INNOVATIVE PLANNING SOLUTIONS

planners • project managers • land development

November 13, 2023

Township of Puslinch, County of Wellington
Planning & Development
7404 Wellington Road 34
Puslinch, ON N0B 2J0

Attention: Lynne Banks
Development and Legislative Coordinator

Re: Zoning By-law Amendment 3rd submission Cover letter
6706 Gore Road, Township of Puslinch

On behalf of Aziz & Amber Usman, Innovative Planning Solutions (IPS) is pleased to submit the following Zoning By-law Amendment (ZBA) 3rd submission regarding lands municipally known as 6706 Gore Road in the Township of Puslinch. Materials enclosed are outlined on the table attached.

The purpose of this Application is to obtain approval for a Zoning By-law Amendment to rezone a portion of the subject lands to Agricultural Site-Specific Exception (A-XX) zone within the Township of Puslinch Zoning By-law 023-18. The proposed rezoning is intended to facilitiate the development of a dog breeding – Kennel use.

Trusting this is satisfactory; we would request that the following information be circulated and reviewed as required. Should you have any additional questions or concerns, please do not hesitate to contact the undersigned at your convenience.

Respectfully submitted,
Innovative Planning Solutions

[redacted]

Nick Skerratt,
Senior Planner

647 WELHAM ROAD, UNIT 9A, BARRIE ONTARIO L4N 0B7
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6706 Gore Road

Township of Puslinch, County of Wellington

November 2023 IPS File No. 23-1325

#	Document or Report and Plans	Copies
	Link: SUBMISSION MATERIAL (Shared folder)	
1.	6706 Gore Road Line Cover Letter Dated November 2023	Digital
2.	6706 Gore Road Comment Response Matrix Dated November 2023	Digital
3.	6706 Gore Road Site Plan Sheet 1 Dated November 2023	Digital
4.	6706 Gore Road Site Plan Sheet 2 Dated November 2023	Digital
5.	6706 Gore Road Site Plan Sheet 3 Dated November 2023	Digital
6.	6706 Gore Road Environmental Noise Study Dated November 2023	Digital

Comment Response Matrix

6706 Gore Road

Zoning By-law Amendment (D14-AZI)

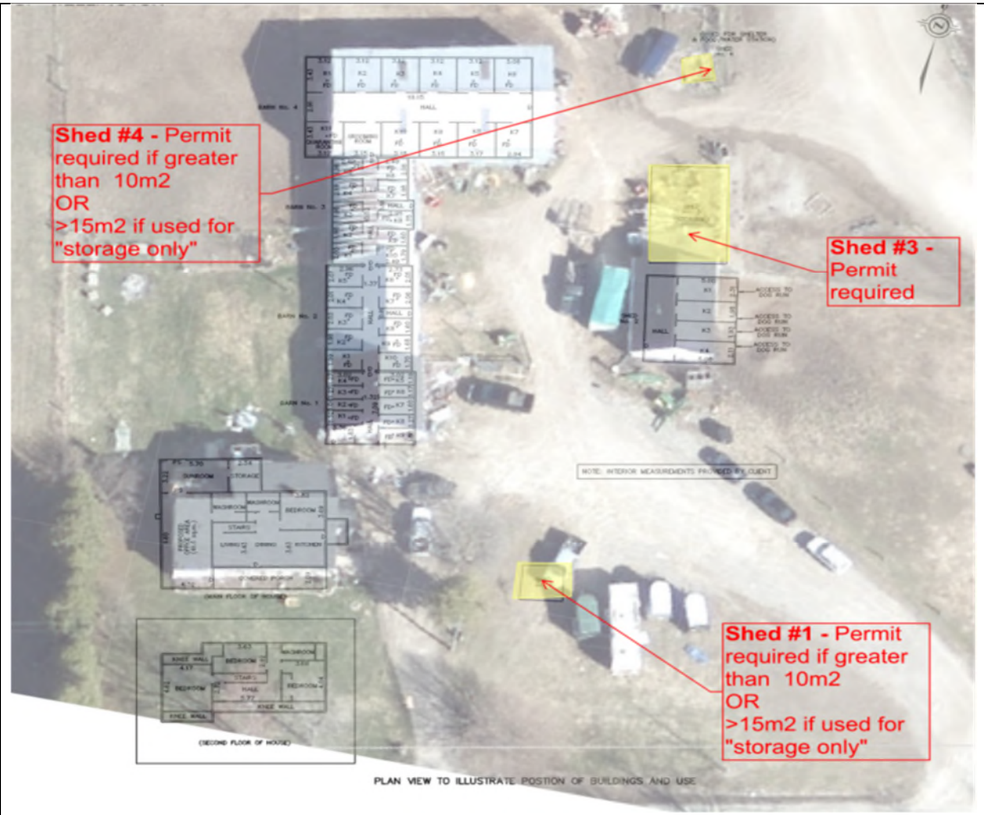
IPS File No. 23-1225 Comment Matrix Date: November 13, 2023

Township of Puslinch

Legend – Consulting Abbreviations:

IPS – Innovative Planning Solutions
JD – J.D. Barnes consultant
SLR – Environmental Noise Study consultant

#	Comment	Responsibility	Comment Response
Township of Puslinch Building Department			
1	In comparing the 2020 aerials we have available to us, it appears that Shed#1, Shed #3 & Shed#4 are newer and require building permits. If the owner can provide a record of the building permits for Shed#1, Shed #3 & Shed#4, that will be acceptable, otherwise the owner is required to apply for building permits for the sheds constructed without the benefit of permit.	IPS/Owner	- The current owner took possession of the subject lands in 2021 and will obtain the necessary building permits to comply with the Ontario Building Code, as required.

2			- Shed #1 & #4 are used for storage as indicated in the 2nd submission material - Shed #3 – although the use of shed #3 is for storage, the size is over the OBC requirement of <15m2 and may require a building permit subject to Zoning Bylaw Amendment Council decision and Site Plan Control. Should a permit be required for shed #3, application will be made after completion of Planning related development applications.
Blue Pan Engineering			
3	GMBP Comment March 22, 2023: Please see the complete Site Plan and Drawing Requirements for a list of items required for a Site Plan: Site Plan and Drawing Requirements (puslinch.ca) (https://puslinch.ca/wp-content/uploads/2020/09/Site-Planand-Drawing_Guidelines.pdf) Please confirm the general information such as the owner, consultant, legal description, property lines referenced to a current plan of survey, north arrow, revision dates (if applicable) on the Site Plan. Please also confirm garbage disposal areas, lighting information, accessibility routes, and signage for the fire access route on the Site Plan. GMBP Comment September 14, 2023: Please confirm accessible route on the Site Plan, including accessible parking with maximum slopes per County of Wellington Facility Accessibility Design Manual. Please also provide parking calculation to justify number of parking spaces and accessible parking spaces.	JD	– The majority of this comment can be addressed at site plan stage. - Zoning matrix provided By J.D. Barnes (sheet 1) – November 10/23
County of Wellington Planning Department			
4	A draft Site-specific Zoning By-law has been included in the planning justification letter to rezone a portion of the subject lands from Agricultural (A) zone to and Agricultural Exception (A-XX) zone. As the intent is to have a kennel specific to breeding and the Zoning By-law definition of a “Kennel” is more general, it may be appropriate for the draft amending by-law to identify the use being permitted	IPS	- Acknowledge comment with respect to Zoning Bylaw definition of kennel use as being a broad term in relation to the proposed dog breeding kennel use however, for consistency between the Zoning Bylaw and the Kennel Licensing Bylaw it is recommended that the site specific exception utilize the existing defined term within the Zoning Bylaw. The kennel definition not only captures

	is specifically a breeding kennel to reflect the development as proposed and to identify the existing building(s) being utilized as part of the kennel.		dog breeding as a permitted use, rather other forms of business operations that may become available in the future, subject to licensing bylaw compliance, to allow for flexibility. As the proposed use falls within a kennel use and regulated by the zoning bylaw and licensing bylaw, any changes to the dog breeding kennel use would require compliance to municipal regulations and policies. At this time, it is not necessary to scope the use outside of the defined term within the zoning bylaw as a kennel use.
5	Can you please provide building sections to determine the building height.	JD	- Building heights shown on sheet 3, and provided for on zoning matrix (sheet 1) – Nov.10/23
6	Is outdoor storage required?	IPS	- Outdoor storage has not been proposed for this ZBA application or is necessary for the dog breeding kennel use.
7	Is there any signage proposed. If yes, please ensure compliance with Sign By-law.	JD	- If required this will be included in the Site plan submission.
8	Will there be any other business on site other than the dog breeding operation.	IPS	- Within the requested site specific exception area, the only uses proposed are a single dwelling unit (existing) and dog breeding kennel operation.
9	Please confirm if there will be grooming services provided for the dogs other than those on site.	IPS	- No grooming services provided for other dogs other than those on site
For the conceptual plan			
10	Can you confirm if a lighting is proposed on site. If yes, please ensure compliance with Section 4.15 of the Zoning By-law.	JD	- Meets zoning requirements – shown on plans.
11	Please identify the parking for the existing dwelling and parking associated with the kennel separately. Please provide dimensions for the parking spaces within the detailed site plan.	JD	- Completed and shown on site plans November 10/23
12	It is understood garbage will not remain on site for long; however, we request that any garbage storage be screened from public view and located away from any residential uses.	JD	- Completed and shown on site plans November 10/23
Aboud & Associates Inc.			
13	All proposed facilities are existing on the property, and only the addition of board on board fencing for a proposed dog run/play area is proposed as new build.	IPS	- No action required
14	Review of Google aerial and street view photography images has not identified any additional/unmapped natural heritage features are present in the vicinity of the proposal.	IPS	- No action required
15	GRCA regulated habitat (a small area of Wetland identified to the north of the proposed development) is present within the property limits, but the proposed use is approximately 60m from the regulation limit.	IPS	- No action required
16	The MNRF Natural Heritage System mapping and the Wellington County Draft Natural Heritage System mapping does not identify any further natural heritage features within the property limits.	IPS	- No action required
17	The provincial Natural Heritage System limits are present on the property and include the area of a 30m buffer around the northern wetland feature. It appears that the proposed board on board fencing is outside of the NHS.	JD	- Deemed complete as per site drawing created by J.D. Barnes dated July 2023
18	Our Species at Risk review of the NHIC, Ontario Reptile & Amphibian Atlas, Breeding Bird Atlas and Mammal Atlas, has determined that habitat for any Species at Risk is unlikely to be impacted, based on the limits of the development, and that the structures are existing and will remain.	IPS	- No action required
19	The proposed development is within the boundaries of the Growth Plan for the Greater Golden Horseshoe but does not appear to include the lands within the Natural Heritage System.	IPS	- No action required
Grand River Conservation Authority			
20	The GRCA continues to have no objection to the proposed ZBA at 6706 Gore Road and have no further comments at this time.	Owner	- Applicant to provide payment to GRCA
Valcoustics Canada Ltd.			
21	We agree that the application of the sound level limits for a stationary noise source as outlined in Ministry of Environment, Conservation and Parks (MECP) Publication NPC-300 appropriately address	SLR	- No further comment required from SLR.

	the requirements of the applicable Noise By-Laws. This is consistent with item 8.1.9 in By-Law Number 024-2021 which indicates the predicted noise levels are not to exceed the environmental noise guidelines from stationary sources as published by the MECP.		
22	Section 4.1.1 of the SLR report indicates that the reference sound power level of 110 dBAI used to complete the impact assessment is an average sound power level that is representative of small to large breed dogs. The report then goes on to say "as the kennel is planning to include small breeds at this time, this is considered to be a conservatively high assessment of noise impacts". A few questions: a. Why is this a conservatively high assessment when the reference sound power level used is a representation of the mix of breed sizes anticipated at the facility? b. Is the facility planning on not having small breeds at some point in the future? c. If small breeds are not at the facility, what impact does this have on the reference sound power level and the resulting off site sound levels? Conversely, if larger breeds are not anticipated at the facility, what impact does this have on the reference sound power level and the resulting off site sound levels?	SLR	a. The assessment is conservative as the measured sound power level is representative of a mix of small to-large dog breeds. The 110 dBAI sound power level used in the original and revised assessments is an energy average of 15 different small, medium, large and very large dog barks. The dog breeding kennel will only have small dog breeds including Pembroke Welsh Corgis, Bichon Frisés and Miniature Poodles, as noted in the report introduction. Use of a conservative approach is common and appropriate in the absence of detailed measurement information of the specific sources in question. b. SLR understands the facility is only planning to have small breeds. c. As only small breeds are planned for the facility, it is not relevant to speculate on off-site impacts considering larger breeds. A scenario with larger breeds will not occur in the future for the current property owner. It is expected that with the conservative sound power level used in the assessment, offsite sound levels would be equal to or lower than the modelled levels presented in the SLR report.
23	Section 4.1.1 also recommends that "exterior windows to climate-controlled spaces where dogs will be located indoors remain closed for noise control purposes". For noise control purposes, all indoor spaces where dogs may be located require exterior windows and doors to remain closed for noise control purposes and not just those spaces that are climate controlled.	SLR	SLR understands that all indoor spaces that will contain dogs will be climate controlled. It is recommended that all indoor spaces where dogs may be located are subject to the requirement of keeping windows and doors to the spaces closed for noise control purposes.
24	The recommendation that a/c unit selections shall meet the sound level recommendations of MECP Publication NPC-216 is not adequate. According to NPC-216, the indicated 7.6 bels limit applies to residential air conditioners that are 38,900 BTU or less. If larger air conditioners are used, there is no corresponding sound level limit in NPC-216. Thus, the recommendation should simply be that each a/c unit must have an ARI sound rating not exceeding 7.6 bels.	SLR	SLR recommends that each air conditioning unit have an ARI sound rating not exceeding 7.6 bels.
25	The discussion in 4.4 of the SLR report indicates that the vacant lot is not noise sensitive. NPC-300 clearly defines a noise sensitive zoned lot as being a Point of Reception where the noise guideline limits must be met. We agree that any required noise mitigation can be deferred but that the mitigation must be in place prior to any dwelling or other noise sensitive use being occupied. However, the noise study must demonstrate that any potential noise mitigation measures are feasible and practical. Questions about the potential noise mitigation measures mentioned in the report are: a. What does administrative controls mean? Will outdoor runs 1 and 2 cease to be used? Review of the analysis results also seem to show the guideline limits are exceeded for the outdoor run 4 scenario. Does this mean future outdoor activities will be limited to outdoor run 3? b. What height of sound barrier is needed to meet the guideline limits? c. Regarding Figure 5 which shows the area where an excess above the guideline limit is predicted, the Outdoor Point of Reception should also be considered which extends 30 m from the dwelling facades in all directions.	SLR	a. Administrative controls in this case means not using dog runs 1 and 2, if a dwelling or other noise sensitive use is constructed in the area shown on Figure 5. If a 2nd-storey plane of window is located north of the 50 dBAI sound level contour shown in Figure 3d, dog run 4 will not be used. b. Administrative controls alone are feasible to meet applicable limits without the need for a sound barrier, should a future POR be located within the area shown on Figure 5. Potential barrier requirements can be investigated if necessary, and would depend on the ultimate location of the POR, and as recommended in the assessment, actual measurements of the small breed dog barks at the facility. If a barrier greater than 3 m high cannot be used to achieve applicable limits, the administrative controls must be used (i.e., not using the dog run(s) where sound levels are predicted to exceed applicable limits). c. The area shown in Figure 5 considers all areas of predicted excesses considering both 1.5 m (outdoor POR) and 4.5 m high (2nd-storey plane of window) high receptors, based on sound level contours shown in Figures 3a to 3d and Figures 4a to 4d. Figure B1, Attachment B has been included in this response letter for additional information. Figure B1 shows the area where consideration for mitigation may be required if a dwelling is constructed within 30 m of the "Zone of Predicted Excesses" area (and if there is an outdoor POR within 30 m of that dwelling).
26	The sound level modelling discussion in 4.2 indicates existing buildings were taken into account. Review of the analysis results indicate that the predicted sound levels are higher at POR 1 than at POR 3. These receptors are about the same distance from the facility. However, POR 1 likely benefits from the acoustical screening provided by the existing buildings (the analysis information in Appendix B	SLR	SLR notes that a minor revision has been made in the analysis. Area sources representing the dog runs and barking were revised and 'fit to DTM' in Cadna/A model to more accurately follow the terrain. This resulted in minor changes to predicted sound levels (< 1 dB), provided in the revised report, but the conclusions of the study remain unchanged. Changes were only made to Table 4 and Figure 3a to Figure 3d, Figure 4a to Figure 4d, and Figure 5.

	shows barrier attenuation for the receptor to the west). Thus, it is not clear why the sound level at POR 1 is higher than at POR 3. Clarification is needed.		POR1 and POR3 are both one-storey dwellings with receptors at a height of 1.5 m above grade. They vary in their distances from the individual dog runs. In all cases, POR3 is located further from the dog runs compared to POR1. The distance is approximately the same only for Dog run 2, where the respective predicted sound levels are also similar. Estimated distances from the nearest portion of the dog runs to the respective PORs are shown in the following table. Differences in sound levels are due primarily to the varying distances. following table. Differences in sound levels are due primarily to the varying distances. Dog Run / Closest Distance to POR1 (m) / Predicted Sound Level at POR1 (dBAI) / Closest Distance to POR3 (m) / Predicted Sound Level at POR3 (dBAI) Dog Run 1 / 107 / 43 / 146 / 40 Dog Run 2 / 133 / 40 / 134 / 40 Dog Run 3 / 111 / 41 / 179 / 36 Dog Run 4 / 128 / 39 / 159 / 37
27	The report fails to provide any significant analysis details, such are the ground absorption coefficient, or a sample calculation. Additional analysis detail is needed to confirm the analysis approach.	SLR	A sample calculation for a single POR and dog run was previously provided in Appendix B, as referenced in peer review comment f). Additional sample calculations for all dog runs and all points of reception have been provided in Appendix B of the revised report dated November 8, 2023. The other following modelling details are provided as requested. Noise impacts from stationary sources were modelled using Cadna/A, a software implementation of the internationally recognized ISO-9613-2 environmental noise propagation algorithms. The following additional parameters were used in the modelling: • Temperature: 10°C; • Relative Humidity: 70%; • Ground Absorption G: G = 1.0 (absorptive) as the default global parameter • Reflection: Two (2) orders of reflection were used (accounts for noise reflecting from building surfaces); • Wall Absorption Coefficients: Set to 0.21 or 0.37 (21%/37% of energy is absorbed, 79%/63% reflected); and • Terrain: 1 m topographical contours obtained from the Ontario GeoHub.
Township of Puslinch By-Law Enforcement Department			
28	If the applicant is successful in a Zoning By-law Amendment, a New Kennel Licence Application is required to be submitted **immediately** after the passing of the Zoning By-law Amendment. An application can be submitted at the following link: https://puslinch.ca/doing-business/kennel-licences/.	Owner	- Acknowledged
29	Once a New Kennel Licence Application is submitted, the Township will process the application and schedule an inspection in accordance with the provisions set out in the Township of Puslinch Kennel Licensing By-law 24- 2021. The Kennel must pass the inspection and be in compliance with every section of the Kennel Licensing By-law, in order to continue operation. I have attached a copy of the Township of Puslinch Kennel Licensing Bylaw 024-2021 for reference.	Owner	- Acknowledged
30	A Kennel shall have a maximum of twenty-five (25) Dogs at any one time. Puppies under 4 months old shall not be included in this number.	Owner	- Acknowledged
31	The Floor Plan included in the Zoning By-law Amendment would have to be revised to meet the requirements for a Floor Plan set out in Section 8.1.7. of the Kennel Licensing By-law. The Floor Plan must be drawn to scale (min. 1:64 (3/16” = 1’-0”)) of any building, structure, dog run, or facility being	JD	- To be shown at site plan stage.

	used for the housing of Dogs. The floor plan must graphically indicate the area being used for a Kennel including pens, dog runs, walkways, exits, fire extinguishers, etc. The plans shall be fully dimensioned and labelled.		
32	In the Waste Management Plan Report, it is mentioned that dog fecal matter will be disposed of at the dumping site. Could you please clarify what the 'dumping site' is?	Owner	- Guelph Transfer Station, 80 Dunlop Drive, Guelph ON N1L 1P4
33	Every Kennel shall be of sufficient space to allow the Dogs kept therein to stand erect and be comfortable and shall have no less than 2.3 square meters of floor area per dog. For bitches with nursing puppies, the required space in each Kennel is increased by 10% (0.23) to a total of 2.53 square meters of floor area per nursing puppy. Please see the below calculations based on 2.3 square meters per dog. Please do your own calculations separately to include nursing puppies and provide them. o Barn No.1 – Each Pen is permitted to keep a maximum of 1 dog, except for K7 which is permitted a maximum of 2 dogs. o Barn No.2 – Each Pen is permitted to keep a maximum of 2 dogs, except for K8 and K9 which is permitted a maximum of 1 dog. o Barn No. 3 – Each Pen l is permitted to keep a maximum of 2 dogs, except for K9 and K10 which is permitted a maximum of 1 dog. o Barn No.4 – Each Pen is permitted to keep a maximum of 4 dogs. o Shed No.2 – Each Pen is permitted to keep a maximum of 4 dogs, except K1 which is permitted a maximum of 5 dogs. o No dogs are permitted to be kept in sheds 1,3, and 4. o Please note that the By-law only permit a maximum of 25 dogs and the required 10% of nursing puppies is not calculated in these calculations. Please provide your own calculations for the pens with nursing puppies.	JD	- To be shown at site plan stage.
34	Floors in all pens, alleyways and outdoor runs shall be sloped to allow for sufficient drainage.	JD	- To be shown at site plan stage.
35	The Names and addresses of the purchasers of individual dogs must be recorded. There is no exception to this rule.	Owner	- Acknowledged
36	All dogs shall be confined indoors during the hours of 8:00 p.m. to 7:00 a.m.	Owner	- Acknowledged
Harden Environmental Services Ltd – (no comments from previous submissions**)**			
37	The site plan included in the first submission showed three separate septic tanks and dispersal beds on the property. The site plan included in the second submission shows one septic tank and dispersal bed just north of the existing house, and the other two septic locations identified in the first submission as "Septic Tank #2" and "Septic Tank #3" have been replaced with "Soak Away Pit (LID)" locations. Both site plans are attached for reference. The applicant should clarify the existing/proposed use of the soak away pits, the type(s) of liquid and quantity/flows discharged to these pits and classification (e.g., sewage, greywater, stormwater management, etc.), and any existing/proposed treatment systems. Sewage flows that exceed 10,000 L/day (cumulative for the entire property) require an Environmental Compliance Approval (ECA) from the Ministry of the Environment, Conservation and Parks (MECP).	IPS	- can be provided through detailed site plan control submission as this detail is not necessarily for the ZBA application process. The first submission incorrectly labelled the soak away pits as septic systems. The second submission provided correct information as these systems are not designed or used for waste management. There is no connection to the soak way pits that would facilitate any waste, sewage, greywater as there are no existing facilities located with the barn structures or proposed. To note, these structures (soak away pits) can be removed if necessary as they do not form any function to the proposed use.

