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Oregon CEG #E957
Washington LEG #314

April 10, 2019

Stanley Roberts
In care of Sabrina Pearson, Plan Development, LLC

Re: **Summary of Initial Engineering Geologic Reconnaissance**
Tax Lot 600, Township 5 North, 10 West, Section 31 AA, Cannon Beach, Oregon

Dear Mr. Roberts and Ms. Pearson,

I am preparing this summary to advise of my initial reconnaissance findings from my visit to the subject property with Stanley Roberts, his brothers, and Jason Morgan, P.E., on April 10, 2019.

I first entered the property from down slope to the west after noting several sets of horizontal drains issuing from the toe of the hillslope rising above the Pacific Ocean Beach. I recognize these drains, as installed, as an engineered landslide mitigation technique. After entering the property by climbing up the slope and observing the building pad area, I initially noted three protective steel casings installed to about 3 feet above the ground surface. The steel casings contained smaller diameter blue plastic pipe with machine grooved internal channels. These, I recognize as slope inclinometer measurement installations used as a method to determine depth and rate of landside movement. A few minutes later in the Nenana Avenue right-of-way we observed two more inclinometer installations, and two nearby flush-mount surface monuments of the type also used to protect geotechnical subsurface monitoring installations. From these observations, and the site topography, I surmised that the property is located within a recently active landslide mass that has undergone slope stability mitigation efforts and monitoring.

When asked what he knew of the site history, Stanley Roberts shared that he was aware of the landslide history of the property and adjacent Hemlock Street, the toe drain installation, and subsequent repair and reopening of Hemlock Street after a period of closure. It is my understanding that Mr. Roberts' now deceased brother reportedly purchased Tax Lot 600 at discount with knowledge of the landslide history and that the Roberts brothers would like to advance their understanding of development potential for a home, vehicular driveway access and required public Nenana Avenue right-of-way improvement, and a possible stairway to access the beach.

During our discussion of site development potential, I pointed out that because of this history of slope instability, it would be necessary to consider the question of suitability for residential development based on a clear understanding of subsurface conditions and calculated slope stability of the site. I suggested that the geotechnical engineering consultant involved with the previous landslide characterization, stabilization design, and monitoring would have a far better understanding of homesite suitability than could developed from a surficial engineering geologic reconnaissance.

After our site meeting, I checked with City of Cannon Beach Public Works Director Karen LaBonte', and she confirmed the recent landslide status of Hemlock Street, and that the consultant for the slide is Geotech Solutions, Inc., with Oregon licensed Geotechnical Engineer Donald Rondema, P.E., G.E. as principal.

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I know Mr. Rondema and called him to discuss potential referral of him to the Roberts for his direct geotechnical engineering consultation regarding stability and development potential of the proposed homesite. Mr. Rondema indicated we was familiar with Tax Lot 600, was aware of the purchase by the Roberts', and seemed agreeable to working directly with the Roberts to address their stability and development concerns.

Based on this information, it is my recommendation that, rather than continuing with my engineering geologic services, Mr. Roberts would be better served by hiring Geotech Solutions, Inc. to obtain direct access and interpretation of the existing subsurface information and experience previously gained by Geotech Solution's exploration and design work involving the subject property.

I support reducing my work scope to services already provided. Mr. Roberts has previously sent me an advance retainer fee sum of $1,980.00, representing 12 hours budget, based on a fee rate of $165.00 per hour. With completion of the site reconnaissance, field consultation, discussion with City of Cannon Beach and Mr. Rondema, P.E., G.E., and preparation of this summary letter, I have charged 6 hours against the retainer. I would be happy to refund the balance of the unused funds to Mr. Roberts or reserve the remaining funds for further consultation or review as desired.

Regards,

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