



**THE CORPORATION OF THE TOWNSHIP OF AUGUSTA
BY-LAW NUMBER 3566-2022**

BEING A BY-LAW TO EXECUTE A SITE PLAN AGREEMENT

WHEREAS authority is granted under Section 41 (7) of the *Planning Act, R.S.O. 1990 C.P. 13* to enter into an agreement for the purposes of imposing site plan control;

AND WHEREAS the council of the Corporation of the Township of Augusta deems it advisable to enter into a Site Plan Control Agreement with Shouldice Trucking, legally known as 2535727 Ontario Inc. respecting the development of property described as:

Part of Lot 3, Concession 2 being Part 2 of Reference Plan 15R-7837 in the Township of Augusta

NOW THEREFORE the Council of the Corporation of the Township of Augusta enacts as follows:

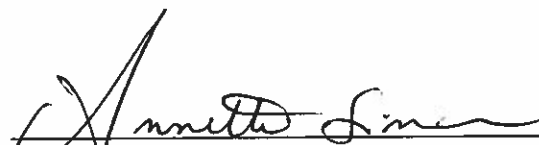
1. That the site plan agreement attached hereto as Appendix 'A' shall form part of this By-Law.
2. That the applicant shall deposit with the Treasurer of the Township of Augusta funds in the amount of \$2,000.00, to be held as a financial security pending the satisfactory construction of the facilities as set out in the Agreement.
3. That the Mayor and Clerk are hereby authorized to enter into the said Agreement on behalf of the Corporation of the Township of Augusta and to register the said agreement against the lands to which it applies pursuant to the authority of Section 41 (10) of the *Planning Act, R.S.O. 1990 C.P. 13*.
4. That By-Law 3294-2017 is hereby repealed.
5. This By-Law shall be in full force as of date of passing.

READ a first time this 9 day of May 2022.

READ a second time this 9 day of May 2022.

READ a third time and finally passed on this 9 day of May 2022.


MAYOR


CLERK

SITE PLAN AGREEMENT

THIS AGREEMENT made this day of , 2022.

BETWEEN

THE CORPORATION OF THE TOWNSHIP OF AUGUSTA

(Hereinafter called "the MUNICIPALITY")

OF THE FIRST PART

-AND-

2535727 Ontario Inc. (SHOULDICE TRUCKING)

(Hereinafter called "the OWNER")

OF THE SECOND PART

WHEREAS the Owner(s) has applied for site plan approval on lands herein described in Section 2 of this Agreement;

AND WHEREAS the intent of the Owner is to develop a trucking terminal in a highway commercial zone for the parking of transport tractors;

AND WHEREAS authority is granted pursuant to Section 41(7) (c) of the Planning Act to enter into agreements imposed as a condition to the approval of development;

AND WHEREAS the Owner(s) warrants that he/she is the Owner(s) of the lands described in Section 2 of this Agreement;

AND WHEREAS the Parties hereto have agreed that the specific provisions as set forth herein shall be met by the Owner(s) as a condition to the approval of the development of the subject lands;

NOW THIS AGREEMENT WITNESSETH that in consideration of the approval by Council of the Site Plan Drawings and other good and valuable consideration, the Owner hereby agrees with the Municipality as follows:

1. DEFINITIONS

In this Agreement:

Chief Building Official shall mean the Chief Building Official of the Township of Augusta as appointed under the Building Code Act;

Clerk shall mean the clerk of the Township of Augusta;

Council shall mean the (elected) Council of the Township of Augusta;

Environmental Compliance Approval shall mean an approval issued under the Authority of the *Ontario Water Resources Act*, the *Environmental Protection Act* or other applicable provincial legislation for the sanitary sewage works, water works and storm sewer works or a portion thereof;

Owner includes an individual, an association, a partnership or a corporation or contractor carrying out any works for the Owner.

Municipality shall mean the Corporation of the Township of Augusta.

2. LANDS AFFECTED

The lands affected by this Agreement are located on part of Lot 3, Concession 2, being Part 2 of Reference Plan 15R-7837 in the Township of Augusta, United Counties of Leeds and Grenville as shown on Schedule "A" attached hereto and forming part of this Agreement.

3. SCHEDULES TO THE AGREEMENT

The following Schedules are attached to and form part of this Agreement:

Title	Prepared by	Dated
Schedule A – Description of Land	Arnett, Kennedy, Ridell and Jason Survey Ltd.	February 20, 1990
Schedule B – Security for Works		
Schedule C – Site Plan Drawing	Kollaard & Associates Engineers	June 28, 2019
Schedule D – Grants of Easement		
Schedule E – Municipal Conditions		
Schedule F – Acoustic Study	Gradient Wind Engineers & Scientists	October 1, 2019
Schedule G – Lighting Study	Morris Engineering Ltd.	September 23, 2019
Schedule H – Grading and Storm Water Management Plan	Kollaard & Associates Engineers	June 28, 2019

4. SCOPE OF WORK AND ADMINISTRATION:

- A. The Owner represents and warrants that he/she is the registered and beneficial owner of the Lands described in Schedule "B".
- B. The Owner covenants and agrees to prepare entirely at its own cost and expense all plans, specifications, profiles, contours, and other engineering material, drawings and data required, in the opinion of the Township acting reasonably, to implement this Agreement.
- C. Owner shall comply with any amendments, additions, or deletions to the Site Plan Drawings that the Municipality may reasonably require after the date of this Agreement in order to better ensure the proper and orderly development of the Owner's Lands and the construction of the works and facilities required by this Agreement.
- D. The Owner covenants and agrees to construct and install all of the works, as the case may be and as more particularly set out in this Agreement.
- E. If the Owner improperly performs the work or abandons any part of the work before its completion, or unreasonably delays the work so that the conditions of this Agreement are being violated, or fails to carry out maintenance or repairs required by this Agreement, then in any such case the Clerk shall promptly notify the Owner in writing of such default, failure, delay or neglect, and if such default, failure, delay or neglect continues for fifteen (15) clear days after such notice then in that case the Municipality shall thereupon have full authority and power to immediately complete the work in accordance with good engineering or landscaping practice at the Owner's expense; and to add the cost thereof to the Collector's Roll for the said lands and to collect the said costs, with interest, in like manner as municipal taxes.
- F. The Owner shall ensure that the requirements of this Agreement and the Site Plan Drawings are brought to the attention of its contractors, employees and workers prior to the start of any construction and shall exercise due diligence at all times with respect to the design

and construction of all matters associated with this project.

- G. The Owner acknowledges and agrees that all materials to be supplied by the Owner with respect to the development shall be of good quality and appropriate in design and construction for the facilities to be installed to be installed.
- H. The Owner shall deliver to the Municipality those deeds or grants of easement or rights-of-way set out on Schedule "D".

5. OTHER APPROVALS

Prior to the commencement of any construction, the Owner shall at its own cost obtain all other permits and approvals that may be required by any other agency or authority having jurisdiction including, but not limited to the Ministry of Transportation and the Ministry of the Environment and Climate Change. The Owner further covenants and agrees that nothing in this Agreement releases the Owner from the obligation to comply with the provisions of all other by-laws of the Municipality that may now or in future be in effect.

6. SITE PLAN DRAWING

All construction shall comply with recommendations included in Schedule F – Acoustic Study and Schedule G – Lighting Study.

The Owner shall, at its sole risk and expense and to the satisfaction of the Municipality, construct, extend, install, maintain, reinstate, restore or retain all buildings, structures, other works and landscaping in compliance with the site plan drawings as set out in Schedule "C" and all other terms of this Agreement.