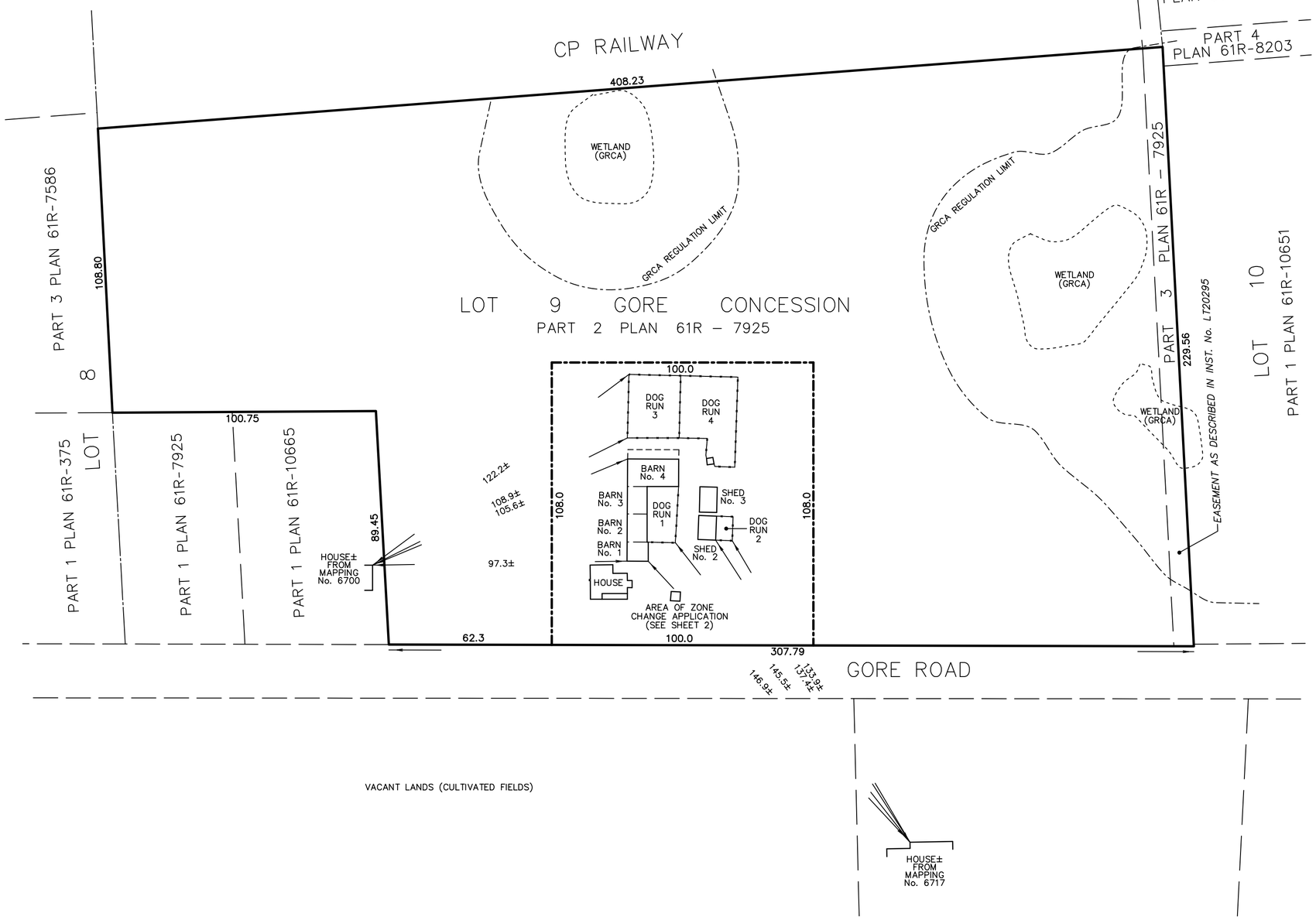
TOWNSHIP OF PUSLINCH
COUNTY OF WELLINGTON

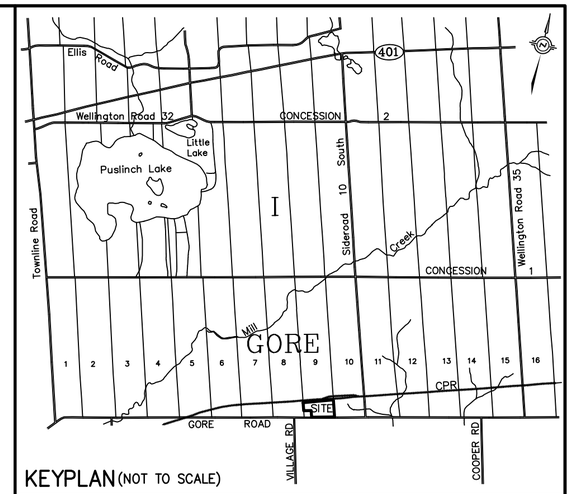
AGRICULTURAL ZONE REQUIREMENTS

STANDARD	REQUIRED	PROVIDED	CONFORMS
MIN LOT AREA	4.0 ha	7.8 ha	Y
MIN LOT FRONTAGE	120.0	307.79	Y
MIN FRONT YARD	10.0	16.8	Y
MIN INTERIOR SIDE YARD	3.0	77.9 & 178.8	Y
MIN EXTERIOR SIDE YARD	N/A		
MIN REAR YARD	7.5	141.5	Y
MAX LOT COVERAGE	30%	1%	Y
PARKING SPACE FOR RESIDENTIAL DWELLING	2	2	Y
MAX BUILDING HEIGHT (AS PER SECTION 4.10)	10.0	HOUSE - 6.6 BARN 1 - 5.6 BARN 2 - 5.0 BARN 3 - 4.8 BARN 4 - 6.9 SHED 2 - 4.3 SHED 3 - 4.0 SHED 4 - 3.0	Y

KENNEL REQUIREMENTS

STANDARD	REQUIRED	PROVIDED	CONFORMS
MIN LOT AREA	3.0 ha	1.08 ha	N
MIN DISTANCE FROM EXISTING RESIDENTIAL DWELLING	125.0	97.3	N
1 PARKING SPACE PER 30.0 sq.m. FOR OFFICE COMPONENT	45.0 sq.m. ÷ 30.0 = 1.5	9	Y





KEYPLAN (NOT TO SCALE)

GENERAL NOTES:

1. THIS PLAN WAS PREPARED FOR USMAN AZIZ.
2. LOT DIMENSIONS SHOWN ARE AS SHOWN ON PLAN BY J.D. BARNES LIMITED, PROJECT No. 22-14-851-00-A, DATED DECEMBER 20, 2022 AND HAVE NOT BEEN VERIFIED BY SURVEY.
3. THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE USED FOR TRANSACTION OR MORTGAGE PURPOSES.
4. THE POSITION OF ALL POLE LINES, CONDUITS, WATER MAINS, SEWERS AND OTHER UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THIS PLAN, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
5. ALL ANIMAL WASTE COLLECTION IS TO BE REMOVED FROM THE SITE DAILY THROUGH A PRIVATE CONTRACTOR OR OWNER AND THAT ALL OTHER FORMS OF WASTE ARE STORED WITHIN THE GARBAGE BIN FOR STANDARD COLLECTION SERVICES.
6. LIGHTING FIXTURES SHALL BE INSTALLED WITH THE LIGHT DIRECTED DOWNWARDS AND DEFLECTED AWAY FROM ADJACENT LOTS AND STREETS, AND IN SUCH A MANNER AS TO NOT CONFUSE PERSONS DRIVING VEHICLES ON SUCH STREETS.

PROPERTY DESCRIPTION – PART OF LOT 9, GORE CONCESSION (7.8 ha)

CURRENT ZONING – A (AGRICULTURAL)

CIVIC No. 6706

BARN No. 1 – 9 PROPOSED DOG KENNELS (59.1 sq.m.)
BARN No. 2 – 10 PROPOSED DOG KENNELS (80.3 sq.m.)
BARN No. 3 – 10 PROPOSED DOG KENNELS (79.8 sq.m.)
BARN No. 4 – 11 PROPOSED DOG KENNELS & QUARANTINE ROOM (204.8 sq.m.)
SHED No. 1 – (13.0 sq.m.)
SHED No. 2 – 4 PROPOSED DOG KENNELS (62.6 sq.m.)
SHED No. 3 – STORAGE (64.0 sq.m.)
SHED No. 4 – USED FOR SHELTER AND FOOD/WATER STATION (6.5 sq.m.)
HOUSE – DWELLING (152.0 sq.m. TOTAL GROUND FLOOR) & PROPOSED OFFICE (OFFICE 4.32 x 9.60 – 41.5 sq.m.)

LEGEND

GRCA	DENOTES	GRAND RIVER CONSERVATION AUTHORITY
ST	DENOTES	SEPTIC TANK
HP	DENOTES	HYDRO POLE
UG	DENOTES	UNDERGROUND
PL	DENOTES	PROPERTY LINE
S	DENOTES	'NO PARKING - FIRE ROUTE' SIGN
OL	DENOTES	OUTDOOR LIGHTING (SEE NOTE 6)
PS	DENOTES	PATIO SLIDER
D	DENOTES	MANDOOR
FD	DENOTES	FLOOR DRAIN
K	DENOTES	PROPOSED KENNEL NUMBER

No.	REVISIONS	BY	DATE
5			
4			
3			
2	AS PER COMMENTS FROM INNOVATIVE PLANNING SOLUTIONS	DM	NOV. 10, 2023
1	AS PER COMMENTS FROM INNOVATIVE PLANNING SOLUTIONS	DM	AUG. 11, 2023
	CONSTRUCTION		
	TENDER		
	ISSUE FOR APPROVALS		
	ISSUE BLOCK		

COUNTY OF WELLINGTON — TOWNSHIP OF PUSLINCH

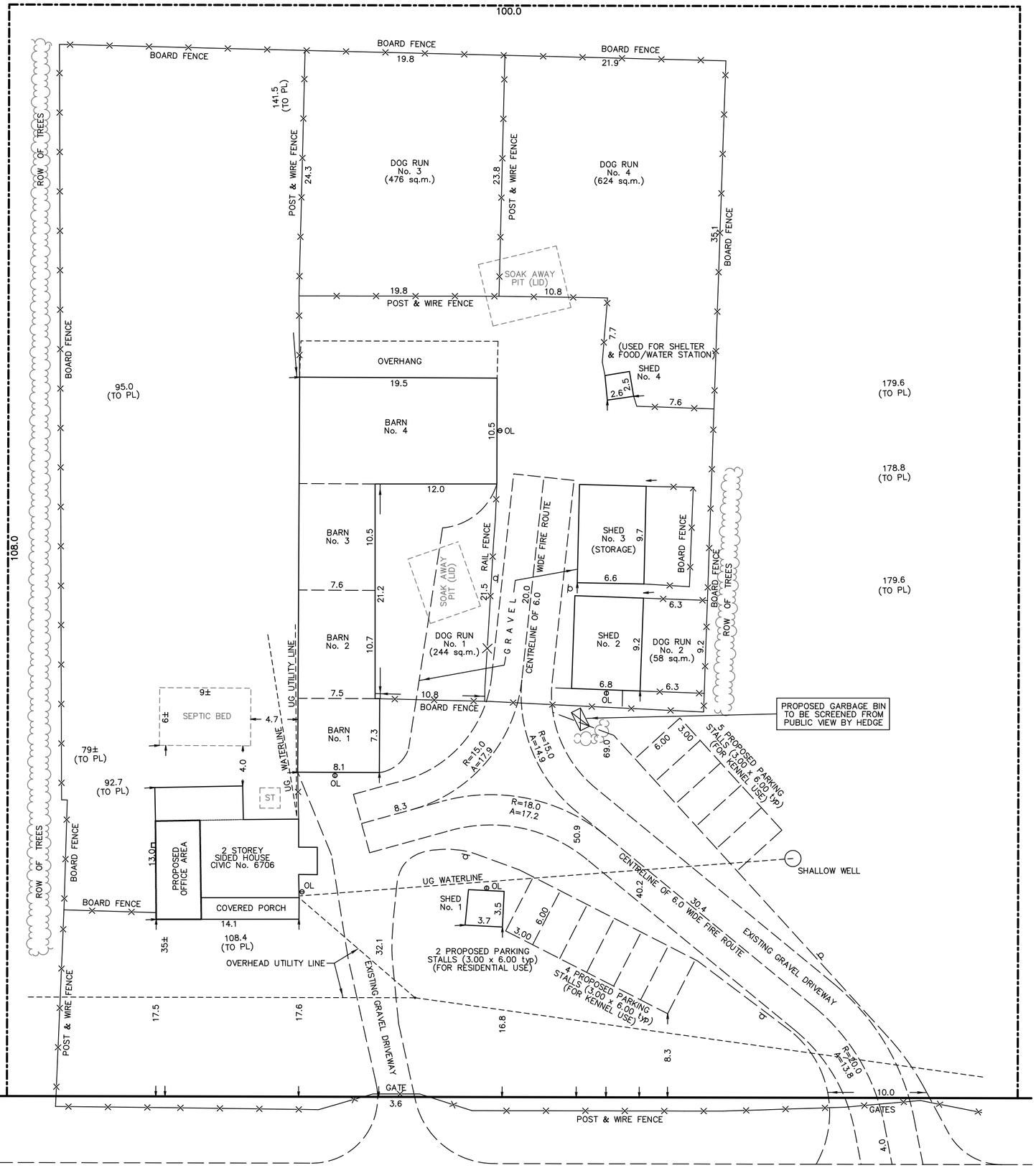
SITE PLAN / ZONE CHANGE APPLICATION

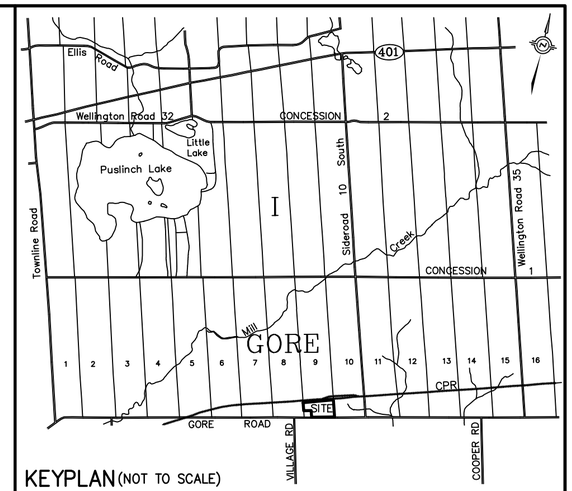
J.D.BARNES LIMITED
SURVEYING MAPPING GIS
LAND INFORMATION SPECIALISTS
257 WOODLAWN ROAD WEST, UNIT 101, GUELPH, ON N1H 8J1
T: (519) 822-4031 F: (519) 822-1220 www.jdbarnes.com

DESIGNED BY:	KFH	SCALE 1 : 1250	DATE: JULY 20, 2023
CHECKED BY:	KFH	20 0 20 40 metres	
DRAWN BY:	DM		SHEET 1 OF 3
CHECKED BY:	KFH		
FILE No. 22-14-851-01		REVISION No. 2	

PLOTTED: 11/10/2023
FILE: G:\22-14-851\01\Drawing\22-14-851-01 SITE PLAN.dgn

TOWNSHIP OF PUSLINCH
COUNTY OF WELLINGTON





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PROPERTY DESCRIPTION – PART OF LOT 9, GORE CONCESSION (7.8 ha)

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CIVIC No. 6706

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HOUSE – DWELLING (152.0 sq.m. TOTAL GROUND FLOOR) & PROPOSED OFFICE (OFFICE 4.32 x 9.60 – 41.5 sq.m.)

LEGEND

GRCA	DENOTES	GRAND RIVER CONSERVATION AUTHORITY
ST	DENOTES	SEPTIC TANK
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COUNTY OF WELLINGTON **TOWNSHIP OF PUSLINCH**

SITE PLAN / ZONE CHANGE APPLICATION

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LAND INFORMATION SPECIALISTS
257 WOODLAWN ROAD WEST, UNIT 101, GUELPH, ON N1H 8J1
T: (519) 822-4031 F: (519) 822-1220 www.jdbarnes.com

DESIGNED BY: KFH	SCALE 1 : 300		DATE: JULY 20, 2023
CHECKED BY: KFH	5 0 5 10 metres		
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CHECKED BY: KFH			
FILE No. 22-14-851-01	REVISION No. 2		

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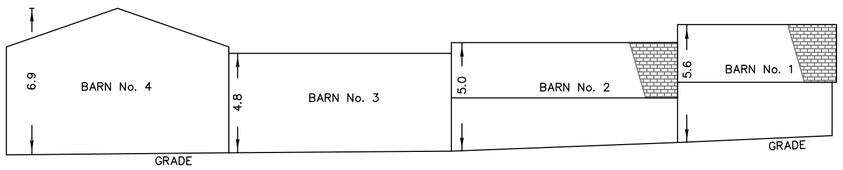
TOWNSHIP OF PUSLINCH
COUNTY OF WELLINGTON



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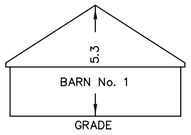

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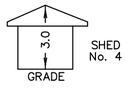

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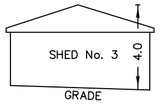

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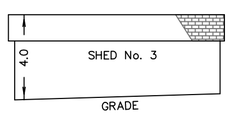

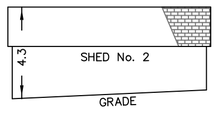

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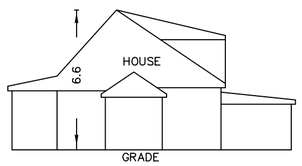

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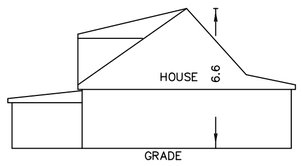

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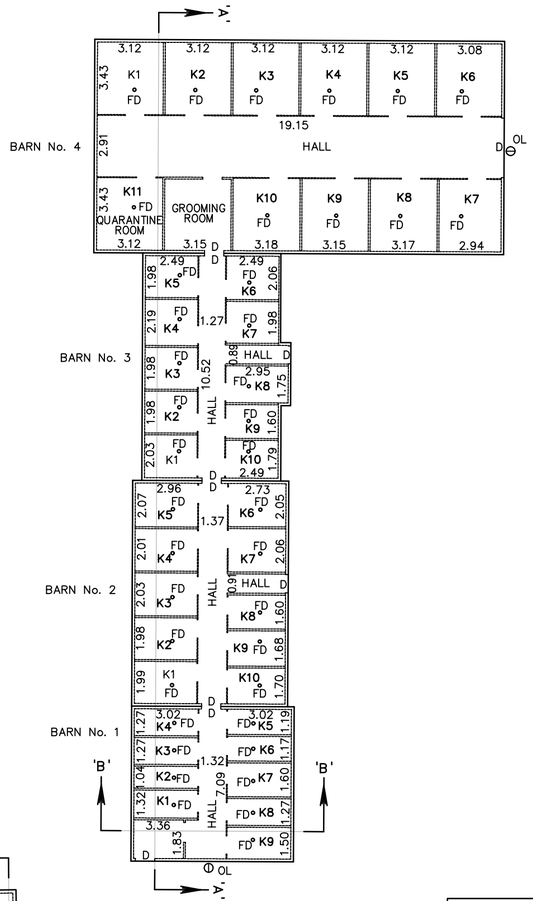
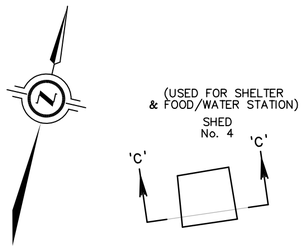
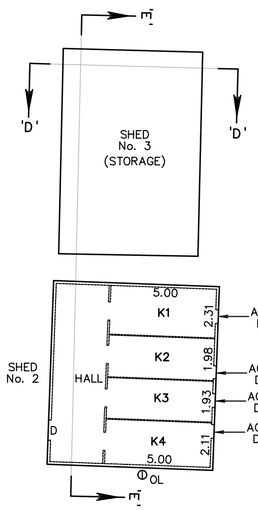
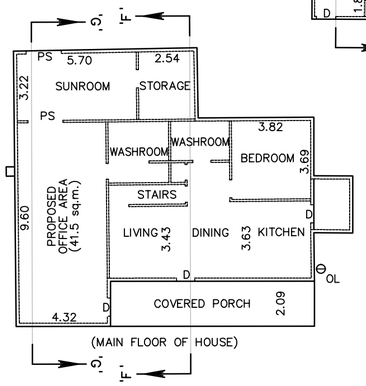
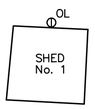
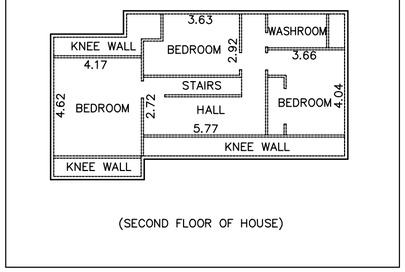






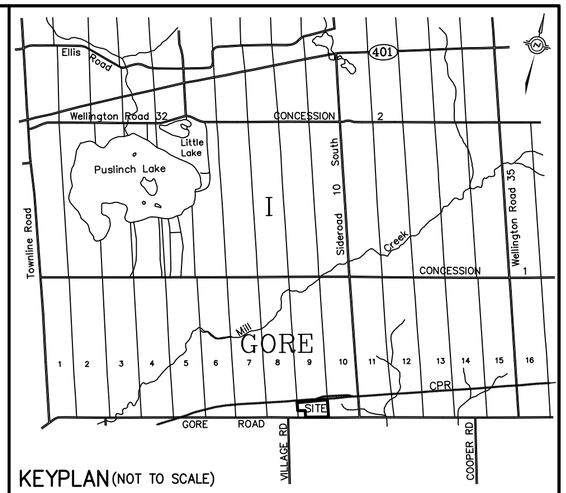






NOTE: INTERIOR MEASUREMENTS PROVIDED BY CLIENT

PLAN VIEW TO ILLUSTRATE POSTION OF BUILDINGS AND USE



KEYPLAN (NOT TO SCALE)

GENERAL NOTES:

1. THIS PLAN WAS PREPARED FOR USMAN AZIZ.
2. LOT DIMENSIONS SHOWN ARE AS SHOWN ON PLAN BY J.D. BARNES LIMITED, PROJECT No. 22-14-851-00-A, DATED DECEMBER 20, 2022 AND HAVE NOT BEEN VERIFIED BY SURVEY.
3. THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE USED FOR TRANSACTION OR MORTGAGE PURPOSES.
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DESIGNED BY: KFH	SCALE 1 : 200		DATE: JULY 20, 2023
CHECKED BY: KFH	4 0 4 8 metres		
DRAWN BY: DM			SHEET 3 OF 3
CHECKED BY: KFH			
FILE No. 22-14-851-01	REVISION No. 2		

PLOTTED: 11/10/2023
FILE: G:\22-14-851\01\Drawing\22-14-851-01 SITE PLAN.dgn

Environmental Noise Study

Dog Breeding Kennel

Usman Aziz

6706 Gore Road
Puslinch ON, N0B 2J0

Prepared by:

SLR Consulting (Canada) Ltd.

100 Stone Road West, Suite 201
Guelph ON N1G 5L3

SLR Project No:

241.030733.00001

November 8, 2023

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Appendices

1.0 Introduction

SLR Consulting (Canada) Ltd. (SLR) was retained by property owner Usman Aziz to conduct an environmental noise study for the conversion of a former equestrian facility to a dog breeding kennel facility, to be located at 6706 Gore Road, Puslinch, Ontario.

An initial study was completed (dated December 6, 2022) to satisfy the requests of the Township of Puslinch and Wellington County as part of the zoning by-law amendment application to allow for a kennel on the lands. This revised study has been completed to consider an updated site plan, and to address peer review comments provided by Valcoustics Canada Ltd. dated April 26, 2023.

1.1 Kennel Description

The 6706 Gore Road property was formerly an equestrian facility. The proposal to convert the facility to a dog breeding kennel includes the renovation of the existing buildings to be thermally insulated and climate controlled, and the addition of new storage shed buildings. The interior box areas for dogs are designed with drains and hose facilities for easy clean up. Four (4) outdoor run areas are included throughout the kennel layout.

Small dog breeds are currently planned for the kennel, which includes Pembroke Welsh Corgis, Bichon Frisé and Miniature Poodles.

As the interior box areas are designed with drains and hose facilities for easy clean up, dogs are not let out for potty-breaks during the evening or night-time periods and can be kept indoors. Access to the outdoor dog runs is limited to the hours of 7 am to 7 pm.

A site plan excerpt showing the dog kennel layout is shown in **Figure 1**, with detailed development drawings provided in **Appendix A**.

1.2 Description of Surrounding Lands

The 6706 Gore Road property is bounded by the CP Galt Rail line to the north and Gore Road to the south. The surrounding lands are zoned Agricultural in all directions.

Lands north of Gore Road are part of the Township of Puslinch. South of Gore Road, the lands are part of the Township of North Dumfries.

Single family residential homes are located on the north and south sides of Gore Road, with no residential homes within 600 m of the 6706 Gore Road property to the north.

The surrounding topography is variable, where the surrounding residential homes are generally located at higher elevations from the 6706 Gore Road property.

An area plan is shown in **Figure 2**.

2.0 Review of Applicable Guideline Limits

A review of the following was completed to determine the applicable guidelines for dog barking related to the proposed dog kennel facility:

- The Corporation of the Township of Puslinch By-law No. 5001-05, "Being a by-law to provide for the regulation and prohibition of unusual noises or noises likely to disturb the public and/or the prevention of public nuisances ";
- The Towns of Erin and Minto, and the Townships of Centre Wellington, Guelph/Eramosa, Mapleton, Puslinch and Wellington North By-law Number 5001-05, "Being a by-law to provide for the regulation and prohibition of unusual noises or noises likely to disturb the public and/or the prevention of public nuisances";
- The Corporation of the Township of North Dumfries By-law No. 2609-14-05, "Being a By-law to prohibit and regulate noise within the Township of North Dumfries and to repeal By-law No. 2249-07"; and
- Ontario Ministry of the Environment, Conservation and Parks (MECP) NPC-300 Environmental Noise Guideline.

2.1 The Corporation of the Township of Puslinch Noise By-Law

The 6706 Gore Road property is located in the Township of Puslinch. The applicable noise by-law for this location is The Corporation of the Township of Puslinch By-Law No. 5001-05. The applicable sections of the by-law are as follows:

> **Section 3** of By-law No. 5001-05 stipulates 'General Prohibitions' based on the nature of noise-generating activities as follows:
>
> > General Prohibitions
> >
> > No Person shall emit or cause or permit the emission of sound resulting from any act listed in Schedule 1 – General Prohibitions and which sound is clearly audible at a point of reception at anywhere within the municipality, at any time.
>
> **Section 4** of By-law No. 5001-05 stipulates 'Prohibitions by Time and Place' based on the nature of noise-generating activities as follows:
>
> > Prohibitions by Time and Place
> >
> > No Person shall emit or cause or permit the emission of sound resulting from any act listed in Schedule 2 – Prohibitions by Time and Place if clearly audible at a point of reception located in an area of the municipality within a prohibited time shown for such an area.

The Township of Puslinch By-law 5001-05 does not include any references to dog barking.

2.2 The Towns of Erin and Minto, and the Townships of Centre Wellington, Guelph/Eramosa, Mapleton, Puslinch and Wellington North Noise By-Law

The Towns of Erin and Minto, and the Townships of Centre Wellington, Guelph/Eramosa, Mapleton, Puslinch and Wellington North By-Law Number 5001-05 was reviewed, and was found to be the same as

Township of Puslinch By-Law Number 5001-05 discussed in **Section 2.1** with respect to General Prohibitions and Prohibitions by Time and Place. The applicable sections of the by-law are as follows:

> **Section 3** of By-law No. 5001-05 stipulates 'General Prohibitions' based on the nature of noise-generating activities as follows:
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> >
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The Towns of Erin and Minto, and the Townships of Centre Wellington, Guelph/Eramosa, Mapleton, Puslinch and Wellington North By-Law Number 5001-05 does not include any references to dog barking.

2.3 The Corporation of the Township of North Dumfries Noise By-Law

The lands south of Gore Road are located in the Township of North Dumfries. The applicable noise by-law for this location is The Corporation of the Township of North Dumfries By-Law No. 2609-14. The applicable section of the by-law is the following:

> **Section 3** of By-law No. 2609-14 stipulates 'General Prohibitions' based on the nature of noise-generating activities as follows:
>
> > General Prohibitions
> >
> > No Person shall make, cause or permit Noise or Vibration, at any time, which is likely to disturb an inhabitant of the Township, which may include disturbing the quiet, peace, rest, enjoyment, comfort or convenience of the in habitant.

