

June 13, 2019

Caled Carr EIT
MEDENBACH & EGGERS CIVIL ENGINEERING & LAND SURVEYING, P.C.
4305 US HWY 209
Stone Ridge, New York 12484

**Subject: 850 Route 28, LLC. Sound Study
Response to Ulster County Planning Board Recommendation Letter**

Dear Mr. Carr:

Below please find H2H's response to the board's comments regarding the potential noise impacts to Onteora Lake, and state lands within the Bluestone Wildforest (state lands).

The major source of sound during site development work having the potential to cause an increase in ambient sound levels on state land is the primary crusher, operating at 96.0 (dB). Given the location of the primary crusher shown on Figure 2 of H2H's Noise Study Report Dated February, 2019 the projected sound level at the site's northwestern property boundary assuming an unobstructed straight-line path from the primary crusher to the property boundary is 84.0 (dB). The major sound source along the northwestern property boundary during manufacturing operations will be the unloading and stockpiling of raw material along the northwestern Phase 1 boundary (Figure 2 of H2H's Noise Study Report Dated February, 2019). During the 12/29/2019 sound study a front-end loader loading material, and creating stockpiles was recorded operating at 65.7 (dB) at a distance of 100 feet (Logging Station 15, H2H Sound Study Dated 2/2019). The proposed stockpiling area is proposed to be located ~100 feet from the northwestern property boundary giving a projected sound level of 65.7 (dB) during manufacturing operations.

Based on historic sound level measurements collected by H2H a 10 foot by 15-foot earthen berm will cause a ~14 dB reduction in sound levels. Using an earthen berm as an additional mitigating factor a projected sound level of 70.0 (dB) at the northwestern property boundary during site development work, and a projected sound level of 51.7 (dB) during manufacturing operations can be expected.

The ambient sound level at the site's western property boundary (Logging Station 13, H2H Sound Study Dated 2/2019) collected during the 12/29/2019 on site sound study is 40.8 (dB). Given the ambient sound level of 40.8 (dB) an increase of 29.2 (dB) can be expected at the northwestern property boundary during site development work. Though this is a significant increase the site development work is a temporary project, and will only be taking place during weekdays during daytime hours. Given the ambient sound level of 40.8 (dB) an increase of 10.9 (dB) can be expected at the northwestern property boundary during manufacturing operations. H2H recommends moving the raw materials stock pile to a more central location on site to reduce the offsite sound impacts to state lands during manufacturing operations.

If you have any questions regarding this information feel free to contact me at (518) 270.1620 ext. 102.

Very truly yours,

H2H Associates, LLC

A handwritten signature in cursive script, appearing to read "M. Bell".

Project Geologist

c. Richard A. Hisert, Ph.D. PG (H2H Associates, LLC)