The Owner further acknowledges and agrees that the site plan drawing set out in Schedule 'C' to this Agreement shall not be altered except by an amendment to this Agreement and shall be subject to the prior approval of the Municipality. The parking spaces as illustrated on the site plan drawing shall and are hereby acknowledged as the designated parking spaces for the transport tractors.

7. SEWAGE DISPOSAL

The Owner agrees to comply with the *Ontario Building Code Act* or the *Ontario Water Resources Act* whichever applies with respect to the future installation of any sanitary sewage works and further shall comply with any Environmental Compliance Approval (ECA) issued by the Ministry of the Environment and Climate Change, if required. The Owner shall provide a copy of all permits or approvals issued by the approval authority to the Municipality upon demand.

8. WATER SUPPLY

The Owner agrees to comply with the requirements of the *Ontario Water Resources Act* with respect to the future installation of any water works and further shall comply with any Environmental Compliance Approval issued by the Ministry of the Environment and Climate Change. The Owner shall provide a copy of all approvals issued by the approval authority to the Municipality upon demand.

9. DRAINAGE AND SITE ALTERATION

Drainage and site alterations shall comply with the Grading and Stormwater Management Plan attached as schedule H.

The Owner acknowledges that only minimal alteration to the subject lands shall be permitted through minor grading and gravelling provided that the alterations do not affect the existing drainage pattern of the property. The Owner hereby agrees that no contouring, grading, filling, cutting, site alteration, or changes to elevation or paving shall be undertaken except in conformity to an approved drainage and site alteration plan and that such changes shall be by way of an amendment to this Agreement. The owner agrees that any such alterations shall be designed by a professional engineer and shall be subject to approvals as may be determined by the Municipality.

The Owner further agrees that no site alteration shall be permitted on the wetland area running along the northern perimeter of the subject lands.

10. LANDSCAPING

The Owner acknowledges that no landscaping requirements apply to the subject lands; however, the Agreement is not intended to limit the Owner from undertaking minor cosmetic plantings of native species such as trees or bushes or the installation of a grassed area provided such plantings comply with subsection 9 above.

11. ZONING AND BUILDING RESTRICTIONS

The Municipality shall regulate by by-law the zoning of and the building standards in all areas where applicable within the boundaries of the lands affected by this Agreement. It is understood and agreed that nothing in this Agreement shall relieve the Owner of the obligation to comply at all times, including during construction if so directed by the Chief Building Official, with the Zoning By-law, as amended and any building by-law of the Municipality.

12. BUILDING PERMITS – DEFAULT

Pursuant to the *Building Code Act*, the Owner agrees that building permits may be withheld or the issue of them stopped, if the Owner, in the opinion of the Chief Building Official is in default under this Agreement, until such time as such default can be rectified.

13. TIMING

Except as may otherwise be provided for in this Agreement, the Owner shall complete the construction of all works and facilities within one calendar year of the date of occupancy of the building; but in cases of undue hardship, the Municipality may extend in writing any time for completion required by this Agreement.

14. INDEMNITY

The Owner(s) on behalf of itself, its successors and assigns entitled hereto covenants and agrees to indemnify and save harmless the Municipality from all actions, causes of action, duties, claims or demands whatsoever which arise directly or by reason of the development of the lands governed by this Agreement including the construction and maintenance of any works.

15. NOTICES

Any notices required to be given hereunder may be given by registered mail addressed in the case of the Municipality to:

Clerk
Township of Augusta
3560 County Road 26
R. R. # 2
PRECOTT ON K0E 1T0
Tel. (613) 925-4231. Fax. (613) 925-3499

And in the case of the Owner to:

Mr. Stan Shouldice
2535727 Ontario Inc. (Shouldice Trucking)
3820 Leitrim Road
GLOUCESTER ON K1G 3N4
Tel. (613) 822-8568. Fax. (613) 822-3291

and shall be effective as of the date of deposit thereof in the post offices or such notice may be served personally upon the appropriate officer of either party hereto named.

16. SUBSEQUENT PARTIES

This Agreement shall be binding upon the parties hereto, their respective heirs, executors, administrators, successors and assigns.

17. REGISTRATION OF AGREEMENT

The Owner consents to the registration by the Municipality at the Owner's expense of this Agreement against the title to the Owner's lands and, in accordance with s. 41(10) of the *Planning Act*, all of the terms and conditions of this Agreement may be enforced against the Owner and any and all subsequent owners of the Owner's Lands. The Owner shall not make any application or permit or authorize any person to make application, to remove notice of this Agreement from the title to the Lands.

18. RIGHT TO ENTER AND INSPECTION OF WORKS

The Owner(s) agree(s) to carry out the works in accordance with the terms and conditions specified herein. In default of the Owner(s) completing the works as required herein and in addition to any other remedy, the Owner(s) hereby authorizes the Municipality, its officers, servants, agents and employees to enter on the subject lands and to complete the works at the Owner(s)' expense; and to add the cost thereof to the Collector's Roll for the said lands and to collect the said costs, with interest, in like manner as municipal taxes.

19. MUNICIPAL FEES

The Owner agrees to pay the legal, engineering, landscape architectural, planning and administrative costs incurred by the Municipality to process the Site Plan Drawings, including but not limited to, the preparation of this Agreement and all plans and specifications, and the supervision and inspection of the Works.

20. FINANCIAL SECURITY

Before this Agreement is executed by the Municipality, the Owner shall deposit with the Municipality a sufficient sum in cash or an irrevocable letter of credit or other financial security acceptable to the Council and herein referred to as the "financial security" to meet the financial requirements of this Agreement as set out in Schedule "B". If such letters of credit or other financial security contains an expiry or termination date, then, until the final acceptance of the works by Council, the Owner shall continue to redeposit new irrevocable letters of credit or financial security in the same manner as provided in the preamble of this clause until the final acceptance of the works by Council.

Upon approval of the required works by the Municipality, the Municipality agrees to release the financial security. The approval of such works or part thereof shall be dated as of the date of the Owner's application for approval thereof or following the inspection of same by the Municipality.

21. DEFAULT AND RELEASE OF SECURITY

After having first notified the Owner, the Municipality may at any time authorize use of the whole or part of the amount of the financial security referred to in Schedule "B" thereof to pay the cost of any work that the Municipality deems necessary to rectify default by the Owner or its assigns, or to pay the cost of any matter for which the Owner is liable under this Agreement, whether such cost is in relation to construction or installation of any works or service or any defects or required maintenance.

22. SEVERABILITY

It is intended that all provisions of this Agreement shall be fully binding and effective between the parties, but in the event that any particular provision or provisions or a part of one is found to be void, voidable or unenforceable for any reason whatsoever, then the particular provision or provisions or part of the provision shall be deemed severed from the remainder of this Agreement and all other provisions shall remain in full force.

23. INTERPRETATION

All covenants in this Agreement shall be construed as being joint and several and that, when the context so requires or permits, the singular number shall be read as if the plural were expressed, and the masculine gender as if the feminine or neuter gender, as the case may be, were expressed.

