



July 6, 2023 Aercoustics Project #: 17123.05

Waterford Group

70 Ewart Ave. RR#8 Brantford, Ontario

ATTN: Caitlin Port, MHBC

Ed Lamb, Waterford Sand and Gravel

Subject: Law Quarry Extension Noise Impact Study

JART Comment Letter Responses

1 Introduction

Aercoustics Engineering Limited (Aercoustics) was retained by the Waterford Group to prepare a Noise Impact Study (NIS) for the proposed Law Quarry Extension in Wainfleet, Ontario.

This document has been prepared to address comments contained in Appendix 6 of a comment letter from Joint Agency Review Team (JART), dated January 13, 2023. Aercoustics has prepared a revised Noise Impact Study dated July 6, 2023, herein referred to as the "Report".

2 **Peer Review Comment Responses**

1. The reviewer notes that there is a single-family dwelling owned by the operator which was considered non-noise sensitive in the NIS and recommends that the receptor be considered noise-sensitive.

Per Section 3.2 of the revised Report, the two existing dwellings to the northeast of the Law Quarry Extension lands are owned by the proposed operator and are planned to remain vacant. The licensee will retain ownership or control of and will vacate houses within additional lands owned or controlled by applicant for the duration of the extraction operation. If the houses are occupied or the properties sold the licensee shall notify MNRF immediately and provide mitigation necessary to ensure provincial noise, air, and ground vibration and dust limits are satisfied.

2. The reviewer requests that road traffic data be included in the Report.

Additional road traffic data from the Ministry of Transportation has been included in Appendix B of the revised report.

3. The reviewer requests confirmation regarding the acoustical significance of maintenance activities within the site, requesting that such activities be assessed in the study.

Any maintenance activities occurring outside of regular operational hours would be expected to be acoustically insignificant due to the shielding and setback afforded to sensitive receptor locations, which were designed to effectively mitigate the steady noise output of much louder equipment.

4. The reviewer requests that CadnaA noise modelling setup parameters be included.

CadnaA parameters have been included in the revised NIS.

5. The reviewer requests clarification regarding the heights at which various sources were assessed in consideration of the worst-case noise output, including clarification regarding at-grade processing.

At-grade processing is not expected during extraction and processing operations of the site. Noise sources were modelled at the worst-case elevations for each phase and subphase:

- Drill operating approximately at grade/at top of rock
- Processing plant operating at top of first bench (nominally 17 m below grade)
- Extraction loader(s) operating at top of first pass of first bench (nominally 4-5 m below existing grade)

This has been clarified in the revised Report.

6. The reviewer requests clarification as to whether Biedermann Road was assessed as being removed or remaining in the noise study, and which scenario represents the worst-case noise impact.

The removal or retention of Biederman Road was reviewed in detail and was found to have an insignificant impact on the worst-case noise impacts. The worst-case noise impacts at sensitive locations are driven by drilling, processing, and extraction operations, which are not impacted by Biedermann Road.



The Noise Study & reported sound levels include Biedermann Road remaining which, compared to Biedermann road being removed, includes trucks travelling up a ramp from the extension lands, moving at-grade to the existing lands, and travelling down grade.

7. The reviewer requests clarification regarding the assessment of Receptor R16 and its non-noise sensitive status.

Additional clarification has been provided in Section 5.2 of the revised report.

Receptor R16 is now owned by the operator of the proposed Quarry Extension. Please see response to Item #1, above.

8. The reviewer requests that a typo be corrected in Table 5 of the NIS.

This typo has been corrected in the revised Report.

Please do not hesitate to call if there are any questions or concerns.

Sincerely,

AERCOUSTICS ENGINEERING LIMITED

Kohl Clark, B.Eng., P.Eng.

Derek Flake, M.Sc., P.Eng.