SONAIR
ENVIRONMENTAL

ACOUSTICAL FEASIBILITY STUDY

FOR

120 FAIRVIEW ROAD WEST, MISSISSAUGA

PREPARED FOR:

Land and Building Experts
6-570 Alden Road
Markham, Ontario
L3R 8N5

PREPARED BY:

Ben Sprang
Project Technologist
bsprang@SONAIRenviro.com

Thomas Li, MEPP, P.Eng
Principal Consultant
tli@SONAIRenviro.com

SE #: 1227.001

November 21, 2023

(Page left black intentionally)

TABLE OF CONTENTS

TABLES

APPENDICIES

1.0 INTRODUCTION

Land and Building Experts retained SONAIR Environmental Inc. (SONAIR) to prepare an Acoustical Feasibility Study in support of a proposed residential development located at 120 Fairview Road West in Mississauga. The purpose of this study is to evaluate the noise impact from vehicular traffic along Confederation Parkway, Central Parkway West, and Hurontario Street, as well as any environmental noise impact from existing land uses surrounding the proposed development.

The City of Mississauga does not have ultimate traffic data for Fairview Road West and is not classified as a major collector or arterial roadway. Minimal traffic is expected given that the proposed development is located in a residential area with a speed limit of 40 km/hr. Therefore, Fairview Road West have been deemed insignificant from a noise perspective.

No stationary noise sources of concern surrounding the development inclusive of industrial, commercial, and municipal facilities exist in close proximity to the proposed development. Therefore, stationary noise impact from existing land uses surrounding the development is not considered a concern and will not be further discussed.

In accordance with the Federation of Canadian Municipalities and the Railway Association of Canada (FCM-RAC), given that the proposed development is over 300m away from the existing GO/CP rail line to the South, no adverse noise impact on the proposed development is expected from the railway, and will not be included as part of this noise assessment.

This study was conducted in accordance with applicable environmental noise guidelines from the Ministry of the Environment, Conservation and Parks (MECP) Guidelines:

- NPC-300: Environmental Noise Guideline: *Stationary and Transportation Sources*

1.1 Methodology

Sound level predictions from vehicular traffic were determined based on the MECP ORNAMENT manual where the STAMSON noise modelling software, in conjunction with the traffic data obtained, was used to calculate the noise levels at identified points of reception. Predicted worst-case sound levels were compared against MECP noise guideline values to determine if any mitigations are required for the proposed development.

1.2 Subject Site

The developer is proposing to construct a residential development on a parcel of land originally identified by its civic address as 120 Fairview Road West in Mississauga. The proposed development is surrounded by Confederation Parkway, Central Parkway West, and Hurontario Street, and located in the middle of a predominantly existing residential area. The proposed development consists of nine (9), two-storey single detached dwellings. This report characterizes the noise impact from vehicular traffic surrounding the development. The assessment was based on publicly available information and traffic data obtained from the City of Mississauga. The subject site is shown in Appendix A.

The subject site is located to the East, South, and West of Confederation Parkway, Central Parkway West, and Hurontario Street, respectively. Confederation Parkway and Hurontario Street runs North and South, while Central Parkway West runs East and West. All roadways are 4-lane roads with a speed limit of 50 km/hr. A Light Rail Transit (LRT) is proposed along Hurontario Street that separates the Northbound and Southbound lanes. Based on the Environmental Project Report, dated June 2014, prepared for the Hurontario-Main LRT Project, a speed limit of 80 km/hr is proposed for the LRT.

The surrounding land can be characterized as:

Table 1 – Summary of Surrounding Land Use

Direction	Land Use
North	Residential
East	Residential
South	Residential
West	Residential

2.0 TRANSPORTATION NOISE IMPACT ASSESSMENT

2.1 Location of Assessed Noise Impact

The locations of the Plane of Windows (POWs) and Outdoor Living Areas (OLAs) were determined in accordance with NPC-300. These locations can be evaluated in Appendix A. The assessed locations were deemed to be the most impacted façade/units and outdoor areas based on distance to the roadway, location of existing barriers, and line of sight to the roadways.

2.2 Road Noise Criteria

Road noise limits for new developments have been established by the Ministry of Environment, Conservation and Parks (MECP) in NPC-300. The values for daytime/evening, and nighttime hours are provided in Table 2 below:

Table 2 – Road Noise Sound Level Limits

Time Period	**L_{eq} (dBA)**
07:00 to 23:00	55 (Measured at OLA)
07:00 to 23:00	55 (Measured at POW)
23:00 to 07:00	50 (Measured at POW)

If predicted noise levels at the OLA and/or at the POW are equal to or less than the values in Table 2, no noise control measures are required. If predicted noise levels exceed Table 2 values, then the following clauses or actions are required:

Table 3 – Required Noise Clauses or Actions

Time Period	**Location**	**Sound Pressure Level (dBA)**	**Requirements**
07:00 to 23:00 (Daytime)	OLA	≤ 55	No Requirements
		$55 < L_{eq} \leq 60$	Barrier or Warning Clause Type “A”
		> 60	Barrier & Warning Clause Type “B”
07:00 to 23:00 (Daytime)	POW	≤ 55	No Requirements
		$55 < L_{eq} \leq 65$	Provision for A/C & Warning Clause Type “C”

Time Period	Location	Sound Pressure Level (dBA)	Requirements
		> 65	Central A/C, Building Component Specifications Requirements & Warning Clause Type "D"
23:00 to 07:00 (Nighttime)	POW	≤ 50	No Requirements
		$50 < L_{eq} \leq 60$	Provision for A/C & Warning Clause Type "C"
		> 60	Central A/C, Building Component Specifications Requirements & Warning Clause Type "D"