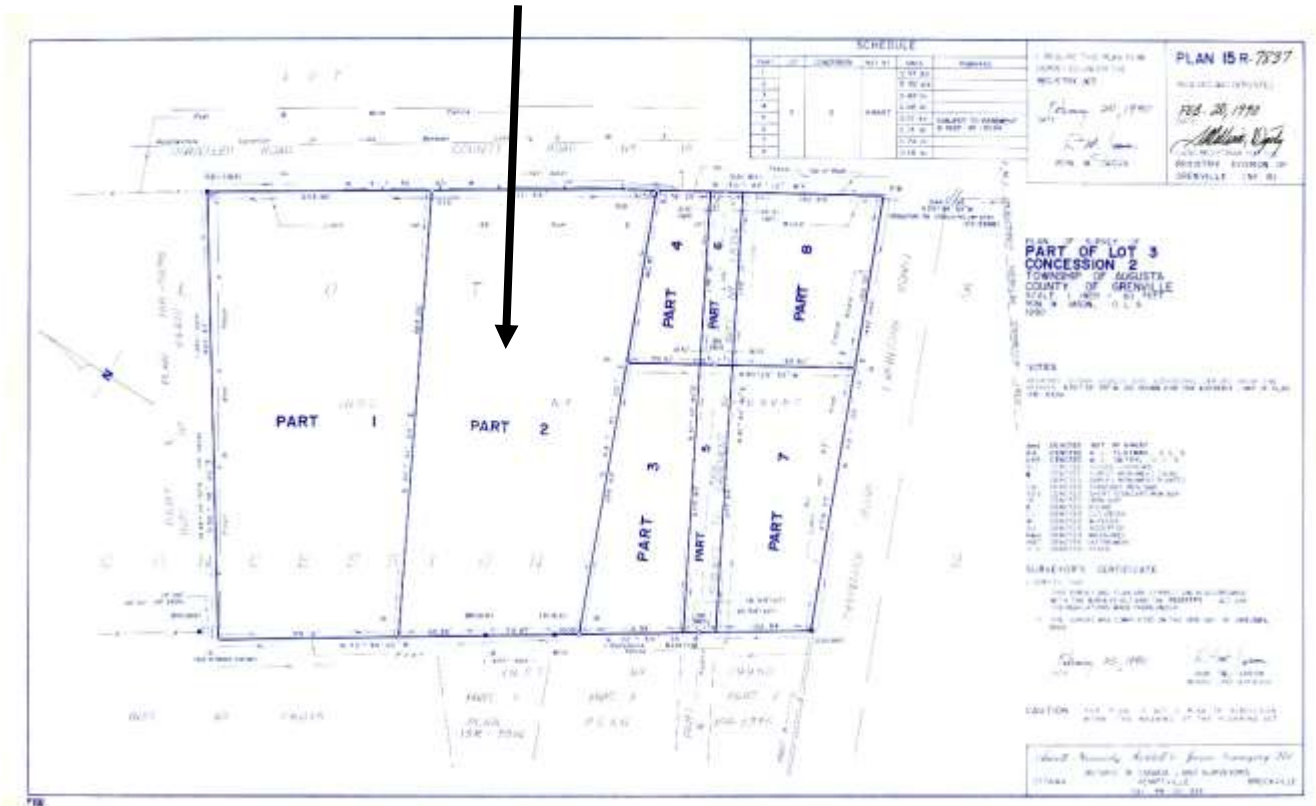
By-Law 3294-2017

Schedule "A"

LANDS AFFECTED BY THIS AGREEMENT

The lands affected by this Agreement are located on part of Lot 3, Concession 2, being Part 2 of Reference Plan 15R-7837 in the Township of Augusta, United Counties of Leeds and Grenville as shown on Schedule "A" attached hereto and forming part of this Agreement.

Subject Lands



Schedule "B"

ESTIMATED COST OF WORKS

AND/OR FINANCIAL SECURITY

Minor Site Alterations	\$ 2,000
Construction of Buildings and sewage to zoning requirements	<u>\$ n/a</u>
TOTAL COST	\$2,000.00

In accordance with clause 20 of this Agreement, the Owner shall deposit with the Treasurer of the Municipality at the time of entering this Agreement cash or a letter of credit in the amount 100% or \$2,000 as security for the performance of the Owner's obligations under this Agreement.

Upon completion to the satisfaction of the Municipality of the works and facilities to be constructed in accordance with this Agreement and the performance by the Owner of all other obligations under this Agreement, the security or any balance thereof remaining shall be returned without interest to the Owner.

Schedule "D"

GRANTS OF EASEMENT AND OTHER PUBLIC LANDS

None

Schedule "E"

SPECIFICATIONS

1. Minor Alterations

Shall be limited to minor gravelling and grading on the site to provide for parking spaces for tractors (transport vehicles). No on-site paving or other site alteration of the subject lands is permitted without an amendment to this Agreement.

Schedule "F"
Acoustic Study



PREPARED FOR
Stan Shouldice
Shouldice Trucking Inc.
3820 Leitrim Road
Gloucester, Ontario
K1G 3N4

PREPARED BY
Giuseppe Garro, Junior Environmental Scientist
Michael Lafortune, C.E.T., Environmental Scientist
Joshua Foster, P.Eng., Principal

127 WALGREEN ROAD, OTTAWA, ON, CANADA K0A 1L0 | 613 856 0934
GRADIENTWIND.COM



EXECUTIVE SUMMARY

Gradient Wind Engineering Inc. (Gradient Wind) was retained by Shouldice Trucking Inc. as requested by the Ministry of the Environment, Conservation and Parks (MECP) to perform an acoustic assessment for the Shouldice Trucking facility located at 2850 County Road 18 in Augusta Township, Ontario. Under the Environmental Protection Act (EPA), the facility shall obtain an Environmental Compliance Approval (ECA), demonstrating compliance with Ontario's noise regulations. As part of the MECP protocol, all relevant noise sources must be considered in the acoustic assessment. This report describes the methodology and results of the acoustic assessment for all equipment associated with the trucking facility. The findings are based on information provided by Shouldice Trucking Inc. in addition to information collected during a site visit conducted on August 6th, 2019.

Results of the current study indicated that the combined sound level resulting from the sound discharged from the facility at each affected point of noise reception, as determined using an acoustic assessment, is expected to meet the NPC-300 noise criteria. These findings are based on the information outlined in Section 2.1 and 2.2. Parking restrictions should be imposed with signage for drivers so that they only idle in the permitted areas (see Figure 4).



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1. INTRODUCTION AND FACILITY DESCRIPTION

Gradient Wind Engineering Inc. (Gradient Wind) was retained by Shouldice Trucking Inc. as requested by the Ministry of the Environment, Conservation and Parks (MECP) to perform an acoustic assessment for the trucking facility located at 2850 County Road 18 in Augusta Township, Ontario. Under the Environmental Protection Act (EPA), the facility shall obtain an Environmental Compliance Approval (ECA), demonstrating compliance with Ontario's noise regulations. As part of the MECP protocol, all relevant noise sources must be considered in the acoustic assessment. This report describes the methodology and results of the acoustic assessment for all equipment associated with the trucking facility. The findings are based on information provided by Shouldice Trucking Inc. in addition to information collected during a site visit conducted on August 6th, 2019.

The focus of this acoustic assessment is the Shouldice Trucking facility located at 2850 County Road 18 in Augusta Township, Ontario. The facility operates 24 hours a day and comprises a self-storage building near the southeast corner of the site and an existing gravel pad with sixteen (16) truck parking spaces to the north. The gravel pad has been expanded to the west to provide twenty-eight (28) new truck parking spaces. The new parking spaces are aligned north-south along the north and south side of the new gravel pad. The main entrance to the facility is located at the centre of the east perimeter of the site from County Road 18. The facility borders existing residential and commercial properties to the north, west and south. The nearest points of reception are existing residential buildings at 2758 and 2752 McIntosh Road. Sources of stationary noise include idling trucks situated in the parking lot of the Shouldice Trucking facility. The facility's NACIS code is 484121, General Freight Trucking, Long Distance, Truckload. Figure 1 illustrates the site plan and surrounding context. Figure 3 illustrates the location of all noise sources included in this study.

2. NOISE SOURCE SUMMARY

Upon inspection of the site, and surrounding area, several noise sources were identified as being significant. Significant noise sources are located within the site property and would have a noticeable effect on surrounding noise sensitive lands. Described in Table 1 and Appendix A are the significant noise sources. Sound power data for each source is based on sound measurements conducted during a site visit



on August 6th, 2019. The site is located in a rural area where effects from ambient noise sources are considered negligible. Figure 3 shows the locations of all noise sources included in this study.

