
CITY OF MERCER ISLAND

COMMUNITY PLANNING & DEVELOPMENT

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STAFF REPORT & DECISION

CRITICAL AREA REVIEW 2 CAO23-014 (Exhibit 1)

Project No:	CAO23-014
Description:	The applicant proposes to construct a new single-family residence. A critical area review 2 (CAR2) application was submitted due to the proposed development location containing an open watercourse and geologically hazardous areas, specifically potential slide, steep slope and erosion hazard areas.
Applicant/ Owner:	Mei Yang / Zhang Bin and Feng Qi
Location of Property:	9433 SE 54 th St, Mercer Island WA 98040 King County Assessor tax parcel number: 143870-0145
Zoning District	R-15
Staff Contact:	Grace Manahan, Code Compliance Planner grace.manahan@mercerisland.gov 206-275-7764
Exhibits:	<ol style="list-style-type: none">1. Staff Report & Decision dated July 28, 20252. Development Application signed August 16, 20233. Geotechnical Engineering Study prepared by Merit Engineering, Inc., Inc., dated November 19, 20244. Letter prepared by Merit Engineering, Inc., dated May 1, 20255. Critical Area Study prepared by Wetland Resources, Inc., dated February 22, 20226. Memorandum prepared by Wetland Resources, Inc., dated September 19, 20247. Site Plan prepared by Lotus Landscape Design, dated June 5, 20258. Letter of Completeness, dated September 7, 20239. Notice of Application, dated September 18, 202310. Hazard Report generated by the City of Mercer Island on July 15, 202511. Watercourse Map generated by the City of Mercer Island on July 15, 202512. Critical Areas Notice on Title, recorded February 20, 2025 under King County Recorder's Number 2025022000024213. City of Mercer Island Review Letters<ol style="list-style-type: none">a. Review Letter 1, dated January 11, 2024b. Review Letter 2, dated July 24, 2024c. Review Letter 3, dated January 7, 2025d. Review Letter 4, dated March 20, 2025

14. Public Comments Received
 - a. Public comment from Barbara and David Beatty, dated September 30, 2023
 - b. Public comment from Michael and Jenny Yeh, dated October 17, 2023
15. Applicant's Response to Public Comments, dated June 6, 2025
16. Notice of Decision, dated July 28, 2025

INTRODUCTION

I. Project Description

The applicant proposes to build a new single-family residence (proposed development) at 9433 SE 54th St (subject property). A critical area review 2 (CAR2) application was submitted due to the proposed development location containing an open watercourse and geologically hazardous areas, specifically a potential slide, steep slope and erosion hazard area.

II. Site Description and Context

The subject property is located within R-15 Zone. The subject property is surrounded by single-family homes within zone R-15 to the north, east, and west with an open space to the south. The subject property contains an open watercourse as well as mapped geologically hazardous areas including potential slide, steep slope and erosion hazard areas (**Exhibit 10**).

Findings of Fact & Conclusions of Law

I. Application Procedure

1. The application (**Exhibit 2**) for a CAR2 was received by the City of Mercer Island on August 17, 2023. The application was determined to be complete (**Exhibit 8**) on September 7, 2023.
2. Under MICC 19.15.030, Table A, a CAR2 is a Type III land use review. Type III land use reviews require notice of application (discussed below). A notice of decision is issued once the project review is approved by the code official, followed by an appeal period (**Exhibit 16**).
3. The City of Mercer Island provided public notice of application for this Critical Area Review 2 Permit, as set forth in MICC 19.15.090 (**Exhibit 9**). The comment period for the public notice period lasted for 30 days, from September 18, 2023, to October 19, 2023. The following methods were used for the public notice of application:
 - 1) A mailing sent to neighboring property owners within 300 feet of the subject parcel.
 - 2) A sign posted on the subject parcel.
 - 3) A posting in the City of Mercer Island's weekly permit bulletin.
4. Two public comments were received (**Exhibit 14**)

II. State Environmental Policy Act (SEPA)

The proposal is categorically exempt from SEPA pursuant to WAC 197-11-800(1)(b)(i).

