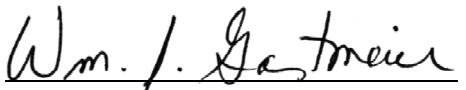


Land Use Compatibility Study (Noise) Proposed Industrial Development Regional Road 97 and Regional Road 47 Township of North Dumfries Regional Municipality of Waterloo, Ontario

Prepared for:

Angbar Construction and Development Ltd.
445 Dobbie Drive
Cambridge, ON
N1T 1S9

Prepared by:


Bill Gastmeier, MAsC, PEng

And



Mandy Chan, PEng

May 5, 2014

Revised: May 4, 2020

Table of Contents

1	EXECUTIVE SUMMARY	1
2	DESCRIPTION OF THE SITE AND SIGNIFICANT NOISE SOURCES.....	2
3	THE POLICY AND REGULATORY CONTEXT	3
3.1	The Environmental Protection Act and the Planning Act	3
3.2	MECP Guidelines for Land Use Compatibility and Distance Separation.....	3
3.3	MECP Guidelines for Stationary and Transportation Sources.....	4
3.4	Municipal Noise By-Law	5
3.5	Summary.....	5
4	PROPOSED INDUSTRIAL ZONING.....	6
5	CONSIDERATION OF WORST CASE INDUSTRIAL ACTIVITIES.....	6
6	DISCUSSION AND RECOMMENDATIONS.....	7

Figure 1: Area Plan

Figure 2: Draft Plan of Subdivision

Appendix A: Zoning Information

Appendix B: Consultant's Statutory Declaration

1 EXECUTIVE SUMMARY

HGC Engineering was retained by Angbar Construction and Development Ltd. (Angbar) to investigate issues of compatibility of a proposed industrial development with an existing Place of Worship (Cedar Creek Community Church) with regard to noise. The lands under consideration are generally located near the northwest corner of the intersection of Regional Road 97 and Regional Road 47 in the Township of North Dumfries, Ontario. Road traffic is the only significant noise source presently evident at the church site.

The original noise study was completed on May 5, 2014 and has been updated to reflect the latest Draft Plan of Subdivision dated January 30, 2020.

This study has been prepared for submission to the Regional Municipality of Waterloo (RMOW) in association with an application to amend the Zoning Bylaw to permit the subject industrial subdivision. It follows Ministry of the Environment (MECP) guidelines with regard to land use compatibility, recommended separation distances and noise assessment.

HGC Engineering personnel visited the site on March 17 and March 21, 2014 in order to investigate the acoustical environment, the site topography and the surrounding land uses. A recent visit was conducted in February 2020 to confirm any changes in the surrounding land use since the completion of the original noise study.

The results of the study indicate that the presence of the church and a residence to the south of Regional Road 97 (Figure 1) impose constraints on the range of industrial uses which should be permitted on the site. A 20 m buffer zone is recommended on the industrial lands adjacent to the church which should be controlled through a zoning by-law amendment and site plan controls. In addition to the required distance setbacks, a perimeter noise barrier is recommended to provide a further level of noise mitigation for the church and may be required for the residence as additional assurance that MECP noise criteria can be met by the future industrial uses. The perimeter noise barrier and source noise controls may be required in addition to the recommended minimum distance setbacks as a result of future noise studies prepared in support of Site Plan Approvals or Environmental Compliance Approval Applications made by individual industries under the EPA.



ACOUSTICS



NOISE



VIBRATION

2 DESCRIPTION OF THE SITE AND SIGNIFICANT NOISE SOURCES

The lands under consideration are presently zoned for aggregate extraction and are located near the northwest corner of Cedar Creek Road (RR #97) and Dumfries Road (RR #47) in the Township of North Dumfries. An area plan is provided as Figure 1. The Draft Plan of Subdivision prepared by DSH dated January 30, 2020 is provided as Figure 2. The plan shows the proposed industrial lots (Lots 1 to 6) and their proximity to the surrounding land uses including a church to the east and a residence to the south.

There are existing industries to the north of the subject lands on Z9 lands. These are generally light and medium in nature many involving outside storage and trucking particularly those related to the manufacture of concrete products. The Regional Municipality of Waterloo Police Services Recreation Centre is located on Z1 lands across the CP Rail line to the northwest. The remaining surrounding lands are all zoned for agricultural (Z1) or aggregate extraction (Z14) uses. A 1-storey residence is located to the southwest of site, south of Cedar Creek Road as indicated on Figures 1 and 2. The church property is zoned Z13 to permit the church use. The permitted uses associated with these zones and the zoning maps are provided in Appendix A.

Road traffic is currently the dominant source of sound at the church property. A noise measurement taken in the church parking lot to the north east of the building utilizing the methods and equipment described in MECP Guideline NPC – 103 indicated a sound level of 50 dBA, Leq (20min).



ACOUSTICS



NOISE



VIBRATION

3 THE POLICY AND REGULATORY CONTEXT

There are several regulations, policies and agreements which should be considered in addressing issues of compatibility and noise impact in the context of this development plan.

3.1 The Environmental Protection Act and the Planning Act

The overriding legislation which applies to industrial uses is the Environmental Protection Act (EPA). Under this legislation, sound is considered contaminants, and is thereby subject to the provision that "no person shall discharge a contaminant ... into the natural environment that causes or is likely to cause an adverse effect". Unless specifically exempt, industries are required to apply for Environmental Compliance Approvals for their operations under this act. The Ontario Ministry of the Environment (MECP) has published certain criteria and guidelines for sound used by industry to obtain approvals under the EPA.

Similarly, the MECP has produced guidelines to assist municipalities and developers in preparing applications under the Planning Act which these authorities implement by providing comments when they are circulated. These are discussed below.

3.2 MECP Guidelines for Land Use Compatibility and Distance Separation

MECP Guidelines D-1, "Land Use Compatibility" and D-6 "Compatibility Between Industrial Facilities and Sensitive Land Uses" were prepared to minimize adverse effects caused by sources regulated by the EPA on existing land uses or in relation to land use approvals under the Planning Act. They recommend separation distances or other mitigation measures based on the results of investigative studies. The recommended minimum separation distances are 20 m for Class I (light) industrial uses, 70 m for Class II (medium) industrial uses and 300 m for Class III (heavy) industrial uses. The classifications are general, leaving some room for interpretation on a specific basis. For example, a Class I industry is categorized as a small-scale plant with no outside storage, sound not audible off property, with daytime only operations and infrequent movement of products and/or heavy trucks. A Class II industry is categorized as a medium level of production with outside storage permitted. Sound may occasionally be audible off property, shift operations are permitted and there



are frequent movement of products and/or heavy trucks.

The minimum separation distances generally apply between the property lines of the industrial and sensitive uses, but portions of the industrial land can be considered as some or all of the setback if the specific use of that portion of the industrial land is controlled in a site specific zoning bylaw. In the case of institutional uses such as the church, the noise sensitive portions of the church site are considered to be lands in the vicinity of the church buildings and any outdoor areas for passive recreation/education. Parking lots, playing fields, running tracks and ball diamonds are generally not considered to be noise sensitive, for example.

The potential zone of influence may be greater than these minimum separation distances; however, as the purpose of this study is to investigate practical options, it is assumed that any industrial noise impact can be mitigated through the implementation of reasonable site specific control measures given the existence of these minimum buffer zones. The guidelines allow for some reductions in the minimum setback distances, based on the results of supporting technical studies for infill developments or “lands in transition”.

