

Civil Connection, LLC.

Providing Engineering & Material Testing Services

February 7, 2024

San Ken Homes
Attn: Mr. Kenny Lehtonen
586 Turnpike Road
New Ipswich, NH 03071

re: **Slope Review**
Tax Lot F-3-2 – Isaac Frye Highway
Wilton, New Hampshire
Project No. 24-136

Dear Mr. Lehtonen;

Civil Connection, LLC is pleased to submit this letter which summarizes our evaluation of the proposed slope for the above-referenced project in Wilton, New Hampshire. The following information was provided to our office for use in evaluating the slope:

1. Site Plan for an Excavation and Reclamation Grading Project – Tax Lot F-3-2 – Isaac Frye Highway, Wilton, New Hampshire, prepared by Rokeh Consulting, LLC. with latest revision date of September 25, 2023.
2. Planting Plan & Schedule for Tax Lot F-3-2 – Isaac Frye Highway, Wilton, New Hampshire, prepared by Terrain Planning & Design, LLC. with latest revision date of January 10, 2023.
3. Photographs of existing conditions.

Slope stability is a function of the geometry of the slope and the material from which the slope is comprised. Additional factors affecting the slope are the material protecting the surface and presence of water. The following is noted:

1. The native soil appears to vary from a f-c SAND, some Gravel, trace Silt to a f-m SAND, trace Gravel, trace Silt. Typical angle of repose for this material would be expected to range from 30 to 34 degrees.
2. No groundwater was observed or seen seeping from the surface. The face of the slope is comprised of the native material with no surficial protective strata.
3. The existing excavated slope face is at about 37 degrees +/-.

Based on our evaluation, the slope, in its existing state, would be expected to continue to erode and destabilize the surroundings as the angle of repose exceeds the soil estimate internal angle of friction. It is our understanding the project entails reconstruction of this slope to a 2H:1V Slope with a minimum 4" layer of loam, seeded, and protected from erosion, as the growth is established, with a Biodegradable Jute Fabric – North American Green Product or equal. The regrading will widen the slope from the current 42 ft run to a run of 77 ft with a mid-slope ditch installed to direct run-off. The resulting slope would have an angle of 26.57 degrees. The resulting angle of repose is less than the soils estimated internal angle of friction

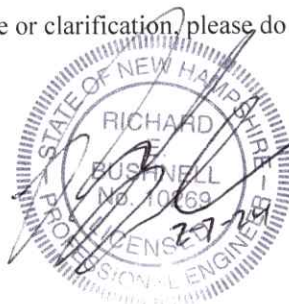
Based on our review of the proposed slope, existing conditions, materials being utilized, and final dimensions, the proposed slope would be expected to be stable and adequate at the 2H:1V orientation provided the native growth is established to protect against erosion.

Should you require further assistance or clarification, please do not hesitate to contact our office.

Very truly yours,
CIVIL CONNECTION, LLC.

Richard E. Bushnell, P.E.
Principal Engineer
cc: Mr. Jon Rokeh, P.E.

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