The Township of North Dumfries By-law 2609-14 does not include any specific references to dog barking and does not provide sound level limits to define what may disturb inhabitants in accordance with the General Prohibition definitions. Therefore, provincial guidelines were also investigated.

2.4 Ministry of Environment, Conservation and Parks Publication NPC-300

The Ministry of Environment, Conservation and Parks (MECP) Publication NPC-300 guidelines were developed based on extensive research conducted by the MECP itself and the U.S. Environmental Protection Agency in the 1970s and 1980s. The research evaluated a number of different types of noise sources, ambient noise conditions, and community responses to the sources/conditions. The guidelines provide a robust approach and framework for evaluation noise impacts. Experience has shown that complaints are generally unlikely for noise sources meeting the guideline limits in NPC-300.

2.4.1 Applicable Sound Level Limits

Under NPC-300, Part A, Section A5 – Definitions, dog barking not considered to be a stationary source and normally addressed in a qualitative manner in the municipal by-laws. Therefore, the NPC-300 Guidelines are not directly applicable to the assessment of dog barking noise impacts. However, the NPC-300 guideline limits have been reviewed as part of this study.

Dog barking is considered an impulsive noise source and would be evaluated by comparing the logarithmic mean impulsive sound level (L_{LM}, dBAI) of several distinct impulses against limits defined by the actual number of impulses per hour.

The Publication NPC-300 sound level limits are provided in the **Table 1** and **Table 2** for impulsive noise at the plane-of-the-window and within outdoor living areas (yards).

On November 23, 2022, a site visit was completed by SLR staff to determine the applicable area classification for the surrounding receptors. As the ambient environment is dominated by the sounds of nature during the daytime period with infrequent vehicle pass-by observed, all surrounding receptors are considered to be located in a Class 3 Rural area.

Table 1: NPC-300 Impulsive Noise Guideline Limits – Plane-of-the-Window

No. of Impulses per Hour	Time Period	Class 1 & 2 Areas [1][2][3] (dBAI)	Class 3 Area [1][2][3] (dBAI)
9 or more	0700h to 2300h	50	45
	2300h to 0700h	45	40
7 or 8	0700h to 2300h	55	50
	2300h to 0700h	50	45
5 or 6	0700h to 2300h	60	55
	2300h to 0700h	55	50
4	0700h to 2300h	65	60
	2300h to 0700h	60	55
3	0700h to 2300h	70	65
	2300h to 0700h	65	60
2	0700h to 2300h	75	70
	2300h to 0700h	70	65
1	0700h to 2300h	80	75
	2300h to 0700h	75	70

Notes: [1] Expressed in terms of the Logarithmic Mean Impulsive Sound Level (L_{LM}).
[2] Or minimum hourly L_{eq} of background noise, whichever is higher.
[3] Applied at the plane-of-the-window.

Table 2: NPC-300 Impulsive Noise Guideline Limits – Outdoor Points of Reception

No. of Impulses per Hour	Time Period	Class 1 & 2 Areas [1][2] (dBAI)	Class 3 Area [1][2] (dBAI)
9 or more	0700h to 2300h	50	45
7 or 8		55	50
5 or 6		60	55
4		65	60
3		70	65
2		75	70
1		80	75

Notes: [1] Expressed in terms of the Logarithmic Mean Impulsive Sound Level (L_{LM})
[2] Or minimum hourly Leq of background noise, whichever is higher

2.5 Guidelines Adopted in Assessment

The reviewed Township noise by-laws do not include any references to dog barking.

Although the NPC-300 guidelines are not directly applicable to dog barking noise, these guidelines are intended to minimize the potential conflict between noise sensitive land uses and sources of noise emissions. As the NPC-300 guidelines can be used as way to assess whether or not a noise is considered to be at an acceptable level, the NPC-300 guidelines have therefore been applied in this assessment.

Furthermore, this approach aligns with The Corporation of the Township of Puslinch By-Law Number 024-2021 for Dogs and Kennels, which references environmental noise guidelines for stationary sources as published by the MECP.

As mentioned above, the surrounding area is considered to be a Class 3 Rural environment, in which the default Class 3 limits were applied in the assessment. Limits are based on the most stringent Class 3 guideline of 9 or more impulses in an hour (i.e., more than 9 barks in an hour).

It should be noted the NPC-300 guidelines do not require that sound be inaudible. Sound levels meeting the limits in **Table 1** may still be audible and recognizable. Logarithmic Mean Impulsive Sound Levels "L_{LM}" are used in the guidelines, as opposed to maximum sound levels, as research has shown that the L_{LM} levels correspond well to potential human annoyance resulting from noise.

3.0 Points of Reception

3.1 Existing Points of Reception

The existing points of reception (POR) included in the noise modelling assessment were selected based on the predicted worst-case impacts from the dog kennel and include the closest residences within a 500 m radius. The worst-case existing PORs are described as follows and are summarized in **Table 3**.

- POR1 – single storey home to the west;
- POR2 – 2-storey home to the east; and

- POR3 – single storey home to the south on the opposite side of Gore Road.

Table 3: Worst-Case Existing Point of Reception Summary

POR ID	POR Address	Description
POR1	6700 Gore Road	1-Storey Residential House to west – plane of window and yard
POR2	6720 Gore Road	2-Storey Residential House to east – plane of window and yard
POR3	6717 Gore Road	1-Storey Residential House to south – plane of window and yard

The above PORs are shown in Figure 2.

No PORs were identified within 500 m to the north of the 6706 Gore Road property.

The existing residential dwelling on the 6706 Gore Road property is not considered a noise-sensitive POR based on definitions outlined in NPC-300, as this dwelling is located within the property boundaries of the stationary noise source.

3.2 Vacant Lot Points of Reception

NPC-300 also indicates that certain vacant lots are to be considered as noise sensitive points of reception, depending on permitted uses for the land under the applicable zoning by-law designation.

A vacant lot zoned as Agricultural is located south/southwest of the proposed facility, south of Gore Road in the Township of North Dumfries (west of POR3). As this land use zoning designation permits a residential (noise sensitive) dwelling, it has been considered in this assessment.

4.0 Noise Impact Assessment

4.1 Noise Sources

4.1.1 Dog Barking

Based on historical noise measurements by SLR staff, a single dog bark was modelled with a sound power level (PWL) of 110 dBAI and a height of 0.5 m above grade. This is considered to be an average PWL, representative of small to large dog breeds. As the kennel is planning to include small breeds at this time, this is considered to be a conservatively high assessment of noise impacts.

Four (4) outdoor dog runs are located within the 6706 Gore Road property. The dog runs are shown in Figure 1.

As the kennel buildings are to be thermally insulated and climate controlled, the shell structures are sufficient to address dog barking break-out noise. Therefore, an assessment of break-out noise is not considered necessary and was not completed. It is recommended that exterior windows and doors to climate-controlled spaces where dogs will be located indoors remain closed for noise control purposes.

4.1.2 Mechanical Equipment

Heating and cooling for the buildings includes three (3) residential home furnace and air conditioning (AC) units.

The residential furnaces are considered to be insignificant for noise. As the closest residential home is located approximately 90 m from the kennel buildings, the residential AC unit noise is not a concern and was not assessed in detail.

The AC unit selections should meet the sound level recommendations of MECP document NPC-216 ("Residential Air Conditioning Devices"), including following the sound emission standards and Maximum ARI Standard Sound Rating noted in Table 216-4 (i.e., 7.6 bels).

4.2 Sound Level Modelling

Dog barking noise impact modelling was performed using Cadna/A, a computerized implementation of the ISO 9613 noise propagation algorithms. The model took into consideration the surrounding terrain, the existing buildings, and the absorptive ground characteristics surrounding the proposed dog kennel.

As the surrounding lands are primarily grass/vegetation covered, absorptive ground was applied in the noise modelling. Ground elevation contours for the 6706 Gore Road property and surrounding areas were taken from the Ontario GeoHub and were included in 1 m increments.

Two (2) orders of reflections were applied in the noise modelling to account for the effect of the existing 6706 Gore Road property buildings.

Dog barking was modelled as area sources within the four (4) outdoor dog runs to account for a distribution of barking over the open areas. This is considered representative of sound levels experienced as the Logarithmic Mean Impulsive Sound Level (L_{LM}) for dogs barking.

Predictable worst-case noise impacts were considered in four modelling scenarios. In each modelling scenario, all dogs and associated barking were assumed to be in a single dog run (i.e., Dog Runs 1 through 4, inclusive). This was determined to result in greater off-site noise impacts compared to considering the L_{LM} from barking in multiple dog runs simultaneously.

4.3 Predicted Sound Levels – Existing PORs

Dog barking noise levels were assessed for daytime hours considering use of the four (4) dog runs. The range of predicted noise levels are summarized in **Figure 3a** through **Figure 3d** for the worst-case plane-of-window (assessment height of 4.5 m) and, and **Figure 4a** through **Figure 4d** for outdoor yards (assessment height of 1.5 m), respectively. A sample modelling output file for POR1 is included in **Appendix B**

4.3.1 Plane of Window Sound Levels

As the outdoor runs are used between the hours of 7am and 7 pm, an assessment against the evening (7 pm to 11 pm) and night-time (11 pm to 7 am) guideline limits was not completed. The predicted dog barking sound levels as shown in **Figure 3a** through **Figure 3d** and compared to the guideline limits in **Table 4**.

Table 4: Predicted Sound Levels from Dog Barking at Worst-Case PORs

POR ID	Assessment Location	Predicted Sound Levels (L_{LM} dBAI)				Applicable Sound Level Limits [1]	Meets Applicable Limits (Y/N)?
		Dog Run 1	Dog Run 2	Dog Run 3	Dog Run 4	Daytime (L_{LM} dBAI)	
POR1	1st Floor Window – East Façade	43	40	41	39	45	Y
POR2	2nd Floor Window – West Façade	40	39	38	39	45	Y
POR3	1st Floor Window – North Façade	40	40	36	37	45	Y
Notes:	[1] Dog barking impacts were assessed against the "frequent" impulsive sound level limits for a Class 3 area.						

Based on the results in **Table 4**, sound levels due to dog barking are predicted to be below applicable sound level limits at the worst-case plane of window POR locations. No additional noise controls are required to address plane of window sound levels from dog barking for existing PORs.

4.3.2 Outdoor POR Sound Levels

Based on the calculated sound level contours at a height of 1.5 m above grade, as shown in **Figure 4a** through **Figure 4d**, the 45 dBA outdoor POR sound level limit is predicted to be met within all yards of the existing surrounding residential homes. No additional noise control measures are required to address outdoor POR sound levels from dog barking for existing PORs.

4.4 Predicted Sound Levels – Vacant Lots

4.4.1 Plane of Window & Outdoor POR Sound Levels

As the vacant lot to the south is zoned Agricultural, construction of a noise sensitive dwelling would be permitted under the current zoning designation.

Although the lot is not currently noise sensitive, sound level contours at a height of 4.5 m (representing a 2nd-storey window height) and 1.5 m (representing outdoor PORs) were modelled for each of the four predictable worst-case scenarios (**Figure 3a** through **Figure 3d** and **Figure 4a** through **Figure 4d**).

Based on the sound level contours shown in the above-noted figures, sound level excesses are predicted within areas at the northeast portion of the vacant lot area. The area encompassing predicted excesses from the four modelling scenarios is shown in **Figure 5**. Potential recommended noise control measures are discussed in the following section.

4.4.2 Potential Recommended Noise Control Measures

As the vacant lot is not currently noise sensitive, no additional noise control measures are recommended at this time. Should a residential dwelling (with associated OPOR) be planned anywhere within the area shown on **Figure 5**, this noise study should be revised, as excesses are predicted without additional noise control measures.

The revised study should consider the actual location of the proposed residential dwelling (including the number of storeys and the potential POR locations). Furthermore, it should consider the proposed actual

grading of the vacant lot to accommodate the proposed dwelling (as topography currently increases sharply in grade moving to the south).

It is further recommended that to design appropriate noise controls (if required), off-site sound levels from dog barking at that time be measured.

Potential noise control measures to meet applicable limits could include:

- Administrative controls (e.g., limiting access to Dog Runs 1 and 2 at the south end of the property where impacts to the south are greatest); and/or
- Physical controls (upgrading board fences along the south and east extents of Dog Runs 1 and 2 to sound barriers without gaps/cracks, and meeting minimum surface density recommendations in MECP Publication NPC-300).

It is feasible to meet applicable Class 3 limits at the vacant lot using administrative and/or physical noise control measures, should a permitted dwelling be constructed within the area shown in **Figure 5**. If a future residential dwelling and associated OPOR on the vacant lot is constructed outside of this area, applicable limits are predicted to be met without the need for additional noise control measures.

5.0 Conclusions and Recommendations

The potential for noise impacts from a dog breeding kennel on the 6706 Gore Road property have been considered. Noise concerns from the kennel are primarily related to barking noise. Based on the results of our study, the following conclusions have been reached.

- The local noise bylaws do not include any references to dog barking specifically;
    - The Township of North Dumfries noise by-law includes reference to General Prohibitions, but no sound level limits are provided.
- Dog barking within the dog runs is predicted to meet the MECP NPC-300 criteria for frequent impulsive noise at all existing points of reception.
    - No additional noise controls are required for dog barking to meet the MECP NPC-300 guideline limits at existing points of receptions.
- Air conditioning units should be selected such that they comply with the recommendations of MECP Publication NPC-216 – Residential Air Conditioning Devices
    - The units should meet the Maximum ARI Standard Sound Rating noted in Table 216-4 (i.e., 7.6 bels).
- Should a residential dwelling be proposed/constructed within the area shown in **Figure 5** within the vacant lot to the south, this study should be reviewed and revised.
    - Administrative and physical mitigation measures are available to meet applicable limits, but should be designed based on actual dwelling location, grading, and measurements of dog barking at the dog kennel facility.

6.0 Statement of Limitations

This report has been prepared and the work referred to in this report has been undertaken by SLR Consulting (Canada) Ltd. (SLR) for Usman Aziz, hereafter referred to as the "Client." It is intended for the sole and exclusive use of the Client. The report has been prepared in accordance with the Scope of Work and agreement between SLR and the Client. Other than by the Client, the Township of Puslinch, Township of North Dumfries and Wellington County in their role as land use planning approval authorities, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted unless payment for the work has been made in full and express written permission has been obtained from SLR.

This report has been prepared in a manner generally accepted by professional consulting principles and practices for the same locality and under similar conditions. No other representations or warranties, expressed or implied, are made.

Opinions and recommendations contained in this report are based on conditions that existed at the time the services were performed and are intended only for the client, purposes, locations, time frames and project parameters as outlined in the Scope or Work and agreement between SLR and the Client. The data reported, findings, observations and conclusions expressed are limited by the Scope of Work. SLR is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. SLR does not warranty the accuracy of information provided by third party sources.

7.0 Closure

Based on the results of this environmental noise study, SLR concludes that the proposed dog breeding kennel operation on the 6706 Gore Road property will meet MECP NPC-300 guideline limits at existing PORs. Therefore, adverse impacts from the proposed dog kennel are not expected on the surroundings, and noise control measures are not required at this time.

Should you have any questions on the above study, feel free to contact the undersigned.

Sincerely,

SLR Consulting (Canada) Ltd.

[redacted]

[redacted]

Keni Mallinen, M.A.Sc., P.Eng
Senior Acoustics Engineer

Arthur Küpper, P.Eng
Principal Acoustics Engineer

Distribution: 1 electronic copy – Usman Aziz

1 electronic copy – SLR Consulting (Canada) Ltd.

8.0 References

International Organization for Standardization, ISO 9613-2: Acoustics – Attenuation of Sound During Propagation Outdoors Part 2: General Method of Calculation, Geneva, Switzerland, 1996.

Ontario Ministry of the Environment, Conservation and Parks, Publication NPC-300: Environmental Noise Guideline: Stationary and Transportation Sources – Approval and Planning, 2013.

The Corporation of the Township of North Dumfries, By-Law No. 2609-14.

The Corporation of the Township of Puslinch, By-Law No. 5001-05.

The Corporation of the Township of Puslinch, By-Law No. 024-2021.

The Towns of Erin and Minto, and the Townships of Centre Wellington, Guelph/Eramosa, Mapleton, Puslinch and Wellington North, By-Law No. 5001-05.

Figures

Environmental Noise Study

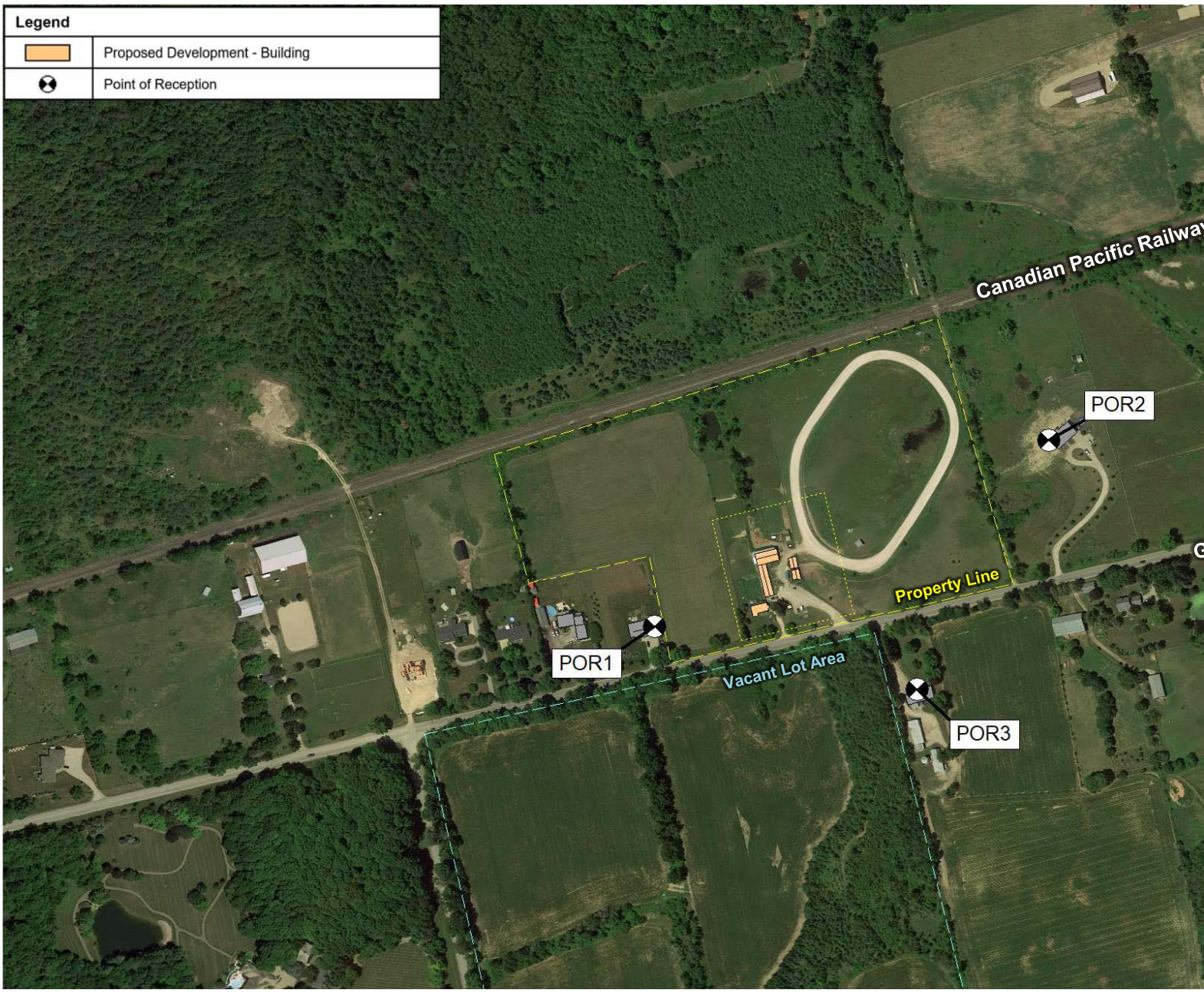
Dog Breeding Kennel

Usman Aziz

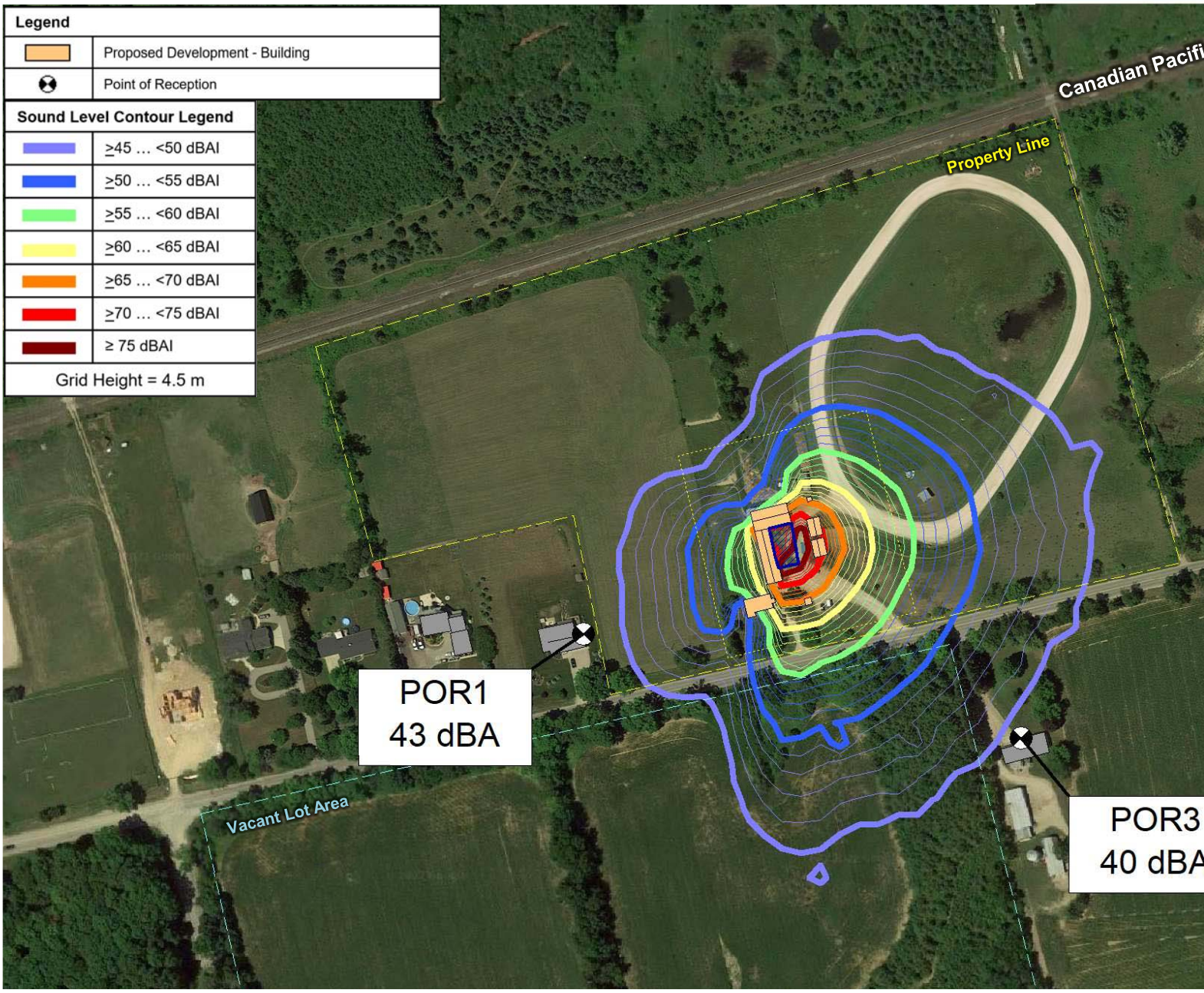
SLR Project No. 241.030733.00001

November 8, 2023

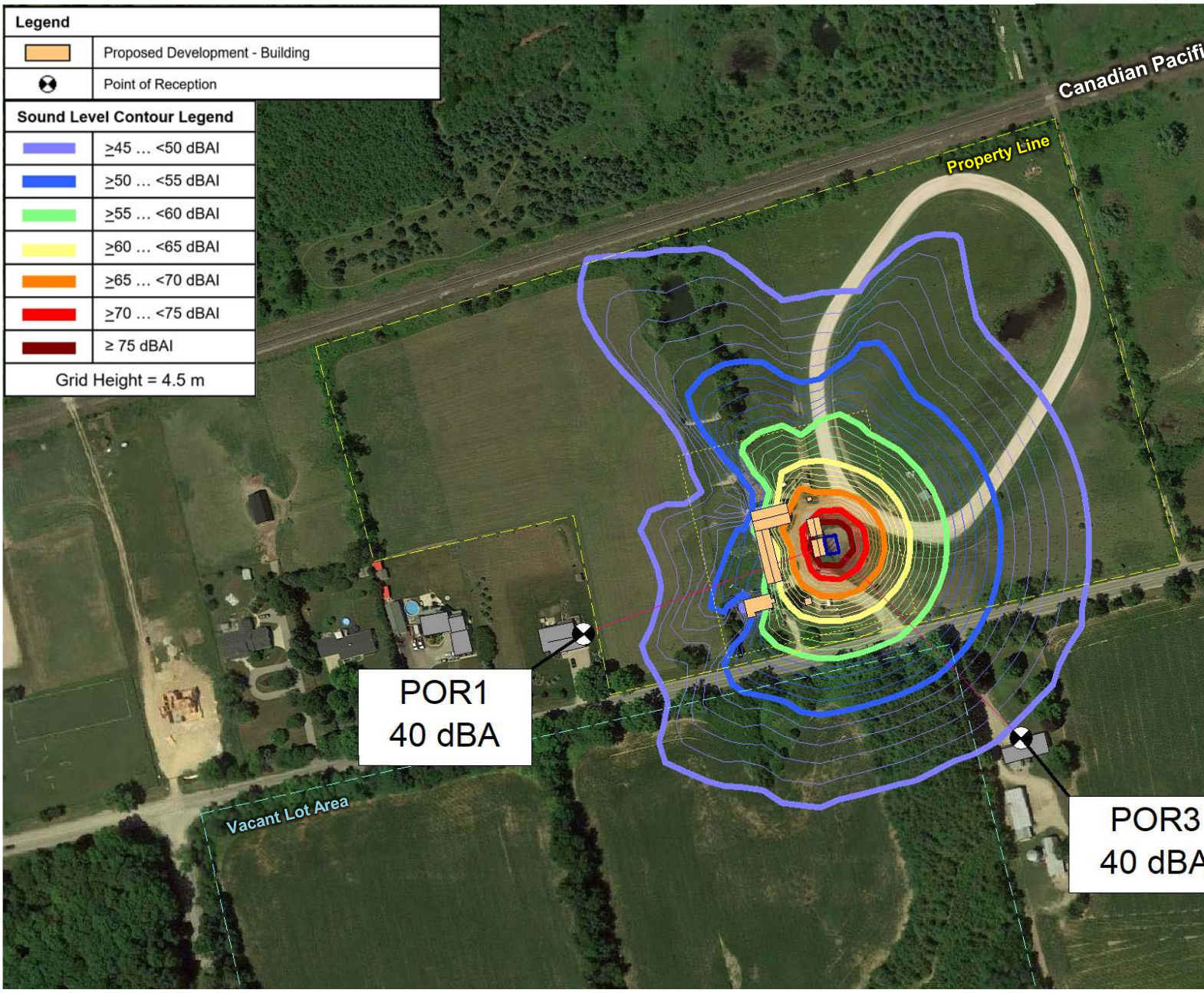
DOG BREEDING KENNEL	True North	Scale:	1:2,000
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023	Rev 0.0
SITE PLAN		Project No. 241.030733.00001	



