

**LAND USE COMPATIBILITY STUDY**  
**FOR**  
**138 ROBERT STREET EAST, PENETANGUISHENE**

**SUBMITTED TO:**

Innovative Planning Solutions Inc.  
647 Welham Road, Unit 9A  
Barrie, Ontario, L4N 0B7

**SUBMITTED BY:**

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SE #: 1148.001

September 19, 2022

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## **1.0 INTRODUCTION**

138 Robert Street LP (Client) retained SONAIR Environmental Inc. (SONAIR) to prepare a Land Use Compatibility Study in support of a planning application for a proposed mixed-use development located at 138 Robert Street East in Penetanguishene. The proposal would introduce a sensitive land use to a residential, commercial, and industrial area. At the request of the Town of Penetanguishene, a Land Use Compatibility Study is required which covers the environmental aspects of noise, vibration, dust, and odour emissions.

The purpose of this assessment is to determine if noise, vibration, dust, and odour emissions from surrounding sources might adversely impact proposed sensitive land uses within the development. This study was conducted in accordance with the Ministry of the Environment, Conservation, and Parks (MECP) Guidelines:

- Guideline D-1: Land Use Compatibility
- Guideline D-6: Compatibility between Industrial Facilities and Sensitive Land Uses

### **1.1 Subject Site**

The Client is proposing to develop the property located at 138 Robert Street East in Penetanguishene, Ontario. The proposed development towards the Northwest side abutting Robert Street East and South side abutting Thompsons Road, are a sensitive land use, consisting of a residential development with low (single-detached dwelling) and medium (townhouses) density housing. The employment area proposed on the Northeast side of the development is not anticipated to adversely impact the nearby sensitive uses as it is not expected that these employment areas will create significant nuisance issues. In any case, any future operations and activities that have the potential to adversely impact sensitive land uses in the vicinity may require obtaining applicable approvals from the Ministry of the Environment, Conservation and Parks in accordance with O. Reg 419/05 and NPC-300. Therefore, for the purpose of this study, the area of influence is based on distances measured between property lines of surrounding industrial facilities and the residential developments.

The proposed development is surrounded by existing residential, forest, agricultural, and industrial land uses. The subject site is shown in Appendix A. The surrounding land can be characterized as:

*Table 1 – Summary of Surrounding Land Use*

<b>Direction</b>	<b>Land Use</b>
North	Industrial
East	Forest
South	Agricultural
West	Residential

## 2.0 LAND USE COMPATIBILITY GUIDANCE

### 2.1 Guideline D-6: Compatibility between Industrial Facilities and Sensitive Land Uses

Guideline D-6 – Compatibility Between Industrial Facilities and Sensitive Land Uses, sets out three (3) distinct classes of facilities. The criterion is provided in Table 2 below.

*Table 2 – Guideline D-6 Industrial Categorization Criteria*

<b>Category</b>	<b>Outputs</b>	<b>Scale</b>	<b>Process</b>	<b>Operation &amp; Intensity</b>
CLASS I	<i>NOISE:</i> Sound not audible off property. <i>DUST and/or ODOUR:</i> Infrequent and not intense. <i>VIBRATION:</i> No ground- borne vibration on plant property.	- No outside storage - Small scale plant or scale is irrelevant in relation to all other criteria for this Class	- Self-contained plant or building which produces/ stores a packaged product. Low probability of fugitive emissions	- Daytime operations only - Infrequent movement of products and/or heavy trucks
CLASS II	<i>NOISE:</i> Sound occasionally audible off property. <i>DUST and/or ODOUR:</i> Frequent and occasionally intense. <i>VIBRATION:</i> Possible ground-borne vibration, but cannot be perceived off property.	- Outside storage permitted - Medium level of production allowed	- Open process - Periodic outputs of minor annoyance - Low probability of fugitive emissions	- Shift operations permitted - Frequent movement of products and/or heavy trucks with the majority of movements during daytime hours
CLASS III	<i>NOISE:</i> Sound frequently audible off property. <i>DUST and/or ODOUR:</i> Persistent and/or intense. <i>VIBRATION:</i> Ground-borne vibration can frequently be perceived off property.	- Outside storage of raw and finished products - Large production levels	- Open process - Frequent outputs of major annoyances - High probability of fugitive emissions	- Continuous movement of products and employees - Daily shift operations permitted

The study area for Land Use Compatibility Assessments is established in the D-Series Guidelines. Depending on the Facility Class categorization around the facility the potential influence area will be as set out in Table 3 below. SONAIR has conservatively taken the position to review the impact from 1,000 meters around the subject site. The recommended setback distances as a function of Facility Class are also provided in Table 3.