3.3 MECP Guidelines for Stationary and Transportation Sources

MECP Publication NPC-300, entitled "Environmental Noise Guideline, Stationary and Transportation sources – Approval and Planning” establishes sound level limits for stationary sources of sound. Stationary sources of sound can be individual facilities or pieces of equipment or the cumulative sound of activity or conveyances operating on industrial property such as trucking yards. NPC-300 is used by industry to determine the impact of their operations at neighbouring noise sensitive receptors to demonstrate compliance for the purpose of obtaining approvals. It is also used by the development industry to determine if there may be significant noise impacts on lands considered for the development of noise sensitive uses. Given the presence of the busy roadways and other industry in the area, the lands would be considered to be in an urban area for any noise assessments.

NPC-300 recommends sound level limits as a function of the background sound levels due to road traffic and other industry. The objective of the guidelines is to establish a sound level limit at each

noise sensitive receptor on the basis of "predictable worst case" impact. In general, the sound level limit must represent the minimum background sound level that occurs during an hour of the day in which the stationary source may operate, subject to exclusionary minima of 45 to 50 dBA, depending upon time of day (daytime, evening or night time) and proximity to the roadways. In this case, the background sound levels due to road traffic are on the church property near the industrial lands to the rear of the buildings was found through measurement not to be higher than the minimum of 50 dBA, and the church is considered to be a daytime only facility, so the minimum daytime criterion of 50 dBA would likely apply on the church property.

There are no indoor sound level criteria associated with NPC-300 for industrial noise sources. This is because the point of reception is generally considered to be outside the building on any useable property associated with its operations

3.4 Municipal Noise By-Law

By-Law No. 2249-07 of the Township of North Dumfries has specific prohibitions for noise generated by noise sources such as vehicles, construction equipment, refrigeration equipment and electronic devices. It also has prohibitions by time and place. Generally, there are no prohibitions for industrial noise sources which are in conformance with the applicable zoning. Municipal Bylaw Enforcement staff is responsible for investigating complaints concerning commercial/industrial occupancies such as are proposed.

3.5 Summary

As an overview of the above regulations, policies and agreements, the industrial developer and the future proposed industries are obliged to provide a suitable distance setback and any additional mitigation for any noise impact on the existing noise sensitive land uses in accordance with the Municipal Noise Control Bylaw and the requirements of the EPA through the Certificate of Approval process as per MECP D1, D6 and NPC-300 Guidelines and related documents.

Industry is not obliged to provide mitigation for noise impact on nearby lands unless those lands are zoned for noise sensitive uses. As a result, a developer seeking to rezone adjacent lands to residential uses in the future is responsible for mitigation, and the MECP Guidelines suggest that both parties

should co-operate to implement feasible control measures. This process is controlled under the Planning Act through NPC-300 and related documents.

4 PROPOSED INDUSTRIAL ZONING

The subject application is to rezone the lands to permit Z9 uses, similar to those located to the north of the CPR Rail line. We have reviewed Section 15 of the Township of North Dumfries Zoning Bylaw which describes the uses permitted in Zone 9. These include light to medium industries having “minimal adverse effects for nearby sensitive land uses”. Examples are Farm Equipment Sales and Service, Distributing or Transportation Operations, Warehousing and Indoor Storage, various retail sales establishments Print Shops and Laundries, hotels, motels etc. The use with the greatest potential for adverse impact in this list from our experience would typically be a busy warehouse or trucking terminal.

The approximate portions of the Draft Plan influenced by the church property and residence are shown in Figure 1 based on the 20 m and 70 m distance setbacks recommended between Class I (light) and Class II (medium) industrial uses. The presence of the church influences the south east corner of the subject lands as does the residence to the south of RR 97. RR 97 provides the required minimum 20 m distance setback to the residence to the south.

5 CONSIDERATION OF WORST CASE INDUSTRIAL ACTIVITIES

Cursory calculations based on HGC Engineering experience with small to medium scale warehousing facilities indicate that there is a possibility that there could be minor excesses of the MECP daytime sound level limit of 50 dBA near the church building (daytime use) if those uses were located in close proximity on the immediately adjacent lots (Lots 1 and 2), depending on the intensity of the operations and numbers of truck movements etc. The calculations also indicate that the provision of a noise barrier with a height on the order of 2 to 3 m above the church property would be sufficient to mitigate any foreseeable excess.

We note that there is an existing earth berm along the western and northern boundary of the church property which was associated with the aggregate license and that the elevation of the land to the



west of the church property drops off significantly into the license area facilitating the implementation of effective noise mitigation at the property line.

The calculations also indicate that if the future industry on Lot 6 operates during nighttime hours, there may be nighttime sound level excesses at the residence to the south of RR 97. A perimeter berm of sufficient height, i.e. blocking the line of sight between the residence and significant noise sources, along the southern lot line would provide mitigation, should mitigation be required.

6 DISCUSSION AND RECOMMENDATIONS

The results of the study indicate that the proposed Class I or Class II industrial/commercial development is feasible on this site. We have the following recommendations.

1. Class III (heavy) industrial uses such as those contained in the Zone 11 list of permitted uses are not compatible with this site, considering the required 300 m minimum distance setback from the church and existing residences in the area, and should not be permitted in the zoning bylaw.
2. For the two industrial lots (Lots 1 and 2) immediately adjacent to the church property, a buffer zone should be established in the zoning bylaw restricting lands within 20 m of the church property line to non-noise producing uses such as parking lots, landscape buffers or earth berms.
3. The zoning bylaw should include provisions which only permit the placement of Class II industrial uses on Lots 1, 2 and 6 subject to those industries demonstrating that their operations can be expected not to cause an adverse impact on the church and residential lands. Through the preparation of Noise Studies. These may include factors relating to the location of loading bays and the location/restrictions on outdoor trucking activities or storage on lands within 70 m of the church and residence for example.
4. Individual industries should be required to do noise studies at the discretion of the Municipality relating to the impact of their proposed operations on the church and residence.

The goal of the noise studies would be to show compliance with the environmental noise criteria contained MECP Guideline NPC-300, or identify specific mitigation measures which can be implemented on the site plan or for specific pieces of equipment which will result in acceptable sound levels at the church and residence. These studies should include the noise reducing effects of the existing or enhanced noise berms currently existing along the church property lines.

5. The developer is proposing to maintain the existing perimeter noise berms along the west and north church property lines, subject to the approval of the Municipality. The actual noise reducing effects of this berm will depend to some degree on the location of the industrial buildings, the lower elevation of the industrial lands in relation to the elevation of the church lands, the industrial activities and the final site plan design. The following general design guidelines are provided at this time to allow some flexibility in site plan design, but maintain barrier effectiveness as much as possible.
 - The barrier should reach a minimum elevation of 2.5 m above the elevation of the church site in the vicinity of the church buildings to shield the church lands from trucking activity and other ground level industrial sources.
 - The barrier can be a combination of the existing or augmented earthen berm and noise wall as required. The noise wall component of the barrier can be constructed of any wood, metal or masonry construction with a minimum surface density of 20 kg per square meter and must be free of gaps or cracks within or below its extent.
6. Individual industries may be required to obtain Environmental Compliance Approvals from the MECP for their operations under the EPA, depending upon the possibility of adverse effects. This may include the preparation Acoustic Assessment reports and the implementation of physical mitigation measures in addition to the required minimum distance setbacks and perimeter barriers.