DOG BREEDING KENNEL	True North	Scale: 1:5,000
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023 Rev 0.0
CONTEXT PLAN		Project No. 241.030733.00001



DOG BREEDING KENNEL	True North	Scale:	1:3,000
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023	Rev 0.0
PREDICTED DAYTIME DOG BARKING SOUND LEVELS AND CONTOURS – PLANE OF WINDOW – DOG RUN 1		Project No. 241.030733.00001	



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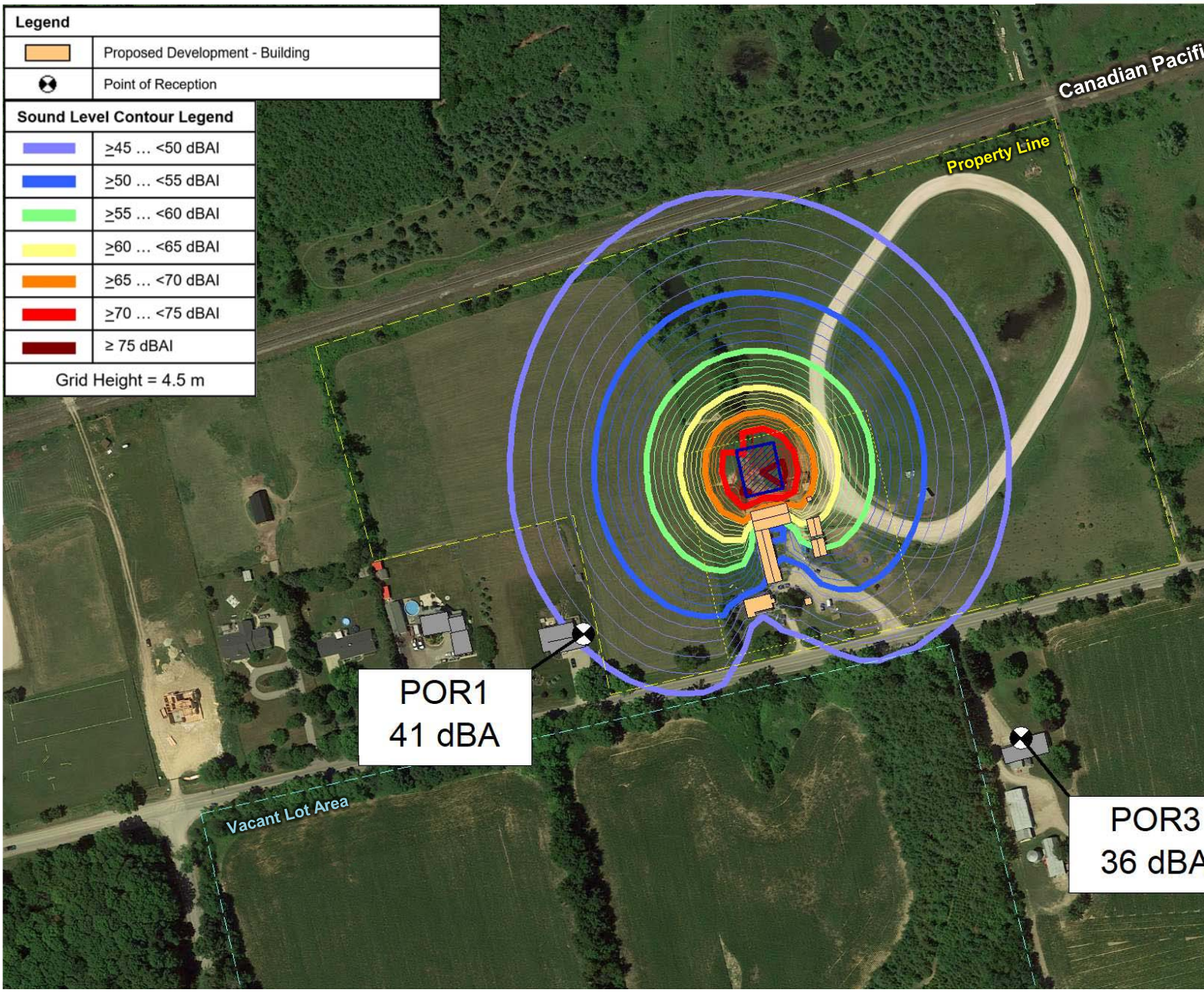
PREDICTED DAYTIME DOG BARKING SOUND LEVELS AND CONTOURS – PLANE OF WINDOW – DOG RUN 2		Project No. 241.030733.00001



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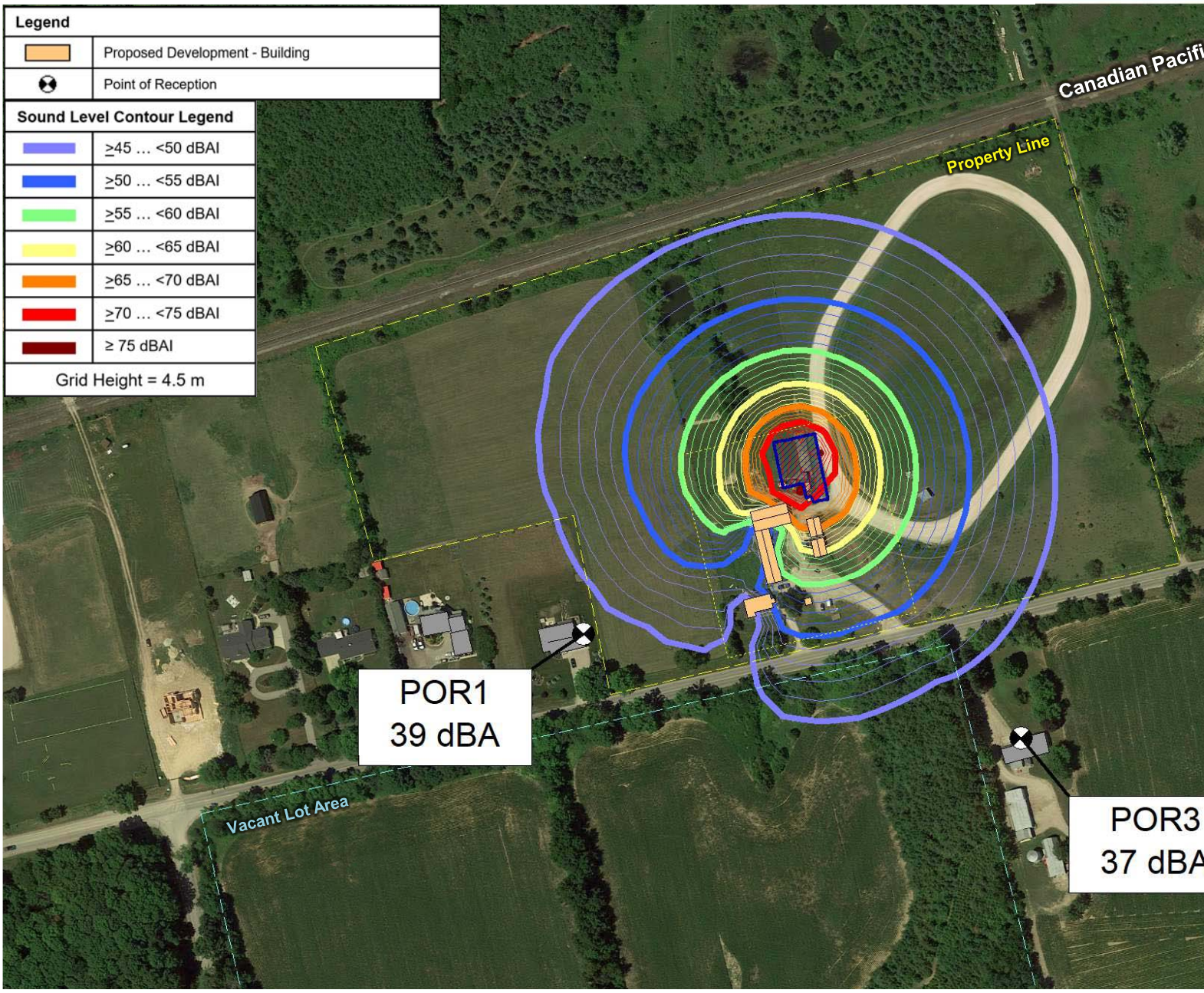
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023	Rev 0.0
PREDICTED DAYTIME DOG BARKING SOUND LEVELS AND CONTOURS – PLANE OF WINDOW – DOG RUN 3		Project No. 241.030733.00001	



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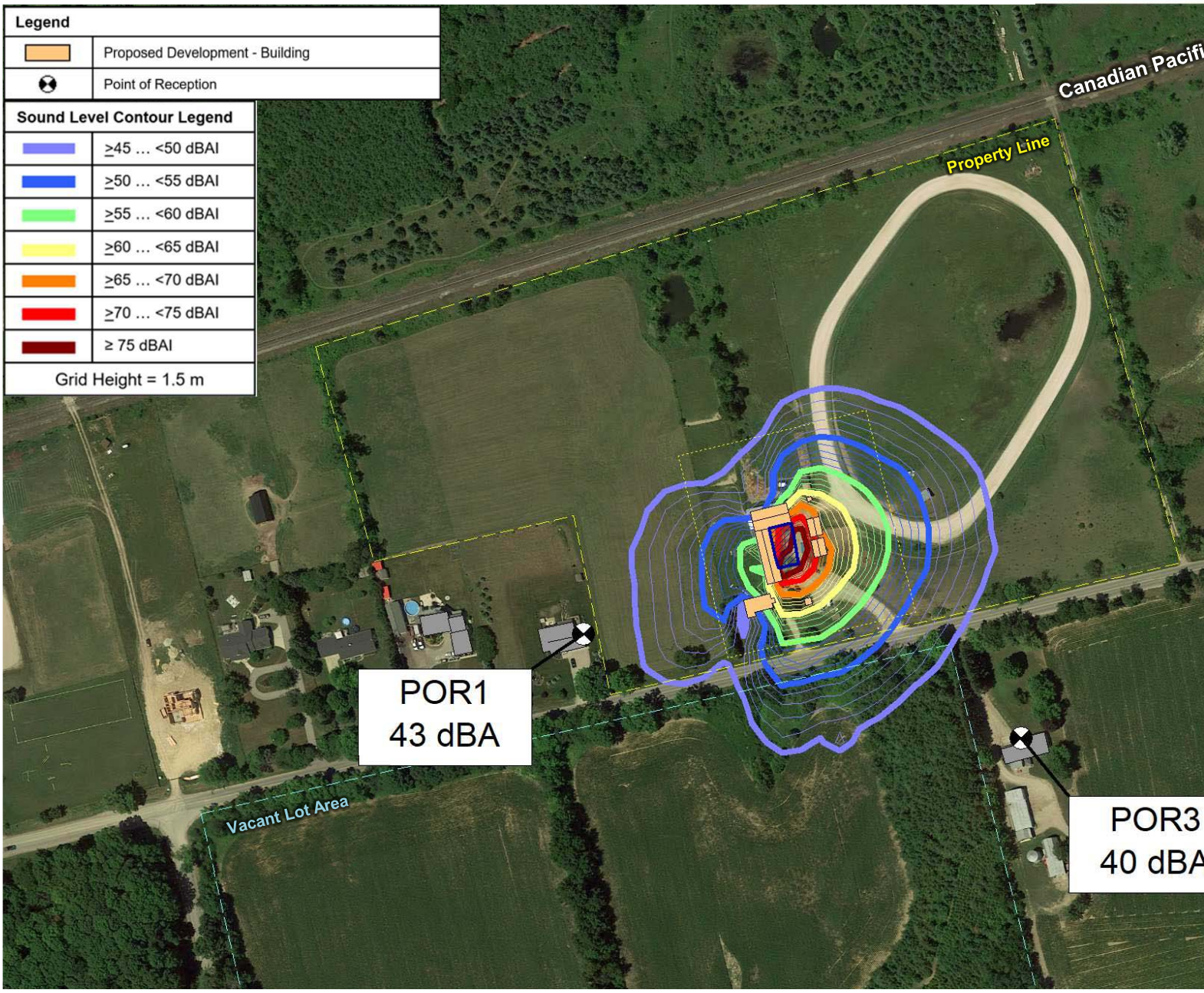
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023	Rev 0.0
PREDICTED DAYTIME DOG BARKING SOUND LEVELS AND CONTOURS – PLANE OF WINDOW – DOG RUN 4		Project No. 241.030733.00001	



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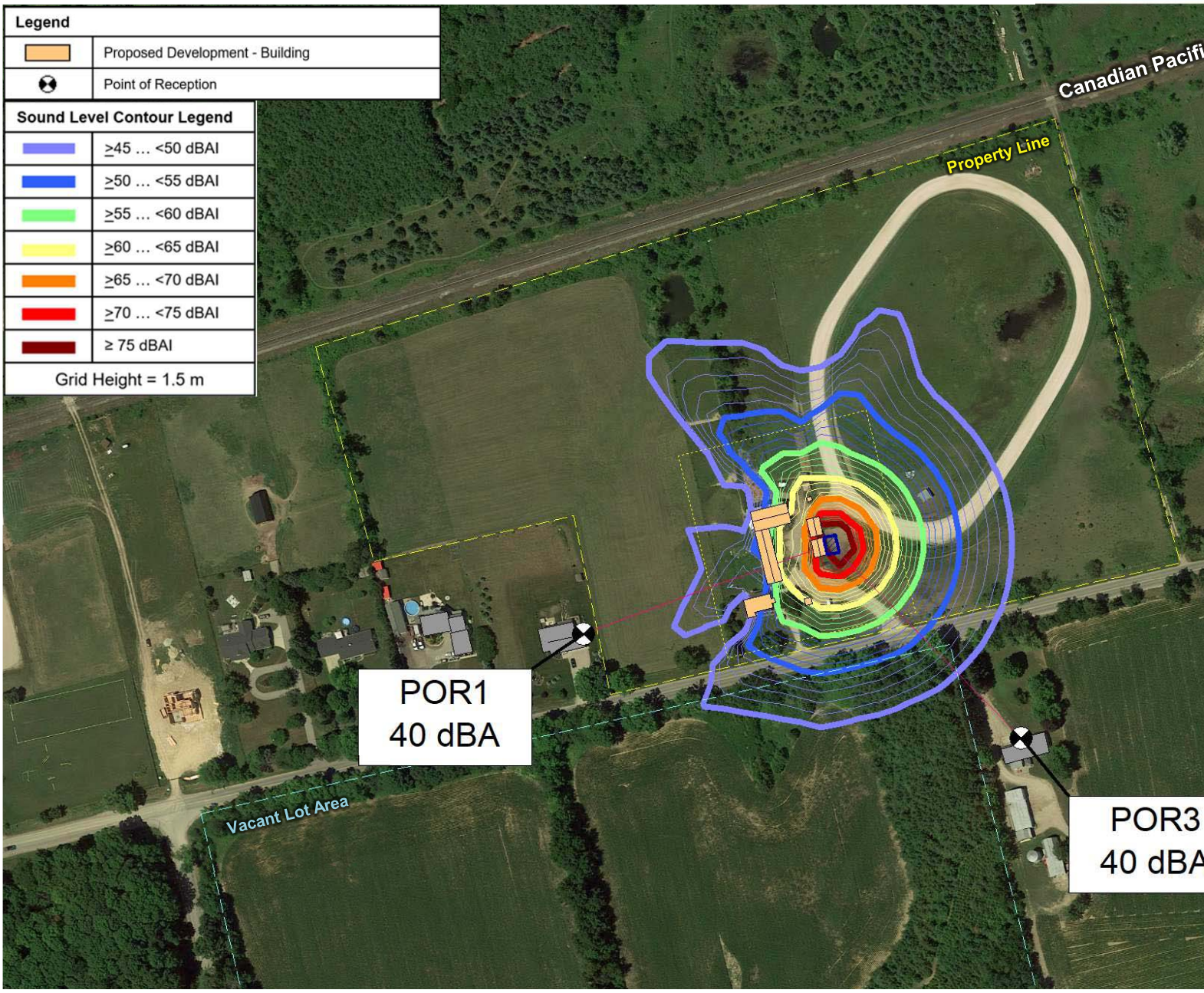
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023	Rev 0.0
PREDICTED DAYTIME DOG BARKING SOUND LEVELS AND CONTOURS – OUTDOOR PORS – DOG RUN 1		Project No. 241.030733.00001	



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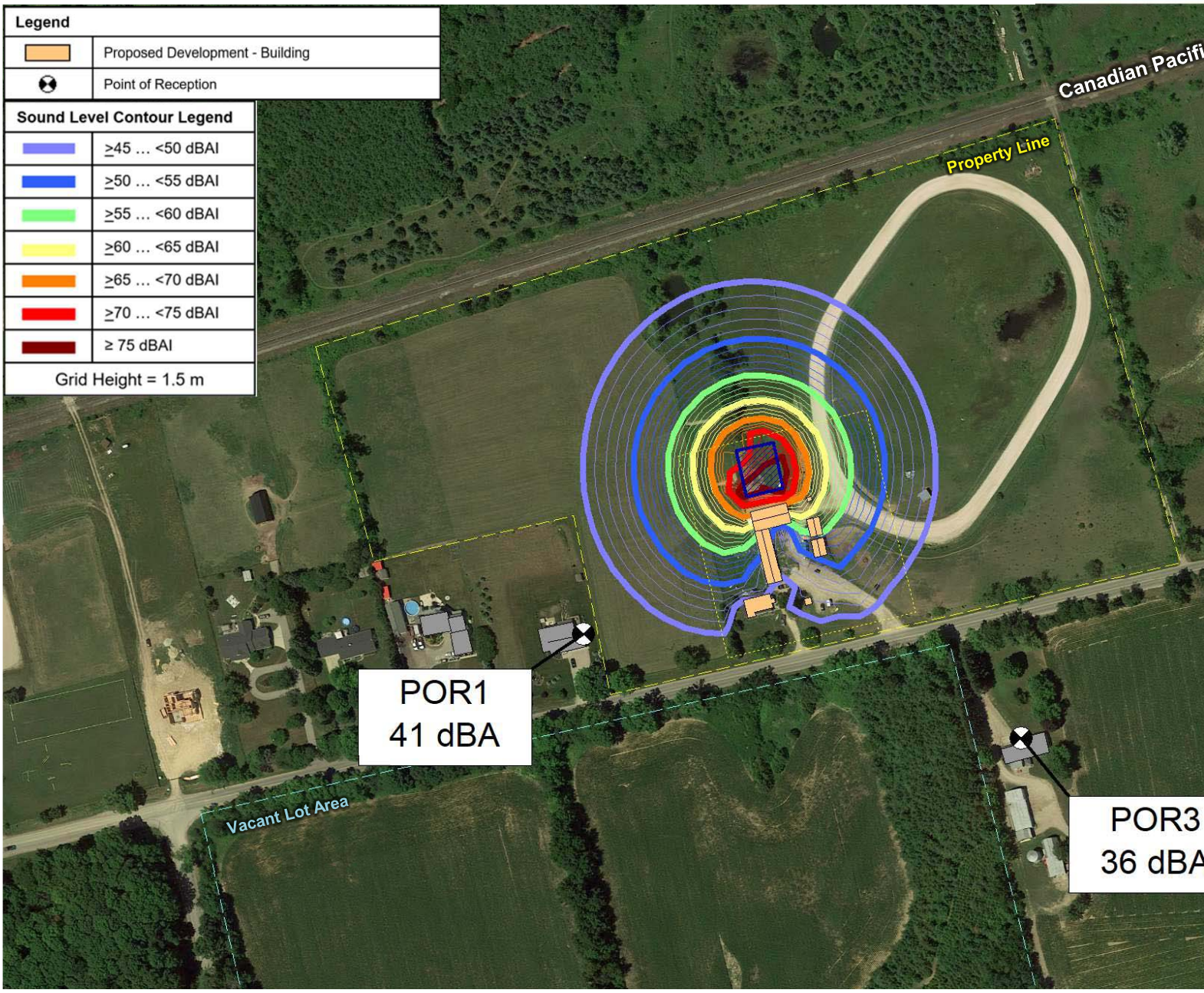
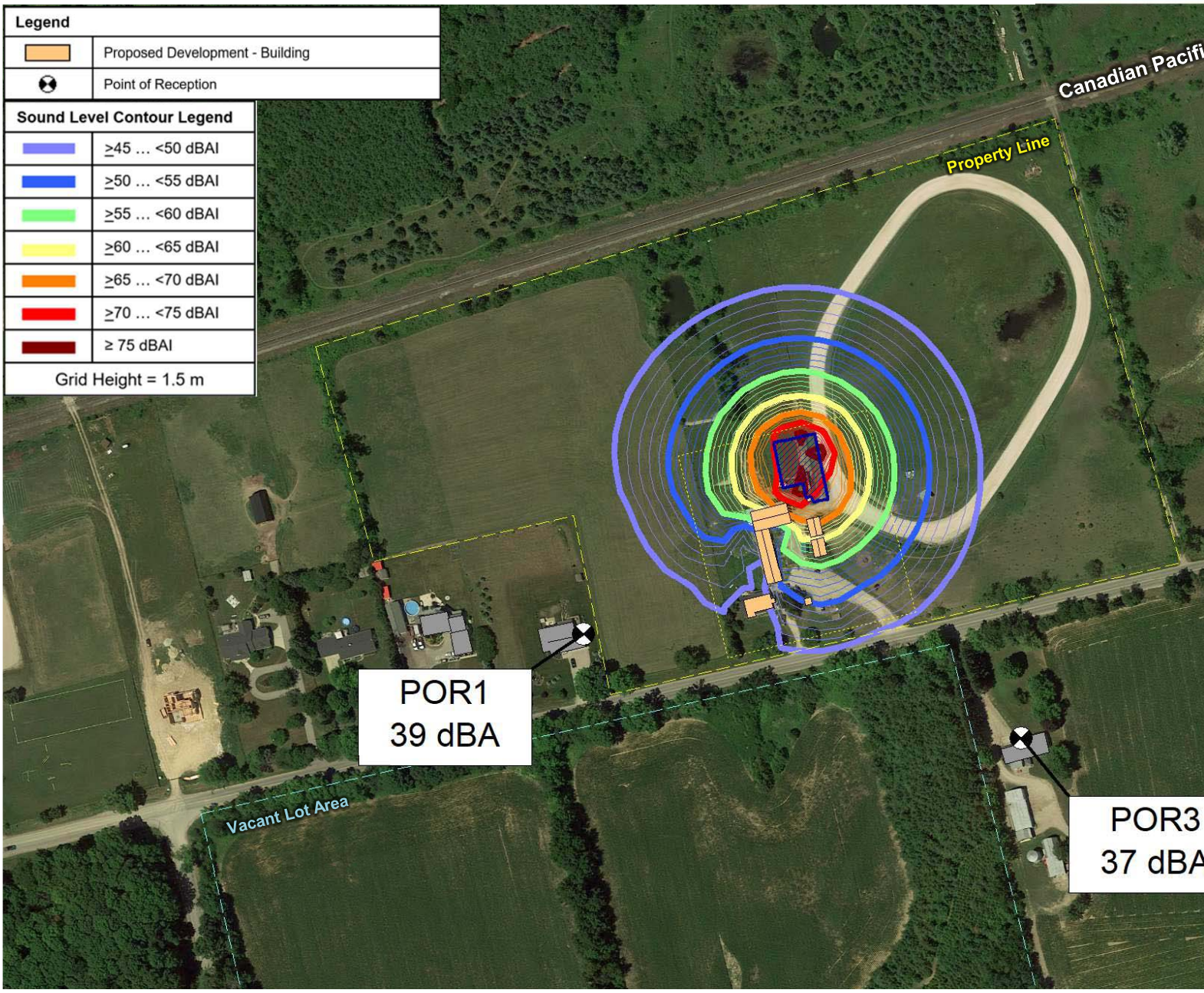
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023 Rev 0.0
PREDICTED DAYTIME DOG BARKING SOUND LEVELS AND CONTOURS – OUTDOOR PORS – DOG RUN 2		Project No. 241.030733.00001



