

01/05/2021



Group Northwest, Inc.

Geotechnical Engineers, Geologists,
& Environmental Scientists

December 18, 2020

G-5333

Mr. Chris Estes
6116 Chennault Beach Drive
Mukilteo, Washington 98275
Email: chrismestes@gmail.com

Subject: **ADDENDUM LETTER**
Proposed New Residence
6300 Webster Way
Mukilteo, Washington 98275

Ref: “City of Mukilteo Determination of Completeness, RUP-HE-2020-001 / SFR-
2020-005 / ENG-2020-009, Linda Ritter Senior Planner, October 18, 2020.”

“Geotechnical Reconnaissance, Residential Property Development, Snohomish
County Parcel No. 00408600400, 100XX 63rd Place West, Mukilteo, Washington,
Project No. 17-114-01, Geospectrum Consultants, Inc., November 27, 2017.”

“Estes Residence, 6300 Webster Ave, Mukilteo, WA, Nash Associates Architects,
September 30, 2020.”

Dear Mr. Estes,

We understand that the City of Mukilteo has requested a geotechnical addendum letter regarding compliance of the proposed project plans with recommendations outlined in the above-referenced geotechnical report, and that the geotechnical engineering firm that wrote the report is no longer accepting new work. We have read the above-referenced geotechnical report and reviewed the project plans to ensure that they are in conformance with the conclusions and recommendations described in the geotechnical report.

BACKGROUND INFORMATION

Based on the information provided, we understand that you are proposing to develop the west section of the existing vacant lot with the construction of a new two-story single-family residence with a south-facing daylight basement and attached garage. The garage will be accessible by a driveway that begins east of the intersection of Webster Way and 63rd Place W and runs parallel to the south property line towards the residence along gradually sloped topography. The residence will have a footprint of approximately 1700 square feet, with a total interior living space of 4,000 square feet within the three floors. We understand that excavations into the existing slope at the west section of the property will be required for the construction of the new residence, but this section of the property is not mapped as a steep slope. As noted in the above-referenced geotechnical report, the site contains steep to very steep slopes within the central and northeast areas and therefore is considered a Geologic Sensitive Area. The existing steep slope and the footprint of the proposed residence are illustrated in in Plate 1 – Site Plan.

GEOLOGIC SENSITIVE AREA REVIEW

The above-referenced geotechnical report mentions that a slope stability analysis was conducted for the steep slope areas in the central and northeast sections of the property. The analysis found that the property has safety factors for deep-seated slope failures greater than 1.5 for the static condition and 1.2 for the seismic condition, indicating that the property is stable in its existing condition. The geotechnical engineer recommended that the proposed residence's setback from the steep slope could be reduced from 25 feet due to the nature of the boundary between the moderate and steep slope areas because the boundary is lateral and not above or below the steep slope.

The geotechnical report concluded that site disturbance for the new residence is acceptable up to the edge of the steep slope area, but that a setback distance of 10 feet from the slope should be implemented regardless. The project plans indicate that the proposed footprint of the residence will be located no less than 10 feet from the edge of the steep slope, and that the driveway area will be located more than 25 feet away from the bottom of the steep slope. It is our opinion that the reduced setback will not cause any adverse impacts to the steep slope area at the central and northeast sections of the property.

CONCLUSIONS AND RECOMMENDATIONS

On December 16, 2020, Bryce Frisher, staff geotechnical engineer from our office, visited the property to conduct a site reconnaissance and ensure that the existing site conditions correspond with the conditions mentioned in the above-referenced geotechnical report. We observed that the west section of the property is relatively flat compared to the central and northeast sections of the property, and that the site appeared stable. The conditions we observed were similar to those described in the above-referenced geotechnical report. Based on the very dense and hard, grayish brown silts and silty sands observed during the subsurface investigation, we agree with the safety factors calculated by the slope stability analysis. Based on our review of the project plans, it is our opinion that the recommendations outlined in the above-referenced geotechnical report have been properly implemented into the design and, therefore, the project site will remain stable during and after construction of the new residence.

During construction, a representative from GEO Group Northwest, Inc. should be on site to monitor excavations to suitable bearing soils for the foundations. We should also be on site to inspect the progress of backfill and compaction, subsurface drainage installation, temporary and permanent erosion control, and to verify slope stability throughout the construction process, as noted in the geotechnical report.

PLAN REVIEW AND MINIMUM RISK STATEMENT

Based on the site conditions observed and our review of the project plans, it is our opinion that the recommendations outlined in the above-referenced geotechnical report have been properly implemented into the design of the proposed new single-family residence. The plans show that the residence will be located at the west section of the property where the topography does not contain any critical slopes with inclinations greater than 40%, and that site development will not occur within a setback distance of 10 feet from the western edge of the steep slope. In our opinion, these plans will not adversely impact the steep slope or the adjacent properties to the north and west.