2.1 Significant Sources

TABLE 1: NOISE SOURCE SUMMARY TABLE

Source ID	Description	Source Location	Sound Characteristics	Noise Control Measures
S1	Hotelling (Engine Exhaust and Radiated)	O	S	U
S2	Long-Term Idling (Engine Exhaust and Radiated)	O	S	U
S3	Short-Term Idling (Engine Exhaust and Radiated)	O	S	U
S4	Moving Truck	O	S	U

Source Location: O – outside
I – inside

Sound Characteristics: S – steady state
I – intermittent
T – tonal

Noise Control Measures: U – uncontrolled
S – silencer

Hotelling/Parking Truck (Source 1)

Up to a maximum of two trucks (S1) can be idling for an extended period of time on the property for hotelling requirements. These trucks are limited to parking spaces north of the building (see Figure 4) and are to be parked with the cab facing north. These operations can occur 24 hours a day. Therefore, a predictable worst-case scenario assumes two idling trucks operate continuously over a 1-hour period during the daytime, evening, and nighttime periods.

Long-Term/Short-Term Idling (Source 2/3)

Additional noise sources were used to account for trucks parked in other locations, started and moved to an area where extended idling can occur. These trucks are to be parked with the cab facing north. A predictable worst-case scenario assumes three trucks operating for 15 minutes within the extended idling region (S2; long-term idling), and three trucks operating for 3 minutes along the south property line (S3; short-term idling) every hour during the daytime, evening, and nighttime periods.



Moving Truck (Source 4)

Three truck movements are assumed per hour, with a path throughout the lot. Trucks are assumed to travel at 12 km/h.

Insignificant Noise Sources

Aside from the primary noise sources outlined above, no other sources of noise are present on site. Heating, ventilation, and air conditioning (HVAC) equipment is internal to the building and was not audible on site. Passenger vehicles and backup beeper sounds are not considered as a stationary noise source as per NPC-300 Part A, and therefore were not included in the model¹.

2.2 Determination of Sound Power Levels

A site visit was conducted on August 6th, 2019 to measure the noise emissions of the idling trucks used in the Shouldice Trucking fleet. Measurements were recorded using a Brüel & Kjær (B&K) integrating sound level meter Type 2250, equipped with a Type 4189 Class 1 microphone. The meter was mounted on a tripod with the microphone set at a height of approximately 1.5 m above grade. Measurements were conducted near idling trucks as well as at further setback distances, to measure the sound pressure levels in front and behind the trucks. From these measurements sound power levels were derived for modelling purposes. Two trucks parked on the southern parking lot boundary toward the east and west oriented north-south were used to collect sound data. The front of the trucks were positioned toward the north.

At each location, the meter was set to slow response and sound recordings were conducted for a minimum of 3 minutes each as the noise was observed to be steady-state. In all cases, measurements of equivalent sound pressure levels were taken for each 1/3 octave band center frequency, and the instrument was allowed to stabilize before measurements were recorded. Weather conditions during the measurement period were mainly clear, winds were relatively calm and there was no observed precipitation. The average temperature was 31 degrees Celsius during the testing period.

Table 2 below describes the measurement locations which are illustrated in Figure 2. It should be noted that for location L1-L4, the east truck was turned on and idling. For location L5-L7, both the east and west trucks were in operation. Results for location L5-L7 were used in the *Predictor-Lima* model for correlation.

¹ NPC-300, Part A, pages 19-20



TABLE 2: ON-SITE NOISE MEASUREMENT LOCATIONS

Location Number	Receptor Location	Height Above Grade (m)
L1	OPOR – Front of Truck (3 m)	1.5
L2	OPOR – Front of Truck (7 m)	1.5
L3	OPOR – Rear of Truck (4 m)	1.5
L4	OPOR – Rear of Truck (7 m)	1.5
L5	OPOR – Southern Property Line	1.5
L6	OPOR – Southern Property Line	1.5
L7	OPOR – Southern Property Line	1.5

Sound power levels of the idling trucks were determined using the measured sound pressure levels summarized Appendix A, setback distances, as well as the following equation²:

$$L_w = L_p + |10 \log \left(\frac{Q}{4\pi \times r^2} \right)|$$

Where:

L_w = Sound power level

L_p = Sound pressure level

Q = Directivity factor (2) to account for reflection from side of building

R = Source-measurement distance

Receptor location L1 and L2 were used to determine the sound power from the engine radiated noise from the cowling, whereas receptor location L3 and L4 were used to determine the sound power from the engine exhaust. In Predictor, sound power levels are based on L1 and L2, and a directivity factor was applied to the point source to account for noise levels that are approximately 10 dB quieter at the rear of the truck (L3 and L4). Table 3 summarizes the sound power of each source used in the analysis. Raw measurement data is available in Appendix A. To account for long-term truck operations, a parked truck (S2) was assumed to operate for 15 minutes, so an intermittence factor of -6 dB was applied to this source.

² Beranek, L. L. (1971). *Noise and Vibration Control*. McGraw-Hill Book Company.



Similarly, to account for short-term truck operations, a parked truck (S3) was assumed to operate for 3 minutes, so an intermittence factor of -13 dB was applied to this source.

TABLE 3: EQUIPMENT SOUND POWER LEVELS (dBA)

Source ID	Description	Height Above Grade (m)	Frequency (Hz)								Total
			63	125	250	500	1000	2000	4000	8000	
S1	Hotelling Truck	3.2	67	73	78	88	94	89	83	72	96
S2	Long-Term Truck [†]	3.2	67	73	78	88	94	89	83	72	96
S3	Short-Term Truck [*]	3.2	67	73	78	88	94	89	83	72	96
S4	Moving Truck	1.5	77	87	94	98	99	94	88	79	103

Note: [†]Assumes a 15 min operation with intermittence factor of -6 dB

^{*}Assumes a 3 min operation with intermittence factor of -13 dB

3. IMPACT ASSESSMENT

The equivalent sound energy level, L_{eq} , provides a weighted measure of the time varying noise levels (including quasi-impulsive), which is well correlated with the annoyance of sound. It is defined as the continuous sound level, which has the same energy as a time varying noise level over a selected period of time. For stationary sources, the L_{eq} is commonly calculated on an hourly interval, while for roadways, the L_{eq} is calculated on the basis of a 16-hour daytime/8-hour nighttime split.

Noise criteria taken from NPC-300 apply to outdoor points of reception (POR). A POR is defined under NPC-300 as "any location on a noise sensitive land use where noise from a stationary source is received"³. A POR can be located on an existing or zoned for future use premises of permanent or seasonal residences, hotels/motels, nursing/retirement homes, rental residences, hospitals, camp grounds, and noise sensitive buildings such as schools and places of worship. The maximum permissible noise levels for a rural area (Class 3) is the higher of the executionary limits presented in Table 4 or background noise levels from environmental sources. The study site is considered to be in a Class 3 area as the acoustical environment is dominated by natural sounds having little or no road traffic. For this analysis, the exclusionary limits

³ NPC – 300, page 14



were used in the analysis as background noise levels were measured to be 45 dBA during the daytime period.

TABLE 4: MINIMUM ONE-HOUR SOUND LIMITS FOR CLASS 3 AREA

Time of Day	Outdoor Points of Reception	Plane of Window
07:00 – 19:00	45	45
19:00 – 23:00	40	40
23:00 – 07:00	N/A	40

3.1 Assessment Procedure

The impact of stationary noise sources on nearby residential areas was determined by computer modelling using the software program *Predictor-Lima*. This program was developed from the International Standards Organization (ISO) standard 9613 Parts 1 and 2 and is capable of representing three-dimensional surfaces and first reflections of sound waves over a suitable spectrum for human hearing. The methodology has been used on numerous assignments and has been accepted by the Ministry of the Environment, Conservation and Parks (MECP) as part of Environmental Compliance Approval applications.

