

October 12, 2022

JN 21409

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via email: xiaoxiaee@gmail.com

Subject: **Addendum to Geotechnical Engineering Report and
Review of Plans**
Proposed Wu Residence
8480 – 85th Avenue S.E.
Mercer Island, Washington

Reference: *Geotechnical Engineering Study*, same site and project; Geotech Consultants, Inc.;
November 16, 2021.

Greetings:

This addendum to our November 16, 2021 report has been prepared to respond to Land Use Review comments made by City of Mercer Island in the plan review process. We have been provided with the revised drawings (architectural plans by Brandt Design Group, civil plans by Latitude 48, and shoring and structural plans prepared by SSF Structural Engineering) all of which were dated October 4, 2022.

Revise geotech report to include the following:

MICC 19.07.110 Critical Area Study

1. (B)(6) Photographic records of the site before the proposed alteration occurs

Response: Included in this letter are seven photographs showing the current condition of the site, before any modifications or alterations have occurred.

2. (B)(8) A description of mitigation sequencing implementation described in section 19.07.100 including steps taken to avoid and minimize critical areas impacts to the greatest extent feasible

Response: In order to satisfy MICC 19.07.100 this project has addressed mitigation of impacts to the Seismic, Steep Slope, Potential Landslide, and Erosion Hazard critical areas present on site in the following manners:

A – Avoiding Impact altogether:

- The site has previously been developed and all of the mapped geologic critical areas have already been disturbed or modified. The planned development includes foundation, drainage, and grading that will avoid increasing the impact to the critical areas. Excavation shoring and deep foundations will be utilized to prevent destabilizing the ground on, or around, the site.
- As a part of the development, the manmade steep slope in the northeastern corner of the site was to remain undisturbed. However, based on the location of the water meter as required by Mercer Island Public Works, some disturbance of that steep slope area is unavoidable. Please see our response in B for our approach.

B – Minimizing Impact:

- Work within the northeastern steep slope is limited to the removal of one tree and hand trenching for utilities. The utility trench is necessitated by the location of the new water meter chosen by Mercer Island Public Works, and reviewed with Mercer Island Engineering and Tree Reviewers. The planned shallow and limited excavation will not adversely impact the stability of the steep slope, or any of the other geologic critical areas located on, or around, the site.
- The project originally proposed to remove an existing site retaining wall that provides support for the toe of the northeastern steep slope, however this wall has been maintained as a means to minimize disturbance of the steep slope.

C – Rectify impacts:

- All work associated with utility installation and/or tree removal in the steep slope will be completed by hand in order to avoid impacts to stability or erosion potential on the steep slope. The disturbed area related to this work will be revegetated.
- Over the remainder of the development, all areas of bare soil will be covered by structure, hardscaping, or landscaping to provide permanent erosion protection.

D – Reduce or eliminate impact over time:

- Not Applicable

E- Compensate for impact:

- Not Applicable

3. (B)(11) A post-design memorandum prepared by a qualified professional confirming that the proposed improvements comply with the design recommendations

Response: We have reviewed the geotechnical aspects of the above-referenced drawings. Based on this review, the current plans conform to the recommendations of our *Geotechnical Engineering Study*.

We provide the following “statement of risk” to satisfy City of Mercer Island conditions:

“It is our professional opinion that the development practices incorporated into the review plans for the new development would render the development as safe as if it were not located in a geologic hazard area.”

Please contact us if you have any questions regarding this letter, or if we can be of further assistance.

Respectfully submitted,
GEOTECH CONSULTANTS, INC.

Marc R. McGinnis, P.E.
Principal



10/12/2022

cc: **The Brandt Design Group** – Bree Medley
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Photographs of Existing Site Conditions Before Proposed Alteration







