

## BURNSIDE BRIDGE ROAD

MUNICIPALITY OF MCDOUGALL, ONTARIO

LAND USE COMPATIBILITY / MITIGATION STUDY (NOISE)

RWDI # 2202279

December 24, 2021

### SUBMITTED TO

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## EXECUTIVE SUMMARY

RWDI Air Inc. was retained by David & Debbie Sim to complete a Land Use Compatibility Study in support of Consent Application No. B46.2021(McD) that has been submitted to the Municipality of McDougall, Ontario. The application is to allow for the subdivision of Part of Lots 69 & 71 RCP Plan 328, to create three new rural lots along the south side of Burnside Bridge Road frontage, excluding the river front lot parcel.

This assessment focuses on sound emissions from sources at the existing Georgian Rock Company Ltd. Quarry located on the north side of Burnside Bridge Road, and the potential effect on sensitive receptors (dwellings) that could be constructed on the three proposed rural lots. Quarry operation noise sources typically include a loader, excavator, drill, and truck traffic. A mobile crusher, under its own environmental permit, is brought on to the site when necessary. Two worst-case operating scenarios and two typical operating scenarios for current and potential future operations were developed for this assessment, based on measurements of similar equipment on file at RWDI and from published sound levels for typical construction equipment, as the quarry was not operating at the time of this assessment. Sound levels assigned to the quarry sources in each scenario were modelled using the Cadna/A software package.

The modelling results were assessed against provincial noise guidelines (NPC-300 limits) at points of reception on the three proposed lots. Under the assumed current “typical operations” scenario, the quarry was found to be in compliance with applicable limits at certain portions of the lots. If future quarry operations are extended to include the lands located to the southeast of the current operational area, there is potential for the modelled results to exceed the applicable limits.

No mitigation was assumed for the quarry, as this information was not available at the time of this assessment. It is likely that there are stockpiles, ground depressions and earthen berms that may reduce the off-site sound levels. Therefore, the modelled results are considered to be conservative. The report recommends that a warning clause be included in any building permits to be issued for these lots by the Municipality. A number of potential mitigation measures are also listed for future consideration, should a builder wish to construct homes on these lots.



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## APPENDIX A

**Appendix A:** Consent Application



## 1 INTRODUCTION

RWDI Air Inc. was retained by David & Debbie Sim to complete a Land Use Compatibility Study in support of Consent Application No. B46/2021 (McD) that has been submitted to the Municipality of McDougall. The application seeks to allow for the subdivision of Part of Lots 69 & 71 RCP Plan 328 (subject lands owned by the Sim's) to create three new rural lots along the south side of Burnside Bridge Road frontage, located in the Municipality of McDougall, Ontario, exclusive of the river front lot parcel. The intent of this study is to identify where potential incompatible land uses could arise due to noise and to provide conceptual recommendations to prevent incompatibilities.

This assessment focuses on sound emissions from sources at the existing Georgian Rock Company Ltd. Quarry (the quarry) located on the north side of Burnside Bridge Road, and the potential effect of the sound emissions on sensitive receptors (dwellings) that could be constructed on the new rural lots. At the time of this noise impact assessment, the subject lands are unoccupied. A copy of the Consent Application No. B46/2021 (McD) is provided in **Appendix A**.

## 2 ASSESSMENT CRITERIA

The Municipality of McDougall Official Plan (Official Plan) requires a land use planning report to assess the potential impacts from commercial and industrial sources on surrounding land uses, and to provide mitigation measures to reduce any potential negative impacts. The Official Plan requires the assessment to be completed following methods outlined in the Ontario Ministry of the Environment, Conservation and Parks (MECP) NPC-300, and with additional guidance drawn from the MECP Guideline D-6 for assessing compatibility between Industrial Facilities and Sensitive Land Uses (MECP, 1995).

The Official Plan and Guideline D-6 are intended to minimize encroachment of industrial facilities on sensitive land uses. The documents provide guidance and regulations to address potential zoning incompatibilities due to emissions such as noise, vibration, odour, and dust.

Both documents provide a classification scheme for industries based on their potential for emissions that could cause annoyance. Potential influence areas and recommended minimum separation distances are provided for each class of industry in **Table 1**.



**Table 1: Summary of Guideline D-6**

Industry Class	Definition	Potential Influence Area	Minimum Separation Distance
I	Small scale, self-contained, daytime only, infrequent heavy vehicle movements, no outside storage.	70 m	20 m
II	Medium scale, outdoor storage of wastes or materials, shift operations, and frequent heavy equipment movement during the daytime.	300 m	70 m
III	Heavy Industrial Uses: Large scale, outdoor storage of raw and finished products, large production volume, continuous movement of products and employees during daily shift operations.	1000 m	300 m

Where a sensitive land use is within the potential influence area as defined in **Table 1**, an assessment of the potential impact and mitigation measures to prevent adverse effects is required. From a noise perspective, the quarry is classified as Class II, based on typical quarry operations. To assess the potential effect from noise, sound levels from sources at the quarry are assessed cumulatively at the nearest noise sensitive receptors.

The allowable sound level limits at the noise sensitive receptors are established in the MECP Publication NPC-300 (MECP, 2013). The NPC-300 exclusion limits are determined from the level of urbanization, or ‘Class’, at the noise-sensitive land use. Noise-sensitive land uses surrounding this proposed development are in a Class 2 acoustical environment. A Class 2 area refers to an acoustic environment that has sound levels characteristic of human activities during the daytime period (07:00 to 23:00) and quiet background sound levels characteristic of a rural setting during the nighttime period (23:00 to 07:00).

## 2.1 Noise Sensitive Receptors

Noise sensitive receptors include properties that accommodate a dwelling, sensitive commercial buildings, sensitive institutional buildings, or vacant lots. Sound level criteria are defined for two possible points of reception (PORs) at each noise-sensitive land use receptor: outdoor and façade. The outdoor PORs for stationary source assessment can include front yards, backyards, terraces, or patios. The façade PORs are the centre of any window or door on the most exposed wall.

No dwellings are currently located on the subject lots. All proposed severed lots are greater than 1-hectare in size, therefore the POR is placed at the center of a 1-hectare portion fronting Burnside Bridge Road, approximately 50 m from the road at a height of 4.5m above ground to represent a second storey façade POR, as required by NPC-300. For due diligence, an outdoor POR at 1.5 m above ground has also been assessed at the same location. During the analysis, moving the receptors to other locations on the subject land lots was investigated to determine the most suitable locations for compliance. Placement of receptors located closer than 70 meters from the quarry limits was not considered, as this would result in placement within the minimum separation distance for a Class II industry. It was also assumed that there will be bedroom windows facing the direction of the quarry.

There are existing sensitive receptors (dwellings) that have been identified on nearby adjacent lots within the 300 m potential influence distance and potentially within the 70 m minimum separation distance for Class II facilities.

Predicted sound levels at these existing receptors are influenced by the ground topography that decreases in elevation towards the waterfront which causes the sound levels to also decrease with the elevation change. An assessment for these existing receptors on the adjacent lots is not included in this evaluation.

The NPC-300 Class 2 POR sound level limits are presented in **Table 2**.

**Table 2:** NPC-300 Sound Level Limits

Time Period	Class 2 Area Sound Level Limits (L <sub>EQ,1-hr</sub> )	
	Outdoor	Plane of Window
Daytime 0700-1900h	50 dBA	50 dBA
Evening 1900-2300h	45 dBA	50 dBA
Nighttime 2300-0700h	--	45 dBA

**Figure 1** below indicates the locations of the three sensitive receptors evaluated (R01, R02 & R03), the Subject Lands and three severed lot property lines, quarry limits and 70 m and 300 m setbacks.