Figure 1 - Area Plan

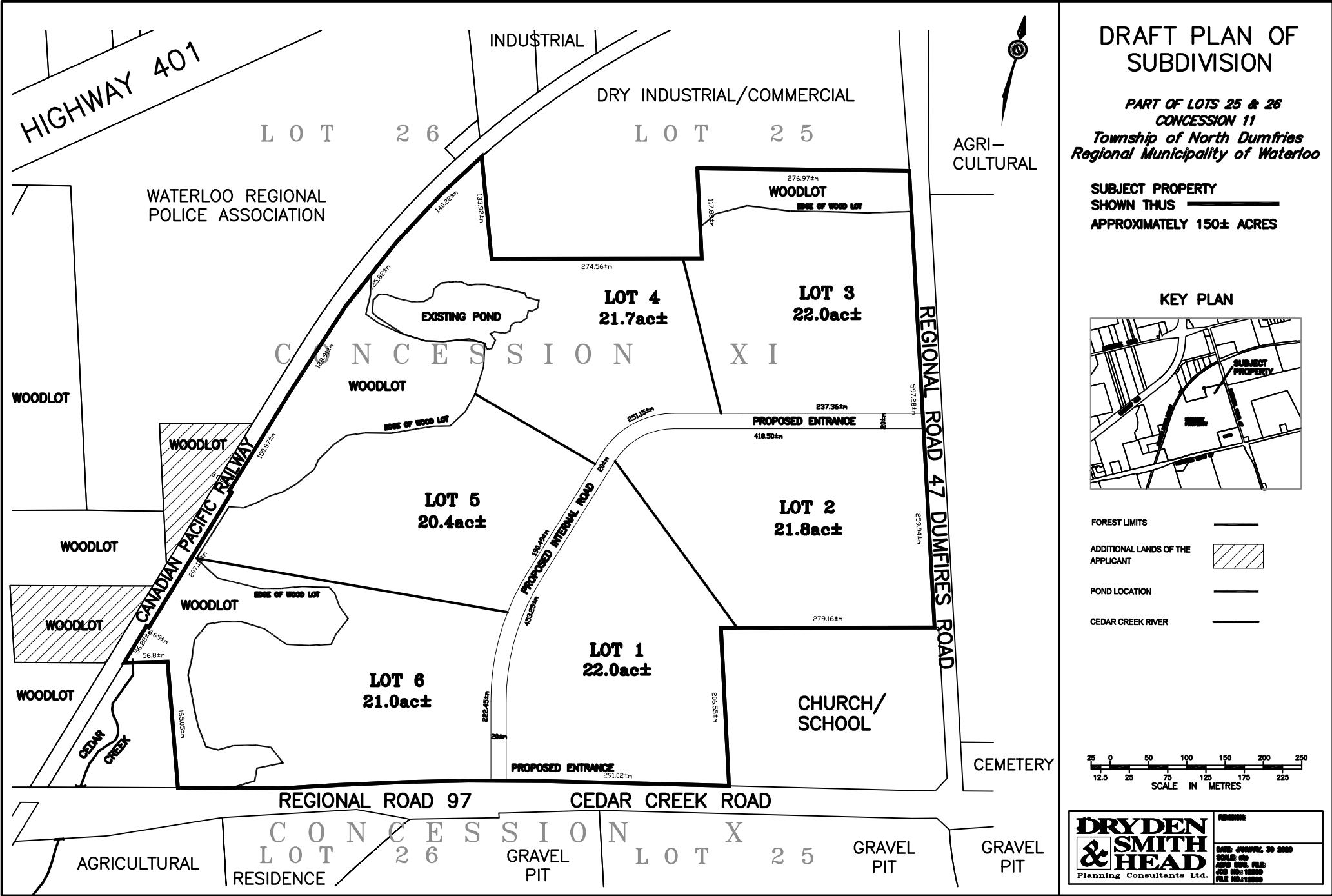


Figure 2: Draft Plan of Subdivision

APPENDIX A

Zoning Information



ACOUSTICS

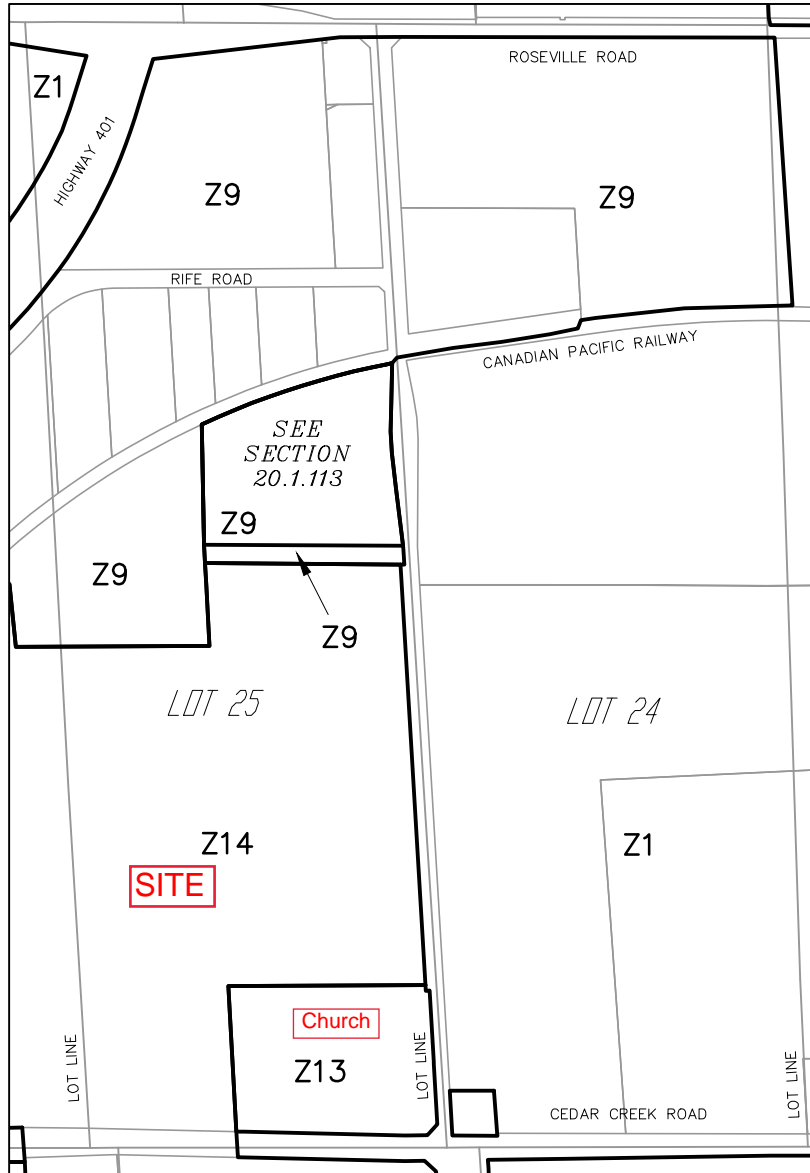


NOISE



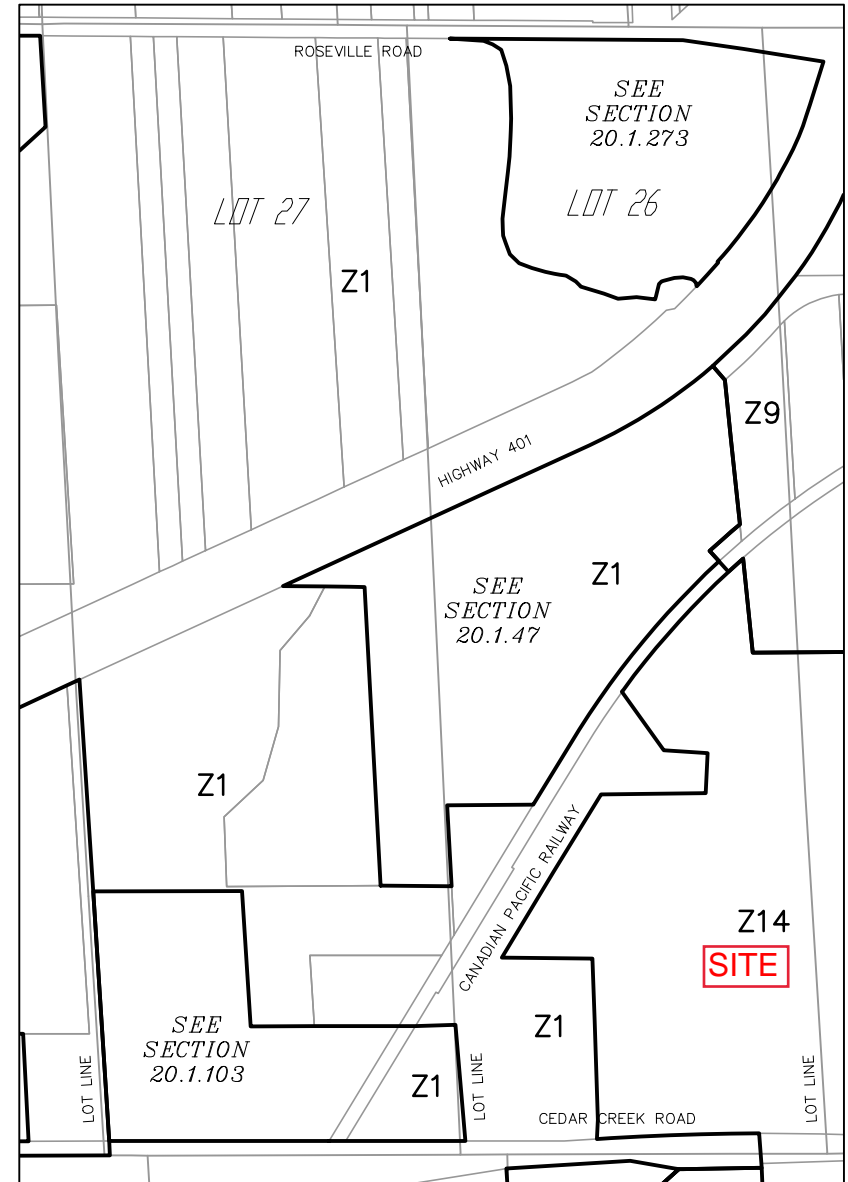
VIBRATION