III. Consistency with the Critical Areas Code and Land Development Code

1. MICC 19.07.070 lists requirements for disclosure and notice on title. The applicant shall disclose to the city the presence of critical areas on the development proposal site and any mapped or identifiable critical areas within the distance equal to the largest potential required buffer applicable to the development proposal on the development proposal site.
 - a. The owner of any property containing critical areas and/or buffers on which a development proposal is submitted, except a public right-of-way or the site of a permanent public facility, shall file a notice approved by the city with the records and elections division of King County. The notice shall inform the public of the presence of critical areas, buffers and/or mitigation sites on the property, of the application of the city's critical areas code to the property and that limitations on actions in or affecting such critical areas and/or buffers may exist. The notice shall run with the land in perpetuity.
 - b. The applicant shall submit proof to the city that the notice has been recorded prior to approval of a development proposal for the property or, in the case of subdivisions, short subdivisions, and binding site plans, at or before recording of the final subdivision, short subdivision, or binding site plan.

Staff Analysis: A Critical Areas Notice on Title was recorded with the King County Recorder's Office on February 20, 2025 (**Exhibit 12**); therefore, this requirement is met.

2. MICC 19.07.090 describes the purpose and procedures by which the city will review and authorize development and verify consistency with this chapter.
 - a. Critical Area Review 2. The purpose of a critical area review 2 is to review critical area studies and mitigation plans in support of proposed buffer averaging and reduction of wetland and watercourse buffers.
 - b. Review timing and sequence.
 - A. When development and/or activity within a wetland, watercourse, fish and wildlife habitat conservation area or buffer associated with these critical area types is proposed, a critical area review 2 is required to be reviewed and approved prior to construction authorization.
 - B. When development and/or activity is proposed on a site containing only geologically hazardous areas, an application has the option of either:
 - i. Applying for a critical area review 2 in advance of construction permits, using the procedures required for a Type III land use review; or
 - ii. Requesting consolidation of the review of geologically hazardous areas together with construction permit review.
 - C. When development and/or activity is proposed on a site containing geologically hazardous areas and on or more of the critical area types listed in subsection (B)(2)(a) of this section or the associated buffer of one of those critical areas, a critical area review 2 reviewing all critical areas is required to be reviewed and approved prior to construction authorization, using the procedures required for a Type III land use review.

Staff Analysis: The applicant applied for a Critical Area Review 2 prior to applying for a building permit; therefore, the application is consistent with the review timing and sequence requirements.

3. MICC 19.07.100 lists requirements for mitigation sequencing. An applicant for a development proposal or activity shall implement the following sequential measures, listed below in order of preference, to avoid, minimize, and mitigate impacts to environmentally critical areas and associated buffers. Applicants shall document how each measure has been addressed before considering and incorporating the next measure in the sequence:
 - a. Avoiding the impact altogether by not taking a certain action or parts of an action. The applicant shall consider reasonable, affirmative steps and make best efforts to avoid critical area impacts. However, avoidance shall not be construed to mean mandatory withdrawal or denial of the development proposal or activity if the proposal or activity is an allowed, permitted, or conditional use in this title. In determining the extent to which the proposal should be redesigned to avoid the impact, the code official may consider the purpose, effectiveness, engineering feasibility, commercial availability of technology, best management practices, safety and cost of the proposal and identified changes to the proposal. Development proposals should seek to avoid, minimize and mitigate overall impacts based on the functions and values of all of the relevant critical areas and based on the recommendations of a critical area study. If impacts cannot be avoided through redesign, use of a setback deviation pursuant to section 19.06.110(C), or because of site conditions or project requirements, the applicant shall then proceed with the sequence of steps in subsections B through E of this section;
 - b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, using a setback deviation pursuant to section 19.06.110(C), using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
 - e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
 - f. Monitoring the impact and taking appropriate corrective measures to maintain the integrity of compensating measures.

Staff Analysis: The Geotechnical Engineering Study prepared by Merit Engineering, Inc., (**Exhibit 3**) addresses mitigation sequencing for the proposed development. The entire development site is encumbered by potential slide and erosion geologically hazardous areas (**Exhibit 10**), therefore avoiding the impact altogether is not possible. The soil cut slope recommendations made in this study are intended to reduce the overall ground disturbance while allowing for re-establishment of adequate slopes after construction. Temporary erosion control measures will be implemented during site work. The project also includes the restoration of the affected environment through the proposed landscaping plan, which includes the landscaping of all disturbed areas outside the proposed building footprint (**Exhibit 7, Sheet L-2**).