A total of 4 receptor locations were chosen around the site to measure the noise impact at points of reception (POR) during the daytime period (07:00-19:00), evening period (19:00-23:00), as well as during the nighttime period (23:00 – 07:00). POR locations include outdoor points of reception (OPOR) and the plane of windows (POW) of the adjacent residential properties. Sensor locations are described in Table 5 and illustrated in Figure 3. Table 6 below contains *Predictor-Lima* calculation settings. These are typical settings that have been based on ISO 9613 standards and guidance from the MECP.

Ground absorption over the study area was determined based on topographical features (such as water, concrete, grassland, etc.). An absorption value of 0 is representative of hard ground, while a value of 1 represents grass and similar soft surface conditions. Existing buildings were added to the model to account for screening and reflection effects from building façades. *Predictor-Lima* modelling data is available upon request.



TABLE 5: RECEPTOR LOCATIONS

Receptor Number	Receptor Location	Height Above Grade (m)
R1	OPOR – 2752 McIntosh Road	1.5
R2	OPOR – 2758 McIntosh Road	1.5
R3	POW - 2752 McIntosh Road	1.5
R4	POW - 2758 McIntosh Road	4.5

TABLE 6: CALCULATION SETTINGS

Parameter	Setting
Meteorological correction method	Single value for CO
Value CO	2.0
Default ground attenuation factor	1
Ground attenuation factor for gravel parking lots	0.5
Temperature (K)	283.15
Pressure (kPa)	101.33
Air humidity (%)	70



4. RESULTS AND DISCUSSION

4.1 Acoustical Assessment Summary of Results

Noise levels at sensitive receptors fall below NPC-300 criteria for stationary noise, as summarized in Table 7 below. The sound levels listed in Table 7 are based on information outlined in Section 2.1 and 2.2. Point of Reception Noise Impact Tables are provided in Appendix B.

TABLE 7: NOISE LEVELS FROM STATIONARY SOURCES

Receptor Number	Receptor Location	Noise Level (dBA)			Meets Class 3 Criteria		
		Day	Evening	Night	Day	Evening	Night
R1	OPOR – 2752 McIntosh Road	39	39	-	Yes	Yes	-
R2	OPOR – 2758 McIntosh Road	40	40	-	Yes	Yes	-
R3	POW - 2752 McIntosh Road	38	38	38	Yes	Yes	Yes
R4	POW - 2758 McIntosh Road	37	37	37	Yes	Yes	Yes

As Table 7 summarizes, noise levels fall below NPC-300 criteria at all receptors during all hours of the day. Parking restrictions should be imposed with signage for drivers so that they only idle in the permitted lots (see Figure 4).

5. CONCLUSIONS AND RECOMMENDATIONS

Results of the current study indicated that the combined sound level resulting from the sound discharged from the facility at each affected point of noise reception, as determined using an acoustic assessment, is expected to meet the NPC-300 noise criteria. These findings are based on the information outlined in Section 2.1 and 2.2. In order to ensure compliance with the sound level limits the following administrative noise control measures should be implemented and maintained:

- Extended idling should be restricted to the green hatched area identified in Figure 4, which is approximately the northeast corner of the property.



- Three start-up trucks are permitted to operate for 3 minutes per hour within the new and existing parking spaces on the property, as indicated by the blue region in Figure 4. However, after 3 minutes, the start-up trucks should be relocated to the extended idling region (green hatched area). This will provide the flexibility of parking the trucks anywhere on the property, while keeping noise levels below the ENCG Class 3 criteria for surrounding noise sensitive areas.
- Signage should be posted around the property to alert drivers of the idling restrictions.
- Drivers are to be trained and advised of the parking restrictions and importance of parking in dedicated areas due to noise concerns.

This concludes our assessment and report. If you have any questions or wish to discuss our findings, please advise us. In the interim, we thank you for the opportunity to be of service.

Sincerely,

Gradient Wind Engineering Inc.