**LOTS 24 & 25
CONCESSION XI
TOWNSHIP OF NORTH DUMFRIES**



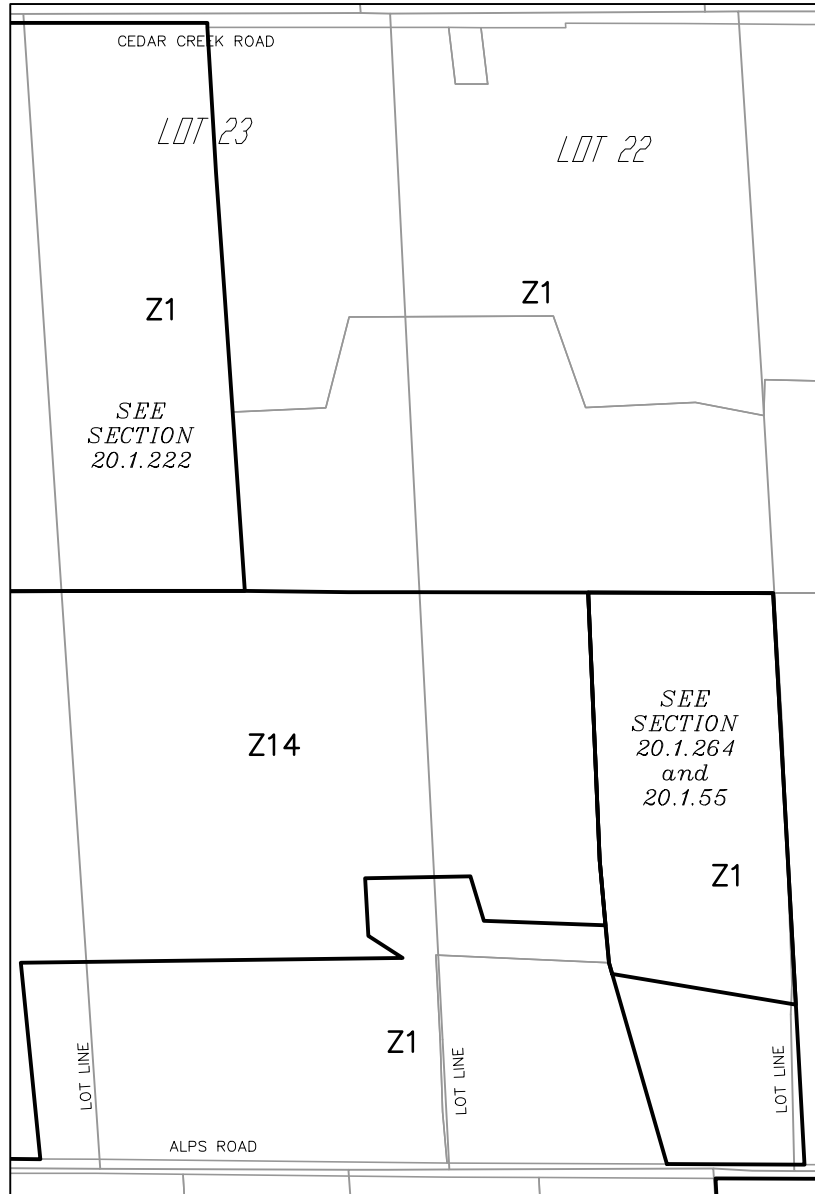
THIS IS PART 81 OF SCHEDULE "B"

**LOTS 26 & 27
CONCESSION XI
TOWNSHIP OF NORTH DUMFRIES**



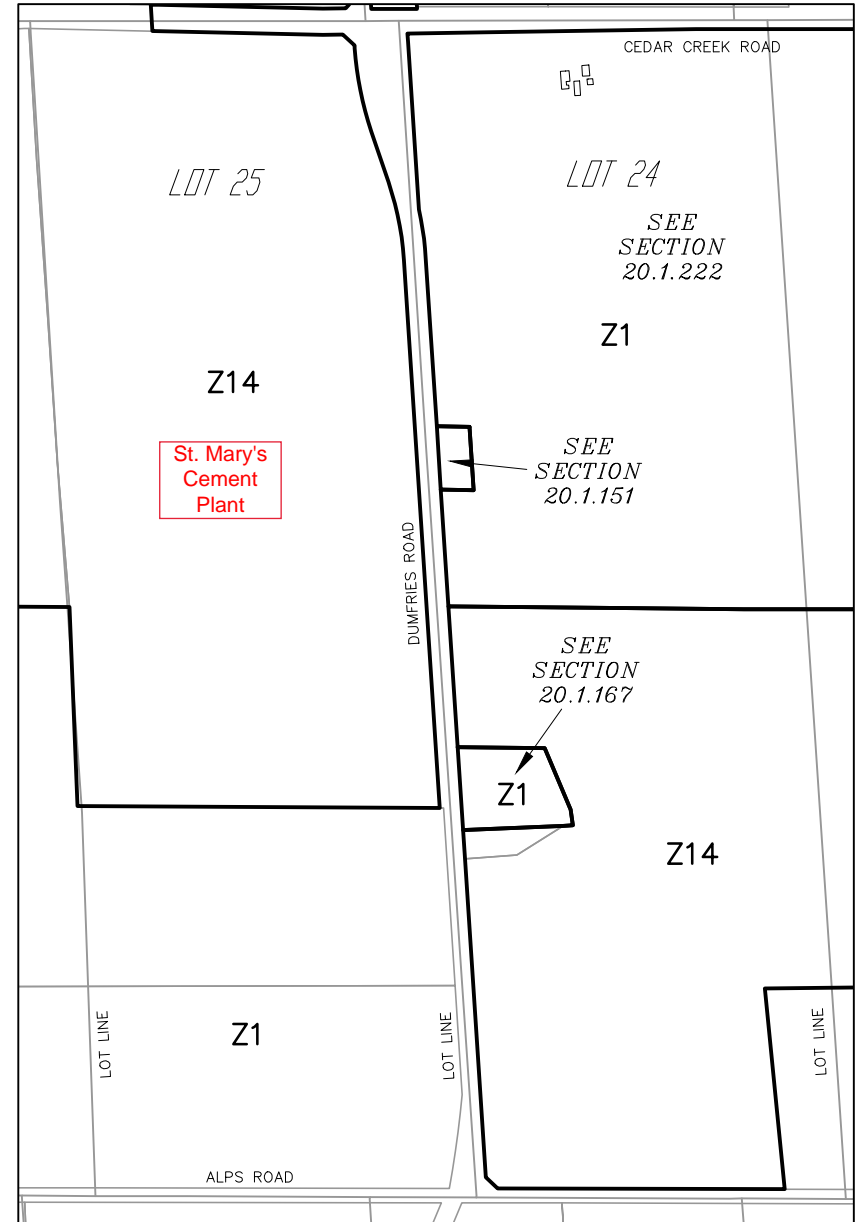
THIS IS PART 82 OF SCHEDULE "B"