DOG BREEDING KENNEL	True North	Scale:	1:3,000
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023	Rev 0.0
PREDICTED DAYTIME DOG BARKING SOUND LEVELS AND CONTOURS – OUTDOOR PORS – DOG RUN 3		Project No. 241.030733.00001	



DOG BREEDING KENNEL	True North	Scale:	1:3,000
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023	Rev 0.0
PREDICTED DAYTIME DOG BARKING SOUND LEVELS AND CONTOURS – OUTDOOR PORS – DOG RUN 4		Project No. 241.030733.00001	

DOG BREEDING KENNEL	True North	Scale: 1:2,500
6706 GORE ROAD, PUSLINCH		Date: Nov. 8, 2023 Rev 0.0
VACANT LOT – ZONE OF PREDICTED SOUND LEVEL EXCESSES FROM DOG BARKING		Project No. 241.030733.00001

Appendix A Development Drawings

Environmental Noise Study

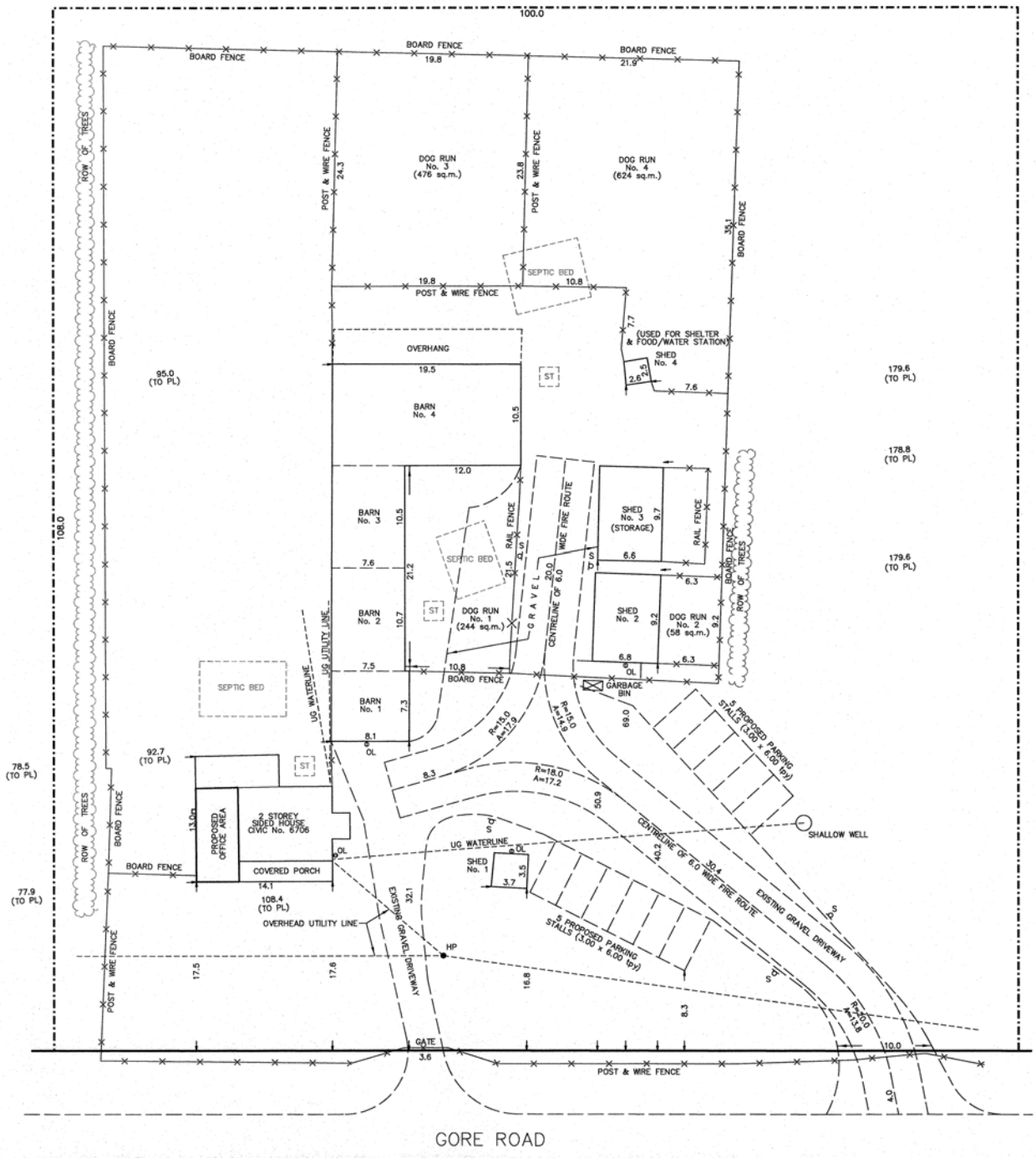
Dog Breeding Kennel

Usman Aziz

SLR Project No. 241.030733.00001

November 8, 2023

TOWNSHIP OF PUSLINCH
COUNTY OF WELLINGTON



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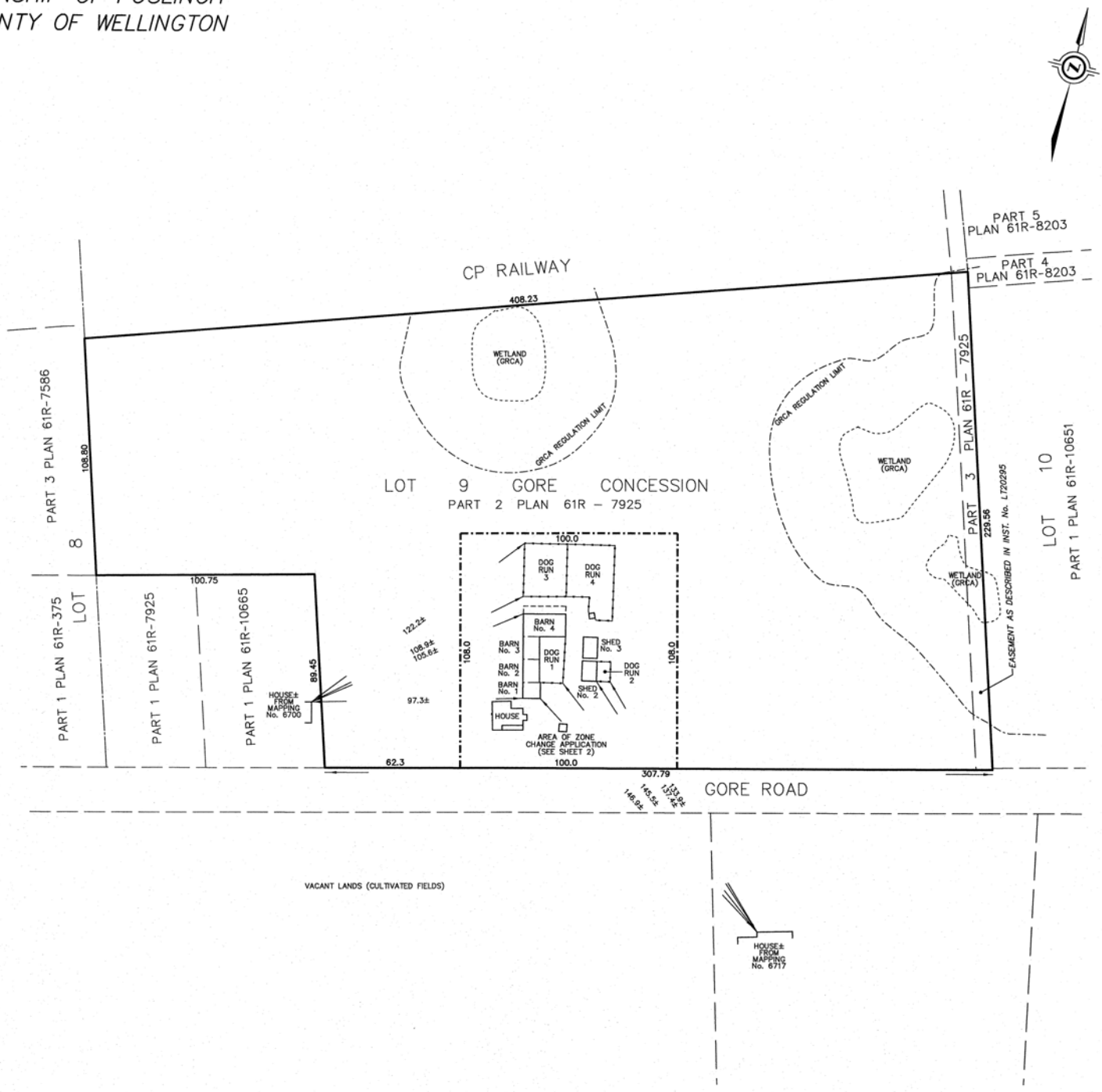
TOWNSHIP OF PUSLINCH
COUNTY OF WELLINGTON



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Appendix B Sample Modelling Output Files

Environmental Noise Study

Dog Breeding Kennel

Usman Aziz

SLR Project No. 241.030733.00001

November 8, 2023

Appendix B - Sample Modelling Output File - Dog Run 1

Receiver
Name: bungalow to west
ID: POR1
X: 562467.11 m
Y: 4804855.87 m
Z: 304.50 m

Area Source, ISO 9613, Name: " ", ID: "DogRun1_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
1	562573.26	4804899.56	302.21	0	DEN	500	86.1	15.4	0.0	0.0	0.0	52.2	0.2	9.2	0.0	0.0	5.4	0.0	0.0	34.6
3	562571.43	4804905.03	302.05	0	DEN	500	86.1	17.5	0.0	0.0	0.0	52.2	0.2	9.2	0.0	0.0	5.8	0.0	0.0	36.2
6	562572.35	4804912.81	301.84	0	DEN	500	86.1	-7.4	0.0	0.0	0.0	52.6	0.2	11.3	0.0	0.0	3.0	0.0	0.0	11.6
17	562572.33	4804911.51	301.87	1	DEN	500	86.1	4.3	0.0	0.0	0.0	52.6	0.2	11.1	0.0	0.0	3.3	0.0	2.0	21.3
25	562566.40	4804910.94	301.84	0	DEN	500	86.1	10.9	0.0	0.0	0.0	52.1	0.2	9.0	0.0	0.0	7.7	0.0	0.0	28.0
27	562568.05	4804910.59	301.86	0	DEN	500	86.1	7.2	0.0	0.0	0.0	52.2	0.2	9.1	0.0	0.0	6.9	0.0	0.0	24.9
28	562567.31	4804906.41	301.98	0	DEN	500	86.1	16.3	0.0	0.0	0.0	52.0	0.2	9.1	0.0	0.0	7.7	0.0	0.0	33.5
34	562567.23	4804910.85	301.85	1	DEN	500	86.1	-5.6	0.0	0.0	0.0	52.2	0.2	9.1	0.0	0.0	7.3	0.0	2.0	9.7
38	562568.93	4804911.67	301.84	1	DEN	500	86.1	10.3	0.0	0.0	0.0	52.3	0.2	9.1	0.0	0.0	6.5	0.0	2.0	26.3
46	562571.32	4804895.49	302.31	0	DEN	500	86.1	16.4	0.0	0.0	0.0	51.9	0.2	9.1	0.0	0.0	6.5	0.0	0.0	34.7
58	562573.20	4804913.27	301.83	0	DEN	500	86.1	-1.9	0.0	0.0	0.0	52.6	0.2	12.2	0.0	0.0	1.9	0.0	0.0	17.4
60	562573.65	4804913.26	301.83	0	DEN	500	86.1	-9.7	0.0	0.0	0.0	52.7	0.2	12.5	0.0	0.0	1.4	0.0	0.0	9.6
63	562575.09	4804907.77	301.99	0	DEN	500	86.1	13.1	0.0	0.0	0.0	52.6	0.2	12.5	0.0	0.0	1.2	0.0	0.0	32.7
68	562573.99	4804911.94	301.87	1	DEN	500	86.1	7.9	0.0	0.0	0.0	52.7	0.2	12.6	0.0	0.0	1.2	0.0	2.0	25.2
69	562574.02	4804913.45	301.82	1	DEN	500	86.1	-1.2	0.0	0.0	0.0	52.7	0.2	12.9	0.0	0.0	0.9	0.0	2.0	16.2
73	562575.90	4804893.53	302.41	0	DEN	500	86.1	9.6	0.0	0.0	0.0	52.2	0.2	10.1	0.0	0.0	3.8	0.0	0.0	29.5
78	562568.32	4804892.29	302.37	0	DEN	500	86.1	7.1	0.0	0.0	0.0	51.6	0.2	9.0	0.0	0.0	11.3	0.0	0.0	21.1
83	562573.19	4804892.95	302.40	0	DEN	500	86.1	5.5	0.0	0.0	0.0	52.0	0.2	9.1	0.0	0.0	5.8	0.0	0.0	24.5
88	562567.64	4804895.08	302.30	0	DEN	500	86.1	5.1	0.0	0.0	0.0	51.7	0.2	9.0	0.0	0.0	11.5	0.0	0.0	18.9
95	562577.87	4804893.96	302.42	0	DEN	500	86.1	5.3	0.0	0.0	0.0	52.4	0.2	11.8	0.0	0.0	1.5	0.0	0.0	25.5
102	562574.10	4804893.15	302.41	0	DEN	500	86.1	3.5	0.0	0.0	0.0	52.1	0.2	9.1	0.0	0.0	5.4	0.0	0.0	22.8

Receiver
Name: 2 storey house to east
ID: POR2
X: 562807.09 m
Y: 4805017.61 m
Z: 310.18 m

Area Source, ISO 9613, Name: " ", ID: "DogRun1_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
2	562575.83	4804898.10	302.27	0	DEN	500	86.1	8.7	0.0	0.0	0.0	59.3	0.5	8.3	0.0	0.0	0.0	0.0	0.0	26.7
4	562574.51	4804898.93	302.23	0	DEN	500	86.1	4.6	0.0	0.0	0.0	59.3	0.5	10.1	0.0	0.0	0.0	0.0	0.0	20.8
7	562574.03	4804899.22	302.22	0	DEN	500	86.1	3.6	0.0	0.0	0.0	59.4	0.5	11.7	0.0	0.0	0.0	0.0	0.0	18.1
10	562573.62	4804899.47	302.21	0	DEN	500	86.1	4.5	0.0	0.0	0.0	59.4	0.5	12.4	0.0	0.0	0.0	0.0	0.0	18.4
13	562572.02	4804900.45	302.18	0	DEN	500	86.1	13.5	0.0	0.0	0.0	59.4	0.5	11.5	0.0	0.0	0.0	0.0	0.0	28.2
16	562571.31	4804904.75	302.05	0	DEN	500	86.1	17.0	0.0	0.0	0.0	59.4	0.5	11.2	0.0	0.0	0.0	0.0	0.0	32.1
18	562572.06	4804910.43	301.90	0	DEN	500	86.1	2.9	0.0	0.0	0.0	59.2	0.5	10.6	0.0	0.0	0.0	0.0	0.0	18.7
20	562572.21	4804911.65	301.87	0	DEN	500	86.1	3.0	0.0	0.0	0.0	59.2	0.5	12.4	0.0	0.0	0.0	0.0	0.0	17.0
23	562572.37	4804912.96	301.83	0	DEN	500	86.1	-10.9	0.0	0.0	0.0	59.2	0.5	11.7	0.0	0.0	3.2	0.0	0.0	0.6
36	562566.33	4804911.21	301.83	0	DEN	500	86.1	9.3	0.0	0.0	0.0	59.4	0.5	7.2	0.0	0.0	5.4	0.0	0.0	22.9
40	562567.90	4804911.04	301.85	0	DEN	500	86.1	5.9	0.0	0.0	0.0	59.4	0.5	11.4	0.0	0.0	2.0	0.0	0.0	18.8
42	562567.73	4804909.86	301.88	0	DEN	500	86.1	11.6	0.0	0.0	0.0	59.4	0.5	12.4	0.0	0.0	0.0	0.0	0.0	25.4
45	562567.51	4804908.39	301.92	0	DEN	500	86.1	7.9	0.0	0.0	0.0	59.4	0.5	12.4	0.0	0.0	0.0	0.0	0.0	21.7
49	562566.99	4804904.88	302.02	0	DEN	500	86.1	14.4	0.0	0.0	0.0	59.5	0.5	12.3	0.0	0.0	0.0	0.0	0.0	28.2
52	562566.60	4804903.97	302.04	1	DEN	500	86.1	13.1	0.0	0.0	0.0	59.6	0.5	12.3	0.0	0.0	0.0	0.0	1.0	25.7
55	562566.92	4804906.96	301.96	1	DEN	500	86.1	6.7	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	1.0	19.3
57	562567.06	4804908.26	301.92	1	DEN	500	86.1	10.4	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	1.0	23.0
59	562567.20	4804909.52	301.89	1	DEN	500	86.1	7.8	0.0	0.0	0.0	59.6	0.5	11.2	0.0	0.0	1.7	0.0	1.0	20.0
62	562567.29	4804910.29	301.86	1	DEN	500	86.1	7.4	0.0	0.0	0.0	59.6	0.5	7.5	0.0	0.0	7.1	0.0	1.0	17.8
71	562567.89	4804897.80	302.22	0	DEN	500	86.1	6.7	0.0	0.0	0.0	59.6	0.5	12.3	0.0	0.0	0.0	0.0	0.0	20.4
74	562569.04	4804897.14	302.25	0	DEN	500	86.1	2.4	0.0	0.0	0.0	59.5	0.5	12.4	0.0	0.0	0.0	0.0	0.0	16.1
75	562569.48	4804896.89	302.26	0	DEN	500	86.1	2.5	0.0	0.0	0.0	59.5	0.5	12.4	0.0	0.0	0.0	0.0	0.0	16.2
76	562569.99	4804896.60	302.27	0	DEN	500	86.1	4.7	0.0	0.0	0.0	59.5	0.5	12.4	0.0	0.0	0.0	0.0	0.0	18.4
80	562572.09	4804895.38	302.32	0	DEN	500	86.1	13.9	0.0	0.0	0.0	59.5	0.5	12.3	0.0	0.0	0.0	0.0	0.0	27.7
81	562572.40	4804893.30	302.38	0	DEN	500	86.1	8.8	0.0	0.0	0.0	59.5	0.5	12.3	0.0	0.0	0.0	0.0	0.0	22.6
84	562570.37	4804897.42	302.25	1	DEN	500	86.1	10.7	0.0	0.0	0.0	59.7	0.5	12.4	0.0	0.0	0.0	0.0	1.0	23.2
89	562573.17	4804913.32	301.82	0	DEN	500	86.1	-3.6	0.0	0.0	0.0	59.2	0.5	11.7	0.0	0.0	3.3	0.0	0.0	7.9
91	562573.60	4804913.34	301.82	0	DEN	500	86.1	-10.1	0.0	0.0	0.0	59.2	0.5	12.4	0.0	0.0	0.0	0.0	0.0	4.0
93	562573.86	4804912.58	301.85	0	DEN	500	86.1	5.6	0.0	0.0	0.0	59.2	0.5	12.4	0.0	0.0	0.0	0.0	0.0	19.7
96	562574.16	4804911.41	301.88	0	DEN	500	86.1	2.3	0.0	0.0	0.0	59.2	0.5	10.7	0.0	0.0	0.0	0.0	0.0	18.0
98	562575.29	4804907.00	302.01	0	DEN	500	86.1	11.3	0.0	0.0	0.0	59.2	0.5	7.1	0.0	0.0	0.0	0.0	0.0	30.7
100	562576.80	4804901.08	302.19	0	DEN	500	86.1	-5.6	0.0	0.0	0.0	59.2	0.5	11.0	0.0	0.0	0.0	0.0	0.0	9.8
103	562576.90	4804900.68	302.20	0	DEN	500	86.1	-6.5	0.0	0.0	0.0	59.2	0.5	11.7	0.0	0.0	0.0	0.0	0.0	8.1
105	562577.02	4804900.21	302.21	0	DEN	500	86.1	-5.5	0.0	0.0	0.0	59.2	0.5	10.1	0.0	0.0	0.0	0.0	0.0	10.8
108	562577.36	4804898.88	302.25	0	DEN	500	86.1	-1.3	0.0	0.0	0.0	59.3	0.5	6.7	0.0	0.0	0.6	0.0	0.0	17.7
112	562575.90	4804893.53	302.41	0	DEN	500	86.1	9.6	0.0	0.0	0.0	59.4	0.5	9.1	0.0	0.0	0.0	0.0	0.0	26.7
116	562569.28	4804890.86	302.42	0	DEN	500	86.1	-3.2	0.0	0.0	0.0	59.6	0.5	12.3	0.0	0.0	0.0	0.0	0.0	10.5
118	562568.25	4804892.37	302.37	0	DEN	500	86.1	6.6	0.0	0.0	0.0	59.6	0.5	12.3	0.0	0.0	0.0	0.0	0.0	20.2
120	562567.08	4804895.06	302.29	0	DEN	500	86.1	-9.9	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	3.7
122	562566.91	4804895.45	302.28	0	DEN	500	86.1	-21.3	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	-7.7
124	562567.12	4804895.00	302.29	1	DEN	500	86.1	-9.0	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	1.0	3.6
126	562568.32	4804892.35	302.37	1	DEN	500	86.1	6.6	0.0	0.0	0.0	59.7	0.5	12.3	0.0	0.0	0.0	0.0	1.0	19.2
128	562568.71	4804890.72	302.41	1	DEN	500	86.1	-3.7	0.0	0.0	0.0	59.7	0.5	12.3	0.0	0.0	0.0	0.0	1.0	8.9
130	562573.19	4804892.95	302.40	0	DEN	500	86.1	5.5	0.0	0.0	0.0	59.5	0.5	11.8	0.0	0.0	0.0	0.0	0.0	19.9
133	562570.73	4804891.09	302.44	1	DEN	500	86.1	-6.6	0.0	0.0	0.0	59.7	0.5	12.4	0.0	0.0	0.0	0.0	1.0	6.0
135	562577.87	4804893.96	302.42	0	DEN	500	86.1	5.3	0.0	0.0	0.0	59.3	0.5	7.2	0.0	0.0	0.0	0.0	0.0	24.4
136	562568.39	4804893.65	302.34	0	DEN	500	86.1	1.8	0.0	0.0	0.0	59.6	0.5	12.3	0.0	0.0	0.0	0.0	0.0	15.5
137	562567.43	4804895.31	302.29	0	DEN	500	86.1	-4.1	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	9.5
138	562567.23	4804895.65	302.28	0	DEN	500	86.1	-8.3	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	5.3
139	562567.15	4804895.83	302.27	0	DEN	500	86.1	-8.5	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	5.1
140	562567.04	4804896.13	302.26	0	DEN	500	86.1	-5.4	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	8.2
141	562566.66	4804897.18	302.23	0	DEN	500	86.1	-1.2	0.0	0.0	0.0	59.6	0.5	12.3	0.0	0.0	0.0	0.0	0.0	12.5

Area Source, ISO 9613, Name: " ", ID: "DogRun1_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
142	562568.49	4804893.46	302.35	1	DEN	500	86.1	1.2	0.0	0.0	0.0	59.7	0.5	12.3	0.0	0.0	0.0	0.0	1.0	13.8
143	562567.56	4804895.07	302.30	1	DEN	500	86.1	-3.7	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	1.0	8.9
144	562567.33	4804895.47	302.28	1	DEN	500	86.1	-7.5	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	1.0	5.1
145	562567.23	4804895.66	302.28	1	DEN	500	86.1	-8.5	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	1.0	4.1
146	562567.11	4804895.97	302.27	1	DEN	500	86.1	-4.9	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	1.0	7.7
147	562566.71	4804897.08	302.23	1	DEN	500	86.1	-0.7	0.0	0.0	0.0	59.6	0.5	12.3	0.0	0.0	0.0	0.0	1.0	12.0
148	562574.10	4804893.15	302.41	0	DEN	500	86.1	3.5	0.0	0.0	0.0	59.4	0.5	10.9	0.0	0.0	0.0	0.0	0.0	18.8

Receiver
Name: bungalow to south
ID: POR3
X: 562693.50 m
Y: 4804802.25 m
Z: 307.57 m