*Table 3 – Guideline D-6 Minimum Separation Distances and Potential Influence Areas*

<b>Class</b>	<b>Recommended Separation Distance</b>	<b>Potential Influence Area</b>
I	20	70
II	70	300
III	300	1000

Further to Table 3, the D-6 guideline also suggests that while separation distances are typically measured between property lines, there is an alternative which allows for measuring from a specific source to the sensitive receptor. Additionally, guideline D-6 provides allowances for reducing the minimum separation distance required based on mitigation at industrial sites and provides for exceptions to the Minimum Separation Distances for some development sites.

### **3.0 IDENTIFIED FACILITIES WITH POTENTIAL IMPACTS**

The 1,000 meter study area surrounding the proposed development is developed with predominantly residential, commercial, and industrial land uses. Table 4 below provides a summary of the surrounding land uses, the nature of their operations, and if any potential conflicts exist.

*Table 4 – Study Area Classification*

<b>Facility #</b>	<b>Relative Direction</b>	<b>Facility</b>	<b>Address</b>	<b>Minimum Distance from Site (m)</b>	<b>Relevant Operations</b>	<b>Potential Emissions</b>	<b>MECP Industrial Class</b>	<b>Comments</b>
1	N	Penetang Wine Cellar	143 Robert St. E	149	Winemaking supply store	Odour	I	Acceptable Range
2	N	WINMAR GBM	2 Centennial Dr.	235	Building Restoration Services	Noise	I	Acceptable Range
3	N	Home and Cottage Centre	4 Centennial Dr.	256	Fireplace Store/Dealer	n/a	0	n/a
4	N	Gilkan Construction Ltd.	6 Centennial Dr.	264	Construction / Renovation Company	Dust, Noise	I	Acceptable Range
5	N	Maurice Mechanical Services Ltd.	8 Centennial Dr.	265	Automation Manufacturing Company	Dust, Noise	I	Acceptable Range
6	W	Life Labs Medical Laboratory Services	101 Thompsons Rd.	158	Medical Laboratory	n/a	0	n/a
7	W	The Salon at Georgian Village	101 Thompsons Rd.	161	Hair and Beauty Salon	n/a	0	n/a
8	W	Georgian Bay Cancer Support Centre	45 Edward St.	594	Social Services	n/a	0	n/a

Facility #	Relative Direction	Facility	Address	Minimum Distance from Site (m)	Relevant Operations	Potential Emissions	MECP Industrial Class	Comments
9	NW	Sitting Pretty Uphostery	109 Church St.	769	Upholstery Shop	n/a	0	n/a
10	N	Techform Products, a Division of Magna Mechatronics	11 Centennial Dr.	383	Auto Parts Manufacturer	Dust, Noise, Vibration, Odour	II	Acceptable Range
11	N	Techform Products Limited	15 Centennial Dr.	539	Auto Parts Manufacturer	Dust, Noise, Vibration, Odour	II	Acceptable Range
12	N	Techform Products Limited	14 Centennial Dr.	444	Auto Parts Manufacturer	Dust, Noise, Vibration, Odour	II	Acceptable Range
13	N	Storage 4 All	163 Robert St.	309	Storage Facility	Dust, Noise	I	Acceptable Range
14	N	K.B. Tool and Machine Inc.	171 Robert St. E	457	Precision Machine Shop	Dust, Noise	I	Acceptable Range
15	N	Georgian Bay Parts	171 Robert St. E	457	ATV repair shop	Noise	I	Acceptable Range
16	N	Georgian Bay Services Inc.	171 Robert St. E	457	Construction Management and Services Provider	Noise	I	Acceptable Range
17	N	Industrial Filter Manufacturing Ltd.	187 Robert St. E	673	Liquid Filtration Product Manufacturer	Dust, Noise	I	Acceptable Range