**LOTS 22 & 23
CONCESSION X
TOWNSHIP OF NORTH DUMFRIES**



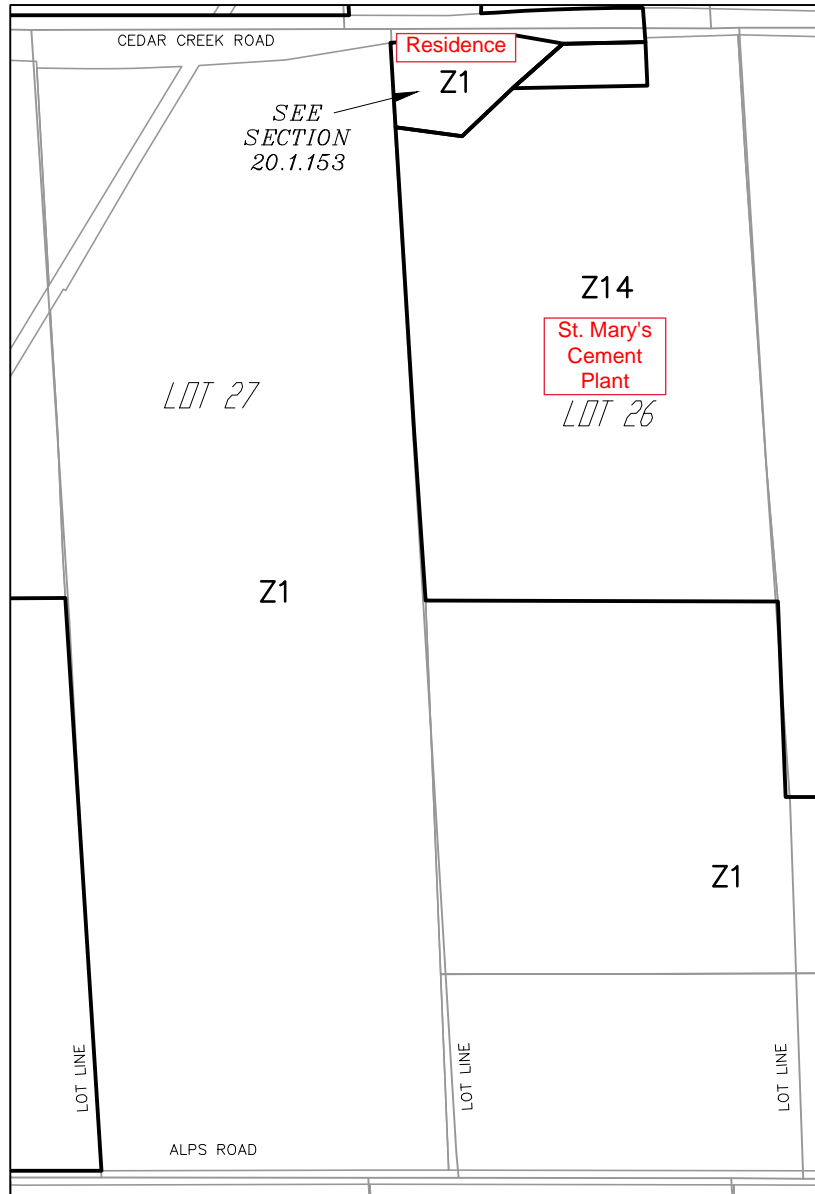
THIS IS PART 67 OF SCHEDULE "B"

**LOTS 24 & 25
CONCESSION X
TOWNSHIP OF NORTH DUMFRIES**



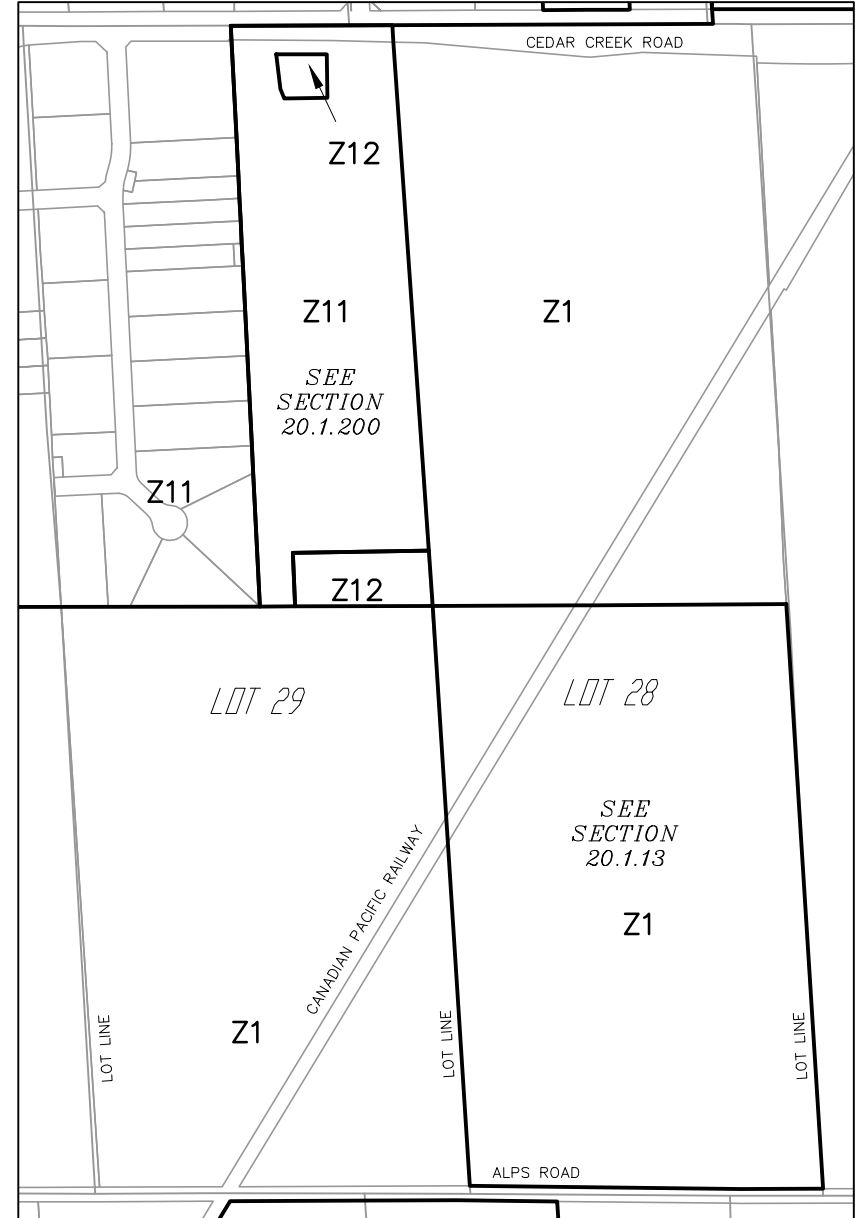
THIS IS PART 68 OF SCHEDULE "B"