Where daytime (07:00 to 23:00) sound pressure levels exceed 65 dBA, and/or nighttime (23:00 to 07:00) sound pressure levels exceed 60 dBA, the residential dwellings must be designed such that the indoor sound as measured at the bedroom or living/dining room meets the following criteria:

Table 4 – Indoor Sound Pressure Level Limits

Indoor Location & Time Period	Sound Pressure Level, L_{eq} (dBA)
Living/Dining	45
Bedroom (07:00 to 23:00)	45
Bedroom (23:00 to 07:00)	40

2.3 Vehicle Traffic Volumes

Road traffic data was obtained from the City of Mississauga, while data for the proposed LRT was obtained from the Environmental Project Report (EPR), dated June 2014 prepared for the Hurontario-Main LRT Project. SONAIR was not able to locate the Noise and Vibration Impact Assessment Report under Appendix B.6 of the EPR, which may contain data for the LRT; however, other studies (prepared by consultant involved in the EPR) conducted for nearby developments contained the daytime and nighttime LRT volume, and are used as part of this assessment. The City of Mississauga provided Ultimate Annual Average Daily Traffic (AADT)

data for all three roadways. The vehicle distribution used for Confederation Parkway was 95% cars, 2.75% medium trucks, and 2.25% heavy trucks. For Hurontario Street, 90% cars, 5.5% medium trucks, and 4.5% heavy trucks were used, while 97% cars, 7.15% medium trucks, and 5.85% heavy trucks were used for Central Parkway West. A daytime/nighttime split of traffic was provided as 90%/10% for all roadways.

Table 5 – AADT Road Traffic Volumes

Year	Roads	Total
Ultimate	Confederation Parkway	31,600
Ultimate	Hurontario Street	53,000
Ultimate	Central Parkway West	21,100

Table 6 – Vehicle Traffic Volume Breakdown

Roads/LRT	Time Period	Total	Cars (Light)	Trucks (Medium)	Trucks (Heavy)
Confederation Parkway	Daytime	28,440	27,018	782	640
	Nighttime	3,160	3,002	87	71
Hurontario Street	Daytime	47,700	42,930	2,624	2,147
	Nighttime	5,300	4,770	292	239
Central Parkway W	Daytime	18,990	16,521	1,358	1,111
	Nighttime	2,110	1,836	151	123
Proposed LRT	Daytime	560	-	-	-
	Nighttime	88	-	-	-

2.4 Road/LRT Traffic Noise

Predicted sound power levels for the most impacted unit/facade in the development are:

Table 7 – Traffic Noise Model Details

Receiver	OLA/ POW	Barrier	Receptor Elevation (m)	Noise at Receiver Day (dBA)	Noise at Receiver Night (dBA)
R1	POW	-	4.50	52.0	45.5
R2	POW	-	4.50	49.1	42.5
R3	POW	-	4.50	48.4	41.8
R4	POW	-	4.50	49.4	43.0
R5	POW	-	4.50	49.5	43.1
R6	POW	-	4.50	51.8	45.4
R7	POW	-	4.50	52.1	45.7
R8	POW	-	4.50	52.1	45.6
R9	OLA	-	1.5	52.2	n/a
R10	OLA	-	1.5	52.4	n/a

3.0 SUMMARY OF RESULTS

3.1 Plane of Window (POW)

3.1.1 North Façades – R1 & R8

The predicted daytime noise levels at the POW are below 55 dBA, and below 50 dBA during nighttime. Therefore, no further noise attenuation or warning clauses are required.

3.1.2 West Façades – R2 & R3

The predicted daytime noise levels at the POW are below 55 dBA, and below 50 dBA during nighttime. Therefore, no further noise attenuation or warning clauses are required.

3.1.3 South Façades – R4 & R5

The predicted daytime noise levels at the POW are below 55 dBA, and below 50 dBA during nighttime. Therefore, no further noise attenuation or warning clauses are required.

3.1.4 East Façades – R6 & R7

The predicted daytime noise levels at the POW are below 55 dBA, and below 50 dBA during nighttime. Therefore, no further noise attenuation or warning clauses are required.

3.2 **Outdoor Living Area (OLA)**

3.2.1 Worst-Case OLA – R9 & R10

The predicted daytime noise levels at the identified worst-case OLA are below 55 dBA. Therefore, no further noise attenuation or warning clauses are required.

4.0 EXTERIOR AIR CONDITIONING UNITS

Proposed air conditioning units on the exterior of the building may potentially create significant noise impact and should be located and installed in an area away from noise sensitive spaces.

It is also recommended that each proposed air conditioning unit comply with noise criteria and maximum sound rating of 7.6 bels for residential exterior condenser units, in accordance with the MECP Publication NPC-216, *"Residential Air Conditioning Devices"*, thus minimizing the noise impacts of both, on and in the vicinity of the subject property. Equipment specifications and sound ratings should be verified once details become available for the equipment to ensure it complies with the requirements of NPC-216 before issuance of a building permit.