Giuseppe Garro, MASc,
Junior Environmental Scientist

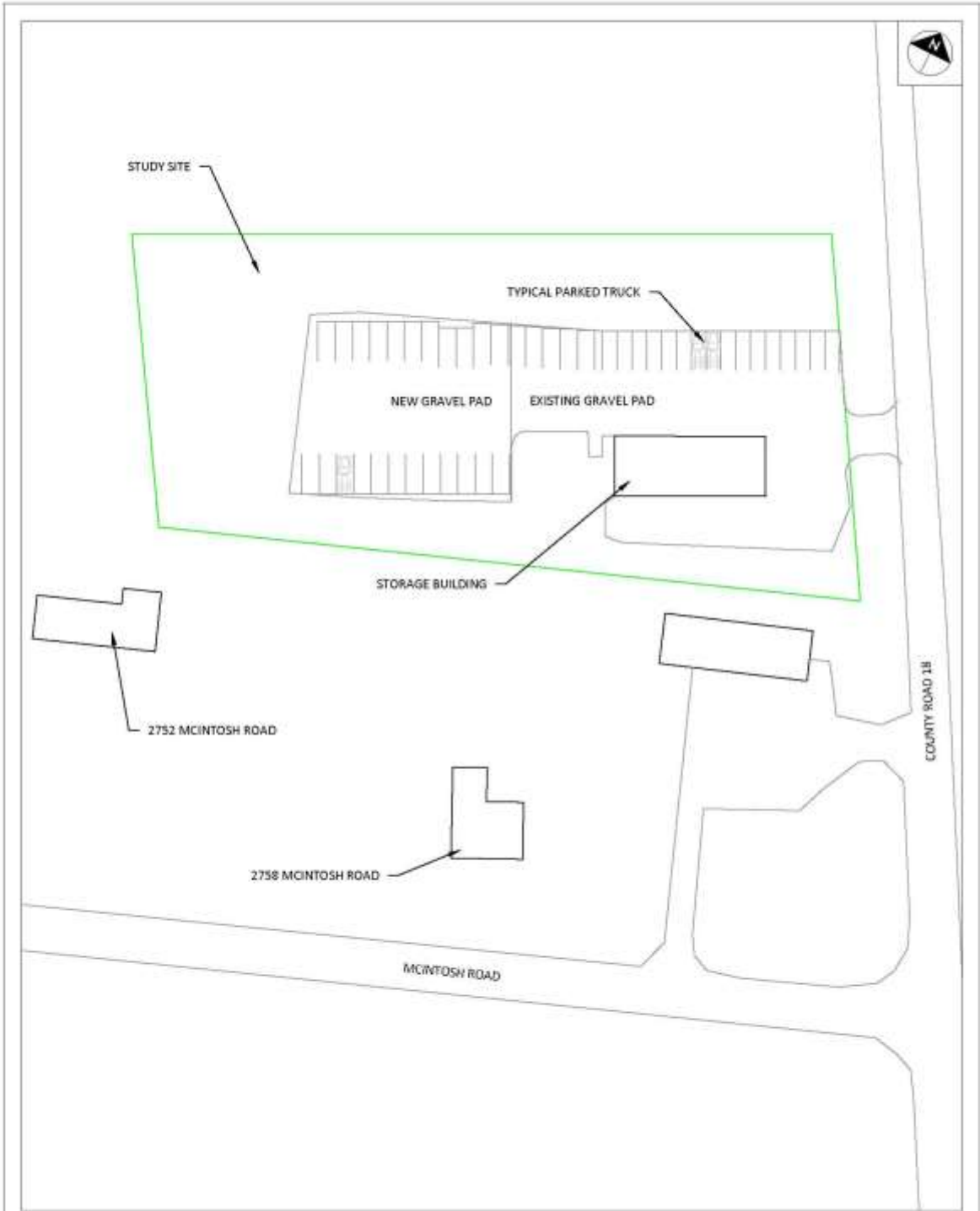


Michael LaFortune, C.E.T.
Environmental Scientist

Gradient Wind File #19-138 – AAR



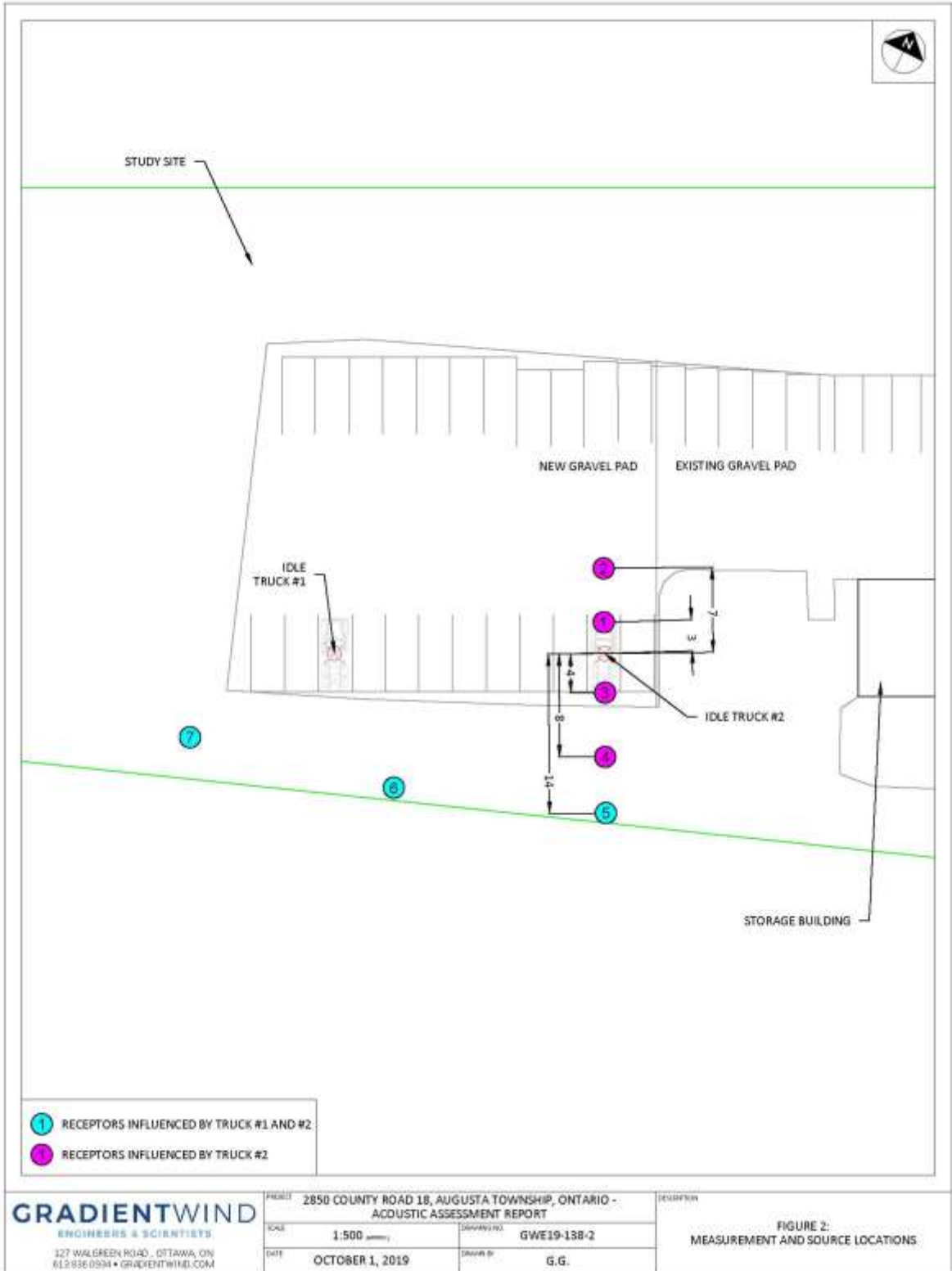
Joshua Foster, P.Eng.
Principal

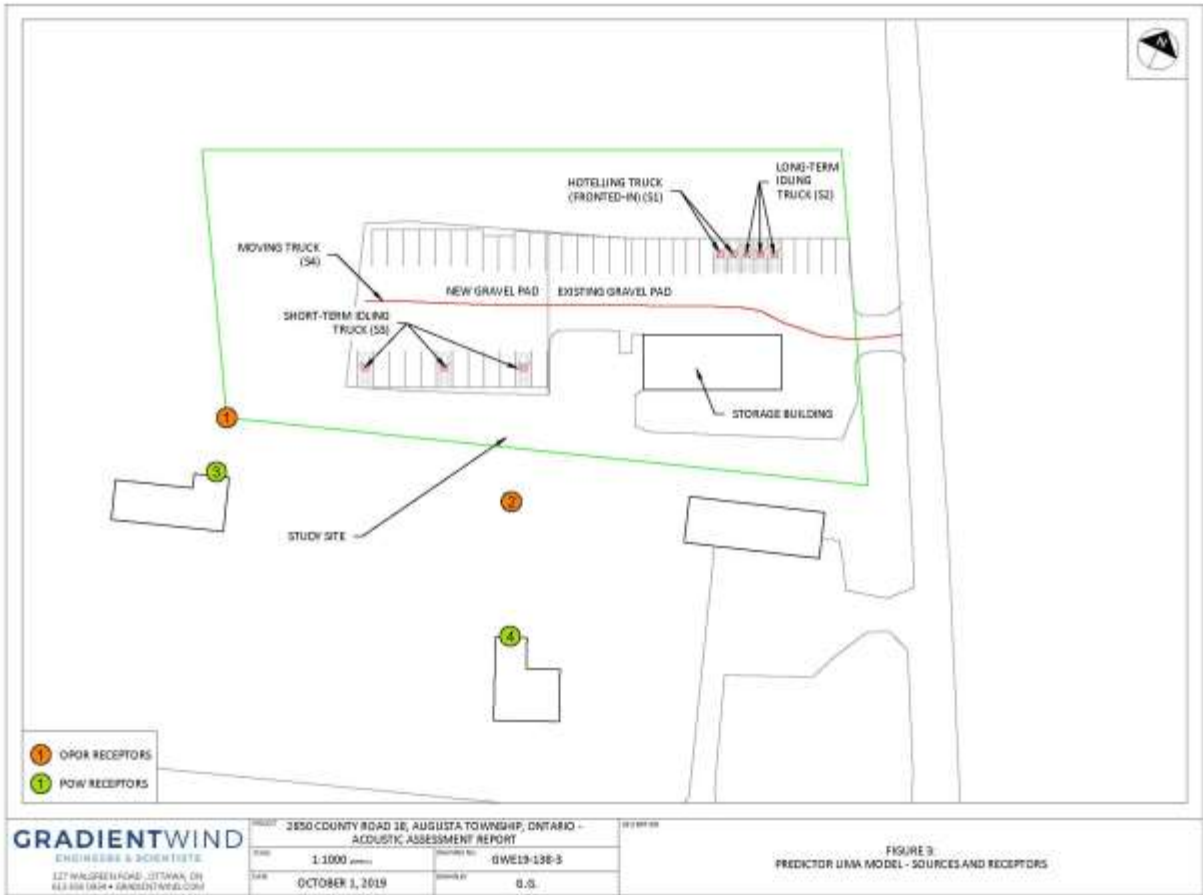


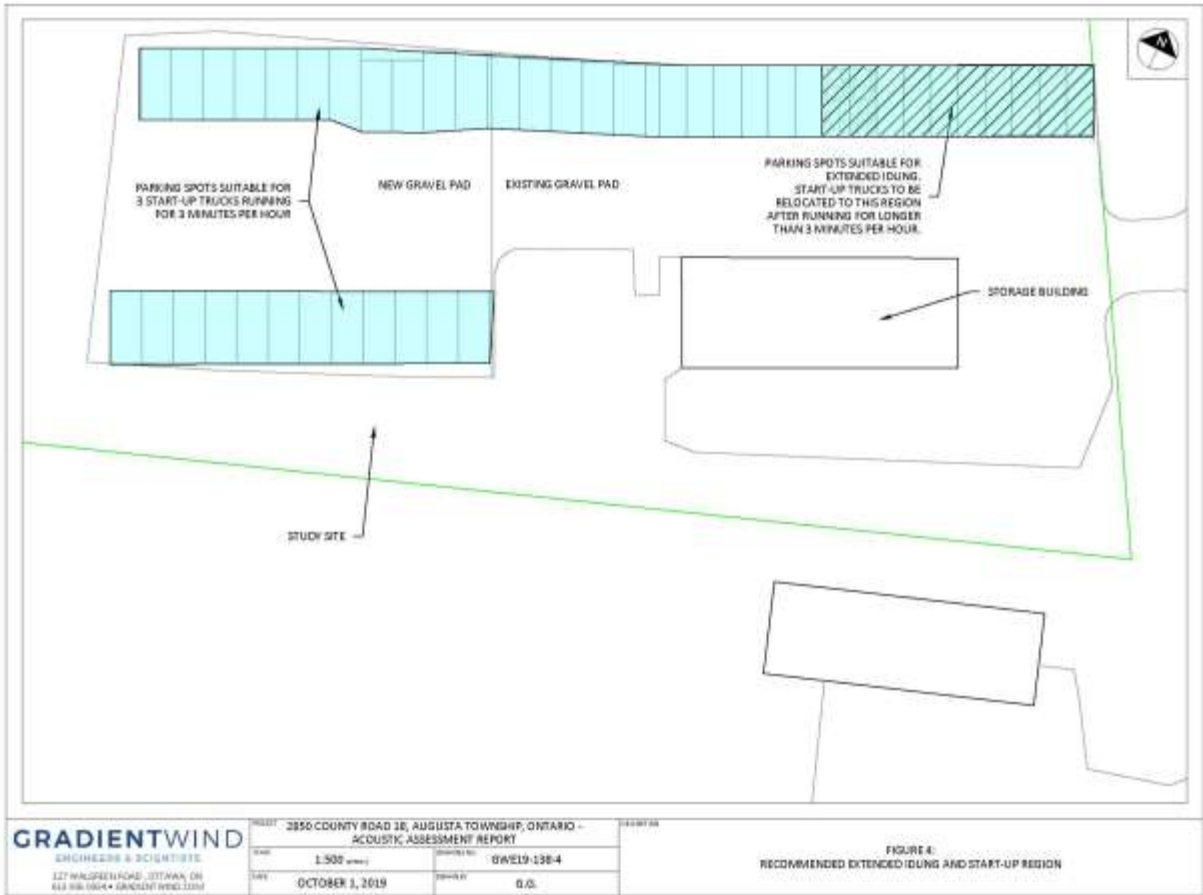
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PROJECT	2850 COUNTY ROAD 18, AUGUSTA TOWNSHIP, ONTARIO - ACOUSTIC ASSESSMENT REPORT	
SCALE	1:1000 (AS SHOWN)	DRAWING NO. GWE19-138-1
DATE	OCTOBER 1, 2019	DRAWN BY G.G.

DESCRIPTION
FIGURE 1:
 SITE PLAN AND SURROUNDING CONTEXT







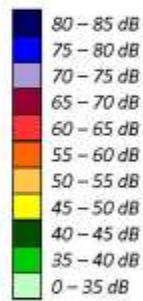
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PROJECT	2850 COUNTY ROAD 18, AUGUSTA TOWNSHIP, ONTARIO - ACOUSTIC ASSESSMENT REPORT		
SCALE	1:500 (AS SHOWN)	PROJECT NO.	GW19-138-4
DATE	OCTOBER 1, 2019	DESIGNER	G.O.

FIGURE 4
RECOMMENDED EXTENDED IDLING AND START-UP REGION



FIGURE 5: STATIONARY NOISE CONTOURS (1.5 METERS ABOVE GRADE)





APPENDIX A
MEASUREMENT DATA

127 WALGREEN ROAD, OTTAWA, ON, CANADA K0A 1L0 | 613 856 0934
GRADIENTWIND.COM



IDLING TRUCK: MEASUREMENT LOCATION 1 (3 METERS)

Frequency	63	125	250	500	1000	2000	4000	8000	Total
Sound Pressure Level (Lp) Z-Scale	73	67	69	73	77	70	64	55	81
Sound Pressure Level (Lp) A-Scale	47	51	60	70	77	71	65	54	79
Sound Power Level (Lw) A-Scale	65	69	78	88	95	89	83	72	97

IDLING TRUCK: MEASUREMENT LOCATION 2 (7 METERS)