**LOTS 26 & 27
CONCESSION X
TOWNSHIP OF NORTH DUMFRIES**



THIS IS PART 69 OF SCHEDULE "B"

**LOTS 28 & 29
CONCESSION X
TOWNSHIP OF NORTH DUMFRIES**



THIS IS PART 70 OF SCHEDULE "B"

SECTION 7: ZONE 1 - Z.1

7.1 PERMITTED USES

Within a Zone 1 - Z.1, no land shall be used and no building or structure shall be erected or used except for one or more of the Permitted Uses listed in Column 1 of sub-section 7.3.

7.2 REGULATIONS

Within a Zone 1 - Z.1, no land shall be used and no building or structure shall be erected or used except in conformity with the applicable regulations contained in Section 6 - "General Regulations" and the following:

7.2.1	Minimum Lot Area	35 hectares (86.5 acres)
7.2.2	Minimum Lot Frontage	230 metres (754.6 feet)
7.2.3	Minimum Side Yard (each side)	
	a) Residence	3 metres (10 feet)
	b) Other Permitted and/or Accessory Buildings	Equal to one-half (½) building but in no case less than 3 metre (10 feet)
7.2.4	Minimum Rear Yard	7.5 metres (25 feet)
7.2.5	Minimum Floor Area - Residential Building	
	a) 1 storey	100 square metres (1075 square feet)
	b) 1½ storey or split level	140 square metres (1500 square feet)
	c) 2 or more storeys	160 square metres (1700 square feet)
7.2.6	Off-Street Parking	In conformity with the provisions of sub-sections 6.11 and 6.13
7.2.7	Minimum Distance Separation— Buildings used for livestock or manure storage	In conformity with the provisions of sub-sections 6.28 and 6.29.

7.3 ADDITIONAL REGULATIONS

In addition to the regulations set forth in sub-section 7.2, the regulations in Column 2 below shall apply to the specific uses listed in Column 1 below:

<u>Column 1</u> <u>Permitted Uses</u>	<u>Column 2</u> <u>Regulations</u>
7.3.1 Farming (except sod farming or commercial greenhouses) including the following accessory uses: a) any barn, shed, building or structure required as part of the farm operation	In conformity with the provisions of sub-section 6.4

	part	
	b) sale of products grown or raised on the premises	
	c) A farm-related occupation	In conformity with the provisions of sub-section 6.23
	d) a second dwelling unit by	In conformity with the provisions of sub-sections 6.24 and 6.25
7.3.2	Residential Building - One Unit which may include:	
	a) a private home day care	
	b) a home occupation or office, base or headquarters for	In conformity with the provisions of sub-section 6.18
	c) a hairdresser or barber	In conformity with the provisions of sub-section 6.27
	d) Bed and Breakfast establishment	In conformity with the provisions of sub-section 6.35
7.3.3	A Group Home Type 'A'	In conformity with the provisions of sub-section 6.30
7.3.4	A Veterinary Clinic or Office	
7.3.5	The raising, training or boarding of horses including Riding Stable or Riding Academy	
7.3.6	Accessory Uses	
	a) buildings or structures accessory to the foregoing permitted uses	In conformity with the provisions of sub-section 6.4
	b) accessory signs	In conformity with the provisions of sub-section 6.16

7.4 RECOGNIZED LOT - 1390 SQUARE METRES TO 4 HECTARES

Notwithstanding anything contained in the foregoing, any Recognized Lot which has a Minimum Lot Frontage of not less than 30 metres and which contains an area of not more than 4 hectares may be used for the permitted uses listed in Column 1 below in conformity with the applicable regulations contained in Section 6, entitled "General Regulations", and in conformity with the additional regulations for the specific uses listed in Column 2 below.

<u>Column 1</u> <u>Permitted Uses</u>	<u>Column 2</u> <u>Regulations</u>
7.4.1 Farming (except sod farming, commercial greenhouses or any farming activity which includes the keeping or raising of animals or other livestock for commercial purposes except as specifically permitted below) including the following accessory uses:	In conformity with the provisions of sub-section 7.2 except for Minimum Lot Area and Minimum Frontage requirements

- | | |
|---|--|
| a) any barn, shed, building or structure required as part of the farm operation | In conformity with the provisions of sub-section 6.4 |
| b) sale of products grown or raised on the premises | |

The foregoing permitted uses are not to be construed to permit a second dwelling unit or a farm-related occupation

- | | |
|--|--|
| 7.4.2 Residential Building - One Unit which may include: | In conformity with the provisions of sub-section 7.2 except for Minimum Lot Area and Minimum Frontage requirements |
|--|--|

- | | |
|---|---|
| a) a private home day care | In conformity with the provisions of sub-section 6.18 |
| b) a home occupation or office, base or headquarters for the occupant | In conformity with the provisions of sub-section 6.35 |
| c) Bed and Breakfast Establishment | |

- | | |
|-----------------------------|---|
| 7.4.3 A Group Home Type 'A' | In conformity with the provisions for a Residential Building - One Unit of paragraph 7.4.2 and the provisions of sub-section 6.30 |
|-----------------------------|---|

- | | |
|-------------------------------------|--|
| 7.4.4 A Veterinary Clinic or Office | |
|-------------------------------------|--|

- | | |
|---|---|
| 7.4.5 The raising, training or boarding of horses | In conformity with the provisions of sub-sections 6.28 and 6.29 |
|---|---|

- | | |
|--|---|
| 7.4.6 Accessory Uses | |
| a) buildings or structures accessory to the foregoing permitted uses | In conformity with the provisions of sub-section 6.4 |
| b) accessory signs | In conformity with the provisions of sub-section 6.16 |

7.5 RECOGNIZED LOT - 4 HECTARES TO 35 HECTARES

Notwithstanding anything contained in the foregoing, any Recognized Lot which has a Minimum Lot Frontage of not less than 30 metres and which contains an area of more than 4 hectares and area of not more than 35 hectares may be used for the permitted uses listed in Column 1 below in conformity with the applicable regulations contained in Section 6, entitled "General Regulations", and in conformity with the additional regulations for the specific uses listed in Column 2 below.

<u>Column 1</u> <u>Permitted Use</u>	<u>Column 2</u> <u>Regulations</u>
7.5.1 Farming (except sod farming or commercial greenhouses) including the following accessory uses:	In conformity with the provisions of sub-section 7.2 except for Minimum Lot Area and Minimum Lot Frontage requirements
a) any barn, shed, building or structure required as part of the farm operation	In conformity with the provisions of sub-section 6.4

	b) sale of products grown or raised on the premises	In conformity with the provisions of sub-section 6.23
	c) a farm-related occupation	
7.5.2	Residential Building - One Unit which may include:	In conformity with the provisions of sub-section 7.2 except for Minimum Lot Area and Minimum Lot Frontage requirements
	a) a private home day care	
	b) a home occupation or office, base or headquarters for the occupant	In conformity with the provisions of sub-section 6.18
	c) Bed and Breakfast Establishment	In conformity with the provisions of sub-section 6.35
7.5.3	A Group Home Type 'A'	In conformity with the provisions for a Residential Building - One Unit of paragraph 7.5.2 and the provisions of sub-section 6.30
7.5.4	A Veterinary Clinic or Office	
7.5.5	The raising, training or boarding of horses including Riding Stable or Riding Academy	
7.5.6	Accessory Uses	
	a) buildings or structures accessory to the foregoing permitted uses	In conformity with the provisions of sub-section 6.4
	b) accessory signs	In conformity with the provisions of sub-section 6.16

SECTION 15: ZONE 9 - Z.9

15.1 PERMITTED USES

Within a Zone 9 - Z.9, no land shall be used and no building or structure shall be erected or used except for one or more of the Permitted Uses listed in Column 1 below.