4. MICC 19.07.110 lists requirements for a critical area study. A critical area study is required when a development proposal will result in an alteration to one or more critical area buffers or when required to determine the potential impact to a critical area. The critical area study may be waived or modified if the applicant demonstrates that the development proposal will not have an impact on the critical area or its buffer in a manner contrary to the purposes and requirements of this chapter.

Staff Analysis: The applicant submitted a Geotechnical Engineering Study prepared by Merit Engineering, Inc., (**Exhibit 3**) that addresses all the requirements for a critical area study in MICC 19.07.110; therefore, this requirement is met.

5. MICC 19.07.160 lists standards for development on sites containing geologically hazardous areas.
 - A. Geologically hazardous areas are lands that are susceptible to erosion, landslides, seismic events, or other factors as identified by WAC 365-190-120. These areas may not be suited for development activities because they may pose a threat to public health and safety. Areas susceptible to one or more of the following types of hazards shall be designated as geologically hazardous areas: landslide hazard areas, seismic hazard areas, and erosion hazard areas.

Staff Analysis: The subject property contains landslide and erosion hazard areas. A letter prepared by Merit Engineering, Inc. (**Exhibit 4**) was submitted showing that the proposed development has incorporated all geotechnical recommendations so that the risk to the site and adjacent property is eliminated or mitigated such that the site is determined to be safe.

- B. Alteration within geologically hazardous areas or associated buffers is required to meet the standards in this section, unless the scope of work is exempt pursuant to section 19.07.120, exemptions, or a critical area review 1 approval has been obtained pursuant to section 19.07.090(A).
 1. 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.

Staff Analysis: The applicant submitted a Geotechnical Evaluation prepared by Merit Engineering, Inc. (**Exhibit 3**) that states that the proposed development incorporates all recommendations to render the site safe and will not increase the risk of landslide or erosion. The geotechnical engineering study and critical area study were reviewed and approved by the City of Mercer Island's third-party geotechnical reviewer Michele Lorilla, PE; therefore, this requirement is met.

2. Alteration of landslide hazard areas and seismic hazard areas and associated buffers may occur if the critical area study documents find that the proposed alteration:
 - a. Will not adversely impact other critical areas;
 - b. Will not adversely impact the subject property or adjacent properties;
 - c. Will mitigate impacts to the geologically hazardous area consistent with best available science to the maximum extent reasonably possible such that the site is determined to be safe; and
 - d. Includes the landscaping of all disturbed areas outside of building footprints and installation of hardscape prior to final inspection.

Staff Analysis: The Geotechnical Engineering Study prepared by Merit Engineering, Inc. (**Exhibit 3**), states that, provided the recommendations in the report are followed, the planned development will not adversely impact the stability of the neighboring properties or result in a need for increased critical area buffers on those adjacent properties. The proposed development has been reviewed by the Geotech professional and incorporates all geotechnical recommendations. The proposed development includes a landscaping plan that includes the landscaping of all disturbed areas outside of the building footprints and installation of hardscape, required prior to final inspection (**Exhibit 7, Sheet L-2**).

3. Alteration of landslide hazard areas, seismic hazard areas and associated buffers may occur if the conditions listed in subsection (B)(2) of this section are satisfied and the geotechnical professional provides a statement of risk matching one of the following:
 - a. An evaluation of site-specific subsurface conditions demonstrates that the proposed development is not located in a landslide hazard area or seismic hazard area;
 - b. The landslide hazard area or seismic hazard area will be modified or the development has been designed so that the risk to the site and adjacent property is eliminated or mitigated such that the site is determined to be safe;
 - c. Construction practices are proposed for the alteration that would render the development as safe as if it were not located in a geologically hazardous area and do not adversely impact adjacent properties; or
 - d. The development is so minor as not to pose a threat to the public health, safety and welfare.

Staff Analysis: The letter prepared by Merit Engineering, Inc. (**Exhibit 4**) states the development has been designed so that the risk to the site and adjacent property is eliminated or mitigated such that the site is determined to be safe; therefore, this requirement is met.

- C. Development is allowed within landslide hazard areas and associated buffers, when the following standards are met:
 1. A critical area study shall be required for any alteration of a landslide hazard area or associated buffer;

2. Buffers shall be applied as follows. When more than one condition applies to a site, the largest buffer shall be applied:
 - a. Buffer widths shall be equal to the height of a steep slope, but not more than 75 feet, and applied to the top and toe of slopes;
 - b. Shallow landslide hazard areas shall have minimum 25-foot buffers applied in all directions; and
 - c. Deep-seated landslide hazard areas shall have 75-foot buffers applied in all directions.

