



OTTO ROSENAU & ASSOCIATES, INC.

Geotechnical Engineering, Construction Inspection & Materials Testing

6747 M. L. King Way South, Seattle, Washington 98118-3216 USA
Tel: (206) 725-4600 • Toll Free: (888) OTTO-4-US • Fax: (206) 723-2221
WBE W2F5913684 • WABO Registered Agency • Website: www.ottorosenau.com

May 2, 2025

Kathryn and Timothy Bauman
5928 77th Avenue SE
Mercer Island, WA 98040

Re: Response to Reasonable Use Exception Review Comments
Bauman Residence
5928 77th Avenue SE
Mercer Island, Washington

ORA Project Number: 25-0287

We understand that the City of Mercer Island provided geotechnical-related review comments while processing the Reasonable Use Exception request for the proposed project at 5928 77th Avenue SE. The review comment that was provided was as follows.

“The landslide hazard area may require buffers per MICC 19.07.160(C). Please have a geotechnical professional determine whether a buffer is required and add this critical area to the analysis for the reasonable use exception as necessary.”

Response to the geotechnical-related Reasonable Use Exception Review Comment

Otto Rosenau & Associates, Inc. completed a geotechnical study at the subject property related to an addition on the currently existing structure, which included completion of two borings 19 and 20 feet below the existing ground surface in June 2001. We also completed a brief site visit to meet with the project owners and architect on April 30, 2025, to evaluate the current site conditions and the currently proposed development.

Based on a review of the City of Mercer Island’s, GIS Portal, we understand that the site is encumbered with multiple overlapping geologic critical area features, including the following:

- Potential Slide Hazard Critical Area,
- Steep Slope Hazard Critical Area,
- Erosion Hazard Critical Area,
- Seismic Hazard Critical Area.

It is our opinion that a buffer will NOT need to be provided to address the landslide hazard critical area features that are present on the property, provided that the currently proposed structures are supported on deep foundation elements. The use of deep foundation support elements such as drilled piers, augercast piles, or driven steel piles will allow the new loads of the proposed structures to be transferred through the weaker near-surface soils to suitable bearing soils that

Bauman Residence
ORA Project No.: 25-0287
May 2, 2025
Page 2 of 2

we observed in our 2001 site investigation without imposing new loads on the existing site slopes. Furthermore, it is our opinion that the presence of deep foundation support elements at the proposed structures will provide resistance to potential lateral movement of the soils in the immediate vicinity of the proposed structures and will enhance the long-term stability of the existing site slopes.

If you have any questions, please contact us.

Sincerely,

OTTO ROSENAU & ASSOCIATES, INC.

A handwritten signature in blue ink that reads "Anthony Coyne". The signature is written in a cursive, flowing style.

Anthony Coyne, P.E.
Senior Geotechnical Engineer