Frequency	63	125	250	500	1000	2000	4000	8000	Total
Sound Pressure Level (Lp) Z-Scale	69	68	61	65	68	62	56	48	74
Sound Pressure Level (Lp) A-Scale	43	52	52	62	68	63	57	47	70
Sound Power Level (Lw) A-Scale	68	77	77	87	93	88	82	72	95

IDLING TRUCK: MEASUREMENT LOCATION 3 (4 METERS)

Frequency	63	125	250	500	1000	2000	4000	8000	Total
Sound Pressure Level (Lp) Z-Scale	70	66	61	67	64	60	53	47	74
Sound Pressure Level (Lp) A-Scale	44	50	52	64	64	61	54	46	68
Sound Power Level (Lw) A-Scale	64	70	72	84	84	81	74	66	88

IDLING TRUCK: MEASUREMENT LOCATION 4 (7 METERS)

Frequency	63	125	250	500	1000	2000	4000	8000	Total
Sound Pressure Level (Lp) Z-Scale	64	58	56	58	57	51	42	33	67
Sound Pressure Level (Lp) A-Scale	38	42	47	55	57	52	43	32	60
Sound Power Level (Lw) A-Scale	63	67	72	80	82	77	68	57	85



IDLING TRUCK: ENGINE FAN NOISE

Frequency	63	125	250	500	1000	2000	4000	8000	Total
Location 1 Sound Power Level (Lw) A-Scale	65	69	78	88	95	89	83	72	97
Location 2 Sound Power Level (Lw) A-Scale	68	77	77	87	93	88	82	72	95
Average Sound Power Level (Lw) A-Scale	67	73	78	88	94	89	83	72	96

IDLING TRUCK: ENGINE EXHAUST NOISE

Frequency	63	125	250	500	1000	2000	4000	8000	Total
Location 3 Sound Power Level (Lw) A-Scale	64	70	72	84	84	81	74	66	88
Location 4 Sound Power Level (Lw) A-Scale	63	67	72	80	82	77	68	57	85
Average Sound Power Level (Lw) A-Scale	64	69	72	82	83	79	71	62	87



Schedule "G"

Lighting Study

MORRIS Engineering Ltd.