15.2 REGULATIONS

Within a Zone 9 - Z.9, no land shall be used and no building or structure shall be erected or used except in conformity with the applicable Regulations contained in Section 6, "General Regulations" and the additional regulations for the specific uses listed in Column 2 below.

<u>Column 1</u> <u>Permitted Uses</u>	<u>Column 2</u> <u>Regulations</u>
15.2.1 Any light to medium industrial use providing light to medium scale processing, manufacturing, packaging, assembly, production, fabrication, warehousing, testing, treating, storage of goods / products, or finishing, and having minimal adverse effects for nearby sensitive land uses. In connection with any of the above permitted uses, a retail or wholesale outlet or showroom may be established as any accessory use so long as such outlet is located within the main building and does not occupy an area exceeding 25% of an area of the ground floor of the main building. Such outlet or showroom shall only display or offer for sale products manufactured, fabricated or processed on the premises.	In conformity with the provisions of sub-section 15.3
15.2.2 Distributing or Transportation Operation	In conformity with the provisions of sub-section 15.3
15.2.3 Veterinary Clinic or Office	In conformity with the provisions of sub-section 15.3
15.2.4 Contractor, Building Supplies Dealer/ Outlet or Sawmill	In conformity with the provisions of sub-section 15.3
15.2.5 Automobile Service Station	In conformity with the provisions of sub-section 15.3
15.2.6 Farm Equipment Sales and Service	In conformity with the provisions of sub-section 15.3
15.2.7 Warehousing or Indoor Storage	In conformity with the provisions of

		sub-section 15.3
15.2.8	Wholesale Outlet or Showroom	In conformity with the provisions of sub-section 15.3
15.2.9	Bank, Restaurant or Catering Service	In conformity with the provisions of sub-section 15.3
15.2.10	Parking Lot or Garage Public	In conformity with the provisions of sub-section 15.3
15.2.11	Service or Repair Enterprise	In conformity with the provisions of sub-section 15.3
15.2.12	Office or Office Building	In conformity with the provisions of sub-section 15.3
15.2.13	Commercial Printing or Laundry	In conformity with the provisions of sub-section 15.3
15.2.14	Car Washing Establishment	In conformity with the provisions of sub-section 15.3
15.2.15	Club or Amusement Enterprise, Lodge or Recreation Use	In conformity with the provisions of sub-section 15.3
15.2.16	Hotel or Motel	In conformity with the provisions of sub-section 15.3
15.2.17	Trucking or Transportation Enterprise or Terminal	In conformity with the provisions of sub-section 15.3
15.2.18	Sales or Servicing of Motor Vehicles or Machinery	In conformity with the provisions of sub-section 15.3
15.2.19	Boat, Bus & Trailer Display, Service and Storage	In conformity with the provisions of sub-section 15.3
15.2.20	Funeral Home	In conformity with the provisions of sub-section 15.3
15.2.21	Theatre or Bowling Alley	In conformity with the provisions of sub-section 15.3
15.2.22	Storage & Display of Manufactured Modular or Prefabricated Buildings	In conformity with the provisions of sub-section 15.3
15.2.23	Storage, Sale and Supply of Livestock Equipment (Excluding animals)	In conformity with the provisions of sub-section 15.3

- | | | |
|---|--|---|
| 15.2.24 | Storage, Sale and Supply of Poultry Equipment (Excluding animals / birds) | In conformity with the provisions of sub-section 15.3 |
| 15.2.25 Accessory Uses | | |
| a) | accessory buildings or structures | In conformity with the provisions of sub-section 6.4 |
| b) | accessory signs | In conformity with the provisions of sub-section 6.16 |
| 15.2.26 The foregoing permitted uses are not to be construed to permit: | | |
| a) | a use designated as an offensive trade, business or manufacture by the Public Health Act, R.S.O. 1980, as amended; | |
| b) | a use which is or may become obnoxious, offensive or dangerous by reasons of the presence, emission or production in any manner of odour, dust, smoke, noise, fumes, vibration, refuse matter or water-carried wastes; | |
| c) | use which would require for its operation a standard of services (particularly water supply and waste disposal) which the municipality is unable or unwilling to provide; | |
| d) | the recycling of animal, oil or waste products, a rendering plant, abattoir or slaughter house. | |

15.3 ADDITIONAL REGULATIONS

- | | | |
|--|-----------------------------------|--|
| 15.3.1 Minimum Lot Area | | |
| a) | With Municipal Water and Sewer | 1390 square metres or the area of a Recognized Lot |
| b) | Without Municipal Water and Sewer | 2000 square metres or the area of a Recognized Lot |
| 15.3.2 Minimum Lot Width | | |
| a) | With Municipal Water and Sewer | 22 metres or the width of a Recognized Lot |
| b) | Without Municipal Water and Sewer | 30 metres or the width of a Recognized Lot |
| 15.3.3 Minimum Side Yard (each side) | | |
| Equal to one-half (½) building height but in no case less than 3 metres. On any side yard that abuts a Zone 2, 2a, 3, 4, 4a or 5, the minimum side yard shall be 7.5 metres. | | |
| 15.3.4 Minimum Flankage Yard | | |
| 7.5 metres | | |
| 15.3.5 Minimum Rear Yard | | |
| 7.5 metres | | |

- a) Where any rear yard abuts a railway right-of-way and/or an Ontario Hydro right-of-way, no rear yard is required.
 - b) In any case where a side or rear yard abuts a Zone 2, 2a, 3, 4, 4a or 5, no building, structure, outdoor storage or parking area shall be permitted within 4.5 metres of the side or rear lot lines.
- 15.3.6 Maximum Lot Coverage Fifty percent (50%) of total lot area
- 15.3.7 Maximum Building Height 13.5 metres (44 feet)
- 15.3.8 Off-Street Parking and Off-Street In conformity with the provisions of sub-sections 6.11, 6.12 and 6.13
- 15.3.9 Buffer Strips
- A buffer strip in conformity with the provisions of sub-section 6.15 shall be provided along all lot lines which abut any Zone 2, 2a, 3, 4, 4a, 4b, 4c, 4d, 5, 5a, 6 or 7.
- 15.3.10 Outdoor Storage
- a) shall not be permitted between the front wall of the main building and the street line;
 - b) shall not be permitted in any required side yard;
 - c) all outdoor storage areas shall be screened by a wall, fence or planting so that such storage space is not visible from any street;
 - d) notwithstanding the aforementioned, outdoor display and sale of new or used motor vehicles or farm equipment is permitted so long as all such display or sales area are to the rear of all building lines established by this By-law.
- 15.3.11 Main and Accessory Buildings
- Notwithstanding any other provisions of this By-law, more than one main building and an accessory building or buildings shall be permitted on any lot in this zone.
- 15.3.12 Gasoline Pumps as Accessory Use
- Notwithstanding anything contained in this By-law, gasoline pumps may be installed by a trucking or transportation enterprise as an accessory use only. However, no gasoline or diesel fuels shall be permitted to be sold or resold on the premises of such trucking or transportation enterprise.