Facility #	Relative Direction	Facility	Address	Minimum Distance from Site (m)	Relevant Operations	Potential Emissions	MECP Industrial Class	Comments
18	N	Sealand Quality Foods / iQF Products	11 Laurier Rd.	626	Food Product Supplier	Noise	I	Acceptable Range
19	N	Georgian Bay Transport	9 Laurier Rd.	579	Trucking Company	Noise	I	Acceptable Range
20	N	CamWood Doors	13 Laurier Rd.	630	Door Manufacturer	Dust, Noise	I	Acceptable Range
21	N	J.B. Merchandise Design Inc.	17 Laurier Rd.	651	Construction / Renovation Services Provider	Noise	I	Acceptable Range
22	N	Recollections Auction House	19 Laurier Rd.	718	Auction House	Noise	I	Acceptable Range
23	N	Georgian Bay Custom	23 Laurier Rd. Unit 4	748	Custom Engraving	Noise	I	Acceptable Range
24	N	Georgian Bay Metal Inc.	12 Laurier Rd.	581	Steel Fabricator	Dust, Noise	I	Acceptable Range
25	N	Town of Penetanguishene Public Works Department	24 Centennial Dr.	727	Public Works Roads Site	Dust, Noise	II	Acceptable Range
26	N	Maacon Construction Corporation	45 Robillard Dr.	770	General Contractor	Dust, Noise	I	Acceptable Range
27	N	Georgian Bay Plastics	874 Fuller Ave.	857	Plastic Fabrication Company	Dust, Noise, Odour	II	Acceptable Range

Facility #	Relative Direction	Facility	Address	Minimum Distance from Site (m)	Relevant Operations	Potential Emissions	MECP Industrial Class	Comments
28	N	Krytiuk Motorsports	836 Fuller Ave.	779	Motorsports Vehicle Restoration	Dust, Noise	I	Acceptable Range
29	N	Canadian Dip Mouldings Inc.	798 Fuller Ave.	730	Dip Mouldings & Powder Coating Services	Dust, Noise, Odour	II	Acceptable Range
30	NE	Tinney's Septic Service & Construction	693 Fuller Ave.	515	Excavating & Septic Service / Landscape Material Provider	Dust, Noise	I	Acceptable Range
31	NE	Charles Morden Construction Ltd. (Fuller Pit)	905 Fuller Ave.	868	Class A Aggregate, Sand, and Gravel Pit	Dust, Noise, Vibration	III	Within Potential Influence Area

*\*Facilities that do not meet the definition of any one of the three industrial classes and have little to no potential for creating nuisance issues have been classified as Class 0.*

## **4.0 IDENTIFIED FACILITIES WITH POTENTIAL CONFLICTS**

### **4.1 Industrial Facilities**

One (1) industrial facility was identified as potentially, or likely to have an adverse impact as a result of the proposed sensitive land use.

#### *4.1.1 Charles Morden Construction Ltd. (Fuller Pit)*

Charles Morden Construction Ltd. operates a licensed Class A pit located at 905 Fuller Avenue in Penetanguishene, roughly 868 m from sensitive land uses within the proposed development. The hours of operation are 8:00 AM to 5:00 PM. The Fuller pit produces a variety of sand and gravel products as well as limestone and granite. Due to the Class A license and maximum tonnage of 300,000 per year, the pit was classified as a Class III facility. Measuring the separation distance from property line to property line, the facility is located within the potential influence area of the proposed development.

Odour emissions are not anticipated to be a concern as the processes are not expected to be significant sources of odour based on the nature of its operations.

Noise and vibration generated from on-site equipment are not anticipated to be a concern given the large separation distance between the facility and the proposed sensitive land uses. As the facility only operates during the daytime, it is anticipated that noise impact will be insignificant relative to the road noise. Since the proposed development is abutting Robert Street East and Thompsons Road, road traffic that contributes to the background noise may be at a higher level than noise generated from the pit. In addition, industrial facilities to the North of Robert Street East also breaks the line of sight, shielding noise emissions generated from the pit to the proposed development.

Dust emissions can be a concern given the nature of its operations. However, a wind rose has been developed from local meteorological conditions, attached in Appendix B, indicating that winds seldom blow from the pit towards the direction of the proposed development, and that prevailing winds are blowing from the Northwest to the Southeast, where emissions from the facility are generally directed away from the proposed development.

An existing residential area and a hospice are located approximately 438m South and 145m West of the Pit, respectively, which are much closer in proximity compared to the proposed sensitive

land uses. As these existing sensitive receptors are not adversely impacted by the pit's operations, it is unlikely that the pit will adversely impact the proposed development.