2019 September 23

Project Number: 501

Shouldice Trucking
2850 County Rd 18
Prescott, ON
K0E 1T0

Attention: Stan Shouldice
President

Dear Mr. Shouldice:

Re: Site Lighting
Shouldice Trucking
Prescott, Ontario

Further to our letter dated September 06th, 2019, we have performed site reviews of the Shouldice Trucking site, after dark, to visually review the light levels in the rear parking lot and at the rear property lines.

As noted previously, the rear site lighting consists of 2 light poles, as follows:

- Light pole to the north of the rear parking lot, with 2 x RAB #VFL5-LED300-B-5K-W-BRZ-SF units, which are 300W LED fixtures (note that the west fixture has been turned off);
- Light pole at the center of the rear parking lot, with 4 x RAB # VFL5-LED300-B-5K-N-BRZ-SF units, which are 300W LED fixtures.

Our first site visit was on September 14th, 2019, with a follow-up site visit occurring on September 19th, 2019. During the follow-up visit, we directed your Electrical Contractor to adjust the lamps on the light pole at the center of the rear parking lot.

Following are our observations:

- The one active light fixture at the light pole to the north of the rear parking lot is directed away from the property lines, and down towards the ground;
- The four light fixtures at the light pole at the center of the rear parking lot are all directed away from the property lines and down towards the ground;
- There appears to be minimal *light trespass* at the north and south property lines which border the rear yard of the site (Illuminating Engineering Society (IES) definition of *light trespass*: The encroachment of light, typically across property boundaries, causing annoyance, loss of privacy, or other nuisance);
- The north, west and south property lines are tree-lined, which appears to contain most of the light spillage beyond the property lines;

As site Owner/Operator you indicated the following:

- That the lighting of the rear yard is required for safety of both personnel and asset protection;
- That a slatted fence (near opaque, approx. 7 ft high) will be installed along the neighbouring property lines, for additional security and containment of light spillage.

MORRIS Engineering Ltd.

Based on the above, our opinion of the rear yard site lighting is as follows:

- It meets the Owner's requirement for site safety;
- There is minimal light trespass occurring at the property lines, as the light fixtures are all directed away from the property lines;
- There is no light pollution (upward light), as the light fixtures are all directed toward the ground;
- The installation of a near opaque fence will largely contain the remaining light spillage at the property lines.

If you have any questions, or require additional information, please do not hesitate in contacting us.

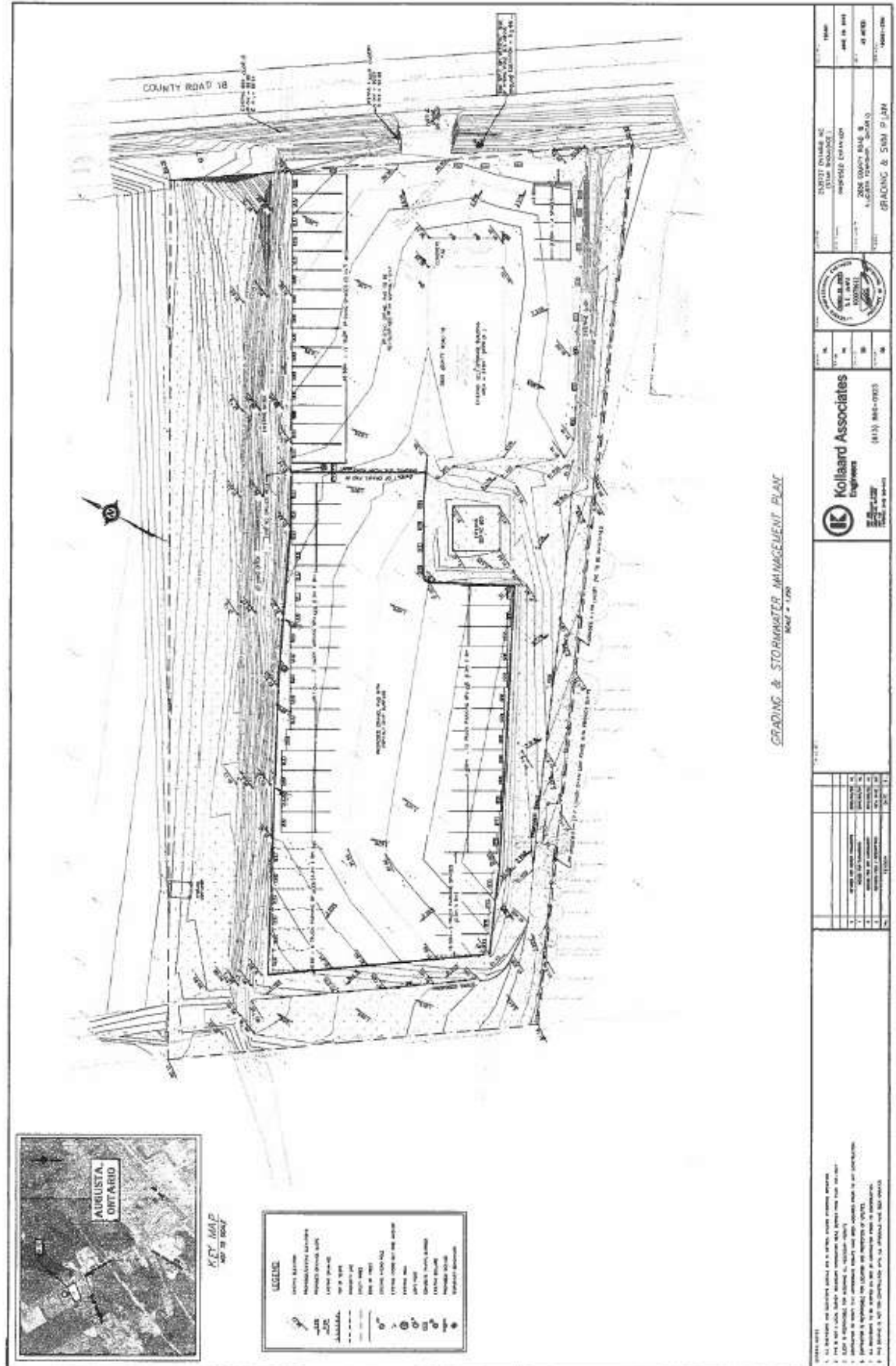
Sincerely,
MORRIS ENGINEERING LTD.



Matt Morris P.Eng.

Schedule "H"

Grading and Storm Water Management Plan



LEGEND

	UTILITY MARKING
	PROPOSED STORM SEWER
	CATCH BASIN
	STORM SEWER MANHOLE
	STORM SEWER VALVE
	STORM SEWER INLET
	STORM SEWER OUTLET
	STORM SEWER CATCHMENT AREA
	STORM SEWER CATCHMENT AREA BOUNDARY

PROJECT	2008 COUNTY ROAD 8 AUGUSTA TOWNSHIP, ONTARIO	DATE	MAY 20 2008	SCALE	AS SHOWN
CLIENT	INVEST DEVELOPMENT INC. (FORMERLY INVEST DEVELOPMENT)	DESIGNER	KOLLAARD ASSOCIATES ENGINEERS	PROJECT NO.	08-001
PROJECT NO.	08-001	PROJECT NAME	GRADING & SWM PLAN	PROJECT LOCATION	2008 COUNTY ROAD 8, AUGUSTA TOWNSHIP, ONTARIO
DATE	MAY 20 2008	SCALE	AS SHOWN	PROJECT NO.	08-001

GRADING & STORMWATER MANAGEMENT PLAN
Sheet # 108

K Kollaard Associates
Engineers
1000 Highway 104, Unit 10
Aurora, Ontario M1B 4W7
(416) 884-0003