15.3.13 Parking in Flankage Yard

Notwithstanding anything contained in this By-law, off-street parking spaces may be provided in the front or flankage yards of a corner lot in this zone in accordance with the following regulations:

- a) that a buffer strip of flowers, grass or shrubs with a minimum width of 1.5 metres (5 feet) shall be provided and maintained along and abutting the street except at the location of the ingress and egress ramps;
- b) that a minimum distance between such ramps shall be 21 metres (68.9 feet); and,
- c) that on a corner lot, no such ramps shall be situated closer than 9 metres (25.5 feet) to the intersection of the front and flankage lot lines.

15.3.14 Farm Building

Notwithstanding any other provisions of this By-law, Farm Buildings are prohibited in any Zone 9,10, or 11 designation.

15.3.15 Quonset Hut

Notwithstanding any other provisions of this By-law, Quonset Huts are prohibited in any Zone 9,10, or 11 designation.

SECTION 19: ZONE 13 - Z.13

19.1 PERMITTED USES

Within a Zone 13 - Z.13, no land shall be used and no building or structure shall be erected or used except for one or more of the Permitted Uses listed in Column 1 below.

19.2 REGULATIONS

Within a Zone 13 - Z.13, no land shall be used and no building or structure shall be erected or used except in conformity with the applicable regulations contained in Section 6, "General Regulations" and the additional regulations for the specific uses listed in Column 2 below.

	<u>Column 1</u> <u>Permitted Uses</u>	<u>Column 2</u> <u>Regulations</u>
19.2.1	School under the jurisdiction of a County Board of Education or School Board under a Private School under Provincial Charter	In conformity with the provisions of sub-section 19.3
19.2.2	Church	In conformity with the provisions of sub-section 19.3
19.2.3	Cemetery	In conformity with the provisions of sub-section 19.3
19.2.4	Home for the Aged	In conformity with the provisions of sub-section 19.3
19.2.5	Monastery	In conformity with the provisions of sub-section 19.3
19.2.6	Nunnery	In conformity with the provisions of sub-section 19.3
19.2.7	Home for the Mentally Challenged	In conformity with the provisions of sub-section 19.3
19.2.8	Hospital or Clinic	In conformity with the provisions of sub-section 19.3
19.2.9	Orphanage	In conformity with the provisions of sub-section 19.3
19.2.10	Day Nursery	In conformity with the provisions of sub-section 19.3
19.2.11	Nursing or Convalescent Home	In conformity with the provisions of sub-section 19.3

19.2.12 Accessory Uses

- | | | |
|----|---|--|
| a) | accessory buildings or structures
accessory to the foregoing
permitted uses | In conformity with the provisions of sub-section
6.4 |
| b) | accessory signs | In conformity with the provisions of sub-section
6.16 |

19.3 ADDITIONAL REGULATIONS

19.3.1 Minimum Lot Area

- | | | |
|----|--------------------------------------|---|
| a) | With Municipal Water and
Sewer | 1390 square metres or the area of a Recognized
Lot |
| b) | Without Municipal Water and
Sewer | 2000 square metres or the area of a Recognized
Lot |

19.3.2 Minimum Lot Width

- | | | |
|----|--------------------------------------|----------------------|
| a) | With Municipal Water and
Sewer | 30 metres (100 feet) |
| b) | Without Municipal Water and
Sewer | 30 metres (100 feet) |

19.3.3	Minimum Side Yard (each side)	Equal to one-half (½) building height but in no case less than 4.5 metres (15 feet)
--------	-------------------------------	--

19.3.4	Minimum Rear Yard	7.5 metres (25 feet)
--------	-------------------	----------------------

19.3.5	Maximum Building Height	13.5 metres (44 feet)
--------	-------------------------	-----------------------

19.3.6	Maximum Lot Coverage	Fifty percent (50%) of total lot area
--------	----------------------	---------------------------------------

19.3.7	Off-Street Parking	In conformity with the provisions of sub-sections 6.11 and 6.13
--------	--------------------	--

SECTION 19A: ZONE 14 - Z.14

19A.1 PERMITTED USES

Within a Zone 14 - Z.14, no land shall be used and no building or structure shall be erected or used except for one or more of the Permitted Uses listed in Column 1 below.

19A.2 REGULATIONS

Within a Zone 14 - Z.14, no land shall be used and no building or structure shall be erected or used except in conformity with the applicable regulations contained in Section 6, "General Regulations" and the additional regulations for the specific uses listed in Column 2 below.

<u>Column 1</u> <u>Permitted Uses</u>	<u>Column 2</u> <u>Regulations</u>
19A.2.1 The making, establishment or operation of a pit or quarry.	
19A.2.2 Farming (except sod farming or commercial greenhouse and not including a residence or residential unit)	
19A.2.3 Forestry	
19A.2.4 The following uses only, accessory to the foregoing permitted uses:	
a) buildings or structures which are incidental to and directly related to the extraction operation and which are shown on the site plan forming part of the license approval.	Accessory uses permitted in sub-paragraph 19A.2.4(a) shall not be located within 15 metres of any zone limit
Nothing in the foregoing shall be deemed to permit any manufacturing, commercial or processing operation except for the screening, washing, crushing and storage of material mined on the site.	
b) any barn, shed, building or structure required as part of the farming operation except a residence or residential unit	
c) accessory signs	In conformity with the provisions of sub-section 6.16

APPENDIX B

Consultant's Statutory Declaration



ACOUSTICS



NOISE



VIBRATION

CONSULTANT STATUTORY DECLARATION

CANADA)	In the Matter of the
)	Environmental Protection
PROVINCE OF ONTARIO)	Act and the Planning Act
)	
)	And in the Matter of an
)	Application for a Proposed
)	Industrial Development at
)	Regional Road 97 & Regional Road 47,
)	Township of North Dumfries,
)	Regional Municipality of Waterloo

I, Mandy Chan, of the City of Toronto, SOLEMNLY DECLARE THAT:

1. I am a Professional Engineer employed by HGC Engineering which holds a Certificate of Authorization and have personal knowledge of the matters set out below.
2. I was retained or employed as the principal consultant to undertake the assessment of noise impacts and recommendation of noise mitigation measures for the property described as a Proposed Industrial Development at Regional Road 97 and Regional Road 47 in the Township of North Dumfries.
3. I had the expertise required to perform these services. Any assessment activities or recommendations requiring the application of engineering principles have been undertaken or supervised by an engineer qualified to perform such services.
4. The information used in the study entitled Land Use Compatibility Study (Noise) Proposed Industrial Development Regional Road 97 and Regional Road 47 Township of North Dumfries Regional Municipality of Waterloo, Ontario is the best available information as of the date of the study.
5. The sound level calculations, the interpretation of noise attenuation requirements and the recommended measures are in accordance with Ministry of Environment Guidelines, Region of Waterloo policies, any applicable policy of guidelines or the Area Municipality, and any other applicable policy or guideline.
6. The physical noise attenuation measures proposed in this study are feasible to implement and will provide the level of attenuation indicated in the study.
7. I acknowledge that this study may be subject to a peer review conducted at my cost.

8. I acknowledge that public authorities and future owners, occupants and others may rely on this statement.

AND I make this solemn Declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

DECLARED before me at the City
of Mississauga, in the Region of Peel
this 4th day of May 2020

)
)
) 
Mandy Chan



Greg Guzik
Professional Corporation
82 Queen Street South
Mississauga, ON L5M 1K6
TEL. 905-286-4570
FAX. 905-286-9692