**Figure 1: Sensitive Receptors with Relevant Setback Distances**



## 3 QUARRY DESCRIPTION

The Georgian Rock Company Ltd. does not hold an Environmental Compliance Approval (ECA) permit to operate at this location, nor does it have any noise requirements as part of their operating license as far as RWDI is aware. The quarry is located on the north side of Burnside Bridge Road, across the road from the subject lands. The southern quarry site limits are shown in **Figure 1**. Publicly available satellite imagery (2021, Google Earth) shows the quarry excavation footprint. Land uses adjacent to the quarry site are developed rural residential lots along the river frontage and undeveloped rural landscape north, east, and south of the quarry limits.

### 3.1 Operations

Operations at the quarry site consist of overburden stripping, drilling, extraction, processing/crushing, washing, stockpiling, and shipping of aggregate. Occasional blasting activities also occur as required, but are not typically assessed for sound emissions, so have not been included in this assessment.

Typical hours of operation for the quarry are assumed to be daytime hours as defined in NPC-300. It is expected that the quarry will potentially operate on a year-round basis, however available information indicates the quarry is currently not operating, therefore sound level measurement of equipment in operation was not possible at the time of this assessment. Operational activities for typical operations and potential worst-case include:

- Aggregate loading and shipping from stockpiles (typical); and
- Drilling and extraction at the working face, and aggregate processing of the raw material at a portable crusher plant (worst-case).

Overburden-clearing and berm construction are considered short-term construction activities and are not examined in this assessment. Construction activity is generally temporary in nature and is not part of the day-to-day operation of the site, therefore the sound levels due to these temporary events were not assessed.

### 3.2 Modelled Scenarios

The modelled operating scenarios are based on the current quarry extent and the future operations (which place the equipment within the quarry extents nearer to the subject lands lots). Typical operations involve loading and transporting aggregate and stone from the quarry. The worst-case operating scenarios include the effects of the portable crusher and the drill, in addition to the typical operations. The equipment designated to be modelled is based on a discussion with the Georgian Rock Company Ltd. and are as follows:

- Current typical operation; loading and shipping from stockpiles at current operations location.
- Future typical operation; loading and shipping from stockpiles at easterly location adjacent to the lots.
- Current potential worst-case operation; loading and shipping from stockpiles as well as drilling and processing at a portable crusher plant at current operations location.
- Future potential worst-case operation; loading and shipping from stockpiles as well as drilling and processing at a portable crusher plant at easterly location adjacent to the lots.





It is expected that the worst-case operating scenarios will only occur for less than 60-days, the permissible operating period for a portable crusher, therefore, the potential worst-case operation scenarios are infrequent events but were assessed to provide the potential worst-case predictable sound level impacts. The typical operation scenarios are considered representative of quarry activities during the daytime. Crushers are subject to mobile ECAs which carry their own set of operating conditions to ensure compliance at the nearest sensitive receptors (e.g., residences). It was assumed that the crusher operator will follow the conditions in their ECA. With this assumption in mind, the crusher was modelled in such a manner that it will comply with the applicable sound level limits at the closest existing residences to the west, and north of the quarry.

Ground terrain information was obtained through publicly available Geographic Information System (GIS) mapping. The publicly available terrain mapping does not include the current state of the quarry and therefore ground depressions, stockpiles, or perimeter berms have not been captured and their effects have not been assessed as part of this report. The quarry operator did not provide any relevant information regarding the on-site terrain and stockpiles. Ground depressions, stockpiles and perimeter berms serve to significantly reduce the noise from quarry operations and are often used as forms of on-site mitigation. In the absence of such information, modelled results are often overly conservative (i.e. sound levels are higher than they actually are).

### **3.3 Modelled Equipment**

RWDI has made some reasonable assumptions regarding noise emission levels, their associated locations, and operations times for this assessment. Sound power level data for noise generating equipment associated with the proposed land uses were obtained from measurements of similar equipment on file at RWDI and from published sound levels for typical construction equipment. It was assumed that the quarry would operate during daytime hours (0700 to 2300h). The continuous sources assumed for the typical operations scenario are as follows:

- One (1) loader servicing haul trucks
- One (1) excavator
- One (1) idling truck
- One (1) mobile crusher (subject to its own set of operating conditions)
- One (1) loader servicing the mobile crusher
- One (1) moving haul truck from the site entrance off Burnside Bridge Road to the loading site, with 2 round trips per hour.

Truck haul and loader routes were modelled using a moving point source calculation method and are modelled travelling at a speed of 10 km/h.

The continuous sources assumed for the potential worst-case operation scenario include all the above sources as well as a drill and a crusher. As noted earlier, any on-site crushers are expected to be operated in accordance with their mobile ECA and were modelled at a location that shows compliance with the NPC-300 sound level limits at existing residences.

Average database sound power levels were used in the preparation of the noise model.

### 3.4 Impulsive Sources

There are no impulsive sources of noise anticipated with the operation of the quarry.

## 4 ANALYSIS

To assess the potential impact and to define any required mitigation measures, modelling of the quarry was carried out using the Cadna/A software package, a commercially available implementation of the ISO 9613 noise propagation algorithms. Analysis results are dependant on source location and local topographical ground effects as well as equipment sound power level inputs. Information on quarry equipment (source) placement was not available at the time of modelling, therefore RWDI evaluated many different source placements for each operations scenario. Equipment location has a notable impact in the off-site sound levels and can increase sound levels by as much as 5 dB, which is a clearly audible difference. The current quarry terrain was not made available and any effects due to ground depressions (as material is extracted), stockpiles and perimeter berms could not be accounted for. Prior to implementing mitigation measures, sound pressure level measurements of the quarry equipment when it is operational should be undertaken, and model results updated to reflect actual quarry operations.

### 4.1 Current Typical Operations

The *current typical* operation scenario, that considered loading and shipping from stockpiles, results in compliance with the NPC-300 limits (at an assumed 4.5 m 2<sup>nd</sup> storey receptor) on portions of the subject land lots if the quarry operations are assumed to take place in the currently active northern portion of the quarry. No mitigation has been assumed for these scenarios, both at the quarry or at each of the proposed lots. The configuration of any future residences, for example, if the residences are to be 1 or 2 storey dwellings, as well as the location of any outdoor living areas, will better define how much of each lot will be in compliance with the NPC-300 limits.

The current typical operation scenario modelled quarry noise source locations and predicted time sound level isopleths in 5 dB increments are shown in **Figure 2**. Modelled results show the predicted sound levels during the worst-case one-hour daytime period across each of the lots without the presence of any mitigation at the quarry or at any of the proposed lots. The shaded areas represent areas where the sound level limits are modelled to be in excess of the allowable limits.