Based on the aforementioned rationale, it is not anticipated that the Charles Morden Construction Ltd. (Fuller Pit) will adversely impact the proposed development.

#### 4.2 **Commercial Facilities**

No commercial facilities were identified as potentially, or likely to have an adverse impact as a result of the proposed sensitive land use.

#### 4.3 **Other Facilities**

No other utilities or facilities were identified as potentially, or likely to have an adverse impact as a result of this proposed sensitive land use.

## **5.0 SUMMARY OF POTENTIAL IMPACTS AND CONCLUSIONS**

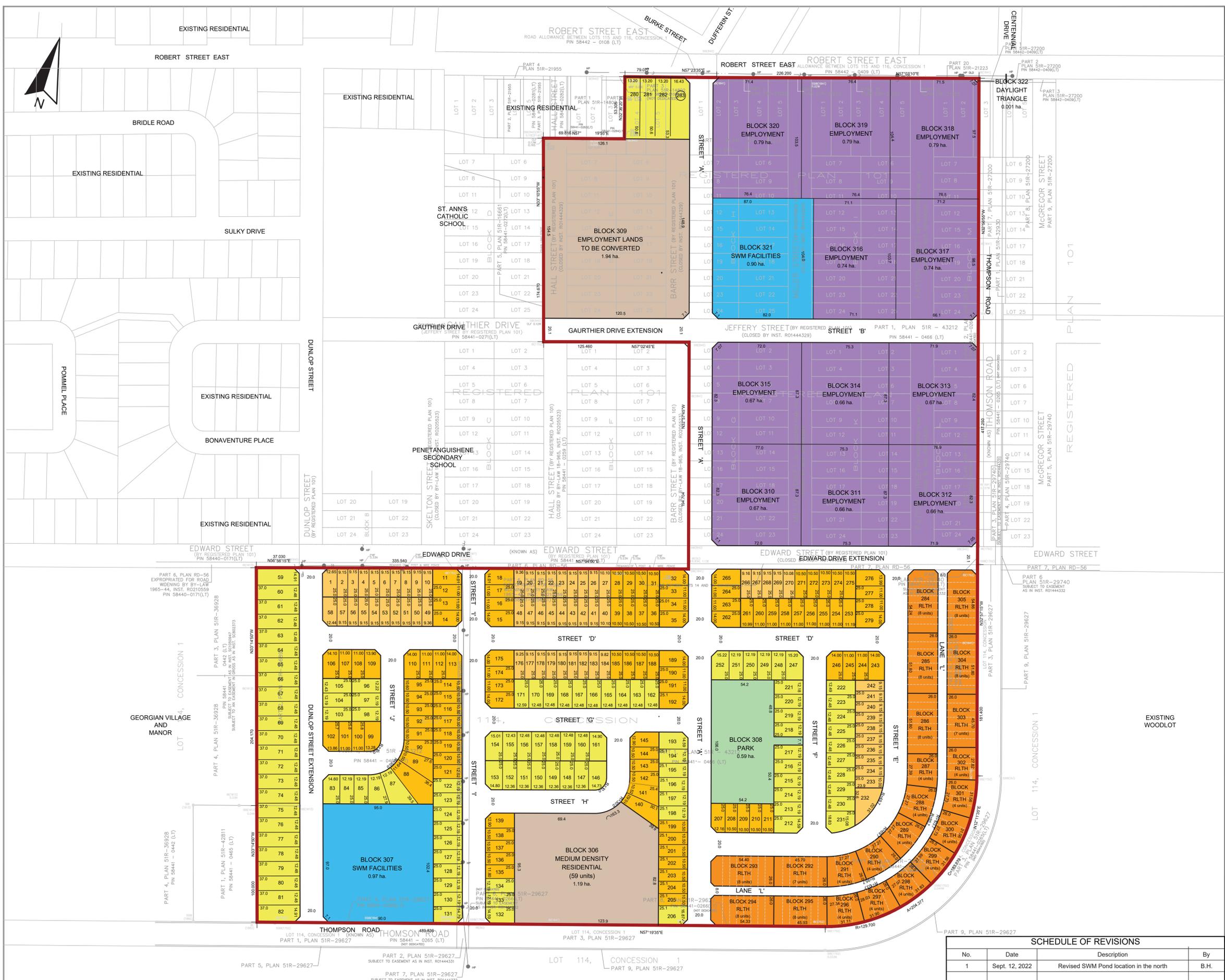
Based on the assessment of the industrial, commercial, and residential land uses in the vicinity of the subject property, and the MECP's D-6 Guidelines, there are no facilities that are expected to adversely impact the proposed development as a result of noise, vibration, dust, or odour.