Area Source, ISO 9613, Name: " ", ID: "DogRun1_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
5	562572.44	4804912.92	301.83	0	DEN	500	86.1	-10.2	0.0	0.0	0.0	55.3	0.3	16.7	0.0	0.0	0.0	0.0	0.0	3.6
8	562572.66	4804909.81	301.92	0	DEN	500	86.1	9.6	0.0	0.0	0.0	55.2	0.3	16.7	0.0	0.0	0.0	0.0	0.0	23.5
9	562572.95	4804905.06	302.05	0	DEN	500	86.1	14.9	0.0	0.0	0.0	55.0	0.3	16.7	0.0	0.0	0.0	0.0	0.0	29.0
11	562573.11	4804901.63	302.15	0	DEN	500	86.1	12.2	0.0	0.0	0.0	54.9	0.3	16.7	0.0	0.0	0.0	0.0	0.0	26.4
12	562572.48	4804900.47	302.18	0	DEN	500	86.1	11.2	0.0	0.0	0.0	54.9	0.3	16.7	0.0	0.0	0.0	0.0	0.0	25.5
14	562570.33	4804899.88	302.18	0	DEN	500	86.1	12.7	0.0	0.0	0.0	54.9	0.3	16.7	0.0	0.0	0.0	0.0	0.0	27.0
15	562567.65	4804899.19	302.18	0	DEN	500	86.1	5.8	0.0	0.0	0.0	55.0	0.3	16.7	0.0	0.0	0.0	0.0	0.0	19.9
19	562567.59	4804901.78	302.11	1	DEN	500	86.1	4.9	0.0	0.0	0.0	56.0	0.3	16.8	0.0	0.0	0.0	0.0	2.0	15.9
21	562569.09	4804904.65	302.04	1	DEN	500	86.1	7.1	0.0	0.0	0.0	55.8	0.3	16.8	0.0	0.0	0.0	0.0	2.0	18.3
22	562570.50	4804905.04	302.04	1	DEN	500	86.1	14.7	0.0	0.0	0.0	55.8	0.3	16.8	0.0	0.0	0.0	0.0	2.0	26.0
24	562568.41	4804899.48	302.18	2	DEN	500	86.1	8.7	0.0	0.0	0.0	56.2	0.3	17.0	0.0	0.0	0.0	0.0	3.0	18.4
26	562566.68	4804899.00	302.18	2	DEN	500	86.1	-1.9	0.0	0.0	0.0	56.1	0.3	16.9	0.0	0.0	0.0	0.0	3.0	7.8
29	562566.08	4804900.41	302.14	0	DEN	500	86.1	2.6	0.0	0.0	0.0	55.1	0.3	16.8	0.0	0.0	0.0	0.0	0.0	16.5
30	562566.11	4804903.25	302.06	0	DEN	500	86.1	9.8	0.0	0.0	0.0	55.2	0.3	16.8	0.0	0.0	0.0	0.0	0.0	23.6
31	562566.12	4804906.76	301.96	0	DEN	500	86.1	12.5	0.0	0.0	0.0	55.3	0.3	16.8	0.0	0.0	0.0	0.0	0.0	26.2
32	562566.11	4804908.47	301.91	0	DEN	500	86.1	-4.5	0.0	0.0	0.0	55.4	0.3	16.8	0.0	0.0	0.0	0.0	0.0	9.1
33	562567.60	4804909.61	301.89	0	DEN	500	86.1	13.8	0.0	0.0	0.0	55.4	0.3	16.8	0.0	0.0	0.0	0.0	0.0	27.4
35	562570.45	4804911.75	301.85	0	DEN	500	86.1	8.2	0.0	0.0	0.0	55.3	0.3	16.8	0.0	0.0	0.0	0.0	0.0	22.0
37	562572.22	4804913.12	301.83	0	DEN	500	86.1	-11.8	0.0	0.0	0.0	55.3	0.3	16.7	0.0	0.0	0.0	0.0	0.0	2.0
39	562566.25	4804908.56	301.90	1	DEN	500	86.1	15.5	0.0	0.0	0.0	55.6	0.3	16.9	0.0	0.0	0.0	0.0	1.0	27.9
41	562571.46	4804911.42	301.87	1	DEN	500	86.1	0.4	0.0	0.0	0.0	55.4	0.3	16.7	0.0	0.0	0.0	0.0	2.0	12.1
43	562569.65	4804907.82	301.96	1	DEN	500	86.1	7.9	0.0	0.0	0.0	55.6	0.3	16.8	0.0	0.0	0.0	0.0	2.0	19.3
44	562568.60	4804905.84	302.00	1	DEN	500	86.1	0.9	0.0	0.0	0.0	55.7	0.3	16.8	0.0	0.0	0.0	0.0	2.0	12.2
47	562567.60	4804906.86	301.97	1	DEN	500	86.1	15.1	0.0	0.0	0.0	55.7	0.3	16.8	0.0	0.0	0.0	0.0	2.0	26.4
48	562565.34	4804909.03	301.88	1	DEN	500	86.1	12.8	0.0	0.0	0.0	55.7	0.3	16.9	0.0	0.0	0.0	0.0	2.0	24.1
50	562566.06	4804899.56	302.16	2	DEN	500	86.1	-4.2	0.0	0.0	0.0	56.1	0.3	16.9	0.0	0.0	0.0	0.0	3.0	5.6
51	562566.07	4804901.54	302.10	2	DEN	500	86.1	6.3	0.0	0.0	0.0	56.0	0.3	16.9	0.0	0.0	0.0	0.0	3.0	16.1
53	562566.09	4804903.57	302.05	2	DEN	500	86.1	7.1	0.0	0.0	0.0	56.0	0.3	16.9	0.0	0.0	0.0	0.0	3.0	17.0
54	562566.09	4804904.46	302.02	2	DEN	500	86.1	-3.0	0.0	0.0	0.0	55.9	0.3	16.9	0.0	0.0	0.0	0.0	3.0	6.9
56	562566.13	4804906.63	301.96	2	DEN	500	86.1	12.8	0.0	0.0	0.0	55.9	0.3	16.9	0.0	0.0	0.0	0.0	3.0	22.8
61	562569.79	4804894.34	302.33	0	DEN	500	86.1	12.6	0.0	0.0	0.0	54.8	0.3	16.7	0.0	0.0	0.0	0.0	0.0	27.0
64	562572.23	4804896.30	302.29	0	DEN	500	86.1	13.8	0.0	0.0	0.0	54.7	0.3	16.6	0.0	0.0	0.0	0.0	0.0	28.3
65	562576.80	4804896.69	302.31	0	DEN	500	86.1	0.2	0.0	0.0	0.0	54.5	0.3	16.6	0.0	0.0	0.0	0.0	0.0	14.9
66	562567.86	4804897.24	302.24	1	DEN	500	86.1	7.6	0.0	0.0	0.0	56.2	0.3	16.8	0.0	0.0	0.0	0.0	2.0	18.4
67	562566.40	4804898.53	302.19	1	DEN	500	86.1	-6.4	0.0	0.0	0.0	56.1	0.3	16.9	0.0	0.0	0.0	0.0	2.0	4.4
70	562576.33	4804902.73	302.14	0	DEN	500	86.1	7.7	0.0	0.0	0.0	54.8	0.3	16.7	0.0	0.0	0.0	0.0	0.0	22.1
72	562574.74	4804908.72	301.96	0	DEN	500	86.1	9.9	0.0	0.0	0.0	55.1	0.3	16.7	0.0	0.0	0.0	0.0	0.0	24.0
77	562573.97	4804911.61	301.88	0	DEN	500	86.1	1.5	0.0	0.0	0.0	55.2	0.3	16.7	0.0	0.0	0.0	0.0	0.0	15.4
79	562574.18	4804912.56	301.85	0	DEN	500	86.1	6.1	0.0	0.0	0.0	55.2	0.3	16.6	0.0	0.0	0.0	0.0	0.0	20.0
82	562573.51	4804912.43	301.85	1	DEN	500	86.1	5.8	0.0	0.0	0.0	55.3	0.3	16.6	0.0	0.0	0.0	0.0	2.0	17.6
85	562577.55	4804896.08	302.34	0	DEN	500	86.1	-3.8	0.0	0.0	0.0	54.5	0.3	16.6	0.0	0.0	0.0	0.0	0.0	11.0
86	562576.61	4804894.19	302.39	0	DEN	500	86.1	6.6	0.0	0.0	0.0	54.5	0.3	16.6	0.0	0.0	0.0	0.0	0.0	21.4
87	562574.96	4804892.57	302.43	0	DEN	500	86.1	6.3	0.0	0.0	0.0	54.5	0.3	16.6	0.0	0.0	0.0	0.0	0.0	21.1
90	562568.32	4804892.29	302.37	0	DEN	500	86.1	7.1	0.0	0.0	0.0	54.8	0.3	16.7	0.0	0.0	0.0	0.0	0.0	21.5
92	562569.29	4804891.09	302.42	1	DEN	500	86.1	-0.6	0.0	0.0	0.0	54.7	0.3	16.6	0.0	0.0	0.0	0.0	1.0	12.8
94	562568.59	4804891.35	302.40	1	DEN	500	86.1	-18.8	0.0	0.0	0.0	54.8	0.3	16.0	0.0	0.0	0.0	0.0	1.0	-4.8
97	562568.01	4804892.76	302.36	1	DEN	500	86.1	5.5	0.0	0.0	0.0	54.8	0.3	16.7	0.0	0.0	0.0	0.0	1.0	18.9
99	562567.38	4804894.25	302.31	1	DEN	500	86.1	-1.1	0.0	0.0	0.0	56.3	0.4	16.9	0.0	0.0	0.0	0.0	2.0	9.5
101	562568.09	4804893.24	302.35	2	DEN	500	86.1	3.6	0.0	0.0	0.0	56.4	0.4	16.9	0.0	0.0	0.0	0.0	3.0	13.1
104	562568.68	4804891.97	302.39	2	DEN	500	86.1	-2.0	0.0	0.0	0.0	56.4	0.4	16.9	0.0	0.0	0.0	0.0	3.0	7.5
106	562577.29	4804896.29	302.33	0	DEN	500	86.1	-12.2	0.0	0.0	0.0	54.5	0.3	16.6	0.0	0.0	0.0	0.0	0.0	2.6
107	562573.47	4804893.15	302.40	0	DEN	500	86.1	4.8	0.0	0.0	0.0	54.6	0.3	16.6	0.0	0.0	0.0	0.0	0.0	19.5

Area Source, ISO 9613, Name: " ", ID: "DogRun1_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
109	562570.92	4804891.24	302.43	0	DEN	500	86.1	-3.2	0.0	0.0	0.0	54.6	0.3	16.6	0.0	0.0	0.0	0.0	0.0	11.4
110	562577.87	4804893.96	302.42	0	DEN	500	86.1	5.3	0.0	0.0	0.0	54.4	0.3	16.5	0.0	0.0	0.0	0.0	0.0	20.2
111	562567.64	4804895.08	302.30	0	DEN	500	86.1	5.1	0.0	0.0	0.0	54.9	0.3	16.7	0.0	0.0	0.0	0.0	0.0	19.4
113	562569.57	4804891.60	302.41	1	DEN	500	86.1	-9.6	0.0	0.0	0.0	54.8	0.3	16.7	0.0	0.0	0.0	0.0	1.0	3.8
114	562567.91	4804894.51	302.32	1	DEN	500	86.1	3.1	0.0	0.0	0.0	54.9	0.3	16.7	0.0	0.0	0.0	0.0	1.0	16.4
115	562566.86	4804896.54	302.25	1	DEN	500	86.1	-1.8	0.0	0.0	0.0	55.0	0.3	16.7	0.0	0.0	0.0	0.0	1.0	11.4
117	562566.44	4804897.75	302.21	1	DEN	500	86.1	-4.9	0.0	0.0	0.0	55.0	0.3	16.7	0.0	0.0	0.0	0.0	1.0	8.1
119	562567.46	4804895.30	302.29	1	DEN	500	86.1	0.8	0.0	0.0	0.0	56.2	0.4	16.9	0.0	0.0	0.0	0.0	2.0	11.4
121	562566.76	4804896.81	302.24	1	DEN	500	86.1	-0.8	0.0	0.0	0.0	56.2	0.4	16.9	0.0	0.0	0.0	0.0	2.0	9.9
123	562566.28	4804898.19	302.20	1	DEN	500	86.1	-9.6	0.0	0.0	0.0	56.1	0.3	16.9	0.0	0.0	0.0	0.0	2.0	1.1
125	562568.41	4804893.53	302.35	2	DEN	500	86.1	1.3	0.0	0.0	0.0	56.4	0.4	16.9	0.0	0.0	0.0	0.0	3.0	10.8
127	562567.20	4804895.92	302.27	2	DEN	500	86.1	2.1	0.0	0.0	0.0	56.2	0.4	16.9	0.0	0.0	0.0	0.0	3.0	11.8
129	562566.45	4804897.84	302.21	2	DEN	500	86.1	-5.8	0.0	0.0	0.0	56.2	0.3	16.9	0.0	0.0	0.0	0.0	3.0	4.0
131	562577.34	4804896.25	302.33	0	DEN	500	86.1	-13.1	0.0	0.0	0.0	54.5	0.3	16.6	0.0	0.0	0.0	0.0	0.0	1.7
132	562574.23	4804893.26	302.40	0	DEN	500	86.1	2.9	0.0	0.0	0.0	54.5	0.3	16.6	0.0	0.0	0.0	0.0	0.0	17.7
134	562572.23	4804891.47	302.45	0	DEN	500	86.1	-6.6	0.0	0.0	0.0	54.6	0.3	16.6	0.0	0.0	0.0	0.0	0.0	8.1

Appendix B - Sample Modelling Output File - Dog Run 2

Receiver
Name: bungalow to west
ID: POR1
X: 562467.11 m
Y: 4804855.87 m
Z: 304.50 m

Area Source, ISO 9613, Name: " ", ID: "DogRun2_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
3	562594.89	4804905.71	302.53	0	DEN	500	92.4	7.2	0.0	0.0	0.0	53.7	0.3	10.1	0.0	0.0	5.7	0.0	0.0	29.8
4	562594.86	4804902.61	302.65	0	DEN	500	92.4	12.0	0.0	0.0	0.0	53.7	0.3	10.2	0.0	0.0	5.7	0.0	0.0	34.6
5	562593.36	4804897.61	302.84	0	DEN	500	92.4	-12.9	0.0	0.0	0.0	53.5	0.3	14.1	0.0	0.0	4.7	0.0	0.0	7.0
11	562597.39	4804898.40	302.96	0	DEN	500	92.4	3.6	0.0	0.0	0.0	53.7	0.3	16.1	0.0	0.0	0.0	0.0	0.0	25.8
15	562596.35	4804898.32	302.92	0	DEN	500	92.4	-12.1	0.0	0.0	0.0	53.7	0.3	16.1	0.0	0.0	0.0	0.0	0.0	10.2
17	562596.39	4804898.54	302.90	0	DEN	500	92.4	3.9	0.0	0.0	0.0	53.7	0.3	14.6	0.0	0.0	0.0	0.0	0.0	27.6
21	562597.00	4804900.86	302.76	0	DEN	500	92.4	12.1	0.0	0.0	0.0	53.8	0.3	10.2	0.0	0.0	4.2	0.0	0.0	36.0
27	562593.25	4804897.57	302.84	0	DEN	500	92.4	-17.8	0.0	0.0	0.0	53.5	0.3	14.1	0.0	0.0	5.1	0.0	0.0	1.6
29	562592.97	4804900.68	302.67	0	DEN	500	92.4	4.3	0.0	0.0	0.0	53.5	0.3	10.1	0.0	0.0	9.0	0.0	0.0	23.8
32	562593.00	4804903.78	302.55	0	DEN	500	92.4	3.4	0.0	0.0	0.0	53.6	0.3	10.1	0.0	0.0	8.0	0.0	0.0	23.8
37	562592.38	4804905.03	302.50	0	DEN	500	92.4	6.2	0.0	0.0	0.0	53.6	0.3	10.1	0.0	0.0	9.0	0.0	0.0	25.6
39	562597.75	4804905.28	302.52	0	DEN	500	92.4	-2.5	0.0	0.0	0.0	53.9	0.3	10.2	0.0	0.0	4.2	0.0	0.0	21.2
40	562596.21	4804902.37	302.64	0	DEN	500	92.4	4.6	0.0	0.0	0.0	53.7	0.3	10.2	0.0	0.0	4.8	0.0	0.0	27.9
41	562593.47	4804897.65	302.84	0	DEN	500	92.4	-19.0	0.0	0.0	0.0	53.5	0.3	14.1	0.0	0.0	4.3	0.0	0.0	1.3
42	562596.31	4804906.77	302.50	0	DEN	500	92.4	5.0	0.0	0.0	0.0	53.9	0.3	10.2	0.0	0.0	4.7	0.0	0.0	28.3
43	562593.22	4804897.56	302.83	0	DEN	500	92.4	-27.2	0.0	0.0	0.0	53.5	0.3	14.1	0.0	0.0	5.3	0.0	0.0	-7.9
44	562592.79	4804899.71	302.65	0	DEN	500	92.4	-7.7	0.0	0.0	0.0	53.5	0.3	10.1	0.0	0.0	10.1	0.0	0.0	10.6
45	562592.47	4804901.30	302.53	0	DEN	500	92.4	-12.2	0.0	0.0	0.0	53.5	0.3	10.1	0.0	0.0	10.6	0.0	0.0	5.7

Receiver
Name: 2 storey house to east
ID: POR2
X: 562807.09 m
Y: 4805017.61 m
Z: 310.18 m

Area Source, ISO 9613, Name: " ", ID: "DogRun2_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
2	562594.86	4804903.36	302.62	0	DEN	500	92.4	13.3	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	34.1
7	562596.97	4804900.31	302.80	0	DEN	500	92.4	13.2	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	34.1
8	562592.98	4804902.04	302.62	0	DEN	500	92.4	6.9	0.0	0.0	0.0	58.7	0.5	12.4	0.0	0.0	0.0	0.0	0.0	27.7
13	562592.97	4804900.50	302.68	1	DEN	500	92.4	4.0	0.0	0.0	0.0	58.8	0.5	12.4	0.0	0.0	0.0	0.0	2.0	22.7
16	562592.97	4804903.37	302.56	1	DEN	500	92.4	3.3	0.0	0.0	0.0	58.8	0.5	12.4	0.0	0.0	0.0	0.0	2.0	22.1
19	562593.21	4804905.31	302.53	1	DEN	500	92.4	-9.6	0.0	0.0	0.0	58.8	0.5	12.4	0.0	0.0	0.0	0.0	2.0	9.1
23	562593.27	4804905.77	302.52	1	DEN	500	92.4	-9.0	0.0	0.0	0.0	58.8	0.5	12.4	0.0	0.0	0.0	0.0	2.0	9.8
25	562592.38	4804905.03	302.50	0	DEN	500	92.4	6.2	0.0	0.0	0.0	58.7	0.5	12.4	0.0	0.0	0.0	0.0	0.0	27.0
28	562592.32	4804904.19	302.50	1	DEN	500	92.4	3.2	0.0	0.0	0.0	58.7	0.5	12.4	0.0	0.0	0.0	0.0	2.0	21.9
30	562592.34	4804905.39	302.50	1	DEN	500	92.4	-3.0	0.0	0.0	0.0	58.7	0.5	12.4	0.0	0.0	0.0	0.0	2.0	15.8
33	562592.35	4804905.89	302.50	1	DEN	500	92.4	0.2	0.0	0.0	0.0	58.7	0.5	12.4	0.0	0.0	0.0	0.0	2.0	19.0
35	562596.45	4804902.82	302.62	0	DEN	500	92.4	5.4	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	26.3
36	562596.31	4804906.77	302.50	0	DEN	500	92.4	5.0	0.0	0.0	0.0	58.5	0.5	12.4	0.0	0.0	0.0	0.0	0.0	26.0
38	562592.71	4804900.11	302.62	0	DEN	500	92.4	-6.4	0.0	0.0	0.0	58.8	0.5	12.4	0.0	0.0	0.0	0.0	0.0	14.3

Receiver
Name: bungalow to south
ID: POR3
X: 562693.50 m
Y: 4804802.25 m
Z: 307.57 m

Area Source, ISO 9613, Name: " ", ID: "DogRun2_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
1	562596.97	4804900.31	302.80	0	DEN	500	92.4	13.2	0.0	0.0	0.0	53.8	0.3	16.3	0.0	0.0	0.0	0.0	0.0	35.2
6	562594.86	4804903.36	302.62	0	DEN	500	92.4	13.3	0.0	0.0	0.0	54.0	0.3	16.4	0.0	0.0	0.0	0.0	0.0	34.9
9	562592.98	4804902.04	302.62	0	DEN	500	92.4	6.9	0.0	0.0	0.0	54.0	0.3	16.4	0.0	0.0	0.0	0.0	0.0	28.5
10	562593.21	4804898.14	302.81	1	DEN	500	92.4	-7.9	0.0	0.0	0.0	53.9	0.3	16.4	0.0	0.0	0.0	0.0	2.0	11.9
12	562592.97	4804901.41	302.64	1	DEN	500	92.4	5.4	0.0	0.0	0.0	54.0	0.3	16.4	0.0	0.0	0.0	0.0	2.0	25.0
14	562592.83	4804903.33	302.54	1	DEN	500	92.4	-6.4	0.0	0.0	0.0	54.1	0.3	16.5	0.0	0.0	0.0	0.0	2.0	13.0
18	562592.23	4804904.40	302.50	0	DEN	500	92.4	3.8	0.0	0.0	0.0	54.2	0.3	16.5	0.0	0.0	0.0	0.0	0.0	25.2
20	562592.19	4804905.53	302.50	0	DEN	500	92.4	-18.2	0.0	0.0	0.0	54.2	0.3	16.5	0.0	0.0	0.0	0.0	0.0	3.2
22	562592.59	4804905.91	302.50	0	DEN	500	92.4	2.4	0.0	0.0	0.0	54.2	0.3	16.5	0.0	0.0	0.0	0.0	0.0	23.7
24	562592.38	4804905.03	302.50	1	DEN	500	92.4	6.2	0.0	0.0	0.0	54.2	0.3	16.5	0.0	0.0	0.0	0.0	2.0	25.5
26	562596.45	4804902.82	302.62	0	DEN	500	92.4	5.4	0.0	0.0	0.0	53.9	0.3	16.4	0.0	0.0	0.0	0.0	0.0	27.2
31	562596.31	4804906.77	302.50	0	DEN	500	92.4	5.0	0.0	0.0	0.0	54.1	0.3	16.4	0.0	0.0	0.0	0.0	0.0	26.5
34	562592.71	4804900.11	302.62	0	DEN	500	92.4	-6.4	0.0	0.0	0.0	54.0	0.3	16.4	0.0	0.0	0.0	0.0	0.0	15.3

Appendix B - Sample Modelling Output File - Dog Run 3

Receiver
Name: bungalow to west
ID: POR1
X: 562467.11 m
Y: 4804855.87 m
Z: 304.50 m

Area Source, ISO 9613, Name: " ", ID: "DogRun3_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
1	562560.57	4804947.12	301.50	0	DEN	500	83.2	23.1	0.0	0.0	0.0	53.3	0.3	16.2	0.0	0.0	0.0	0.0	0.0	36.6
4	562552.51	4804950.63	301.50	1	DEN	500	83.2	15.3	0.0	0.0	0.0	53.5	0.3	15.7	0.0	0.0	2.9	0.0	2.0	24.2
6	562557.96	4804935.98	301.50	0	DEN	500	83.2	21.4	0.0	0.0	0.0	52.7	0.2	15.9	0.0	0.0	0.0	0.0	0.0	35.8
8	562548.39	4804943.79	301.50	1	DEN	500	83.2	-1.5	0.0	0.0	0.0	53.0	0.2	15.5	0.0	0.0	3.1	0.0	2.0	7.9
11	562554.62	4804943.51	301.50	0	DEN	500	83.2	18.3	0.0	0.0	0.0	52.9	0.2	16.0	0.0	0.0	0.0	0.0	0.0	32.4
14	562550.01	4804945.79	301.50	1	DEN	500	83.2	8.2	0.0	0.0	0.0	53.2	0.2	15.6	0.0	0.0	3.1	0.0	2.0	17.4
15	562548.31	4804947.77	301.50	1	DEN	500	83.2	11.3	0.0	0.0	0.0	53.2	0.2	15.6	0.0	0.0	3.0	0.0	2.0	20.5
17	562551.79	4804933.39	301.50	0	DEN	500	83.2	16.4	0.0	0.0	0.0	52.2	0.2	15.7	0.0	0.0	0.0	0.0	0.0	31.5
20	562548.04	4804943.44	301.50	1	DEN	500	83.2	-4.6	0.0	0.0	0.0	53.0	0.2	15.5	0.0	0.0	3.2	0.0	2.0	4.8
21	562563.32	4804931.27	301.50	0	DEN	500	83.2	10.8	0.0	0.0	0.0	52.7	0.2	15.9	0.0	0.0	0.0	0.0	0.0	25.2
23	562568.09	4804932.44	301.50	0	DEN	500	83.2	10.4	0.0	0.0	0.0	53.1	0.2	16.1	0.0	0.0	0.0	0.0	0.0	24.3
24	562570.43	4804932.00	301.50	0	DEN	500	83.2	-13.0	0.0	0.0	0.0	53.2	0.2	16.1	0.0	0.0	0.0	0.0	0.0	0.7

Receiver
Name: 2 storey house to east
ID: POR2
X: 562807.09 m
Y: 4805017.61 m
Z: 310.18 m

Area Source, ISO 9613, Name: " ", ID: "DogRun3_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
2	562560.57	4804947.12	301.50	0	DEN	500	83.2	23.1	0.0	0.0	0.0	59.2	0.5	12.4	0.0	0.0	0.0	0.0	0.0	34.2
5	562557.96	4804935.98	301.50	0	DEN	500	83.2	21.4	0.0	0.0	0.0	59.4	0.5	12.4	0.0	0.0	0.0	0.0	0.0	32.3
9	562554.62	4804943.51	301.50	0	DEN	500	83.2	18.3	0.0	0.0	0.0	59.4	0.5	12.4	0.0	0.0	0.0	0.0	0.0	29.2
12	562551.79	4804933.39	301.50	0	DEN	500	83.2	16.4	0.0	0.0	0.0	59.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	27.1
18	562565.60	4804931.83	301.50	0	DEN	500	83.2	13.7	0.0	0.0	0.0	59.2	0.5	12.4	0.0	0.0	0.0	0.0	0.0	24.8

Receiver
Name: bungalow to south
ID: POR3
X: 562693.50 m
Y: 4804802.25 m
Z: 307.57 m

