous Areas (GHA) on Site

A *Geotechnical and Critical Area Study* was prepared by Geotech Consultants, Inc. and more information can be found in their report. According to the City of Mercer Island GIS, the entire parcel is mapped as a *Potential Landslide Hazard Area*, and the southern portion is also designated as an *Erosion Hazard Area* (Page 2). However, no steep slopes are present on or adjacent to the property, and no steep slope hazard buffers apply (Page 2, Page 3). The nearest mapped landslide is approximately 500 feet south of the site, indicating no immediate landslide activity or direct hazard.

2. Description of Site Conditions

The geotechnical site evaluation, including subsurface exploration, confirms the site is underlain by glacially-compressed, dense native soils, predominantly medium-dense to dense silty sands with some gravel (Page 2). These soils are stable and suitable for supporting both existing and proposed structures (Page 3). No groundwater or wet soil conditions were observed during field exploration.

3. Impact of Proposed Development on Geological Hazards

The proposed additions are relatively modest and involve minimal ground disturbance. Excavation will be shallow, limited to a few feet in depth, and located on gently sloping terrain. The report confirms that the proposed construction will not negatively impact the stability of the site or adjacent properties (Page 3). There will be no adverse alteration of the slope profile or hydrological characteristics due to construction.

4. Mitigation Measures and Construction Recommendations

The report states that **no geologic buffers or mitigation measures** are required to address the Potential Landslide designation (Page 3). However, standard erosion control practices are recommended to mitigate the mapped Erosion Hazard. These include installation of silt fences or straw wattles on downslope areas, minimizing exposed soil, covering stockpiles, and preventing runoff or mud tracking during wet weather conditions (Page 3).

5. Statement of Risk Required by MICC 19.07.160(B)(2)

The following declaration is provided to satisfy MICC requirements:

"The construction practices proposed in this report for the alteration would render the development as safe as if it were not located in a geologically hazardous area and do not adversely impact adjacent properties." (Page 3)

6. Seismic Considerations (MICC 19.07.160(D))

The Site is classified as Site Class D (Stiff Soil) under the International Building Code (Page 4). The glacially-compressed soils underlying the site are not subject to seismic liquefaction due to the absence of near-surface groundwater (Page 4). Therefore, the proposed development is not expected to increase seismic risk or susceptibility to earthquake-induced ground failure.

Development standards – Erosion hazard areas.

- Compliance with chapter 15.09, storm water management program
- Compliance is documented in plan set AD102, AD103
- No drainage design necessary, net increase in impervious surface is less than 500 square feet (See Plan Set AD102)
- Total new and replaced hard surface area equals 500.94 square feet, no drainage design is necessary due to total being less than 2000 square feet (See Plan Set AD102, AD103)
- No net increase in geological instability on or off site as described in Geotechnical Report
- Non-impact described in critical area study Geotechnical Report

Development standards - Additional criteria for specific activities

- Less than 2,000 square feet of site disturbances are proposed, and project should be eligible for a waiver for seasonal disturbances if work should need to occur between October 1 and April 1.
- Geotechnical Study and Critical Area Study was prepared by Geotech Consultants addresses Geotechnical slope stability concerns, erosion and sedimentation impacts can be effectively controlled on site consistent with adopted storm water standards;
- The proposed construction work will not subject people or property, including areas off site, to an increased risk of associated impacts

This narrative satisfies the critical area reporting requirements for geologically hazardous areas under **MICC 19.07.160**, based on the professional findings and recommendations of the March 11, 2025 Geotechnical Report prepared by Geotech Consultants, Inc.

MICC 19.07.170 – Fish and Wildlife Habitat Conservation Areas

One non-fish-bearing (Type Ns) watercourse was identified onsite. No other fish and wildlife habitat conservation areas were identified on-site or within the Study Area. The stream, mitigation sequencing and mitigation measures, are discussed within the *Critical Areas Study* prepared by Eastside Environmental Pros, Inc.

MICC 19.07.180 – Watercourses

One non-fish-bearing (Type Ns) watercourse, **Stream 1**, was identified onsite.

- **Water Course identification:** Stream 1 is a constructed, rock-lined channel with piped segments to the east and west. It meets the definition of a Type Ns stream and requires a 60-foot buffer and 10-foot building setback per MICC 19.07.180.
- Piped portions of the stream meet the criteria under MICC 19.07.180.C.6.d for a 10-foot setback, due to the infeasibility of daylighting under an existing road.
- **Buffer and Setback Compliance:** The proposed expansion is situated almost entirely outside of the buffer, with only **32 square feet** encroaching into the buffer area. Buffer averaging is proposed to offset this encroachment: 32 square feet of degraded buffer will be replaced by higher-quality buffer comprised of mature native vegetation.

This approach retains at least 75% of the standard buffer width and provides a net gain in buffer function and habitat value, consistent with MICC 19.07.180.C.4 and the buffer averaging provisions in MICC 19.07.130(A)(2)(d).

- The proposed shed in the southeast corner of the site is entirely outside of all critical areas and buffers.

MICC 19.07.190 – Wetlands

No wetlands were identified on-site or within the Study Area based on field investigation using the U.S. Army Corps of Engineers methodology. Therefore, this section does not apply.

Conclusion

The proposed residential expansion and shed installation fully comply with the applicable requirements of Critical Area Review 2. Impacts have been avoided and minimized and proposed buffer averaging is consistent with MICC standards. No impacts to critical areas are expected, and where minor buffer modification occurs, mitigation is provided to ensure **no net loss of ecological function**. This project meets the review criteria for Critical Area Review 2 in MICC 19.07.090, MICC 19.07.160, MICC 19.07.170, MICC 19.07.180 and/or MICC 19.07.190.