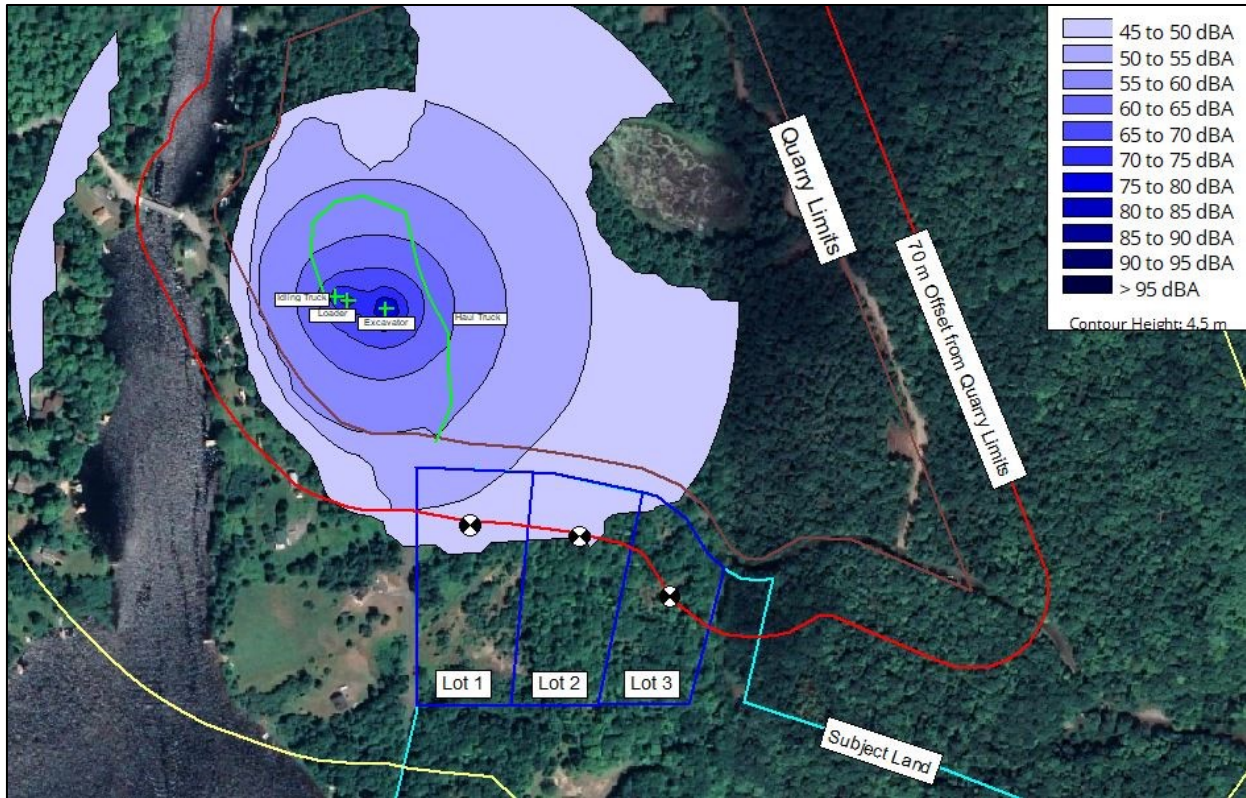


Figure 2: Current Typical Operations Predicted Sound Level Contours

## 4.2 Future Typical Operations

The quarry equipment configuration for *future typical* operations has assumed that the equipment is operating along the southern portion of the quarry, with no mitigation in place at the quarry or at any of the proposed lots. Achieving compliance with the limits at the subject land lots is challenging with this configuration, as the atmospheric and ground attenuation is not sufficient to reduce the quarry equipment sound to levels below the NPC-300 limits at the lots. This is a conservative result as the most up-to-date quarry terrain was not made available by the operator. As material is extracted, the activities take place below grade and are often shielded by the depression made in the ground. Stockpiles and any perimeter berms also help reduce off-site sound levels. Investigating the mitigation options outlined in the following section, particularly the construction of a topsoil or spill pile berm, or other physical barrier of sufficient height, along the northern portion of the lots, or along the southern portion of the quarry limits, is recommended.

The future typical operation scenario modelled quarry noise source locations and predicted sound level isopleths in 5 dB increments are shown in **Figure 3**. Modelled results show the predicted sound levels during the worst-case one-hour daytime period across each of the lots without the presence of any mitigation at the quarry or at any of the proposed lots. The shaded areas represent areas where the sound level limits have been modelled to be in excess of the allowable limits.



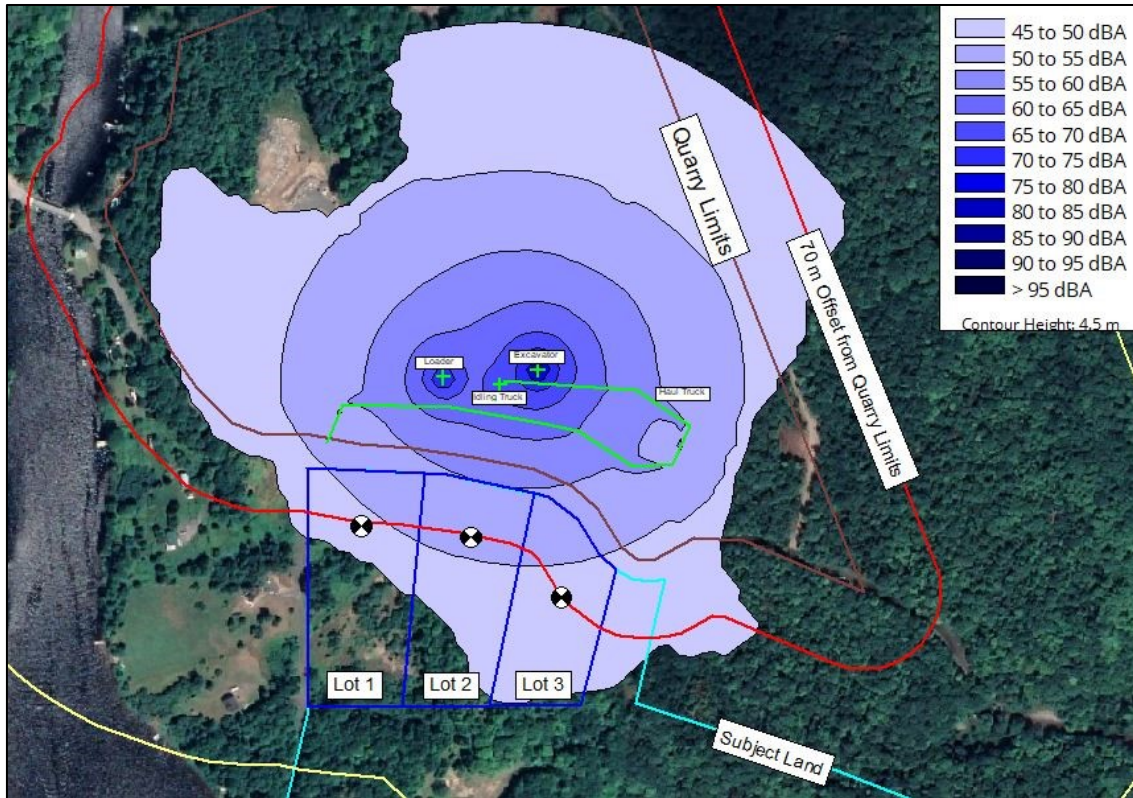


Figure 3: Future Typical Operations Predicted Sound Level Contours

### 4.3 Current Potential Worst-Case Operations

Current potential worst-case operations that include drilling and crushing activities also present challenges for achieving modelled compliance, as the sound levels from drilling at the current operations would further increase the quarry sound levels at the lots. As noted earlier, mobile crushers are subject to mobile ECAs with their own set of operating conditions. It has been assumed that mobile crushers are operated in accordance with their ECA conditions and are therefore already compliant at the existing residences. In these scenarios, compliance with the applicable sound level limits can only be met at the far southern portion of the three lots for both 1 and 2 storey residences.

The current potential worst-case operation scenario modelled quarry noise source locations and predicted sound level isopleth in 5 dB increments are shown in **Figure 4**. Modelled results show the predicted sound levels during the worst-case one-hour daytime period across each of the lots without the presence of any mitigation at the quarry or at any of the proposed lots. The shaded areas represent areas where the sound level limits are modelled to be in excess of the allowable limits.