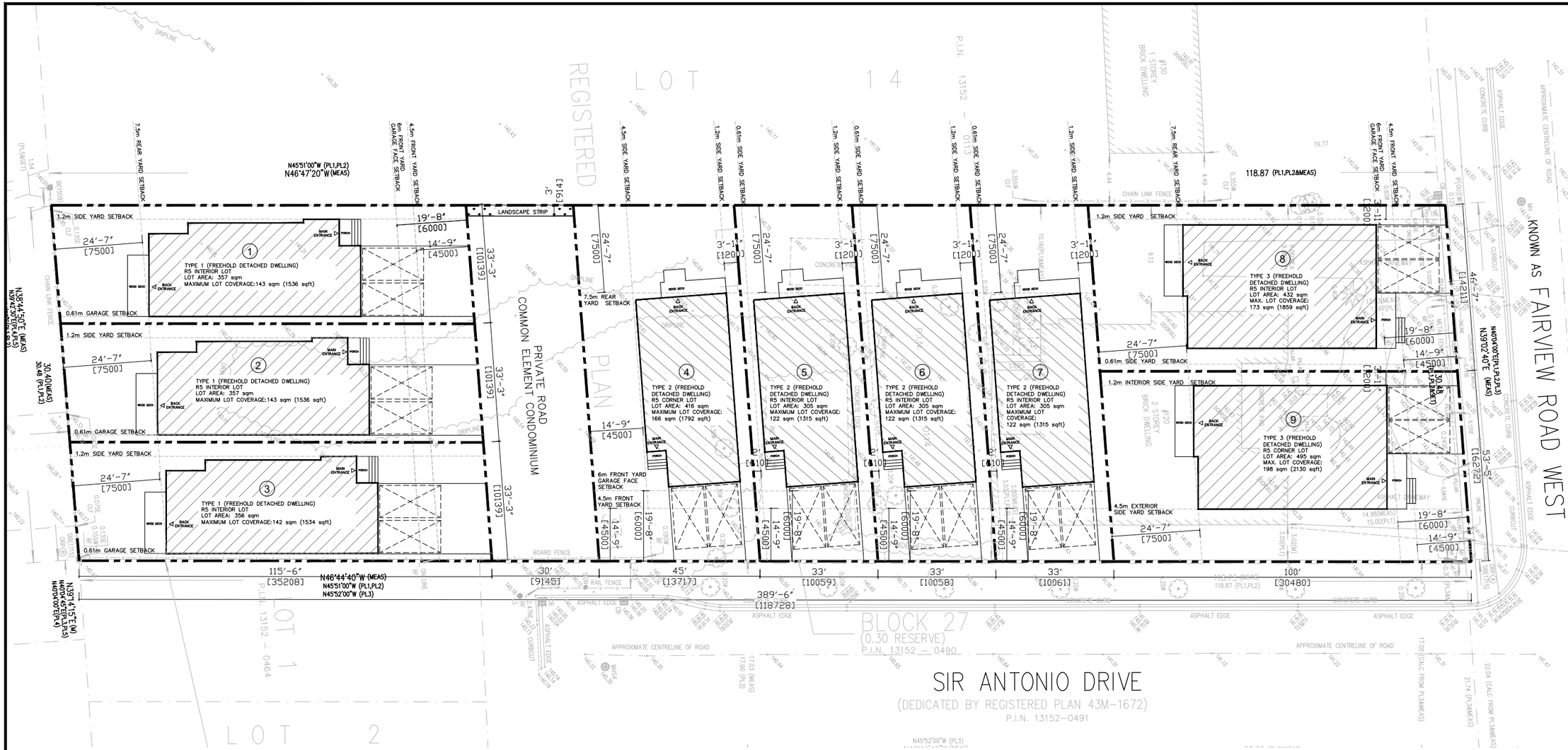
5.0 CONCLUSION AND RECOMMENDATIONS

SONAIR was retained to conduct an acoustical feasibility study to assess the noise impact from vehicular noise sources towards the proposed development at 120 Fairview Road West in Mississauga.

Noise levels from the roadways and the proposed LRT are predicted to be below applicable NPC-300 guideline limits during the daytime/evening and nighttime at all identified points of reception. Therefore, it is in our opinion that the proposed development is compatible with surrounding land uses in a noise perspective without any mitigation requirements.

APPENDIX A

SITE PLAN & DRAWINGS



1 A-100 SITE PLAN
SCALE : 36'-0"" = 1'-0"

ZONING MATRIX		
ADDRESS: 120 FAIRVIEW, MISSISSAUGA		
ZONING: R5 (INTERIOR LOT)		
	REQUIREMENTS	BY-LAW
LOT AREA	MIN. 295m^2	ZONING BY-LAW 0225-2007, 4.2.1, 3.1
LOT FRONTAGE	MIN. 9.75m	ZONING BY-LAW 0225-2007, 4.2.1, 4.1
LOT COVERAGE	MAX. 40%	ZONING BY-LAW 0225-2007, 4.2.1, 5.0
FRONT YARD	MIN. 4.5m / MIN. 6m (GARAGE FACE)	ZONING BY-LAW 0225-2007, 4.2.1, 6.0
INTERIOR SIDE YARD	MIN. 1.2m ON ONE SIDE & MIN. 0.61m ON THE OTHER SIDE	ZONING BY-LAW 0225-2007, 4.2.1, 8.1
EXTERIOR SIDE YARD	MIN. 4.5m / MIN. 6m (GARAGE FACE)	ZONING BY-LAW 0225-2007, 4.2.1, 7.0
REAR YARD	MIN. 7.5m	ZONING BY-LAW 0225-2007, 4.2.1, 9.1
DRIVEWAY WIDTH	WIDTH OF GARAGE DOOR OPENINGS PLUS 2m UP TO MAX. 6m	ZONING BY-LAW 0225-2007, 4.2.1, 12.3
LANDSCAPED SOFT AREA	MIN. 30% OF FRONT YARD AND/OR EXTERIOR SIDE YARD	ZONING BY-LAW 0225-2007, 4.2.1, 12.4