Further, the subject site is not expected to adversely impact the neighbouring land uses. This is consistent with other employment and sensitive land uses located in proximity to the development.

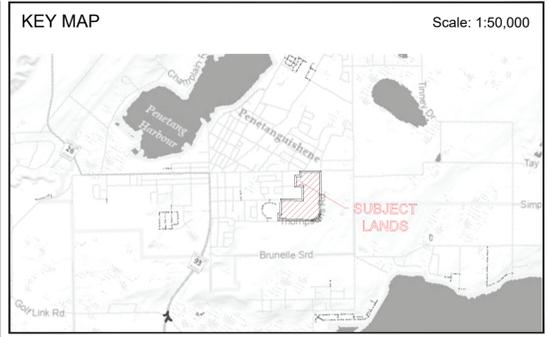


## **APPENDIX A**

### **SITE PLAN & SURROUNDING DRAWINGS**

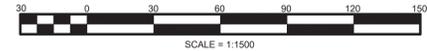


**METRIC NOTE:**  
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048



## DRAFT PLAN OF SUBDIVISION

PART OF LOTS 1, 2, 3 AND ALL OF LOTS 4 TO 25 INCLUSIVE BLOCK E AND ALL OF LOTS 1 TO 24 INCLUSIVE BLOCK G AND ALL OF LOTS 1 TO 25 INCLUSIVE BLOCK H AND ALL OF LOTS 1 TO 25 INCLUSIVE BLOCK I AND ALL OF LOTS 1 TO 24 INCLUSIVE BLOCK K AND PART OF LOTS 1, 4, 5, 8, 9, 12, 13, 16, 17, 20, 21 AND 24 BLOCK L AND ALL OF LOTS 1 AND 2, PART OF LOTS 3, 7, 8, 11, 12, 15, 16, 19, 20, 23 AND 24 BLOCK M AND PART OF JEFFERY STREET, EDWARD STREET, HALL STREET AND BARR STREET (CLOSED BY R01444329) AND ALL OF MILLER STREET AND PATTON STREET (CLOSED BY R01444329) REGISTERED PLAN 101 AND PART OF LOT 114, CONCESSION 1 (GEOGRAPHIC TOWNSHIP OF TAY) TOWN OF PENETANGUISHENE COUNTY OF SIMCOE



**LEGEND**  
 SUBJECT LANDS - 31.62 ha

**LAND USE SCHEDULE**

Land Use	Lot / Block No.	Units	Area (ha)	Area (ac.)	%
RESIDENTIAL SINGLE LOT (8.15m / 30')	Lots 1-10, 19-27, 40-58, 176-184, 232-242, 266-270	63	1,495	3.69	4.7
RESIDENTIAL SINGLE LOT (10.50m / 34')	Lots 11-18, 25-35, 88-95, 99-102, 105-121, 135-145, 172-175, 185-192, 199-205, 207-211, 243-246, 253-265, 271-279	109	3,185	7.87	10.1
RESIDENTIAL SINGLE LOT (12.19m / 40')	Lots 59-87, 96-98, 103-105, 122-134, 146-171, 193-198, 206, 212-231, 247-252, 260-263	111	4,083	10.09	12.9
RESIDENTIAL REAR LANE TOWNHOUSES (8.1m / 20')	Blocks 284-305	126	2,244	5.54	7.1
RESIDENTIAL MEDIUM DENSITY (50 upha.)	Blocks 306, 309	155	3,127	7.73	9.9
STORMWATER MANAGEMENT FACILITIES	Blocks 307, 321		1,870	4.62	5.9
PARK	Block 308		0,593	1.46	1.9
EMPLOYMENT LANDS	Blocks 310 - 320		7,839	19.37	24.8
DAYLIGHT TRIANGLES	Block 321		0,001	0.01	0.0
STREETS	Street A - K (20.0m ROW) Lane 'L' (8.0m ROW)		7,185	17.76	22.7
<b>TOTAL</b>		<b>564</b>	<b>31,622</b>	<b>78.14</b>	<b>100.0</b>

**OWNER'S CERTIFICATE**  
 I, THE UNDERSIGNED, BEING THE REGISTERED OWNER OF THE SUBJECT LANDS, HEREBY AUTHORIZE INNOVATIVE PLANNING SOLUTIONS TO PREPARE THIS DRAFT PLAN OF SUBDIVISION AND TO SUBMIT SAME TO THE TOWN OF PENETANGUISHENE FOR APPROVAL.