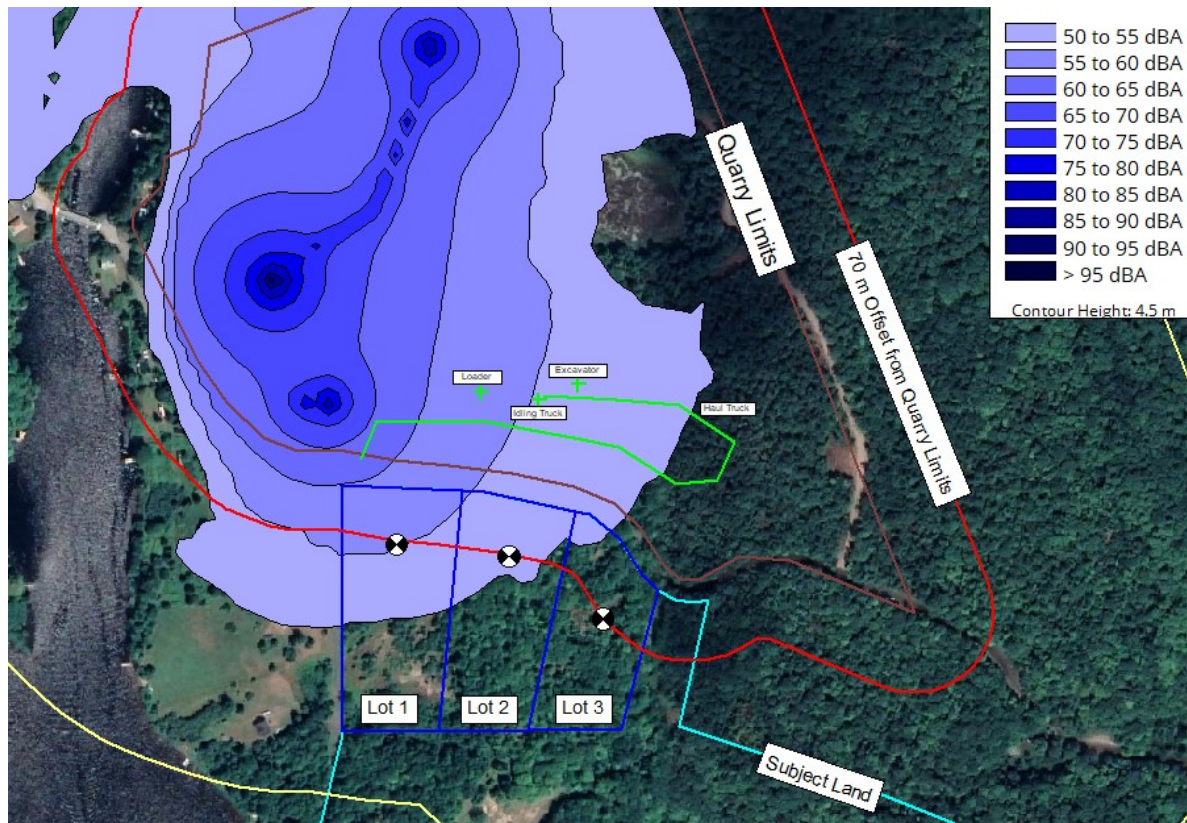


Figure 4: Current Potential Worst-case Operations Sound Level Contours

#### 4.4 Future Potential Worst-case Operation

The future potential worst-case operation, which assumes that the operations have moved to north of the subject lands, results in similar challenges to achieving compliance at the subject land receptors as the future typical operations, albeit with higher predicted sound level impacts.

The future potential worst-case operation scenario modelled quarry noise source locations and predicted sound level isopleth in 5 dB increments, as shown in **Figure 5**. Modelled results show the predicted sound levels during the worst-case one-hour daytime period across each of the lots without the presence of any mitigation at the quarry or at any of the proposed lots. The shaded areas represent areas where the sound level limits are modelled to be in excess of the allowable limits. The entirety of Lot 3 is modelled to be out-of-compliance, whereas a small section of Lot 2 and a larger section of Lot 1 show some “acceptable” areas.