ZONING MATRIX		
ADDRESS: 120 FAIRVIEW, MISSISSAUGA		
ZONING: R5 (CORNER LOT)		
	REQUIREMENTS	BY-LAW
LOT AREA	MIN. 415m^2	ZONING BY-LAW 0225-2007, 4.2.1, 3.2
LOT FRONTAGE	MIN. 13.5m	ZONING BY-LAW 0225-2007, 4.2.1, 4.2
LOT COVERAGE	MAX. 40%	ZONING BY-LAW 0225-2007, 4.2.1, 5.0
FRONT YARD	MIN. 4.5m / MIN. 6m (GARAGE FACE)	ZONING BY-LAW 0225-2007, 4.2.1, 6.0
INTERIOR SIDE YARD	MIN. 1.2m	ZONING BY-LAW 0225-2007, 4.2.1, 8.2
EXTERIOR SIDE YARD	MIN. 4.5m / MIN. 6m (GARAGE FACE)	ZONING BY-LAW 0225-2007, 4.2.1, 7.0
REAR YARD	MIN. 7.5m	ZONING BY-LAW 0225-2007, 4.2.1, 9.2
DRIVEWAY WIDTH	WIDTH OF GARAGE DOOR OPENINGS PLUS 2m UP TO MAX. 6m	ZONING BY-LAW 0225-2007, 4.2.1, 12.3
LANDSCAPED SOFT AREA	MIN. 30% OF FRONT YARD AND/OR EXTERIOR SIDE YARD	ZONING BY-LAW 0225-2007, 4.2.1, 12.4

KEY PLAN (N.T.S.)

DO NOT SCALE DRAWINGS.

The contractor must verify and accept responsibility for all dimensions and conditions on site and must notify the Designer/Engineer of any variations from the supplied drawings and informations before proceeding with the work. Construction must conform to all applicable codes and requirements of authorities having jurisdiction.

NO.	ISSUED FOR	DATE
1	CLIENT REVIEW	03/06/2023

PREPARED BY:
LAND& BUILDING EXPERTS
570 Alden Rd., Unit 6, Markham, ON. L3R 8N5
(647) 340-8649 landbuildex@gmail.com

PROJECT INFO:

120 FAIRVIEW RD W, MISSISSAUGA, ON L5B 1K6

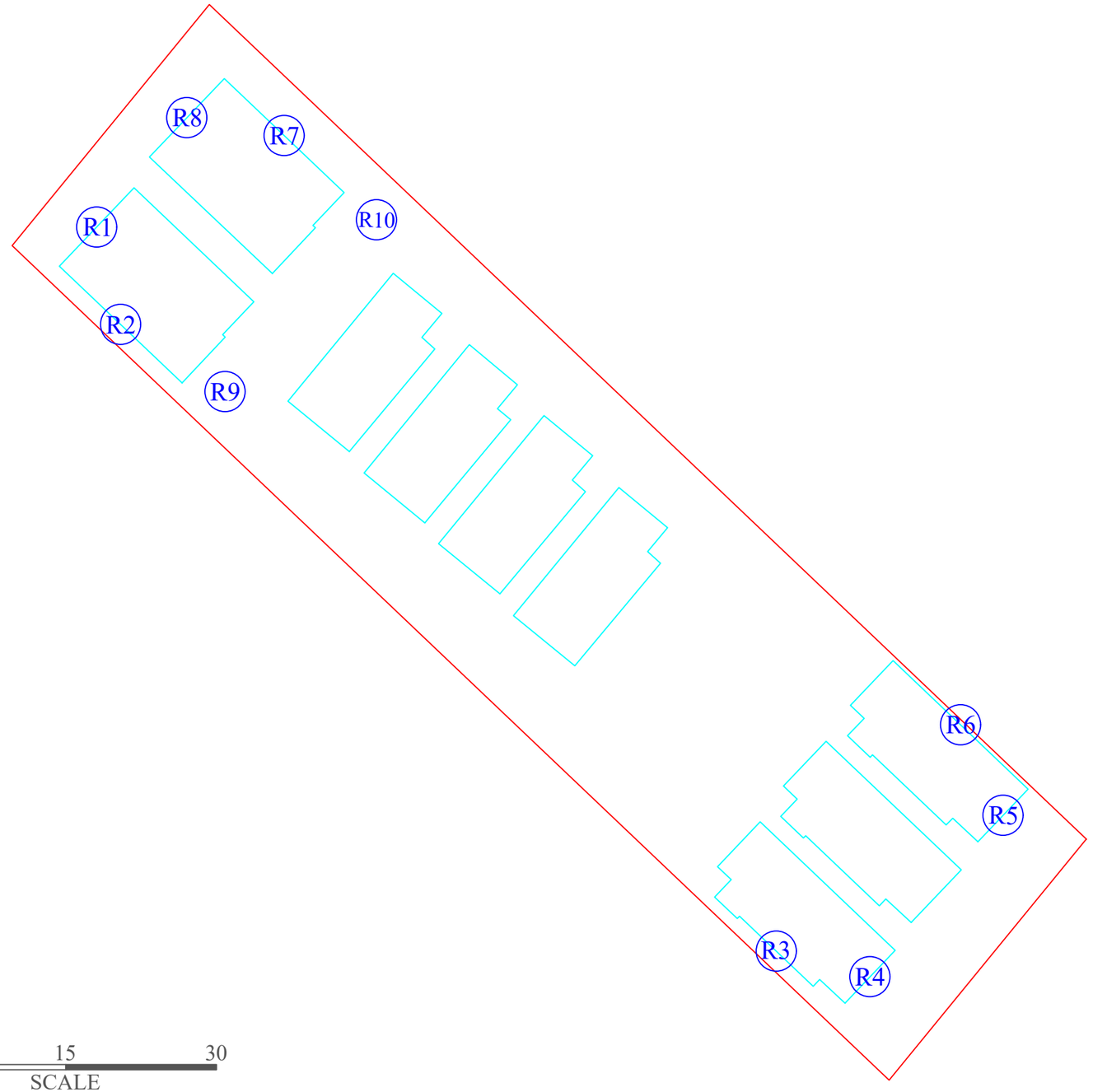
PROJECT NAME:

PROPOSED SUBDIVISION TO HAVE 9 LOTS

DRAWING TITLE:

