



December 10, 2024

VIA EMAIL

Ledyard Planning & Zoning Commission
741 Colonel Ledyard Highway
Ledyard, CT 06339

RE: Response to Mount Decatur Project Application Letter (EX117)

Dear Members of the Ledyard Planning and Zoning Commission:

On behalf of Maine Drilling and Blasting, Inc. ("MDB"), I write in response to the letter from Ms. Lara Stauning to the Ledyard Planning & Zoning Commission, dated October 22, 2024 (EX117), in which Ms. Stauning expresses her concerns with blasting activities that occurred in 2023 near her home in Bozrah, CT.

In providing this response, please note that MDB will only respond to statements in which MDB is directly involved and will not make comments regarding the views or opinions of our customer(s) or 3rd party contractor(s).

MDB performed drilling and blasting services for Coit Excavating from March-August 2023 in connection with the Stockhouse Road Project in Bozrah, CT (the "Stockhouse Project"). Ms. Stauning's property is an abutting property to this location. MDB's blast work on the Stockhouse Project was all well within the industry standard which was verified by measuring and recording the ground vibrations from each blast. Specifically, the peak particle velocity (PPV) of the ground vibration is used to determine the probability of vibration-induced damage to a structure. The industry standard for safe blasting is 2.0 in/sec PPV or less and is based on a study by the U.S. Bureau of Mines (RI 8507). Two inches per second (2.0 in/sec) is the accepted guideline used to protect weaker building materials (e.g., sheet rock and/or plaster) from damage in a typical structure. This criterion is very conservative and reflects caution used industrywide as well as by public safety officials. By comparison, other materials such as concrete, bricks, block, and tile can withstand much greater ground vibrations (4.0 in/sec to 10.0 in/sec).

Here, none of the recorded ground vibrations from the Stockhouse Project exceeded 0.91 in/sec peak particle velocity (PPV) while measuring only 220 feet from the blast location. When considering the additional distance to Ms. Stauning's property (approximately 750 feet from the blast location), the expected ground vibration readings would have been only 0.128 in/sec. This vibration is only 6.4% of the intensity required to approach threshold damage (i.e., 2.0 in/sec) and well below those levels known to cause the types of damages that were claimed. All readings for this Project were well within tolerances and acceptable limits that are known to be safe for all structures.

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In response to Ms. Stauning's other comments:

Noise:

During the Stockhouse project, MDB followed federal requirements for all signals and did everything necessary to minimize the noise impact to abutting properties. As per Occupational Safety and Health Administration (OSHA) standard CFR 1926.909, "before a blast is fired, a loud warning signal shall be given by the blaster in charge". There are three separate warning signals that must be sounded for each blast that occurs. Moreover, MDB offers property owners a phone call notification at 24 hours and/or 1 hour prior to the commencement of the blasting. Ms. Stauning requested this notification and was called 1 hour before each blast for the duration of the Project. And, as Ms. Stauning concedes in her letter, the noise caused by the blast itself was momentary and lasts between 0.25-0.5 seconds. Any noise impact on Ms. Stauning was both expected and minimal.

Traffic:

The Company followed all posted travel routes and adhered to all local, state, and federal laws pertaining to travel to & from the Stockhouse Project location.

Property Damage:

A pre-blast survey was completed of Ms. Stauning's property on March 30, 2023. This survey consisted of a digital audio-video recording of both the interior and exterior conditions of her property. During this visit, a water sample was also taken and tested using an independent laboratory. A copy of the pre-blast survey and water test results were provided to Ms. Stauning on June 16, 2023.

On July 23, 2023, MDB received a damage complaint form from Ms. Stauning. An MDB employee who specializes in pre & post blast surveys completed another in-home site visit on July 26, 2023. Consistent with MDB practice, an investigation into the damage complaint was then undertaken, including an analysis of all relevant project blasting logs and seismograph readings, and a review of both the pre-blast survey and post-blast site-visit. Note, for privacy reasons, MDB will not discuss the findings of the pre-blast survey, post-blast damage complaint site-visit, or the specifics of the investigation and ultimate determination with anyone other than the property owner.

As mentioned in the determination letter provided to Ms. Stauning on August 18, 2023, if she is not satisfied with our findings, we recommend she contacts her insurance company so that they may conduct an investigation using an independent engineer who is trained in vibration analysis. We will be glad to share our records with them so that they may conduct a full investigation on Ms. Stauning's behalf. We fully expect the results of that investigation to be consistent with the conclusions in MDB's determination letter to Ms. Stauning.

Loss of Participation:

MDB has no impact on Ms. Stauning's choice to participate in community engagement opportunities. It is unrealistic to place blame on a company for Ms. Stauning's personal withdrawal from such activities.

Thank you for your time and allowing me to respond to this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'CS', is written over a horizontal line.

Christopher Scott
Risk Management Department
Pre-Blast & Claims Supervisor