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## MEMORANDUM

<b>DATE:</b>	2024-03-13	<b>RWDI Reference No.:</b>	2202279
<b>TO:</b>	David & Debbie Sim	<b>EMAIL:</b>	magnoliagallery@rogers.com
<b>FROM:</b>	Monika Greenfield Slavi Grozev	<b>EMAIL:</b>	Monika.Greenfield@rwdi.com Slavi.Grozev@rwdi.com
<b>RE:</b>	<b>Sim Land Severance Noise Assessment Background Information Burnside Bridge Road Land Severance Burnside Bridge Road, McDougall, Ontario</b>		

Dear David & Debbie,

This memorandum was prepared as a follow up to the meeting held between RWDI AIR Inc. (RWDI), List Planning and the Municipality of McDougall (McDougall) on March 7, 2024, regarding the severance of Part of Lots 69 & 71 RCP Plan 328 to create three new lots along the south side of Burnside Bridge Road in McDougall. RWDI was requested to provide additional information to aid in McDougall's decision-making process.

### Background

RWDI prepared a noise study in support of the severance titled "Burnside Bridge Road Municipality of McDougall, Ontario Land Use Compatibility / Mitigation Study (Noise)", dated December 24, 2021.

The lots are opposite of the Hall Construction Quarry (Quarry). The Quarry retained SLR Consulting (Canada) Ltd. (SLR) to prepare a noise report documenting the site's activities and their sound levels. The results are found in a report titled "Environmental Noise & Vibration Assessment, Parry Sound Area Planning Board Consent Application B46/2021 (McDougall) – (Sim Consent)" dated October 25, 2023. This report has been provided to McDougall and RWDI. In addition to preparing the study, SLR also peer-reviewed RWDI's report and issued comments in a letter titled "Burnside Bridge Road Severance – Land Use Compatibility / Mitigation Study (Noise)", dated July 11, 2022.

SLR's study provides Quarry site plans and licensing figures. These are provided for context in **Appendix A.**

The Quarry's operational plan notes that the following equipment will be normally used on site, but does not provided details on how and where:





- Air track drills;
- Scales;
- Screening Plants;
- Crushers;
- Asphalt Plant;
- Concrete Plant;
- Boom Trucks;
- Forklifts;
- Generators;
- Loaders;
- Excavators;
- Bulldozers;
- Backhoes;
- Other excavation equipment; and
- Trucks.

This is a general list of equipment and typical of such Quarry activities.

Current Quarry operations include removal of overburden (considered temporary construction activity, thus not subject to noise assessment), drilling and excavation, and blasting (subject to a different assessment).

## **Potential Future Quarry Activities**

In addition to the equipment that is currently in use, future activities may also include aggregate operations such as crushing and screening.

The plan also notes that portable asphalt plants and concrete plants operating above grade are subject to a Ministry of the Environment, Conservation and Parks (MECP) Certificate of Approval (now called Environmental Compliance Approval, or ECA), as well as municipal approval. Therefore, pending approval, such activities may also be present in the future. Condition 1.2.17 in the site plans states that this equipment will be portable and temporary in nature but could be permanently established in the future.

Temporary plants are subject to mobile ECA requirements set by the MECP. Mobile ECAs contain setback distances intended to demonstrate compliance with MECP sound level limits regardless of where they are located in the province. Mobile ECAs also limit the time equipment can spend on site within a calendar year to 60 days. The Director can extend this, if there is a case to do so.

The plans also show the excavation depths and cross sections indicating the required sloping. As excavation progresses, it appears that a natural berm (i.e. barrier) will form which will reduce the sound levels off-site, more specifically towards the lots to be severed.

## Quarry Noise Assessment

RWDI's assessment focused on current operations, and some future aggregate activities, but did not include the entire range of future aggregate activities, an asphalt plant, or a concrete plant.

SLR's assessment included several scenarios, including future aggregate activities, asphalt, and a concrete plant.

Although there are some differences in operating assumptions, at a high level both assessments arrive at similar conclusions – there will be sound level exceedances at the proposed lots (i.e. sound levels in excess of MECP's default sound level limits as outlined in NPC-300). However, under most modelled cases, these exceedances are limited to the northern portion of the lots, as well as some of the middle sections. Both studies show that compliance, even under the most-conservative future activities can be achieved at the southern portion of Lots 1 and 2. There are a couple of operational scenarios where compliance at Lot 3 will be limited, but assessments show that compliance can be achieved under most scenarios. **Figure 1** below shows where compliance can be achieved under the most conservative scenario SLR has presented.