Staff Analysis: The Geotechnical Engineering Study prepared by Merit Engineering, Inc. (**Exhibit 3**) satisfies the requirements of a critical area study. The study finds that the risk of erosion and landslide activity at the site is very low and would not be affected by the proposed construction, provided the typical erosion control measures are in place during construction and all areas are landscaped following construction; therefore, these standards are met, as conditioned.

- D. When development is proposed within an erosion hazard area:
 1. All development proposals shall demonstrate compliance with chapter 15.09, storm water management program.
 2. No development or activity within an erosion hazard area may create a net increase in geological instability on or off site.

Staff Analysis: The development proposal was approved by Ruji Ding, Senior Development Engineer, who reviewed the development proposal for compliance with chapter 15.09. The Geotechnical Engineering Study prepared by Merit Engineering (**Exhibit 3**) finds that excavation and construction of the planned construction can be accomplished without adverse erosion impacts to the site and surrounding properties by exercising care and being proactive with the maintenance and potential upgrading of the erosion control system through the entire construction process.

6. MICC 19.07.180 lists standards for development on sites containing watercourses.
 - A. The applicant has demonstrated how impacts will be minimized and that avoidance has been addressed consistent with section MICC 19.07.100, mitigation sequencing:

Staff Analysis: The Critical Area Study and Memorandum prepared by Wetland Resources, Inc., (**Exhibit 5 and 6**) addresses mitigation sequencing for the proposed development and states all proposed development impacts are located outside of the watercourse buffer and associated setback. No impacts to the watercourse or associated buffer are proposed, therefore no mitigation is proposed. There is an existing garage located in the buffer that is proposed for removal. Site disturbance related to the removal of the garage will be limited to the existing structural footprint and a 696 square foot buffer restoration plan is proposed in the footprint of the existing garage.

1. The proposed development shall be in substantial conformance with **Exhibit 7** and all applicable development standards contained within Mercer Island City Code (MICC) Chapter 19.07.
2. The applicant is responsible for documenting any required changes in the project proposal due to conditions imposed by any applicable local, state and federal government agencies.
3. Construction or substantial progress toward construction of a development for which a permit has been granted must be undertaken within three years after the approval of the permit or the permit shall terminate. The code official shall determine if substantial progress has been made.
4. Landscaping of all disturbed areas outside of the building footprints and installation of hardscape is required prior to final inspection of the future anticipated building permit.
5. No development or activity within an erosion hazard area may create a net increase in geological instability on or off site.

DEVELOPMENT REGULATION COMPLIANCE – DISCLOSURE

1. The applicant is responsible for obtaining any required permits or approvals from the appropriate Local, State, and Federal Agencies.
2. All required permits must be obtained prior to the commencement of construction.

DECISION / RECOMMENDATION

Based upon the above noted Findings of Fact and Conclusions of Law, Critical Area Review 2 application CAO23-014, as depicted in **Exhibit 7**, is hereby **APPROVED as conditioned**. This decision is final, unless appealed in writing consistent with adopted appeal procedures, MICC 19.15.130, and all other applicable appeal regulations.

Approved this 28th day of July 2025.



Grace Manahan
Code Compliance Planner
Community Planning & Development
City of Mercer Island

If you desire to file an appeal, you must submit the appropriate form, available from the department of Community Planning and Development, and file it with the City Clerk within fourteen (14) days from the date after the notice of decision is made available to the public and applicant pursuant to MICC 19.15.130. Upon receipt of a timely complete appeal application and appeal fee, an appeal hearing will be scheduled. To reverse, modify or remand this decision, the appeal hearing body must find that there has been substantial error, the proceedings were materially affected by irregularities in procedure, the decision was unsupported by material and substantial evidence in view of the entire record, or the decision is in conflict with the city's applicable decision criteria.

Please note that the City will provide notice of this decision to the King County Department of Assessment, as required by State Law (RCW 36.70B.130). Pursuant to RCW 84.41.030(1), affected property owners may request a change in valuation for property tax purposes notwithstanding any program of revaluation by contacting the King County Department of Assessment at (206) 296-7300.