SITE PLAN

SCALE AS INDICATED	DWG. NO. A-100
DRAWN BY:	
CHECKED BY:	
PROJECT NO.:	



SONAIR ENVIRONMENTAL

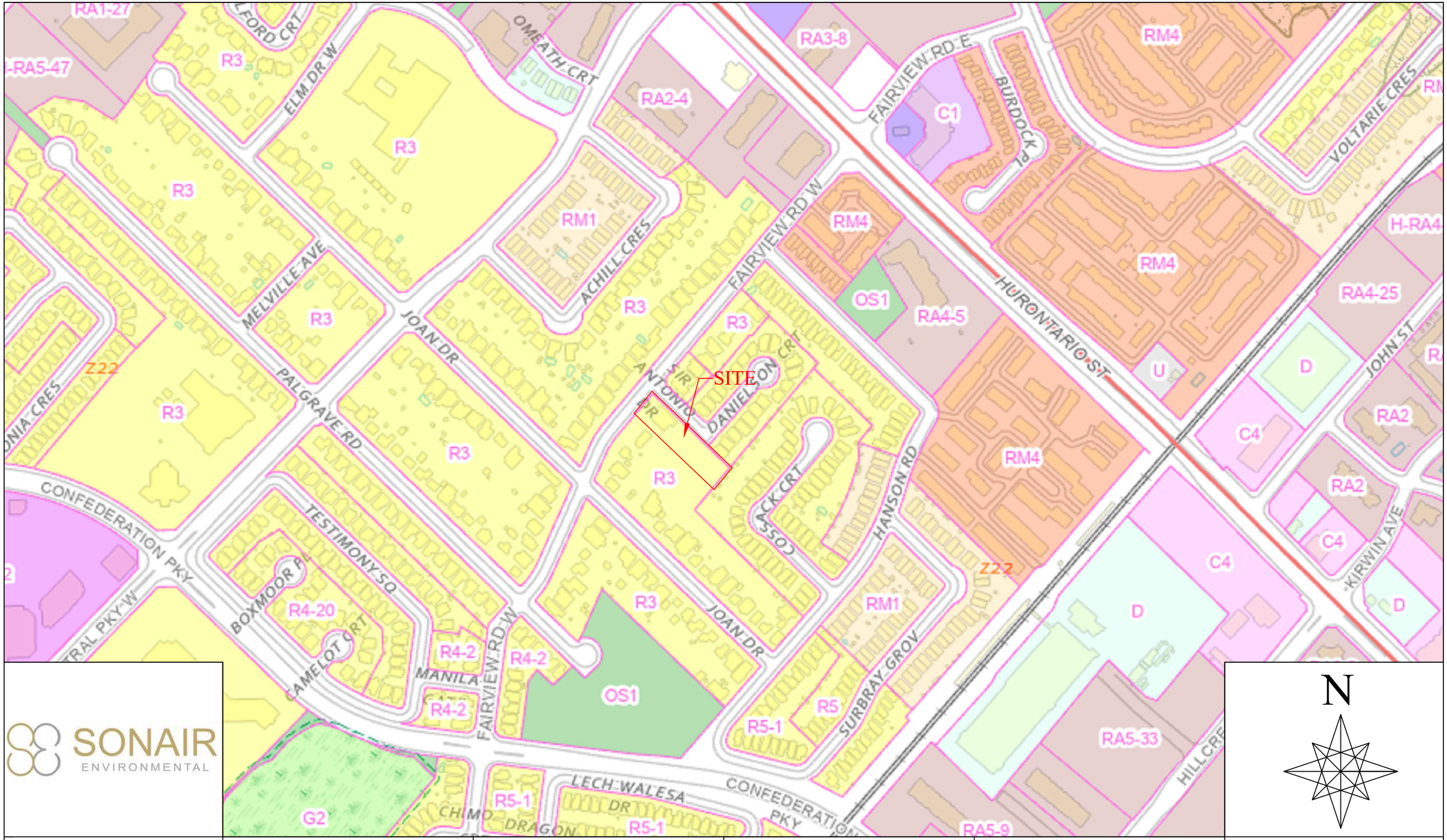
0 5 15 30
SCALE

N

ADDRESS: PO BOX 56702 PINE VALLEY PO VAUGHAN, ON L4L 8V3	DRAWN BY: BAS	CHECKED BY: TL	CLIENT'S NAME: Land and Building Experts	CLIENT'S ADDRESS: 6-570 Alden Road Markham, ON L3R 8N5	SCALE: As shown
SE#: 1227.001	DATE: 2023-11-21	DRAWING NAME: Point of Reception Identification	REVISION #: 0	NOTES: Site at 120 Fairview Road West, Mississauga	

SONAIR ENVIRONMENTAL

ADDRESS:	DRAWN BY:	CHECKED BY:	CLIENT'S NAME:	CLIENT'S ADDRESS:	SCALE:
PO BOX 56702 PINE VALLEY PO VAUGHAN, ON L4L 8V3	BAS	TL	Land and Building Experts	6-570 Alden Road Markham, ON L3R 8N5	As shown
SE#:	**DATE:**	**DRAWING NAME:**	**REVISION #:**	**NOTES:**	
1227.001	2023-08-02	Key Map	0	Site at 120 Fairview Road West, Mississauga	



SONAIR ENVIRONMENTAL

N

ADDRESS: PO BOX 56702 PINE VALLEY PO VAUGHAN, ON L4L 8V3	DRAWN BY: BAS	CHECKED BY: TL	CLIENT'S NAME: Land and Building Experts	CLIENT'S ADDRESS: 6-570 Alden Road Markham, ON L3R 8N5	SCALE: As shown
SE#: 1227.001	DATE: 2023-08-02	DRAWING NAME: Zoning Map	REVISION #: 0	NOTES: Site at 120 Fairview Road West, Mississauga	