Area Source, ISO 9613, Name: " ", ID: "DogRun3_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
3	562564.74	4804952.60	301.50	0	DEN	500	83.2	11.6	0.0	0.0	0.0	56.9	0.4	17.1	0.0	0.0	0.0	0.0	0.0	20.4
7	562563.54	4804949.00	301.50	0	DEN	500	83.2	16.8	0.0	0.0	0.0	56.9	0.4	17.1	0.0	0.0	0.0	0.0	0.0	25.8
10	562562.72	4804946.80	301.50	0	DEN	500	83.2	11.6	0.0	0.0	0.0	56.8	0.4	17.1	0.0	0.0	0.0	0.0	0.0	20.5
13	562562.05	4804945.16	301.50	0	DEN	500	83.2	17.0	0.0	0.0	0.0	56.8	0.4	17.1	0.0	0.0	0.0	0.0	0.0	26.0
16	562560.15	4804944.65	301.50	0	DEN	500	83.2	14.5	0.0	0.0	0.0	56.8	0.4	17.0	0.0	0.0	0.0	0.0	0.0	23.5
19	562554.81	4804947.04	301.50	0	DEN	500	83.2	16.8	0.0	0.0	0.0	57.0	0.4	17.0	0.0	0.0	0.0	0.0	0.0	25.6
22	562547.86	4804950.27	301.50	0	DEN	500	83.2	2.5	0.0	0.0	0.0	57.4	0.4	17.0	0.0	0.0	0.0	0.0	0.0	11.0
25	562555.59	4804932.42	301.50	0	DEN	500	83.2	13.5	0.0	0.0	0.0	56.6	0.4	16.2	0.0	0.0	1.8	0.0	0.0	21.8
26	562554.86	4804936.04	301.50	0	DEN	500	83.2	14.2	0.0	0.0	0.0	56.7	0.4	16.8	0.0	0.0	0.0	0.0	0.0	23.6
27	562554.51	4804937.64	301.50	0	DEN	500	83.2	5.7	0.0	0.0	0.0	56.8	0.4	16.8	0.0	0.0	0.0	0.0	0.0	15.0
28	562554.96	4804937.71	301.50	0	DEN	500	83.2	10.1	0.0	0.0	0.0	56.7	0.4	16.9	0.0	0.0	0.0	0.0	0.0	19.3
29	562556.47	4804937.42	301.50	0	DEN	500	83.2	12.9	0.0	0.0	0.0	56.7	0.4	16.9	0.0	0.0	0.0	0.0	0.0	22.2
30	562558.49	4804937.02	301.50	0	DEN	500	83.2	12.0	0.0	0.0	0.0	56.6	0.4	16.9	0.0	0.0	0.0	0.0	0.0	21.4
31	562560.66	4804936.62	301.50	0	DEN	500	83.2	12.0	0.0	0.0	0.0	56.5	0.4	16.9	0.0	0.0	0.0	0.0	0.0	21.4
32	562564.35	4804935.96	301.50	0	DEN	500	83.2	13.4	0.0	0.0	0.0	56.4	0.4	16.9	0.0	0.0	0.0	0.0	0.0	23.1
33	562568.65	4804935.25	301.50	0	DEN	500	83.2	1.4	0.0	0.0	0.0	56.2	0.4	16.9	0.0	0.0	0.0	0.0	0.0	11.2
34	562548.09	4804944.56	301.50	0	DEN	500	83.2	-1.7	0.0	0.0	0.0	57.2	0.4	16.9	0.0	0.0	0.0	0.0	0.0	7.0
35	562549.04	4804944.92	301.50	0	DEN	500	83.2	7.7	0.0	0.0	0.0	57.2	0.4	17.0	0.0	0.0	0.0	0.0	0.0	16.4
36	562550.19	4804945.41	301.50	0	DEN	500	83.2	10.7	0.0	0.0	0.0	57.1	0.4	17.0	0.0	0.0	0.0	0.0	0.0	19.4
37	562551.02	4804945.81	301.50	0	DEN	500	83.2	9.1	0.0	0.0	0.0	57.1	0.4	17.0	0.0	0.0	0.0	0.0	0.0	17.8
38	562552.72	4804945.11	301.50	0	DEN	500	83.2	10.7	0.0	0.0	0.0	57.0	0.4	17.0	0.0	0.0	0.0	0.0	0.0	19.5
39	562559.03	4804941.40	301.50	0	DEN	500	83.2	14.4	0.0	0.0	0.0	56.7	0.4	16.9	0.0	0.0	0.0	0.0	0.0	23.6
40	562567.52	4804936.45	301.50	0	DEN	500	83.2	1.9	0.0	0.0	0.0	56.3	0.4	16.9	0.0	0.0	0.0	0.0	0.0	11.6
41	562547.82	4804944.10	301.50	0	DEN	500	83.2	-14.5	0.0	0.0	0.0	57.2	0.4	16.9	0.0	0.0	0.0	0.0	0.0	-5.7
42	562548.98	4804941.31	301.50	0	DEN	500	83.2	5.1	0.0	0.0	0.0	57.0	0.4	16.9	0.0	0.0	0.0	0.0	0.0	14.0
43	562551.61	4804934.94	301.50	0	DEN	500	83.2	13.5	0.0	0.0	0.0	56.8	0.4	16.8	0.0	0.0	0.0	0.0	0.0	22.9
44	562552.92	4804931.08	301.50	0	DEN	500	83.2	7.5	0.0	0.0	0.0	56.6	0.4	15.6	0.0	0.0	2.6	0.0	0.0	15.6
45	562552.33	4804929.55	301.50	0	DEN	500	83.2	10.9	0.0	0.0	0.0	56.6	0.4	14.3	0.0	0.0	4.4	0.0	0.0	18.6
46	562569.72	4804934.11	301.50	0	DEN	500	83.2	1.5	0.0	0.0	0.0	56.2	0.3	16.9	0.0	0.0	0.0	0.0	0.0	11.3
47	562569.55	4804933.38	301.50	0	DEN	500	83.2	0.8	0.0	0.0	0.0	56.1	0.3	16.9	0.0	0.0	0.0	0.0	0.0	10.7
48	562567.94	4804932.59	301.50	0	DEN	500	83.2	9.5	0.0	0.0	0.0	56.2	0.3	16.8	0.0	0.0	0.0	0.0	0.0	19.4
49	562565.55	4804931.74	301.50	0	DEN	500	83.2	4.9	0.0	0.0	0.0	56.2	0.4	16.8	0.0	0.0	0.0	0.0	0.0	14.7
50	562564.28	4804931.29	301.50	0	DEN	500	83.2	3.3	0.0	0.0	0.0	56.2	0.4	15.8	0.0	0.0	0.0	0.0	0.0	14.1
51	562563.13	4804930.89	301.50	0	DEN	500	83.2	2.7	0.0	0.0	0.0	56.3	0.4	13.7	0.0	0.0	1.4	0.0	0.0	14.2
52	562562.17	4804930.55	301.50	0	DEN	500	83.2	0.1	0.0	0.0	0.0	56.3	0.4	12.5	0.0	0.0	2.6	0.0	0.0	11.6
53	562560.98	4804930.13	301.50	0	DEN	500	83.2	2.8	0.0	0.0	0.0	56.3	0.4	12.4	0.0	0.0	6.6	0.0	0.0	10.3
54	562558.80	4804929.36	301.50	0	DEN	500	83.2	2.3	0.0	0.0	0.0	56.4	0.4	12.1	0.0	0.0	7.2	0.0	0.0	9.5

Appendix B - Sample Modelling Output File - Dog Run 4

Receiver
Name: bungalow to west
ID: POR1
X: 562467.11 m
Y: 4804855.87 m
Z: 304.50 m

Area Source, ISO 9613, Name: " ", ID: "DogRun4_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
1	562576.10	4804949.18	301.63	0	DEN	500	82.0	22.6	0.0	0.0	0.0	54.1	0.3	16.5	0.0	0.0	0.0	0.0	0.0	33.7
8	562579.44	4804936.85	301.54	0	DEN	500	82.0	14.1	0.0	0.0	0.0	53.8	0.3	16.3	0.0	0.0	0.0	0.0	0.0	25.7
10	562578.03	4804939.61	301.59	0	DEN	500	82.0	16.3	0.0	0.0	0.0	53.9	0.3	16.4	0.0	0.0	0.0	0.0	0.0	27.9
12	562580.75	4804945.85	301.70	0	DEN	500	82.0	17.4	0.0	0.0	0.0	54.2	0.3	16.5	0.0	0.0	0.0	0.0	0.0	28.4
14	562584.77	4804927.95	301.63	0	DEN	500	82.0	-14.6	0.0	0.0	0.0	53.8	0.3	14.2	0.0	0.0	6.3	0.0	0.0	-7.1
16	562584.08	4804931.98	301.62	0	DEN	500	82.0	11.2	0.0	0.0	0.0	53.9	0.3	15.9	0.0	0.0	2.8	0.0	0.0	20.3
18	562583.57	4804935.05	301.61	0	DEN	500	82.0	9.4	0.0	0.0	0.0	54.0	0.3	16.1	0.0	0.0	0.0	0.0	0.0	21.0
20	562584.07	4804939.08	301.65	0	DEN	500	82.0	13.6	0.0	0.0	0.0	54.1	0.3	16.4	0.0	0.0	0.0	0.0	0.0	24.9
21	562585.74	4804947.14	301.76	0	DEN	500	82.0	12.6	0.0	0.0	0.0	54.5	0.3	16.6	0.0	0.0	0.0	0.0	0.0	23.3
25	562588.30	4804926.19	301.80	0	DEN	500	82.0	2.6	0.0	0.0	0.0	53.9	0.3	16.0	0.0	0.0	1.5	0.0	0.0	13.0
27	562587.96	4804926.79	301.79	0	DEN	500	82.0	-6.5	0.0	0.0	0.0	53.9	0.3	15.6	0.0	0.0	2.8	0.0	0.0	3.0
28	562587.75	4804927.17	301.78	0	DEN	500	82.0	2.6	0.0	0.0	0.0	53.9	0.3	13.6	0.0	0.0	4.8	0.0	0.0	12.0
30	562587.38	4804927.82	301.76	0	DEN	500	82.0	3.9	0.0	0.0	0.0	53.9	0.3	13.7	0.0	0.0	6.9	0.0	0.0	11.1
33	562586.98	4804928.55	301.74	0	DEN	500	82.0	5.7	0.0	0.0	0.0	53.9	0.3	13.8	0.0	0.0	6.3	0.0	0.0	13.5
35	562586.78	4804929.12	301.74	0	DEN	500	82.0	1.5	0.0	0.0	0.0	53.9	0.3	15.0	0.0	0.0	4.7	0.0	0.0	9.7
37	562586.88	4804932.62	301.76	0	DEN	500	82.0	13.6	0.0	0.0	0.0	54.1	0.3	16.0	0.0	0.0	2.1	0.0	0.0	23.2
39	562587.10	4804940.02	301.80	0	DEN	500	82.0	12.6	0.0	0.0	0.0	54.3	0.3	16.4	0.0	0.0	0.0	0.0	0.0	23.7
40	562587.36	4804948.34	301.84	0	DEN	500	82.0	9.8	0.0	0.0	0.0	54.6	0.3	16.6	0.0	0.0	0.0	0.0	0.0	20.3
43	562568.80	4804948.91	301.50	0	DEN	500	82.0	17.3	0.0	0.0	0.0	53.8	0.3	16.3	0.0	0.0	0.0	0.0	0.0	28.9
46	562588.44	4804949.14	301.93	0	DEN	500	82.0	9.5	0.0	0.0	0.0	54.7	0.3	16.6	0.0	0.0	0.0	0.0	0.0	19.9
48	562589.36	4804941.58	301.97	0	DEN	500	82.0	12.5	0.0	0.0	0.0	54.5	0.3	16.4	0.0	0.0	0.0	0.0	0.0	23.3
51	562590.13	4804935.26	302.01	0	DEN	500	82.0	12.8	0.0	0.0	0.0	54.3	0.3	16.1	0.0	0.0	0.9	0.0	0.0	23.2
52	562590.33	4804932.03	302.02	0	DEN	500	82.0	5.4	0.0	0.0	0.0	54.2	0.3	16.1	0.0	0.0	0.0	0.0	0.0	16.9
54	562590.04	4804930.61	301.98	0	DEN	500	82.0	5.8	0.0	0.0	0.0	54.2	0.3	13.9	0.0	0.0	0.5	0.0	0.0	19.0
56	562589.75	4804929.24	301.94	0	DEN	500	82.0	2.5	0.0	0.0	0.0	54.1	0.3	13.8	0.0	0.0	1.4	0.0	0.0	15.0
60	562589.55	4804928.24	301.91	0	DEN	500	82.0	1.1	0.0	0.0	0.0	54.1	0.3	13.7	0.0	0.0	3.1	0.0	0.0	12.0
62	562589.43	4804927.65	301.90	0	DEN	500	82.0	-8.0	0.0	0.0	0.0	54.0	0.3	15.7	0.0	0.0	1.2	0.0	0.0	2.9
64	562589.25	4804926.75	301.87	0	DEN	500	82.0	1.0	0.0	0.0	0.0	54.0	0.3	16.0	0.0	0.0	1.0	0.0	0.0	11.8
67	562581.38	4804957.38	301.63	0	DEN	500	82.0	14.8	0.0	0.0	0.0	54.7	0.3	16.6	0.0	0.0	0.0	0.0	0.0	25.2
71	562592.07	4804926.32	302.08	0	DEN	500	82.0	6.0	0.0	0.0	0.0	54.1	0.3	16.1	0.0	0.0	0.0	0.0	0.0	17.5
74	562591.36	4804927.54	302.05	0	DEN	500	82.0	9.3	0.0	0.0	0.0	54.1	0.3	16.0	0.0	0.0	0.1	0.0	0.0	20.8
77	562591.55	4804928.89	302.09	0	DEN	500	82.0	-3.9	0.0	0.0	0.0	54.2	0.3	15.7	0.0	0.0	0.2	0.0	0.0	7.7
80	562591.62	4804929.42	302.10	0	DEN	500	82.0	3.8	0.0	0.0	0.0	54.2	0.3	13.7	0.0	0.0	2.1	0.0	0.0	15.4
82	562591.76	4804930.40	302.13	0	DEN	500	82.0	2.8	0.0	0.0	0.0	54.2	0.3	13.8	0.0	0.0	0.7	0.0	0.0	15.8
85	562591.93	4804931.62	302.16	0	DEN	500	82.0	2.7	0.0	0.0	0.0	54.3	0.3	13.9	0.0	0.0	0.0	0.0	0.0	16.3
88	562592.12	4804932.94	302.20	0	DEN	500	82.0	-4.0	0.0	0.0	0.0	54.3	0.3	16.1	0.0	0.0	0.0	0.0	0.0	7.3
93	562574.33	4804933.37	301.50	0	DEN	500	82.0	8.2	0.0	0.0	0.0	53.4	0.3	16.1	0.0	0.0	0.0	0.0	0.0	20.5
95	562572.21	4804933.26	301.50	0	DEN	500	82.0	-1.1	0.0	0.0	0.0	53.3	0.3	16.2	0.0	0.0	0.0	0.0	0.0	11.2
97	562571.40	4804933.90	301.50	0	DEN	500	82.0	7.1	0.0	0.0	0.0	53.3	0.3	16.2	0.0	0.0	0.0	0.0	0.0	19.5
101	562584.60	4804927.84	301.62	0	DEN	500	82.0	-12.1	0.0	0.0	0.0	53.8	0.3	14.0	0.0	0.0	6.6	0.0	0.0	-4.7
106	562583.55	4804928.38	301.58	0	DEN	500	82.0	2.9	0.0	0.0	0.0	53.7	0.3	13.8	0.0	0.0	5.3	0.0	0.0	11.8
108	562582.40	4804930.30	301.54	0	DEN	500	82.0	7.8	0.0	0.0	0.0	53.8	0.3	13.3	0.0	0.0	6.0	0.0	0.0	16.5
111	562581.40	4804933.20	301.51	0	DEN	500	82.0	-2.6	0.0	0.0	0.0	53.8	0.3	16.1	0.0	0.0	0.6	0.0	0.0	8.7
113	562579.62	4804934.13	301.50	0	DEN	500	82.0	-2.1	0.0	0.0	0.0	53.7	0.3	16.1	0.0	0.0	0.0	0.0	0.0	9.8
114	562576.73	4804934.30	301.50	0	DEN	500	82.0	4.6	0.0	0.0	0.0	53.6	0.3	16.2	0.0	0.0	0.0	0.0	0.0	16.7
115	562572.57	4804934.76	301.50	0	DEN	500	82.0	-1.6	0.0	0.0	0.0	53.4	0.3	16.2	0.0	0.0	0.0	0.0	0.0	10.6
118	562587.76	4804925.07	301.78	0	DEN	500	82.0	-1.2	0.0	0.0	0.0	53.9	0.3	15.9	0.0	0.0	1.8	0.0	0.0	9.0
120	562586.81	4804925.38	301.72	0	DEN	500	82.0	1.9	0.0	0.0	0.0	53.8	0.3	15.9	0.0	0.0	2.1	0.0	0.0	11.8
123	562586.31	4804925.82	301.69	0	DEN	500	82.0	-9.5	0.0	0.0	0.0	53.8	0.3	15.3	0.0	0.0	5.3	0.0	0.0	-2.2
125	562586.03	4804926.07	301.68	0	DEN	500	82.0	-3.1	0.0	0.0	0.0	53.8	0.3	13.2	0.0	0.0	7.8	0.0	0.0	3.9
127	562585.57	4804926.48	301.65	0	DEN	500	82.0	-10.2	0.0	0.0	0.0	53.8	0.3	12.9	0.0	0.0	9.8	0.0	0.0	-4.9
132	562588.97	4804949.52	301.94	0	DEN	500	82.0	-2.1	0.0	0.0	0.0	54.7	0.3	16.6	0.0	0.0	0.0	0.0	0.0	8.2

Area Source, ISO 9613, Name: " ", ID: "DogRun4_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
134	562590.25	4804943.33	302.00	0	DEN	500	82.0	-0.6	0.0	0.0	0.0	54.6	0.3	16.5	0.0	0.0	0.0	0.0	0.0	10.1
135	562590.94	4804939.97	302.04	0	DEN	500	82.0	-5.3	0.0	0.0	0.0	54.5	0.3	16.3	0.0	0.0	0.0	0.0	0.0	5.6
137	562591.50	4804937.28	302.12	0	DEN	500	82.0	-4.1	0.0	0.0	0.0	54.4	0.3	16.2	0.0	0.0	0.1	0.0	0.0	6.9
138	562586.74	4804958.55	301.74	0	DEN	500	82.0	3.3	0.0	0.0	0.0	55.0	0.3	16.7	0.0	0.0	0.0	0.0	0.0	13.4
140	562587.63	4804925.80	301.76	0	DEN	500	82.0	-4.3	0.0	0.0	0.0	53.9	0.3	15.9	0.0	0.0	1.8	0.0	0.0	5.9
142	562586.92	4804926.17	301.73	0	DEN	500	82.0	-13.5	0.0	0.0	0.0	53.9	0.3	15.6	0.0	0.0	3.9	0.0	0.0	-5.1
144	562586.47	4804926.42	301.70	0	DEN	500	82.0	-4.4	0.0	0.0	0.0	53.8	0.3	13.6	0.0	0.0	6.4	0.0	0.0	3.5
146	562585.85	4804926.74	301.67	0	DEN	500	82.0	-5.2	0.0	0.0	0.0	53.8	0.3	13.2	0.0	0.0	8.9	0.0	0.0	0.7
147	562585.52	4804926.97	301.65	0	DEN	500	82.0	-8.1	0.0	0.0	0.0	53.8	0.3	13.0	0.0	0.0	9.3	0.0	0.0	-2.4
149	562585.22	4804927.29	301.64	0	DEN	500	82.0	-6.4	0.0	0.0	0.0	53.8	0.3	12.9	0.0	0.0	9.5	0.0	0.0	-0.8
153	562583.44	4804927.19	301.53	0	DEN	500	82.0	-10.1	0.0	0.0	0.0	53.7	0.3	13.1	0.0	0.0	8.6	0.0	0.0	-3.7
154	562583.17	4804927.10	301.52	0	DEN	500	82.0	-16.3	0.0	0.0	0.0	53.7	0.3	13.2	0.0	0.0	5.9	0.0	0.0	-7.3
156	562582.76	4804927.42	301.52	0	DEN	500	82.0	-0.5	0.0	0.0	0.0	53.7	0.3	12.9	0.0	0.0	6.4	0.0	0.0	8.3
158	562584.43	4804927.61	301.60	0	DEN	500	82.0	-12.5	0.0	0.0	0.0	53.8	0.3	13.1	0.0	0.0	8.5	0.0	0.0	-6.1
159	562584.13	4804927.57	301.58	0	DEN	500	82.0	-8.7	0.0	0.0	0.0	53.8	0.3	13.6	0.0	0.0	7.4	0.0	0.0	-1.7
160	562583.34	4804927.76	301.55	0	DEN	500	82.0	-2.8	0.0	0.0	0.0	53.7	0.3	13.5	0.0	0.0	5.6	0.0	0.0	6.2
161	562592.37	4804933.09	302.24	0	DEN	500	82.0	-16.0	0.0	0.0	0.0	54.4	0.3	16.1	0.0	0.0	0.0	0.0	0.0	-4.7
162	562592.54	4804932.26	302.26	0	DEN	500	82.0	-11.4	0.0	0.0	0.0	54.3	0.3	13.9	0.0	0.0	0.0	0.0	0.0	2.1
163	562592.67	4804931.65	302.27	0	DEN	500	82.0	-13.9	0.0	0.0	0.0	54.3	0.3	13.9	0.0	0.0	0.0	0.0	0.0	-0.4
164	562592.79	4804931.05	302.26	0	DEN	500	82.0	-11.3	0.0	0.0	0.0	54.3	0.3	13.8	0.0	0.0	0.3	0.0	0.0	2.0
165	562592.96	4804930.24	302.25	0	DEN	500	82.0	-12.3	0.0	0.0	0.0	54.3	0.3	13.8	0.0	0.0	1.4	0.0	0.0	-0.0
166	562593.05	4804929.77	302.25	0	DEN	500	82.0	-21.0	0.0	0.0	0.0	54.3	0.3	15.8	0.0	0.0	0.0	0.0	0.0	-9.2
167	562593.31	4804928.52	302.23	0	DEN	500	82.0	-9.3	0.0	0.0	0.0	54.3	0.3	16.1	0.0	0.0	0.0	0.0	0.0	2.1
168	562591.01	4804939.64	301.97	0	DEN	500	82.0	-26.1	0.0	0.0	0.0	54.5	0.3	16.3	0.0	0.0	0.0	0.0	0.0	-15.1
169	562591.72	4804936.21	302.12	0	DEN	500	82.0	-14.9	0.0	0.0	0.0	54.4	0.3	16.1	0.0	0.0	0.4	0.0	0.0	-4.1
170	562592.16	4804934.10	302.21	0	DEN	500	82.0	-25.3	0.0	0.0	0.0	54.4	0.3	16.1	0.0	0.0	0.0	0.0	0.0	-14.0

Receiver
Name: 2 storey house to east
ID: POR2
X: 562807.09 m
Y: 4805017.61 m
Z: 310.18 m