DATE \_\_\_\_\_ SIGNING OFFICER \_\_\_\_\_  
 NAME OF FIRM \_\_\_\_\_

**SURVEYOR'S CERTIFICATE**  
 I CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE \_\_\_\_\_ TOM KRCMAR, OLS  
 KRCMAR SURVEYORS LTD.

**ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT**

a) SHOWN ON PLAN	b) SHOWN ON PLAN	c) SHOWN ON PLAN	d) RESIDENTIAL, OPEN SPACE, EMPLOYMENT
e) SHOWN ON PLAN	f) SHOWN ON PLAN	1) NONE	
g) SHOWN ON PLAN	h) MUNICIPAL WATER	2) SANDY	
j) SHOWN ON PLAN	k) MUNICIPAL SEPTIC SERVICES	i) NONE	

**SCHEDULE OF REVISIONS**

No.	Date	Description	By
1	Sept. 12, 2022	Revised SWM Pond location in the north	B.H.

**IPS INNOVATIVE PLANNING SOLUTIONS**  
 PLANNERS • PROJECT MANAGERS • LAND DEVELOPERS  
 647 WELHAM RD., UNIT 9, BARRIE, ONTARIO, L4N 0B7  
 TEL: 705 • 812 • 3281 FAX: 705 • 812 • 3438 E: info@ipsconsultinginc.com www.ipsconsultinginc.com

Date: August 4, 2022 Drawn By: BH  
 File: Checked: CS



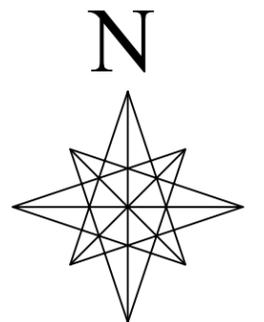
**FACILITY NAMES**

1. Penetang Wine Cellar
2. WINMAR GBM
3. Home and Cottage Centre
4. Gilkan Construction
5. Maurice Mechanical Services Ltd.
6. Life Labs Medical Laboratory Services
7. The Salon at Georgian Village
8. Georgian Bay Cancer Support Centre
9. Sitting Pretty Upholstery
10. Techform Products, a Division of Magna Mechatronics
11. Techform Products, a Division of Magna Mechatronics
12. Techform Products, a Division of Magna Mechatronics
13. Storage 4 All
14. K.B. Tool and Machine Inc.
15. Georgian Bay Parts
16. Georgian Bay Services Inc.
17. Industrial Filter Manufacturing Ltd.
18. Sealand Quality Foods / iQF Products
19. Georgian Bay Transport
20. CamWood Doors
21. J.B. Merchandise Design Inc.
22. Recollections Auction House
23. Georgian Bay Custom
24. Georgian Bay Metal Inc.
25. Town of Penetanguishene Public Works Department
26. Maacon Construction Corporation
27. Georgian Bay Plastics
28. Krytiuk Motorsports
29. Canadian Dip Mouldings Inc.
30. Tinney's Septic Service & Construction
31. Charles Morden Construction Ltd. (Fuller Pit)



**LEGEND**

- Class I Facility
- Class II Facility
- Class III Facility
- Class 0 Facility



ADDRESS: PO BOX 56702 PINE VALLEY PO VAUGHAN, ON L4L 8V3	DRAWN BY: NM	CHECKED BY: TL	CLIENT'S NAME: Innovative Planning Solutions	CLIENT'S ADDRESS: 647 Welham Road, Unit 9 Barrie, Ontario, L4N 0B7	SCALE: As shown
SE#: 1148.001	DATE: 2022-09-19	DRAWING NAME: 1000 Study Area	REVISION #: 0	NOTES: Site at 138 Robert Street East, Penetanguishene	