APPENDIX B

SAMPLE STAMSON CALCULATION

STAMSON 5.0 NORMAL REPORT Date: 09-08-2023 06:03:34
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1P.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Level at R1_POW

Road data, segment # 1: Conf_N (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 2.75
Heavy Truck % of Total Volume : 2.25
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Conf_N (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 474.92 / 474.92 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Hurontario (day/night)

Car traffic volume : 42930/4770 veh/TimePeriod *
Medium truck volume : 2624/292 veh/TimePeriod *
Heavy truck volume : 2147/239 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 53000
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Hurontario (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 380.18 / 380.18 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Road data, segment # 3: Central (day/night)
-------------------------------------------
Car traffic volume  : 16521/1836  veh/TimePeriod  *
Medium truck volume :  1358/151   veh/TimePeriod  *
Heavy truck volume  :  1111/123   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  21100
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   7.15
    Heavy Truck  % of Total Volume     :   5.85
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Central (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 261.04 / 261.04 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Conf_N (day)
---------------------------------
```

Source height = 1.22 m

ROAD (0.00 + 41.00 + 0.00) = 41.00 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.58	69.01	0.00	-23.68	-4.33	0.00	0.00	0.00	41.00

Segment Leq : 41.00 dBA

↟

Results segment # 2: Hurontario (day)

Source height = 1.46 m

ROAD (0.00 + 47.03 + 0.00) = 47.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.57	73.40	0.00	-22.06	-4.32	0.00	0.00	0.00	47.03

Segment Leq : 47.03 dBA

↟

Results segment # 3: Central (day)

Source height = 1.56 m

ROAD (0.00 + 49.56 + 0.00) = 49.56 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.57	70.31	0.00	-19.46	-1.30	0.00	0.00	0.00	49.56

Segment Leq : 49.56 dBA

Total Leq All Segments: 51.86 dBA

↟

Results segment # 1: Conf_N (night)

Source height = 1.22 m

ROAD (0.00 + 34.47 + 0.00) = 34.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.58	62.48	0.00	-23.68	-4.33	0.00	0.00	0.00	34.47

```
--------------------------------------------------------------------------------

Segment Leq : 34.47 dBA

↟
Results segment # 2: Hurontario (night)
---------------------------------------

Source height = 1.46 m

ROAD (0.00 + 40.50 + 0.00) = 40.50 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
   -90      0   0.57  66.87   0.00 -22.06  -4.32   0.00   0.00   0.00  40.50
--------------------------------------------------------------------------------

Segment Leq : 40.50 dBA

↟
Results segment # 3: Central (night)
------------------------------------

Source height = 1.55 m

ROAD (0.00 + 43.01 + 0.00) = 43.01 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
   -90     90   0.57  63.77   0.00 -19.46  -1.30   0.00   0.00   0.00  43.01
--------------------------------------------------------------------------------

Segment Leq : 43.01 dBA

Total Leq All Segments: 45.32 dBA

↟
RT/Custom data, segment # 1: LRT (day/night)
--------------------------------------------
1 - Bus:
Traffic volume    :   560/88    veh/TimePeriod
Speed             :    80 km/h

Data for Segment # 1: LRT (day/night)
-------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 380.18 / 380.18 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
```

Reference angle   :   0.00

↟
Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 37.26 + 0.00) = 37.26 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.60	64.09	-22.46	-4.37	0.00	0.00	0.00	37.26

Segment Leq : 37.26 dBA

Total Leq All Segments: 37.26 dBA

↟
Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 32.23 + 0.00) = 32.23 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.60	59.06	-22.46	-4.37	0.00	0.00	0.00	32.23

Segment Leq : 32.23 dBA

Total Leq All Segments: 32.23 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 52.01
(NIGHT): 45.53

↟
↟

STAMSON 5.0 NORMAL REPORT Date: 09-08-2023 06:09:12
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2P.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Level at R2_POW

Road data, segment # 1: Conf_N (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 2.75
Heavy Truck % of Total Volume : 2.25
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Conf_N (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 469.36 / 469.36 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Conf_M (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Conf_M (day/night)
----------------------------------------
Angle1   Angle2           : -31.00 deg   36.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 380.75 / 380.75 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 3: Conf_S (day/night)
----------------------------------------
Car traffic volume  : 27018/3002  veh/TimePeriod  *
Medium truck volume :   782/87    veh/TimePeriod  *
Heavy truck volume  :   640/71    veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  31600
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Conf_S (day/night)
----------------------------------------
Angle1   Angle2           : -90.00 deg   -66.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 176.73 / 176.73 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 4: Central (day/night)
----------------------------------------
Car traffic volume  : 16521/1836  veh/TimePeriod  *
```

```
Medium truck volume :  1358/151   veh/TimePeriod  *
Heavy truck volume  :  1111/123   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  21100
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   7.15
    Heavy Truck  % of Total Volume     :   5.85
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 4: Central (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 269.53 / 269.53 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Conf_N (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 41.08 + 0.00) = 41.08 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.58  69.01   0.00 -23.60  -4.33   0.00   0.00   0.00  41.08
-------------------------------------------------------------------------------

Segment Leq : 41.08 dBA

↟
Results segment # 2: Conf_M (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 42.40 + 0.00) = 42.40 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -31     36   0.58  69.01   0.00 -22.17  -4.44   0.00   0.00   0.00  42.40
```

Segment Leq : 42.40 dBA

↟
Results segment # 3: Conf_S (day)

Source height = 1.22 m

ROAD (0.00 + 39.16 + 0.00) = 39.16 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-66	0.58	69.01	0.00	-16.91	-12.95	0.00	0.00	0.00	39.16

