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February 21, 2022

William Wagner, Pres. Lake Bunggee Tax District P.O. Box 231 Woodstock, CT 06281

Re: Drainage Issue at Lake View Drive Lake Bunggee District

Dear Bill:

On Thursday February 17<sup>th</sup>, I met with Ross Ellison to examine the drainage issue along the north side of Lake View Drive (a gravel road) just southwest of Bungay Hill Road. The area examined lay just downstream of a pond area recently enlarged by excavation on the property lying to the north of the road. The pond was located directly adjacent to a stone wall running along the top of the slope separating the pond from the downstream road. A storage pile of uncovered and un-stabilized soil was situated just north of the stonewall and west of the excavated and expanded pond area; no sedimentation or erosion controls were noted. A drainage pipe situated near the top of the slope was found to be discharging flow directly from the pond along the relatively steep slope (7 – 8 feet above the road surface) into a shallow gutter running alongside the north edge of the gravel road. Seepage was also noted emanating from the embankment in several locations at the time of the inspection. Exacerbating these problems were the presence of several large trees in some of the saturated areas along the top and side of these slopes, along with low hanging utility wires along the same side.

It was apparent that the flow from the ponded area was contributing to an unstable shoulder situation on the north side of the gravel road surface. The outflow was collected in a shallow swale and subsequently directed westerly toward a small drainage pipe crossing the road and then channeled toward Lake Bunggee between properties at No. 32 and No. 42 Lake View Drive. Just prior to the crossing, it was evident that a layer of sediment was also obstructing the flow entrance to the pipe crossing, some of it coming from the road and some from the adjacent property to the north.

From these observations, it is evident that the instability and saturation of the gravel road surface and, in particular the shoulder area, is due to two factors, one being the seepage of groundwater in the direct vicinity of the slope downstream of the pond and,

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most importantly, the directed flow of the drainage pipe emanating from the pond and into the swale area directly adjacent to the travel surface of the road. Overall, the transport of sediment will also be detrimental in the long term to the degradation of water quality in the lake by the introduction of sediment from upstream watershed areas.

In order to alleviate the issues identified here, I would highly recommend the installation of a proper drainage system which, at this point, will necessarily include the discharge from the pond that shows signs of recent enlargement by excavation. This will necessitate a proper topographic survey, delineation and assessment of the overall wetland situation, design of drainage improvements and, finally, the construction of new facilities.

Should you have any questions, please feel free to contact me at your convenience.

Respectfully yours,

Karl F. Jeimoire

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