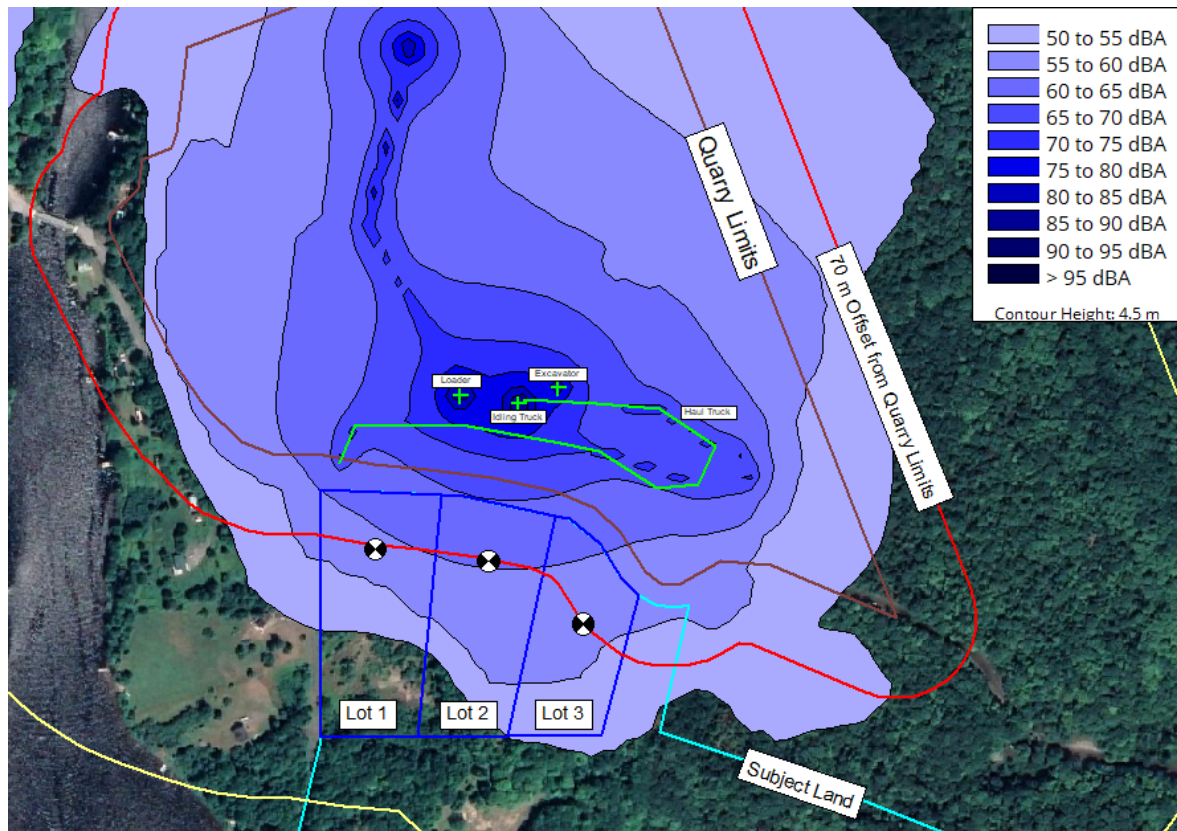


Figure 5: Future Potential Worst-case Operations Sound Level Contours

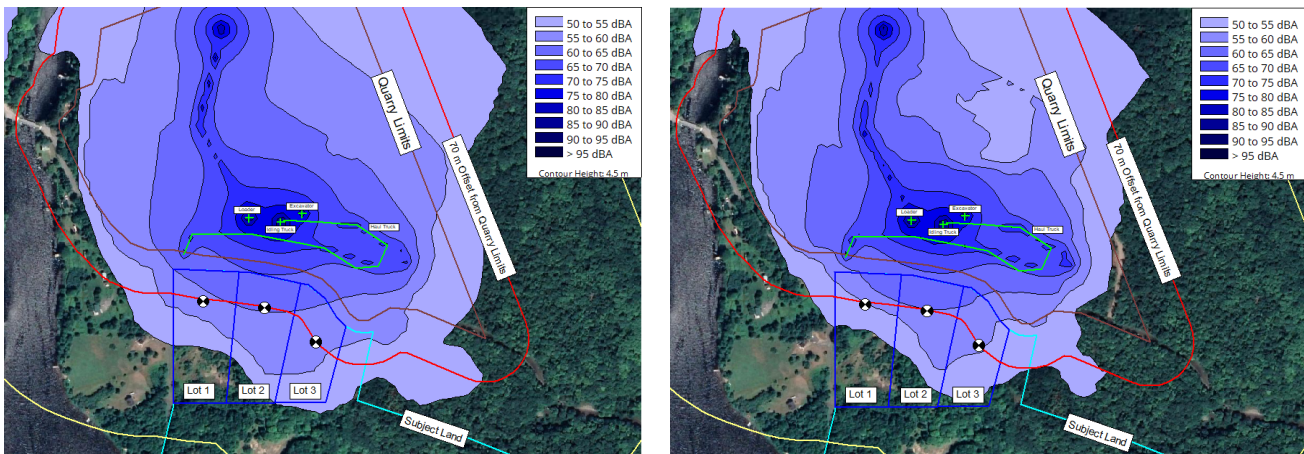
## 5 SITE-SPECIFIC MITIGATION RECOMMENDATIONS

Based on the modelling results, it is anticipated that future residential development on the proposed lots would meet the sound level limits if residences are built furthest from the quarry at the southern portion of the lots, if the quarry is operating as specified in the “typical operations” scenario. However, without mitigation, it is anticipated that the sound levels experienced at future residences to be built on the three lots would not meet the sound level limits under the “worst-case operation” scenarios (when drilling and crushing is occurring) in the northern portions of the lots, especially Lot 3. To further reduce the risk of land use incompatibilities arising, the following considerations and mitigation options are recommended to be incorporated into the design of any future development on these lands.

- 1) Consider building future residences only in the southern portion of the subject land severed lots; this will allow greater distance for attenuation of sound from quarry equipment at the receptors. The 70 m separation distance is approximately 50 m from each lots’ northern property line.
- 2) Construction of an earthen berm along the northern portion of the severed lots, or in the southern portion of the quarry limits, to provide physical shielding from quarry operations. The height and location of the berm would be determined when residence location and plans are proposed.

- 3) Foliage (i.e., tree lines) will not be sufficient to reduce quarry sound levels on the severed lots unless they are 30 m deep and at a minimum as tall as the residence and planted at the front of all severed lots. They would however act as a form of a visual shield and provide some background masking noise.
- 4) Configure (and permit) new homes to be built on the lots to best match modelled results that reflect actual operations (i.e., restrict construction to single storey dwellings, bedroom windows facing away from the quarry, etc.).

All previously indicated, isopleths illustrate the predicted sound levels at a height of 4.5 m, which is the approximate height of a second storey bedroom window. **Figure 6** illustrates the difference between sound levels at the second storey bedroom window and the first storey bedroom window for the worst-case scenario (“future potential worst-case operating scenario”). This Figure indicates that sound levels at a single storey building receptor are lower than those predicted for a two storey bedroom window, thus slightly larger areas of the lots are shown to meet the sound level criteria.



**Figure 6: Sound Level Contours for Two Storey and One Storey Houses**

Further to the above, all purchase/tenant agreements for these lots should include a noise warning clause highlighting the presence of the quarry and stating that there may be exceedances under certain operating conditions or specific activity areas on site. The following generic wording available in NPC-300 is recommended:

*“Purchasers/tenants are advised that due to the proximity of the adjacent quarry, noise from industry may at times be audible.”*

## 6 CONCLUSIONS

RWDI Air Inc. was retained by David & Debbie Sim to complete a Land Use Compatibility Study in support of Consent Application No. B46.2021(McD) that has been submitted to the Municipality of McDougall to allow for the subdivision of Part of Lots 69 & 71 RCP Plan 328, for the creation of three new rural lots along the south side of Burnside Bridge Road frontage, in the Municipality of McDougall, exclusive of the river front lot parcel.

This assessment focuses on sound emissions from sources at the existing Georgian Rock Company Ltd. Quarry located on the north side of Burnside Bridge Road and the potential effect on sensitive receptors (future dwellings)





that could be constructed on the new rural lots. As little information was provided by the quarry, none of the modelled scenarios included any form of physical mitigation, such as ground depressions, stockpiles or perimeter berms. It was also assumed that any on-site mobile crushers will operate in accordance with their respectable mobile ECAs.

The sound levels attributable to the quarry were assessed against the applicable NPC-300 limits at the points of reception. Under the present, “typical operating” conditions, the quarry was found to be in compliance with applicable limits, limited to the southern portions of the lots. However, during future typical and worst-case operations where activities will move to the southeast within the quarry limits, there is a potential for the modelled sound levels to exceed the applicable limits for a much larger portion of the lots. As noted earlier, this does not include any mitigation and is considered to be a conservative representation of the future activities.

## **7 REFERENCES**

1. Ministry of the Environment, Parks and Climate Change (MECP), July 1995, Guideline D-6, Compatibility Between Industrial Facilities and Sensitive Land Uses.
2. Ministry of the Environment, Parks and Climate Change (MECP), 2013, Environmental Noise Guideline Publication NPC-300.
3. Municipality of McDougall, May 27 2015, Official Plan.

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APPENDIX A

**CONSENT APPLICATION NO. B46/2021(McD)**  
**Geographic Township of McDougall**  
**Part of Lots 69 & 71 RCP Plan 328**  
**Burnside Bridge Road**  
**Roll #4931-0100-0409-850**  
**Applicant: Bob Hawkins on Behalf of David and Debbie Sim.**  
**November 25, 2021**

### **BACKGROUND/PURPOSE**

The Sims own a parcel of land on Burnside Bridge Road across the Bridge on the south side of the road.



The owners are proposing to create three new rural lots along the Burnside Bridge Road frontage while keeping the river front lot parcel as retained.