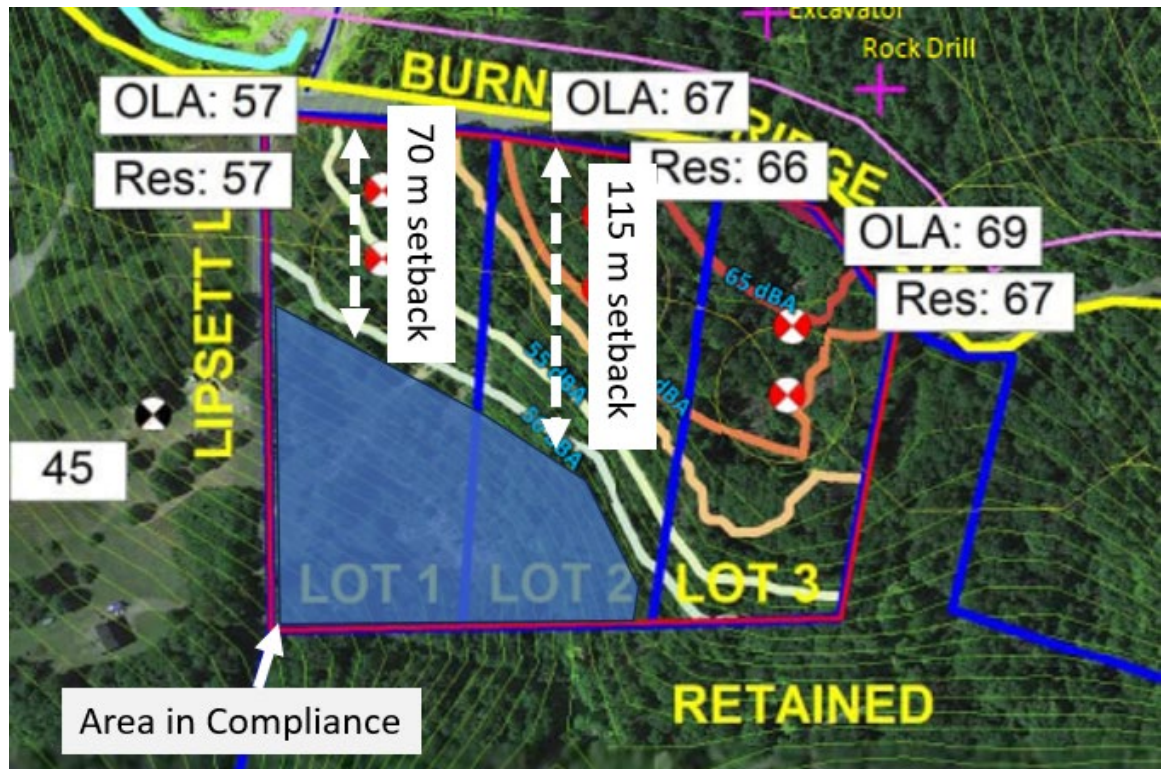


Figure 1: SLR Worst-Case Sound Level Impacts and Compliance Areas

**Figure 2** shows a less conservative, but still impactful scenario and the parts of the lots that are in compliance.

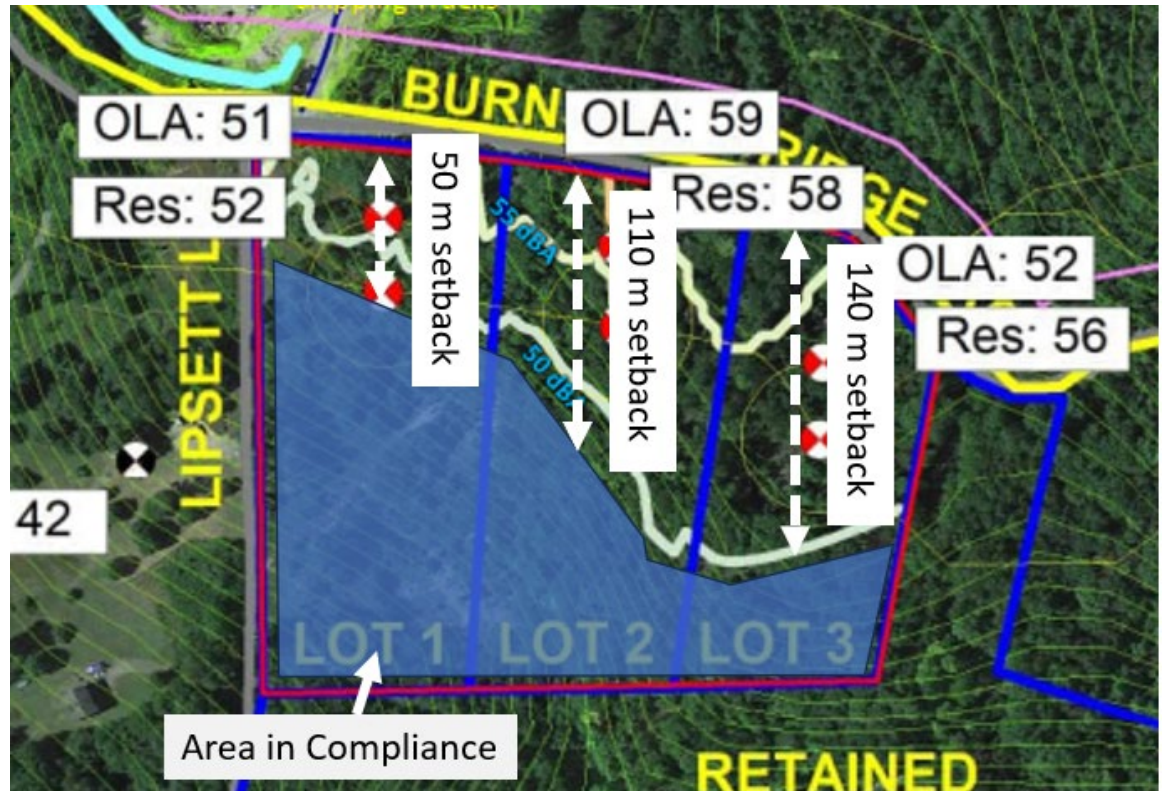


Figure 2: SLR Conservative Sound Level Impacts and Compliance Areas

Both figures show the setbacks from Burnside Road at which compliance is demonstrated in SLR's report which was prepared for the Quarry.

Other operating scenarios modelled by SLR show larger compliance areas, thus are not as restrictive as the ones shown above.

## Recommendations

As demonstrated in the figures above, compliance can be shown based on the Quarry's worst-case operations. In addition to the setbacks noted in the figures, RWDI has the following recommendations that would aid in demonstrating compatibility with the Quarry:

- Maintain dense (i.e. enough to completely block line-of-sight to the Quarry), tall foliage within the setback distances shown in Figures 1 and 2;
- Construct dwellings at the rear of the lots as indicated in the figures;
- Limit dwellings on Lot 3 to a single storey;



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- Consider locating garages or workshops (i.e. non-noise sensitive spaces) on the northern side of any dwellings and facing the Quarry;
- Orient windows to sensitive spaces (e.g. bedrooms and living rooms) away from the Quarry.

All studies done to date conclude that a combination of the above recommendations will result in compatibility between the lands.

## Conclusions

Although RWDI's and SLR's noise assessment assumptions differ, the overall conclusions show that compliance with the Quarry operations can be achieved at large areas of the lots. That, paired, with a combination of the recommendations made above, would result in compatibility between the land uses. Thus, the lands can be severed and used to construct residential dwellings.

Yours truly,

A handwritten signature in blue ink that reads "Monika Greenfield".

Monika Greenfield, M.Sc.  
Senior Project Manager  
RWDI

March 13, 2024  
Attach.



## STATEMENT OF LIMITATIONS

This letter entitled "Sims Land Severance Noise Assessment Background Information" was prepared by RWDI AIR Inc. ("RWDI") for David & Debbie Sim ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared. Because the contents of this report may not reflect changes made to the facility and/or the operations therein after the date of this report, RWDI recommends that it be retained by Client in the event such changes are contemplated/implemented in order to verify that the results and recommendations provided in this report are still applicable for such changes.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein to understand the different factors which may impact the conclusions and recommendations provided.

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# APPENDIX A