## **APPENDIX B**

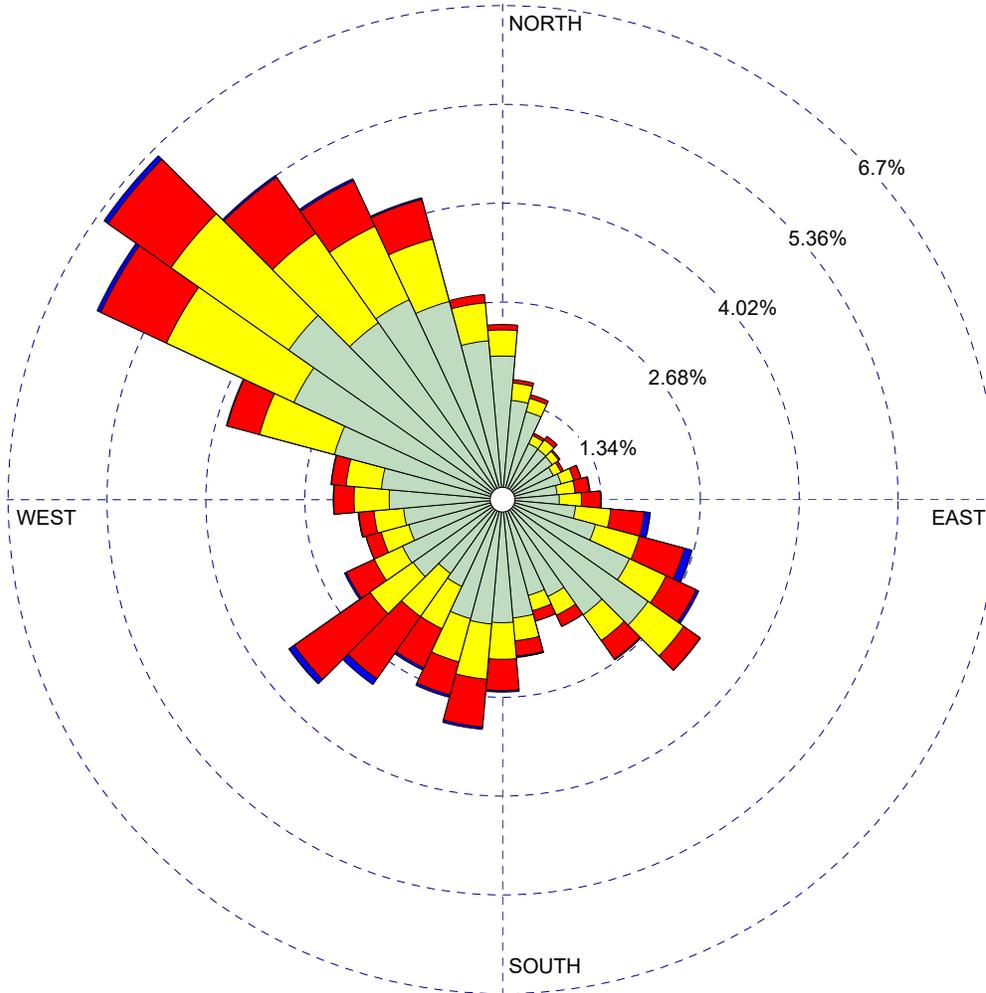
### **WIND ROSE**

WIND ROSE PLOT:

**Wind Rose Plot (2002-2006), Penetanguishene, ON**

DISPLAY:

**Wind Speed  
Direction (blowing from)**



WIND SPEED  
(m/s)

- >= 11.10
- 8.80 - 11.10
- 5.70 - 8.80
- 3.60 - 5.70
- 2.10 - 3.60
- 0.50 - 2.10
- Calms: 0.00%

COMMENTS:

Station ID: 6110617  
Data retained from Environment  
Canada Hourly Data for  
Beausoleil weather station from  
2002-2006.

DATA PERIOD:

**Start Date: 2002-01-01 - 00:00  
End Date: 2006-12-31 - 23:00**

COMPANY NAME:

**SONAIR Environmental Inc.**

MODELER:

**NM**

CALM WINDS:

**0.00%**

TOTAL COUNT:

**40643 hrs.**

AVG. WIND SPEED:

**2.15 m/s**

DATE:

**2022-06-15**

PROJECT NO.:

**1148**