Segment Leq : 39.16 dBA

↟
Results segment # 4: Central (day)

Source height = 1.56 m

ROAD (0.00 + 46.33 + 0.00) = 46.33 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.57	70.31	0.00	-19.68	-4.31	0.00	0.00	0.00	46.33

Segment Leq : 46.33 dBA

Total Leq All Segments: 49.11 dBA

↟
Results segment # 1: Conf_N (night)

Source height = 1.22 m

ROAD (0.00 + 34.55 + 0.00) = 34.55 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.58	62.48	0.00	-23.60	-4.33	0.00	0.00	0.00	34.55

Segment Leq : 34.55 dBA

↟
Results segment # 2: Conf_M (night)

```
-----------------------------------

Source height = 1.22 m

ROAD (0.00 + 35.87 + 0.00) = 35.87 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -31     36   0.58  62.48   0.00 -22.17  -4.44   0.00   0.00   0.00  35.87
-------------------------------------------------------------------------------

Segment Leq : 35.87 dBA

↑
Results segment # 3: Conf_S (night)
-----------------------------------

Source height = 1.22 m

ROAD (0.00 + 32.62 + 0.00) = 32.62 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90    -66   0.58  62.48   0.00 -16.91 -12.95   0.00   0.00   0.00  32.62
-------------------------------------------------------------------------------

Segment Leq : 32.62 dBA

↑
Results segment # 4: Central (night)
-----------------------------------

Source height = 1.55 m

ROAD (0.00 + 39.78 + 0.00) = 39.78 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90      0   0.57  63.77   0.00 -19.68  -4.31   0.00   0.00   0.00  39.78
-------------------------------------------------------------------------------

Segment Leq : 39.78 dBA

Total Leq All Segments: 42.56 dBA

↑



TOTAL Leq FROM ALL SOURCES (DAY): 49.11
                           (NIGHT): 42.56
↑
↑
```

STAMSON 5.0 NORMAL REPORT Date: 09-08-2023 06:11:05
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 3P.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Level at R3_POW

Road data, segment # 1: Conf_N (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 2.75
Heavy Truck % of Total Volume : 2.25
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Conf_N (day/night)

Angle1 Angle2 : 11.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 467.33 / 467.33 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Conf_M (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Conf_M (day/night)
----------------------------------------
Angle1   Angle2           : -25.00 deg   36.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 326.28 / 326.28 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 3: Conf_S (day/night)
----------------------------------------
Car traffic volume  : 27018/3002  veh/TimePeriod  *
Medium truck volume :   782/87    veh/TimePeriod  *
Heavy truck volume  :   640/71    veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  31600
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Conf_S (day/night)
----------------------------------------
Angle1   Angle2           : -90.00 deg   -61.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 174.70 / 174.70 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 4: Central (day/night)
----------------------------------------
Car traffic volume  : 16521/1836  veh/TimePeriod  *
```

```
Medium truck volume :  1358/151   veh/TimePeriod  *
Heavy truck volume  :  1111/123   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  21100
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   7.15
    Heavy Truck  % of Total Volume     :   5.85
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 4: Central (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 359.88 / 359.88 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Conf_N (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 40.33 + 0.00) = 40.33 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
    11     90   0.58  69.01   0.00 -23.57  -5.11   0.00   0.00   0.00  40.33
-------------------------------------------------------------------------------

Segment Leq : 40.33 dBA

↟
Results segment # 2: Conf_M (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 43.07 + 0.00) = 43.07 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -25     36   0.58  69.01   0.00 -21.11  -4.83   0.00   0.00   0.00  43.07
```

Segment Leq : 43.07 dBA

↟
Results segment # 3: Conf_S (day)

Source height = 1.22 m

ROAD (0.00 + 40.52 + 0.00) = 40.52 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-61	0.58	69.01	0.00	-16.83	-11.67	0.00	0.00	0.00	40.52

Segment Leq : 40.52 dBA

↟
Results segment # 4: Central (day)

Source height = 1.56 m

ROAD (0.00 + 44.36 + 0.00) = 44.36 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.57	70.31	0.00	-21.64	-4.31	0.00	0.00	0.00	44.36

Segment Leq : 44.36 dBA

Total Leq All Segments: 48.43 dBA

↟
Results segment # 1: Conf_N (night)

Source height = 1.22 m

ROAD (0.00 + 33.79 + 0.00) = 33.79 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
11	90	0.58	62.48	0.00	-23.57	-5.11	0.00	0.00	0.00	33.79

Segment Leq : 33.79 dBA

↟
Results segment # 2: Conf_M (night)

```
-----------------------------------

Source height = 1.22 m

ROAD (0.00 + 36.54 + 0.00) = 36.54 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -25     36   0.58  62.48   0.00 -21.11  -4.83   0.00   0.00   0.00  36.54
-------------------------------------------------------------------------------

Segment Leq : 36.54 dBA

↑
Results segment # 3: Conf_S (night)
-----------------------------------

Source height = 1.22 m

ROAD (0.00 + 33.98 + 0.00) = 33.98 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90    -61   0.58  62.48   0.00 -16.83 -11.67   0.00   0.00   0.00  33.98
-------------------------------------------------------------------------------

Segment Leq : 33.98 dBA

↑
Results segment # 4: Central (night)
-----------------------------------

Source height = 1.55 m

ROAD (0.00 + 37.82 + 0.00) = 37.82 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90      0   0.57  63.77   0.00 -21.64  -4.31   0.00   0.00   0.00  37.82
-------------------------------------------------------------------------------