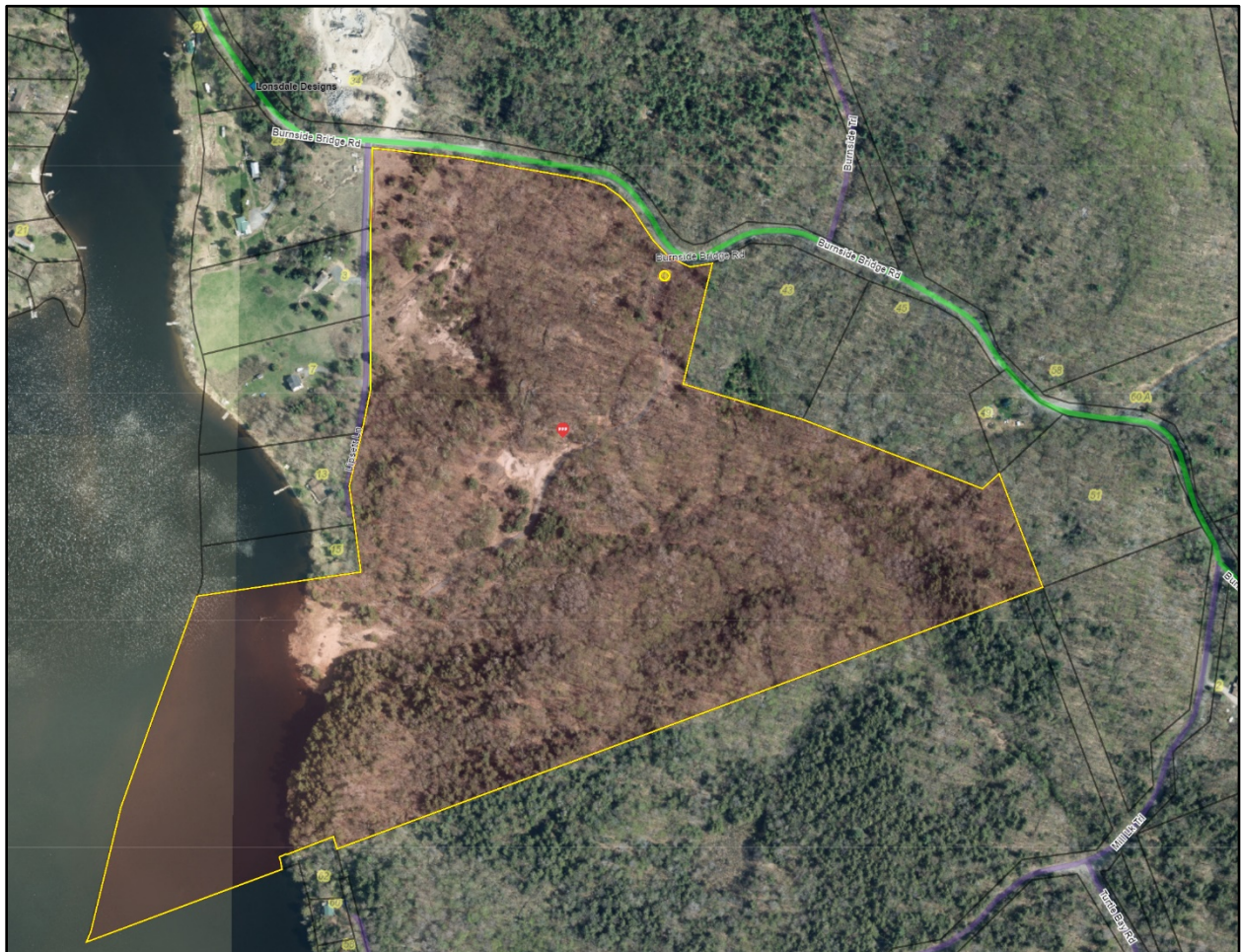
## **PROPERTY DESCRIPTION**

The Sims have a parcel of land that is 26 hectares with 365 metres of frontage along the river and an equal amount of frontage on the municipal road.

The lands are vacant with a small building currently under construction.

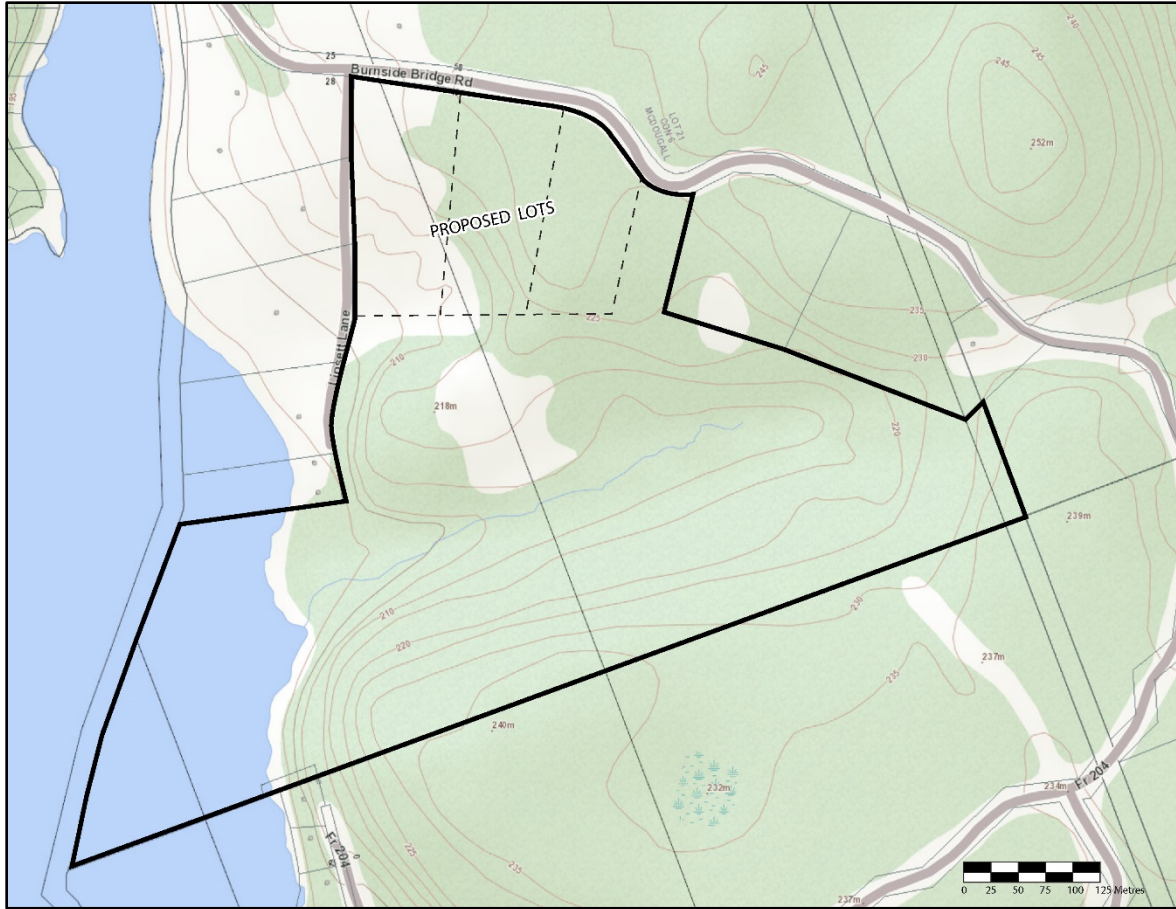
The lands were used historically as a local sandpit but material was no longer extracted after 2007.

The lands are heavily forested except for the areas where previous sand pits existed.



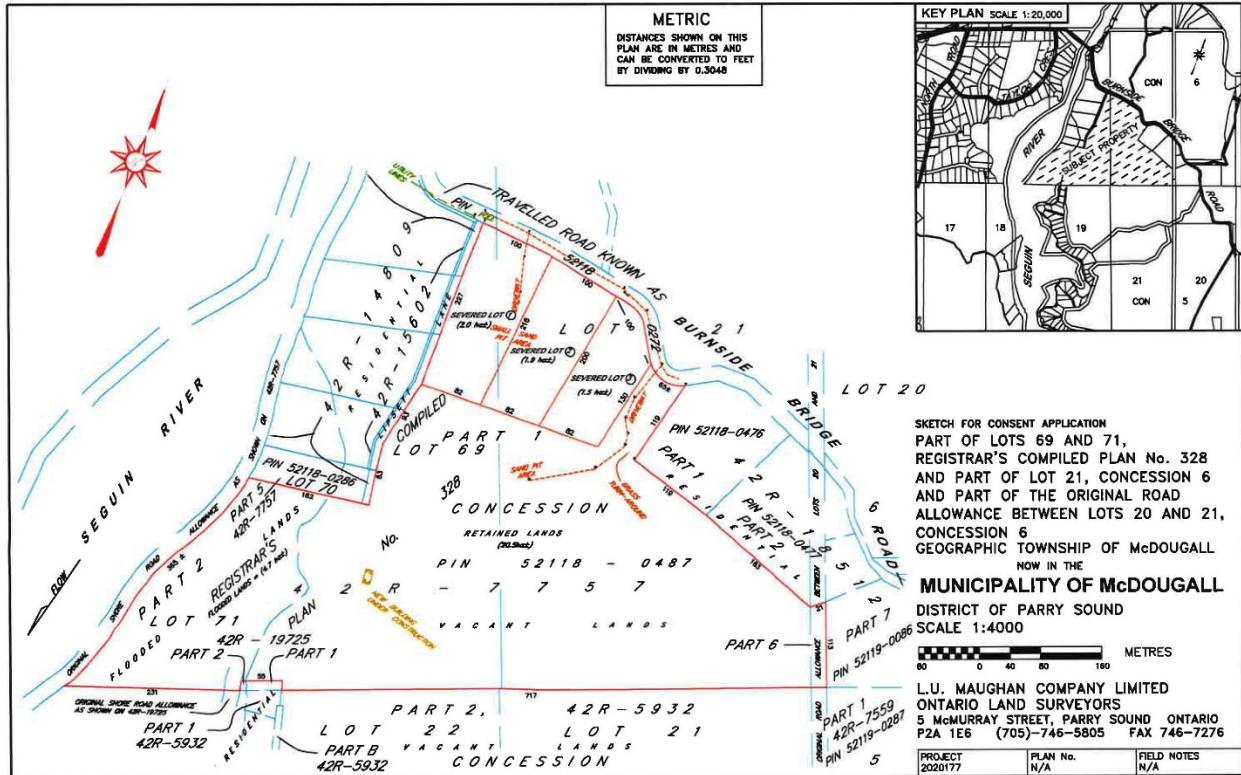
There are no wetlands on the property with a ridge that spans the south perimeter of the property. The lands adjacent to the Municipal Road are level with no constraints to development.





