

Timberline Engineering LLC Juneau, Alaska 907-635-1433 jagraves77@gmail.com

November 1, 2023

City & Borough of Juneau

Re: BLD23-573 – Douglas Eckland, Lot 52, Block 48, Douglas Townsite Hillside Endorsement Geotech Memo

To Whom it May Concern,

This memo addresses the stability of the slopes located at the project site at Lot 52, 5th Street, Douglas. The site grading consisted of excavation of overburden and glacial till. The glacial till is consolidated and dry, and consists of silt, sand and gravel. A minimal amount of 2"-minus shot rock borrow was brought in to grade a foundation pad. The foundation design includes concrete foundation walls and spread footings. The southwest wall is designed to retain the hillside behind the house and it is planned to extend the retaining wall out to the property lines on each side. The concrete retaining wall design is by Dave Gowers Engineering, LLC.

A drainage swale and area drain is planned behind the retaining wall to capture surface runoff and to direct it through buried pipes to the existing CBJ storm drain system on 5th Street. A perforated wall drain will also be installed to collect groundwater into the storm drain system.

For disturbed slopes and drainage swales uphill of the retaining wall, it is recommended to provide vegetative cover to stabilize the organic soils. Apply the City & Borough of Juneau's standard seed mixture and fertilizer (or similar grass seed and topsoil) to the slopes once grading is complete.

Site grading should direct surface water away from the house foundation and towards the concrete valley gutter on 5th Street. Gutters and downspouts are also recommended to direct roof runoff away from the house. Attached is a site plan showing the proposed drainage paths.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Jacob Graves, P.E.

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