Area Source, ISO 9613, Name: " ", ID: "DogRun4_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
3	562576.10	4804949.18	301.63	0	DEN	500	82.0	22.6	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	33.1
6	562579.53	4804941.81	301.63	0	DEN	500	82.0	20.9	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	31.5
11	562584.48	4804939.37	301.67	0	DEN	500	82.0	18.0	0.0	0.0	0.0	58.5	0.5	12.4	0.0	0.0	0.0	0.0	0.0	28.7
19	562587.11	4804936.31	301.78	0	DEN	500	82.0	17.9	0.0	0.0	0.0	58.4	0.5	12.4	0.0	0.0	0.0	0.0	0.0	28.7
22	562588.73	4804925.37	301.82	1	DEN	500	82.0	-9.5	0.0	0.0	0.0	59.6	0.5	11.1	0.0	0.0	0.0	0.0	2.0	-0.7
24	562587.33	4804927.81	301.76	1	DEN	500	82.0	8.8	0.0	0.0	0.0	58.7	0.5	12.4	0.0	0.0	0.0	0.0	2.0	17.3
31	562589.59	4804938.31	301.98	0	DEN	500	82.0	17.6	0.0	0.0	0.0	58.3	0.4	12.4	0.0	0.0	0.0	0.0	0.0	28.5
34	562588.97	4804925.39	301.84	1	DEN	500	82.0	-14.3	0.0	0.0	0.0	59.6	0.5	11.1	0.0	0.0	0.0	0.0	2.0	-5.4
42	562568.80	4804948.91	301.50	0	DEN	500	82.0	17.3	0.0	0.0	0.0	58.9	0.5	12.4	0.0	0.0	0.0	0.0	0.0	27.6
44	562581.38	4804957.38	301.63	0	DEN	500	82.0	14.8	0.0	0.0	0.0	58.4	0.5	12.4	0.0	0.0	0.0	0.0	0.0	25.6
47	562591.65	4804928.33	302.09	0	DEN	500	82.0	12.9	0.0	0.0	0.0	58.4	0.4	12.4	0.0	0.0	0.0	0.0	0.0	23.7
49	562590.11	4804925.49	301.92	1	DEN	500	82.0	-1.7	0.0	0.0	0.0	59.7	0.5	11.1	0.0	0.0	0.0	0.0	2.0	7.0
58	562573.00	4804933.58	301.50	0	DEN	500	82.0	11.0	0.0	0.0	0.0	58.9	0.5	12.4	0.0	0.0	0.0	0.0	0.0	21.3
63	562582.61	4804930.03	301.54	0	DEN	500	82.0	9.3	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	19.9
68	562576.47	4804934.35	301.50	0	DEN	500	82.0	6.3	0.0	0.0	0.0	58.8	0.5	12.4	0.0	0.0	0.0	0.0	0.0	16.6
73	562587.86	4804925.02	301.78	0	DEN	500	82.0	-2.8	0.0	0.0	0.0	58.5	0.5	12.4	0.0	0.0	0.0	0.0	0.0	7.8
76	562586.93	4804925.32	301.73	0	DEN	500	82.0	2.3	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	12.9
79	562586.08	4804926.05	301.68	0	DEN	500	82.0	-1.0	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	9.6
83	562587.34	4804925.17	301.75	1	DEN	500	82.0	-0.1	0.0	0.0	0.0	59.6	0.5	11.3	0.0	0.0	0.0	0.0	2.0	8.6
87	562587.32	4804924.91	301.76	1	DEN	500	82.0	-5.3	0.0	0.0	0.0	59.6	0.5	12.2	0.0	0.0	0.0	0.0	2.0	2.5
89	562586.80	4804924.72	301.74	1	DEN	500	82.0	-9.0	0.0	0.0	0.0	59.5	0.5	12.4	0.0	0.0	0.0	0.0	2.0	-1.5
91	562586.04	4804926.07	301.68	1	DEN	500	82.0	-1.3	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	2.0	7.3
96	562586.74	4804958.55	301.74	0	DEN	500	82.0	3.3	0.0	0.0	0.0	58.2	0.4	12.4	0.0	0.0	0.0	0.0	0.0	14.4
99	562590.21	4804943.54	302.01	0	DEN	500	82.0	3.4	0.0	0.0	0.0	58.2	0.4	12.4	0.0	0.0	0.0	0.0	0.0	14.4
103	562586.35	4804926.52	301.70	0	DEN	500	82.0	1.6	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	12.3
105	562588.47	4804925.35	301.81	1	DEN	500	82.0	-13.7	0.0	0.0	0.0	59.6	0.5	11.1	0.0	0.0	0.0	0.0	2.0	-4.8
107	562586.28	4804926.51	301.69	1	DEN	500	82.0	-1.4	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	2.0	7.2
109	562585.36	4804927.15	301.65	1	DEN	500	82.0	-4.0	0.0	0.0	0.0	58.6	0.5	7.8	0.0	0.0	0.0	0.0	2.0	9.2
110	562582.83	4804927.40	301.52	0	DEN	500	82.0	-0.1	0.0	0.0	0.0	58.7	0.5	12.4	0.0	0.0	0.0	0.0	0.0	10.5
112	562583.03	4804926.97	301.52	0	DEN	500	82.0	-15.3	0.0	0.0	0.0	58.7	0.5	12.0	0.0	0.0	0.0	0.0	0.0	-4.4
117	562583.57	4804927.71	301.56	0	DEN	500	82.0	-1.4	0.0	0.0	0.0	58.6	0.5	12.4	0.0	0.0	0.0	0.0	0.0	9.1
121	562592.89	4804930.57	302.25	0	DEN	500	82.0	-4.0	0.0	0.0	0.0	58.3	0.4	12.4	0.0	0.0	0.0	0.0	0.0	6.9
130	562591.71	4804936.27	302.12	0	DEN	500	82.0	-14.2	0.0	0.0	0.0	58.2	0.4	12.4	0.0	0.0	0.0	0.0	0.0	-3.2

Receiver
Name: bungalow to south
ID: POR3
X: 562693.50 m
Y: 4804802.25 m
Z: 307.57 m

Area Source, ISO 9613, Name: " ", ID: "DogRun4_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
2	562570.46	4804936.63	301.51	0	DEN	500	82.0	3.1	0.0	0.0	0.0	56.2	0.4	17.0	0.0	0.0	0.0	0.0	0.0	11.6
4	562570.85	4804937.85	301.52	0	DEN	500	82.0	2.2	0.0	0.0	0.0	56.2	0.4	17.0	0.0	0.0	0.0	0.0	0.0	10.7
5	562571.66	4804940.48	301.53	0	DEN	500	82.0	11.7	0.0	0.0	0.0	56.3	0.4	17.0	0.0	0.0	0.0	0.0	0.0	20.1
7	562573.71	4804947.28	301.58	0	DEN	500	82.0	18.7	0.0	0.0	0.0	56.5	0.4	17.0	0.0	0.0	0.0	0.0	0.0	26.9
9	562579.14	4804952.80	301.69	0	DEN	500	82.0	19.4	0.0	0.0	0.0	56.5	0.4	17.1	0.0	0.0	0.0	0.0	0.0	27.5
13	562581.26	4804943.86	301.67	0	DEN	500	82.0	19.4	0.0	0.0	0.0	56.1	0.3	17.0	0.0	0.0	0.0	0.0	0.0	28.0
15	562577.31	4804937.52	301.55	0	DEN	500	82.0	11.0	0.0	0.0	0.0	56.0	0.3	17.0	0.0	0.0	0.0	0.0	0.0	19.7
17	562574.96	4804936.71	301.53	0	DEN	500	82.0	12.7	0.0	0.0	0.0	56.1	0.3	15.0	0.0	0.0	0.0	0.0	0.0	23.4
23	562572.60	4804935.91	301.52	0	DEN	500	82.0	3.4	0.0	0.0	0.0	56.1	0.3	17.0	0.0	0.0	0.0	0.0	0.0	12.0
26	562571.45	4804935.54	301.51	0	DEN	500	82.0	4.3	0.0	0.0	0.0	56.1	0.3	17.0	0.0	0.0	0.0	0.0	0.0	12.9
29	562578.48	4804941.26	301.62	1	DEN	500	82.0	11.9	0.0	0.0	0.0	56.6	0.4	16.9	0.0	0.0	0.0	0.0	2.0	18.1
32	562580.09	4804942.48	301.64	1	DEN	500	82.0	12.8	0.0	0.0	0.0	56.7	0.4	16.9	0.0	0.0	0.0	0.0	2.0	18.9
36	562581.41	4804943.50	301.66	1	DEN	500	82.0	11.3	0.0	0.0	0.0	56.7	0.4	16.9	0.0	0.0	0.0	0.0	2.0	17.3
38	562582.10	4804938.55	301.57	1	DEN	500	82.0	6.0	0.0	0.0	0.0	56.5	0.4	16.9	0.0	0.0	0.0	0.0	2.0	12.3
41	562587.11	4804936.31	301.78	0	DEN	500	82.0	17.9	0.0	0.0	0.0	55.7	0.3	16.9	0.0	0.0	0.0	0.0	0.0	27.1
45	562584.48	4804939.37	301.67	0	DEN	500	82.0	18.0	0.0	0.0	0.0	55.9	0.3	16.9	0.0	0.0	0.0	0.0	0.0	26.9
50	562589.59	4804938.31	301.98	0	DEN	500	82.0	17.6	0.0	0.0	0.0	55.7	0.3	16.9	0.0	0.0	0.0	0.0	0.0	26.7
53	562569.70	4804937.46	301.50	0	DEN	500	82.0	2.0	0.0	0.0	0.0	56.3	0.4	17.0	0.0	0.0	0.0	0.0	0.0	10.4
55	562569.50	4804939.34	301.50	0	DEN	500	82.0	1.2	0.0	0.0	0.0	56.3	0.4	17.0	0.0	0.0	0.0	0.0	0.0	9.5
57	562569.06	4804943.46	301.50	0	DEN	500	82.0	10.8	0.0	0.0	0.0	56.5	0.4	17.0	0.0	0.0	0.0	0.0	0.0	19.0
59	562568.39	4804949.52	301.50	0	DEN	500	82.0	13.3	0.0	0.0	0.0	56.7	0.4	17.1	0.0	0.0	0.0	0.0	0.0	21.2
61	562568.97	4804953.73	301.50	0	DEN	500	82.0	12.4	0.0	0.0	0.0	56.9	0.4	17.1	0.0	0.0	0.0	0.0	0.0	20.1
65	562581.38	4804957.38	301.63	0	DEN	500	82.0	14.8	0.0	0.0	0.0	56.6	0.4	17.1	0.0	0.0	0.0	0.0	0.0	22.8
66	562591.65	4804928.33	302.09	0	DEN	500	82.0	12.9	0.0	0.0	0.0	55.2	0.3	16.8	0.0	0.0	0.0	0.0	0.0	22.6
69	562570.71	4804932.27	301.50	0	DEN	500	82.0	-7.0	0.0	0.0	0.0	56.1	0.3	16.9	0.0	0.0	0.0	0.0	0.0	1.8
70	562571.03	4804933.20	301.50	0	DEN	500	82.0	4.4	0.0	0.0	0.0	56.1	0.3	16.9	0.0	0.0	0.0	0.0	0.0	13.2
72	562572.52	4804933.72	301.50	0	DEN	500	82.0	7.9	0.0	0.0	0.0	56.0	0.3	16.9	0.0	0.0	0.0	0.0	0.0	16.6
75	562574.55	4804933.71	301.50	0	DEN	500	82.0	1.5	0.0	0.0	0.0	56.0	0.3	16.9	0.0	0.0	0.0	0.0	0.0	10.2
78	562576.18	4804933.71	301.50	0	DEN	500	82.0	3.2	0.0	0.0	0.0	55.9	0.3	15.0	0.0	0.0	0.0	0.0	0.0	14.0
81	562577.95	4804933.69	301.50	1	DEN	500	82.0	-10.2	0.0	0.0	0.0	56.2	0.4	16.8	0.0	0.0	0.0	0.0	2.0	-3.6
84	562577.03	4804933.65	301.50	1	DEN	500	82.0	-2.3	0.0	0.0	0.0	56.2	0.4	16.8	0.0	0.0	0.0	0.0	2.0	4.3
86	562575.91	4804933.60	301.50	1	DEN	500	82.0	0.4	0.0	0.0	0.0	56.2	0.4	16.8	0.0	0.0	0.0	0.0	2.0	7.0
90	562582.43	4804931.22	301.54	0	DEN	500	82.0	5.7	0.0	0.0	0.0	55.6	0.3	16.9	0.0	0.0	0.0	0.0	0.0	14.9
92	562583.11	4804929.67	301.56	0	DEN	500	82.0	-5.8	0.0	0.0	0.0	55.5	0.3	16.9	0.0	0.0	0.0	0.0	0.0	3.5
94	562582.73	4804929.11	301.54	0	DEN	500	82.0	6.7	0.0	0.0	0.0	55.5	0.3	14.8	0.0	0.0	0.0	0.0	0.0	18.1
98	562581.35	4804933.23	301.51	1	DEN	500	82.0	-3.1	0.0	0.0	0.0	56.3	0.4	16.8	0.0	0.0	0.0	0.0	2.0	3.5
100	562579.78	4804934.22	301.50	0	DEN	500	82.0	-3.0	0.0	0.0	0.0	55.8	0.3	16.9	0.0	0.0	0.0	0.0	0.0	6.0
102	562578.57	4804934.14	301.50	0	DEN	500	82.0	-1.2	0.0	0.0	0.0	55.9	0.3	15.4	0.0	0.0	0.0	0.0	0.0	9.3
104	562576.37	4804934.31	301.50	0	DEN	500	82.0	3.2	0.0	0.0	0.0	55.9	0.3	14.6	0.0	0.0	0.0	0.0	0.0	14.4
116	562573.77	4804934.61	301.50	0	DEN	500	82.0	-4.3	0.0	0.0	0.0	56.0	0.3	17.0	0.0	0.0	0.0	0.0	0.0	4.4
119	562572.12	4804934.81	301.50	0	DEN	500	82.0	-3.3	0.0	0.0	0.0	56.1	0.3	16.9	0.0	0.0	0.0	0.0	0.0	5.4
122	562580.59	4804934.25	301.50	1	DEN	500	82.0	-12.1	0.0	0.0	0.0	56.3	0.4	16.8	0.0	0.0	0.0	0.0	2.0	-5.5
124	562579.30	4804934.14	301.50	1	DEN	500	82.0	-0.9	0.0	0.0	0.0	56.3	0.4	16.8	0.0	0.0	0.0	0.0	2.0	5.7
126	562578.56	4804934.08	301.50	1	DEN	500	82.0	-17.9	0.0	0.0	0.0	56.3	0.4	16.8	0.0	0.0	0.0	0.0	2.0	-11.3
128	562578.21	4804934.12	301.50	1	DEN	500	82.0	-3.0	0.0	0.0	0.0	56.3	0.4	16.8	0.0	0.0	0.0	0.0	2.0	3.6
129	562577.33	4804934.22	301.50	1	DEN	500	82.0	-1.3	0.0	0.0	0.0	56.3	0.4	16.8	0.0	0.0	0.0	0.0	2.0	5.3
131	562576.21	4804934.35	301.50	1	DEN	500	82.0	-2.1	0.0	0.0	0.0	56.2	0.4	16.8	0.0	0.0	0.0	0.0	2.0	4.6
133	562586.87	4804925.46	301.73	0	DEN	500	82.0	4.8	0.0	0.0	0.0	55.2	0.3	16.8	0.0	0.0	0.0	0.0	0.0	14.5
136	562590.21	4804943.54	302.01	0	DEN	500	82.0	3.4	0.0	0.0	0.0	55.9	0.3	16.9	0.0	0.0	0.0	0.0	0.0	12.3
139	562586.74	4804958.55	301.74	0	DEN	500	82.0	3.3	0.0	0.0	0.0	56.5	0.4	17.1	0.0	0.0	0.0	0.0	0.0	11.4
141	562585.35	4804926.91	301.64	0	DEN	500	82.0	-7.6	0.0	0.0	0.0	55.4	0.3	16.8	0.0	0.0	0.0	0.0	0.0	2.0
143	562585.37	4804927.05	301.65	0	DEN	500	82.0	-11.0	0.0	0.0	0.0	55.4	0.3	16.8	0.0	0.0	0.0	0.0	0.0	-1.4

Area Source, ISO 9613, Name: " ", ID: "DogRun4_area"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	I/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
145	562586.56	4804926.42	301.71	0	DEN	500	82.0	0.8	0.0	0.0	0.0	55.3	0.3	16.8	0.0	0.0	0.0	0.0	0.0	10.4
148	562582.83	4804927.39	301.52	0	DEN	500	82.0	0.1	0.0	0.0	0.0	55.5	0.3	14.5	0.0	0.0	3.9	0.0	0.0	7.9
150	562584.77	4804927.73	301.63	0	DEN	500	82.0	-30.0	0.0	0.0	0.0	55.4	0.3	16.8	0.0	0.0	0.0	0.0	0.0	-20.5
151	562584.03	4804927.66	301.58	0	DEN	500	82.0	-4.4	0.0	0.0	0.0	55.4	0.3	14.8	0.0	0.0	3.8	0.0	0.0	3.2
152	562583.10	4804927.77	301.54	0	DEN	500	82.0	-4.5	0.0	0.0	0.0	55.5	0.3	14.5	0.0	0.0	3.2	0.0	0.0	4.1
155	562592.89	4804930.57	302.25	0	DEN	500	82.0	-4.0	0.0	0.0	0.0	55.3	0.3	16.8	0.0	0.0	0.0	0.0	0.0	5.7
157	562591.71	4804936.27	302.12	0	DEN	500	82.0	-14.2	0.0	0.0	0.0	55.5	0.3	16.8	0.0	0.0	0.0	0.0	0.0	-4.9

Comment Summary – Zoning By-law Amendment Application – 6706 Gore Rd.

3rd Submission

Consultant	Comments
GM BluePlan - Engineers	See letter attached
County of Wellington Planning	Comments pending
Hydrogeologist	We understand that additional details on the septic system and soak away pits will be provided through detailed site plan control submission. We have no further comments related to the ZBA application.
Township of Puslinch Building Department – Andrew Hartholt	I have no further comments besides the outstanding permits.
Township of Puslinch By-law – Jacob Normore	By-law recognizes that Mr. Skerratt has acknowledged all comments provided from By-law during circulation of the previous submission. **By-law has no further comments or concerns at this time.** To serve as a reminder to the Property Owner / Applicant, I have provided the same list of comments/requirements for a Kennel under the Township of Puslinch By-law 24-2021: • If the applicant is successful in a Zoning By-law Amendment, a New Kennel Licence Application is required to be submitted **immediately** after the passing of the Zoning By-law Amendment. An

	application can be submitted at the following link: https://puslinch.ca/doing-business/kennel-licences/. • Once a New Kennel Licence Application is submitted, the Township will process the application and schedule an inspection in accordance with the provisions set out in the Township of Puslinch Kennel Licensing By-law 24-2021. The Kennel **must** pass the inspection and be in compliance with **every** section of the Kennel Licensing By-law, in order to continue operation. I have attached a copy of the Township of Puslinch Kennel Licensing By-law 024-2021 for reference. • A Kennel shall have a maximum of twenty-five (25) Dogs at any one time. Puppies under 4 months old shall not be included in this number. • The Floor Plan included in the Zoning By-law Amendment would have to be revised to meet the requirements for a Floor Plan set out in Section 8.1.7. of the Kennel Licensing By-law. The Floor Plan must be drawn to scale (min. 1:64 (3/16" = 1'-0")) of any building, structure, dog run, or facility being used for the housing of Dogs. The floor plan must graphically indicate the area being used for a Kennel including pens, dog runs, walkways, exits, fire extinguishers, etc. The plans shall be fully dimensioned and labelled. • Every Kennel shall be of sufficient space to allow the Dogs kept therein to stand erect and be comfortable and shall have no less than 2.3 square meters of floor area per dog. For bitches with nursing puppies, the required space in each Kennel is increased by 10% (0.23) to a total of 2.53 square meters of floor area per nursing puppy. Please see

	the below calculations based on 2.3 square meters per dog. ○ Barn No.1 – Each Pen is permitted to keep a maximum of 1 dog, except for K7 which is permitted a maximum of 2 dogs. ○ Barn No.2 – Each Pen is permitted to keep a maximum of 2 dogs, except for K8 and K9 which is permitted a maximum of 1 dog. ○ Barn No. 3 – Each Pen l is permitted to keep a maximum of 2 dogs, except for K9 and K10 which is permitted a maximum of 1 dog. ○ Barn No.4 – Each Pen is permitted to keep a maximum of 4 dogs. ○ Shed No.2 – Each Pen is permitted to keep a maximum of 4 dogs, except K1 which is permitted a maximum of 5 dogs. ○ No dogs are permitted to be kept in sheds 1,3, and 4. ○ Please note that the By-law only permit a maximum of 25 dogs and the required 10% of nursing puppies is not calculated in these calculations. Please provide your own calculations for the pens with nursing puppies. • Floors in all pens, alleyways and outdoor runs shall be sloped to allow for sufficient drainage. • The Names and addresses of the purchasers of individual dogs must be recorded. There is no exception to this rule. • All dogs shall be confined indoors during the hours of 8:00 p.m. to 7:00 a.m.
Noise Consultant	See letter attached

TOWNSHIP OF
PUSLINCH

November 29, 2023
Our File: 121006-042

Township of Puslinch
7404 Wellington Road 34
Guelph, ON N0B 2J0

Attention: Ms. Lynne Banks

Re: Zoning By-law Amendment
Proposed Dog Kennel and Related Operation
6706 Gore Road, Township of Puslinch
Third Submission

Dear Ms. Banks,

Following our review of Zoning By-law Amendment 3rd submission documents received on November 14, 2023, we are providing comments for a proposal to convert an existing equestrian facility to a dog kennel facility, on the subject lands at 6706 Gore Road in the Township of Puslinch.

The following documents and drawings were received and reviewed:

- Zoning By-law Amendment 3rd Submission Cover Letter, prepared by Innovative Planning Solutions (IPS), dated November 13, 2023.
- Comment Response Matrix, prepared by IPS, dated November 13, 2023.
- Site Plan, prepared by J.D. Barnes Ltd., dated July 20, 2023 and revised November 10, 2023.

We defer the following documents and drawings to the Township noise consultant.

- Environmental Noise Study, prepared by SLR Consulting Ltd., dated November 8, 2023.

Based on our review of the site and provided documents, it appears that existing buildings, driveways, and parking areas are to be used for proposed dog kennel activities. It is assumed that existing water and wastewater servicing will be used, and that there will not be significant changes to site grading, drainage or the percent imperviousness of the property.

Therefore, as stated in GMBP's pre-consultation letter dated January 6, 2022; zoning by-law amendment letter dated March 27, 2023; and second submission letter dated September 15, 2023, we will review the Site Plan for completeness as it pertains to the proposed activity.

Based on our review, we provide the following updated comments. At this time, we have no concern with the Zoning By-law Amendment application.

Item No.	Matter / Requirement	Drawing / Document Reference	Date Identified	Date Cleared	Comment
	None				

The following items have been identified as completed:

Item No.	Matter / Requirement	Drawing / Document Reference	Date Identified	Date Cleared	Comment
1.	Site Plan Qualified Professional	Site Plan	March 22, 2023	September 14, 2023	GMBP Comment March 22, 2023: Please confirm the Site Plan author/drafter. As per Township of Puslinch Site Plan and Drawing Requirements, the Site Plan must show the author and it must be prepared by a qualified professional. Response: Please see revised drawings from J.D. Barnes dated July 2023. GMBP Comment September 14, 2023: No further comment.
2.	Site Plan	Site Plan	March 22, 2023.	November 29, 2023.	GMBP Comment March 22, 2023: Please see the complete Site Plan and Drawing Requirements for a list of items required for a Site Plan: Site Plan and Drawing Requirements (puslinch.ca) (https://puslinch.ca/wp-content/uploads/2020/09/Site-Plan-and-Drawing_Guidelines.pdf) Please confirm the general information such as the owner, consultant, legal description, property lines referenced to a current plan of survey, north arrow, revision dates (if applicable) on the Site Plan. Please also confirm garbage disposal areas, lighting information, accessibility routes, and signage for the fire access route on the Site Plan. GMBP Comment September 14, 2023: Please confirm accessible route on the Site Plan, including accessible parking with maximum slopes per County of Wellington Facility Accessibility Design Manual. Please also provide parking calculation to justify number of parking spaces and accessible parking spaces.

Item No.	Matter / Requirement	Drawing / Document Reference	Date Identified	Date Cleared	Comment
					Response: The majority of this comment can be addressed at site plan stage. Zoning matrix provided by J.D. Barnes (sheet 1) – November 10/23. GMBP Comment November 28, 2023: Acknowledged. Please ensure that the accessible route is provided at the site plan stage, including accessible parking with maximum slopes per County of Wellington Facility Accessibility Design Manual.

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

Yours truly,

GM BLUEPLAN ENGINEERING
Per:

[redacted]

Parth Lad, E.I.T.
Technical Specialist

[redacted]

Steve Conway, C.E.T., rcsi, PMP
Branch Manager, Senior Project Manager

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fax ● 905 764 6813

December 1, 2023

Township of Puslinch
7404 Wellington Road 34
Puslinch, Ontario
N0B 2J0

Attention: Lynne Banks **VIA E-MAIL**
lbanks@puslinch.ca

Re: Peer Review of Environmental Noise Study and Peer Review Responses
Proposed Dog Breeding Kennel
6706 Gore Road
Puslinch, Ontario
VCL File: 123-0140

Dear Ms. Banks:

We have completed our review of these documents:

- "Environmental *Noise Study, Dog Breeding Kennel, 6706 Gore Road, Puslinch, Ontario*", dated November 8, 2023, prepared by SLR Consulting (Canada) Ltd. (SLR); and
- The responses to the acoustically related comments (i.e., 21 to 27) in the Comment Response Matrix, dated November 13, 2023.

Our comments are outlined below.

22. The response provided addresses the concern.

23. The updated report is still only recommending that exterior windows in climate controlled spaces remain closed. As per the SLR response, all indoor spaces where dogs could be located should have exterior doors and windows closed at all times for noise control purposes.

24. The updated report is still only recommending that the a/c selections comply with MECP Publication NPC-216. As per the SLR response, the recommendation should be changed to each a/c unit should have an ARI sound rating not exceeding 7.6 bels.

25. The response to c) indicates there is a Figure B1 attached to the response letter. The indicated figure was not provided as part of the response matrix. Thus, we cannot comment on the information provided in this figure.

26. The response provided does not address the question/concern. As an example of the issue, in the table provided in the response matrix, Dog Run 2 is about equidistant from POR1 and POR 3 and both PORs are predicted to receive the same 40 dBA sound level

yet POR 1 appears to be fully screened from Dog Run 2 by Shed No. 2 and the Barns and POR 3 has full exposure to Dog Run 2. The report states that the acoustical screening from the existing buildings on the site has been included. Why is the predicted sound level at POR 1 from Dog Run 2 not significantly lower than the predicted sound level at POR 3?

27. The response provided addresses the concern.

If there are any questions, please do not hesitate to call.

Yours truly,

VALCOUSTICS CANADA LTD.

Per: [redacted]

John Emeljanow, P.Eng.

JE\
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Justine Brotherston

From: Asavari Jadhav <asavarij@wellington.ca>
Sent: Friday, December 08, 2023 2:06 PM
To: Lynne Banks
Cc: Meagan Ferris
Subject: 6706 Gore Rd 3rd submission - Comments

Hi Lynne,

For the 6706 Gore Rd 3rd submission for ZBA, we have the following comments:

1. We acknowledge that the intent of using the term kennel within the draft zoning by-law is to allow for flexibility of use. It is also noted that the draft by-law should address other zoning compliance issues, such as the kennel's setback from the existing residential dwelling on neighboring property.
2. It is acknowledged that the building heights have been provided and are in compliance with Section 4.4.2.f table 4.1 of the zoning by-law.
3. The comments regarding the outdoor storage, signage and grooming services have been acknowledged.
4. The applicant has confirmed that there will no other business on the subject property.
5. Within the comment response (comment no 10) it is noted that proposed lighting has been identified on plans. However, the lighting plans does not appear to have been submitted. Please re-submit the plans and ensure compliance with Section 4.15 of the zoning by-law.

Thank you,

Asavari Jadhav
Planner
County of Wellington
Planning and Development Department
74 Woolwich Street,
Guelph ON, N1H 3T9
T 519.837.2600 x 2066
E asavarij@wellington.ca