## **PROPOSED CONSENT**

The application proposes to create three new rural lots along the Burnside Bridge Road frontage.



Each of the lots will have a minimum frontage of 100 metres on the road with areas all in excess of 1.5 hectares.

The retained lands will continue to be a waterfront lot with access off the municipal road.

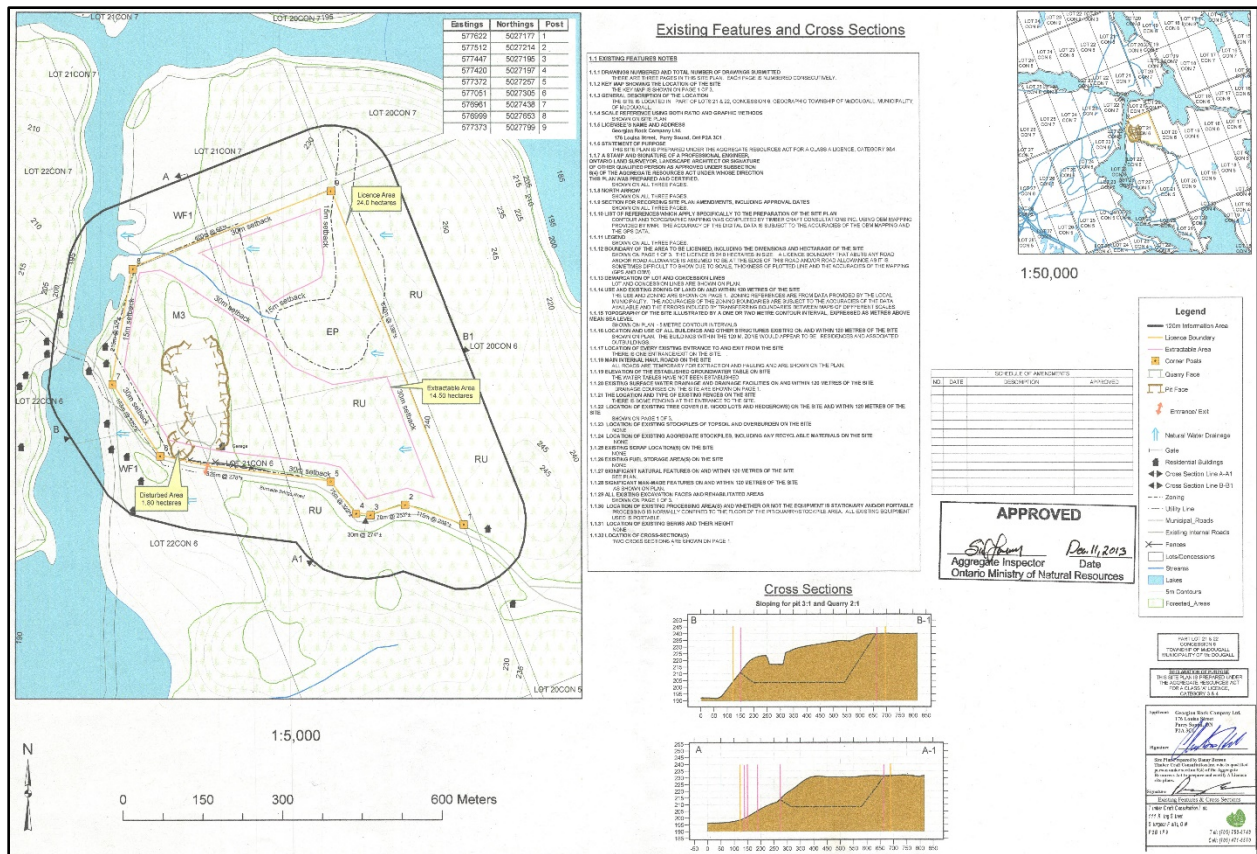
### **PROVINCIAL POLICY STATEMENTS (P.P.S.)**

The subject lands are rural lands and the P.P.S supports new lots created in the rural area. The P.P.S. must be read in it's entirety and there are a number of policies that relate to the consideration of the nearby quarry.

Section 2.5.2.4 states:

***2.5.2.4 Mineral aggregate operations shall be protected from development and activities that would preclude or hinder their expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact. Existing mineral aggregate operations shall be permitted to continue without the need for official plan amendment, rezoning or development permit under the Planning Act. Where the Aggregate Resources Act applies, only processes under the Aggregate Resources Act shall address the depth of extraction of new or existing mineral aggregate operations. When a license for extraction or operation ceases to exist, policy 2.5.2.5 continues to apply.***

There is an active quarry on the lands immediately north of the lands that are proposed to be created.



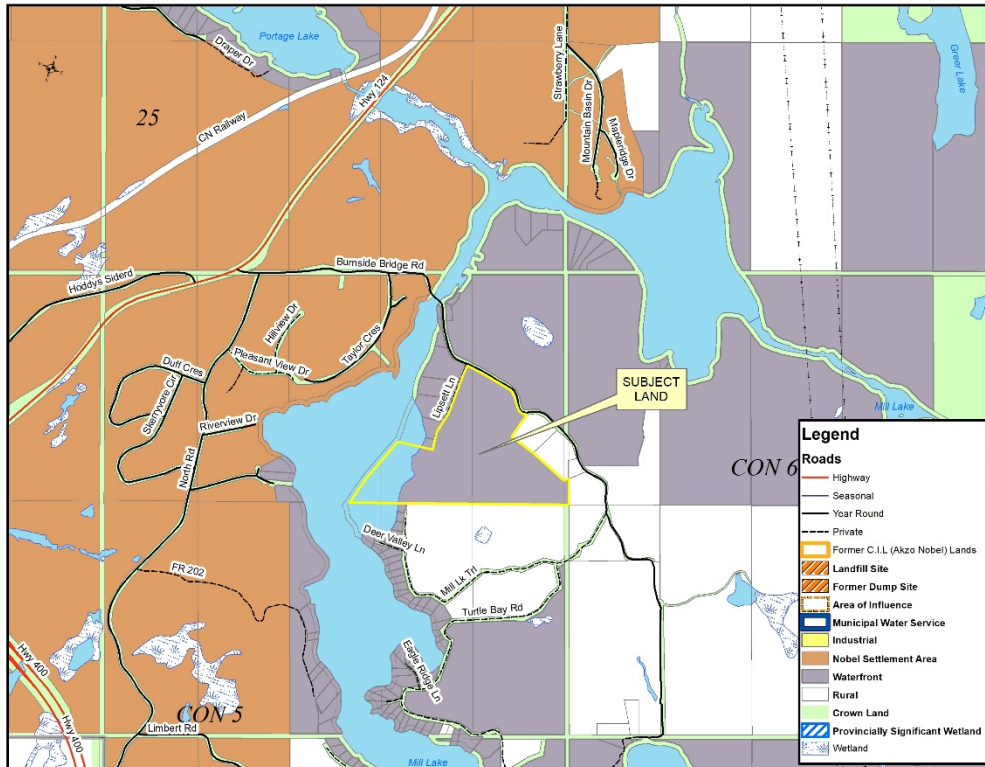
The P.P.S. also addresses land use compatibility. Section 1.2.6.1 states:

**1.2.6.1 Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.**

## OFFICIAL PLAN

The subject lands are designated Waterfront in the McDougall Official Plan. This designation applies to all parcels of land that front on the municipalities recreational water bodies.