Based on our final review of the project plans, it is our opinion that the property will not be adversely impacted by the new residence. The project will not increase the potential for soil movement, and the risk of damage to the new residence and to adjacent properties from soil instability will be minimal, provided that the recommendations outlined in the geotechnical report are satisfied during construction. Minimum risk does not mean no risk, but that necessary design measures have been taken to reduce the level of risk to a low or minimal quantity.

Sincerely,

GEO GROUP NORTHWEST, INC.



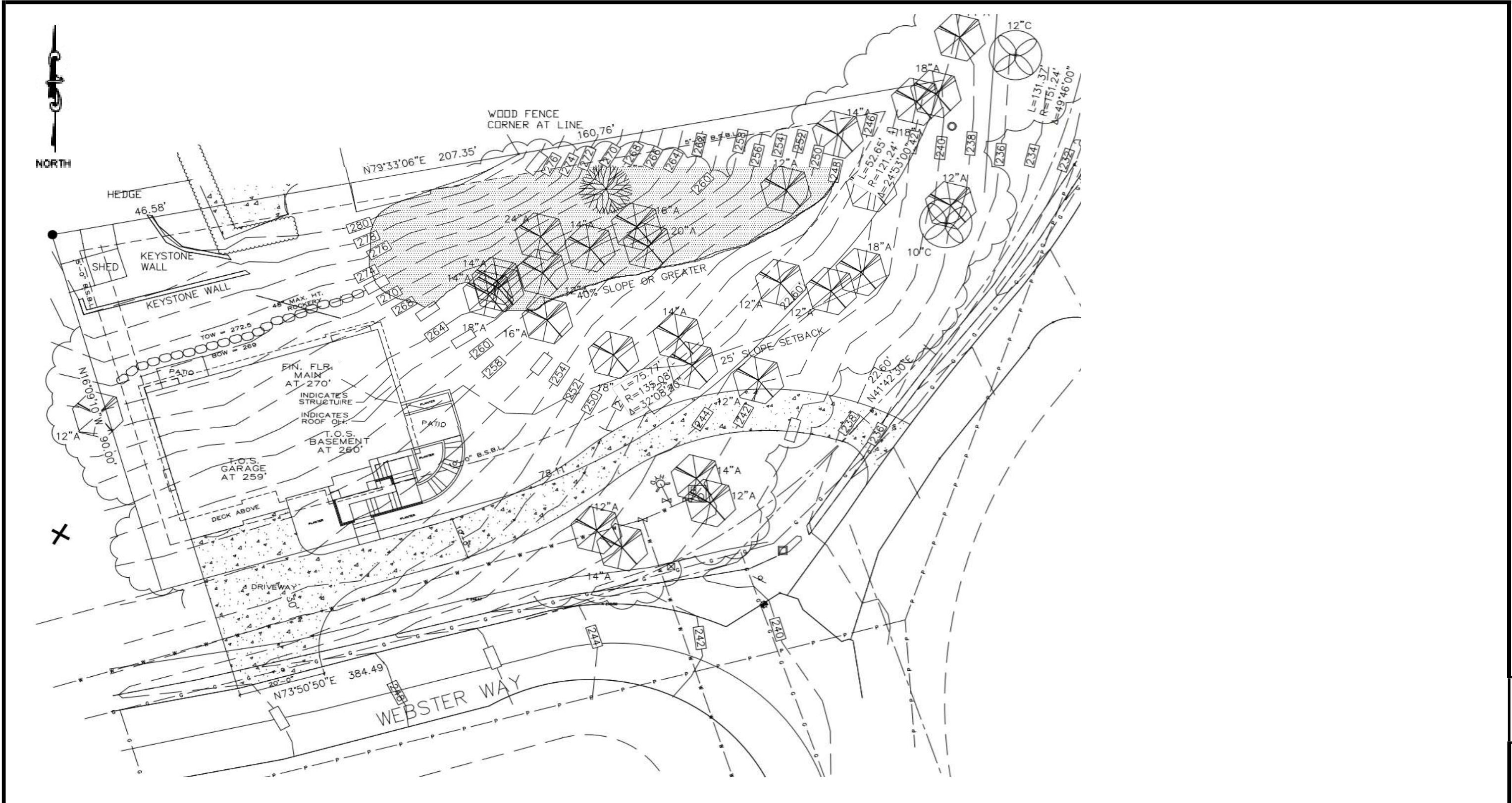
Bryce Frisher, E.I.T.
Staff Geotechnical Engineer




William Chang, P.E.
Principal Engineer

Plates:

Plate 1 – Site Plan



Source: Estes Residence, Site Plan, Nash & Associates Architects, Dated 9/30/2020

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| <div><div></div><div><div>Group Northwest, Inc.</div><div>Geotechnical Engineers, Geologists, & Environmental Scientists</div></div></div> | | | | <div><div><div>SITE PLAN</div><div>PROPOSED NEW RESIDENCE</div><div>6300 WEBSTER WAY</div><div>MUKILTEO, WASHINGTON</div></div></div> | | | | | | | |
| SCALE | AS SHOWN | DRAWN BY | BF | CHECKED BY | WC | DATE | 12/18/2020 | PROJECT NO. | G-5333 | PLATE | 1 |