Once the lands, or a portion of the lands have the waterfront removed, they default to the Rural designation.

**19.02.1 This designation will generally apply to most of the inland areas of the Planning Area which do not front on recreational water bodies. Land uses permitted in this category shall include forestry, conservation uses, agricultural uses and agriculture-related and secondary agriculture uses including uses that produce value added agricultural products from farm operation on the property, market gardening uses, raising of fur bearing animals, churches, schools, hospitals, institutions, cemeteries, country clubs, open air recreational uses and any uses connected with government utilities or departments.**

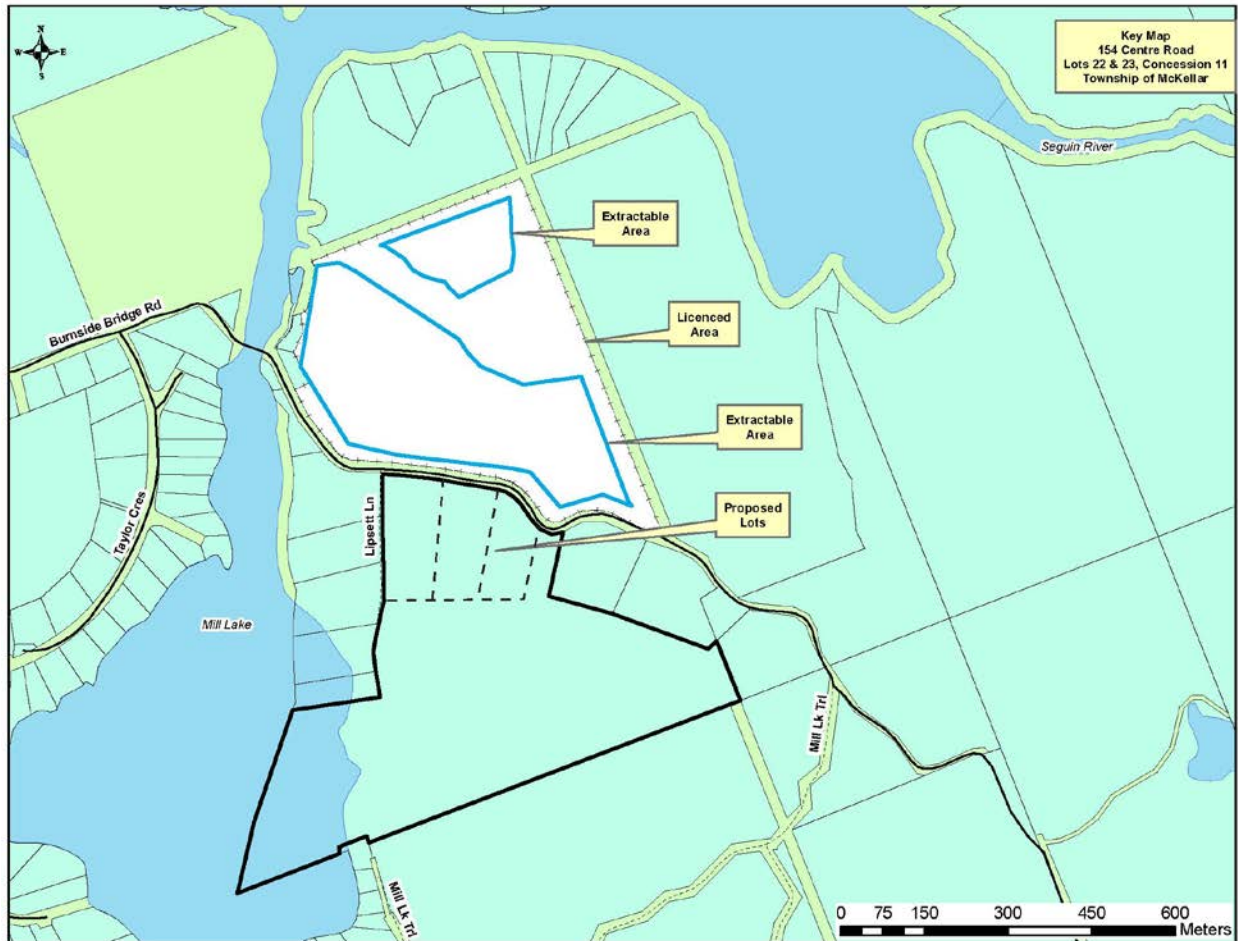
**19.02.2 New homes and cottages, commercial and industrial development uses, pits and quarries, and tourist commercial uses will be permitted in the Rural Areas subject to all other policies of this Plan.**

**19.02.4 Consents to create new lots in the Rural designation will be subject to the following:**

- a) the lot is located on and has access to a road which has been opened, established and publicly owned and maintained on a year round basis;
- b) the proposed driveway location must be satisfactory to the Municipal Road Superintendent and must not be located on a curve or hill where a dangerous condition would be caused for other drivers;
- c) the resulting development will not contribute to an unreasonable demand for the enlargement of municipal services; and
- d) the lot sizes are generally greater than 1.0 hectares and road frontages are approximately 100 metres.

In terms of standards, the proposed consents comply with the Rural lot standards.

There is a licensed pit on the opposite side of Burnside Bridge Road in close proximity to the proposed lots.



The official plan has policy that protects existing quarry operations from sensitive developments (i.e. new residential properties).

It is understood that the subject pit is licensed for quarrying rock and is currently active with blasting, rock removal and trucking during most weekdays. The operators have indicated that they routinely receive concerns by surrounding neighbours for quarry operations.

The official plan policy sets out the requirement for assessment under the D-Series Guidelines.

McDougall's official plan includes provisions for considering land use compatibility.

***“21.14....The approval authority will ensure, through the application of the following land use compatibility policies of this Plan, and through the application of provincial and federal policies and guidelines regarding land use compatibility, that no incompatible land uses are permitted within the Municipality.***

***The Approval Authority may request, in accordance with this Plan, appropriate studies to address identified and potential issues related to land use compatibility prior to consideration and approval of any planning applications submitted to the Approval Authority. These studies shall be in accord with applicable M.O.E.C.C. Guidelines. “21.15”***

The agent for the land owners has indicated that they acknowledge the need for a land use compatibility study.

Such a study will need to follow the M.O.E. D-1 Guideline relating to Land Use Compatibility.

The fundamental approach in such a study is identify adverse impacts and what measures are available to investigate those impacts. It is noted that the preferred mitigation measures relate to adequate separation distances.

Because of the close proximity of the existing quarry operation, it would be prudent to complete the study to assess the appropriateness to proceed with the consents.

Respectfully,



John Jackson M.C.I.P., R.P.P.

JJ : jc