Segment Leq : 37.82 dBA

Total Leq All Segments: 41.89 dBA

↑



TOTAL Leq FROM ALL SOURCES (DAY): 48.43
                           (NIGHT): 41.89
↑
↑
```

STAMSON 5.0 NORMAL REPORT Date: 09-08-2023 06:17:59
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 4P.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Level at R4_POW

Road data, segment # 1: Conf_M (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 2.75
Heavy Truck % of Total Volume : 2.25
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Conf_M (day/night)

Angle1 Angle2 : -24.00 deg 36.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 324.83 / 324.83 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Conf_S (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Conf_S (day/night)
----------------------------------------
Angle1   Angle2           : -90.00 deg   -60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 179.12 / 179.12 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 3: Hurontario (day/night)
----------------------------------------------
Car traffic volume  : 42930/4770  veh/TimePeriod  *
Medium truck volume :  2624/292   veh/TimePeriod  *
Heavy truck volume  :  2147/239   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  53000
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Hurontario (day/night)
--------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 379.01 / 379.01 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Results segment # 1: Conf_M (day)
---------------------------------
```

Source height = 1.22 m

ROAD (0.00 + 43.03 + 0.00) = 43.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-24	36	0.58	69.01	0.00	-21.08	-4.90	0.00	0.00	0.00	43.03

Segment Leq : 43.03 dBA

↟

Results segment # 2: Conf_S (day)

Source height = 1.22 m

ROAD (0.00 + 40.57 + 0.00) = 40.57 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-60	0.58	69.01	0.00	-17.00	-11.44	0.00	0.00	0.00	40.57

Segment Leq : 40.57 dBA

↟

Results segment # 3: Hurontario (day)

Source height = 1.46 m

ROAD (0.00 + 47.05 + 0.00) = 47.05 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.57	73.40	0.00	-22.04	-4.32	0.00	0.00	0.00	47.05

Segment Leq : 47.05 dBA

Total Leq All Segments: 49.15 dBA

↟

Results segment # 1: Conf_M (night)

Source height = 1.22 m

ROAD (0.00 + 36.50 + 0.00) = 36.50 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-24	36	0.58	62.48	0.00	-21.08	-4.90	0.00	0.00	0.00	36.50

```
--------------------------------------------------------------------------------

Segment Leq : 36.50 dBA

↟
Results segment # 2: Conf_S (night)
-----------------------------------

Source height = 1.22 m

ROAD (0.00 + 34.04 + 0.00) = 34.04 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
   -90    -60   0.58  62.48   0.00 -17.00 -11.44   0.00   0.00   0.00  34.04
--------------------------------------------------------------------------------

Segment Leq : 34.04 dBA

↟
Results segment # 3: Hurontario (night)
---------------------------------------

Source height = 1.46 m

ROAD (0.00 + 40.52 + 0.00) = 40.52 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
     0     90   0.57  66.87   0.00 -22.04  -4.32   0.00   0.00   0.00  40.52
--------------------------------------------------------------------------------

Segment Leq : 40.52 dBA

Total Leq All Segments: 42.62 dBA

↟
RT/Custom data, segment # 1: LRT (day/night)
--------------------------------------------
1 - Bus:
Traffic volume    :   560/88    veh/TimePeriod
Speed             :    80 km/h

Data for Segment # 1: LRT (day/night)
-------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 379.01 / 379.01 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
```

Reference angle   :   0.00

↟
Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 37.28 + 0.00) = 37.28 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.60	64.09	-22.44	-4.37	0.00	0.00	0.00	37.28

Segment Leq : 37.28 dBA

Total Leq All Segments: 37.28 dBA

↟
Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 32.25 + 0.00) = 32.25 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.60	59.06	-22.44	-4.37	0.00	0.00	0.00	32.25

Segment Leq : 32.25 dBA

Total Leq All Segments: 32.25 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 49.42
                          (NIGHT): 43.00
↟
↟

STAMSON 5.0 NORMAL REPORT Date: 09-08-2023 06:20:37
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 5P.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Level at R5_POW

Road data, segment # 1: Conf_M (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 2.75
Heavy Truck % of Total Volume : 2.25
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Conf_M (day/night)

Angle1 Angle2 : -21.00 deg 36.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 342.33 / 342.33 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Conf_S (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Conf_S (day/night)
----------------------------------------
Angle1   Angle2           : -90.00 deg   -57.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 199.92 / 199.92 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 3: Hurontario (day/night)
----------------------------------------------
Car traffic volume  : 42930/4770  veh/TimePeriod  *
Medium truck volume :  2624/292   veh/TimePeriod  *
Heavy truck volume  :  2147/239   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  53000
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Hurontario (day/night)
--------------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 358.27 / 358.27 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Results segment # 1: Conf_M (day)
---------------------------------
```

Source height = 1.22 m

ROAD (0.00 + 42.45 + 0.00) = 42.45 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-21	36	0.58	69.01	0.00	-21.44	-5.12	0.00	0.00	0.00	42.45

Segment Leq : 42.45 dBA

↟

Results segment # 2: Conf_S (day)

Source height = 1.22 m

ROAD (0.00 + 40.46 + 0.00) = 40.46 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-57	0.58	69.01	0.00	-17.75	-10.80	0.00	0.00	0.00	40.46

Segment Leq : 40.46 dBA

↟

Results segment # 3: Hurontario (day)

Source height = 1.46 m

ROAD (0.00 + 47.43 + 0.00) = 47.43 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.57	73.40	0.00	-21.65	-4.32	0.00	0.00	0.00	47.43

Segment Leq : 47.43 dBA

Total Leq All Segments: 49.24 dBA

↟

Results segment # 1: Conf_M (night)

Source height = 1.22 m

ROAD (0.00 + 35.92 + 0.00) = 35.92 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-21	36	0.58	62.48	0.00	-21.44	-5.12	0.00	0.00	0.00	35.92

```
--------------------------------------------------------------------------------

Segment Leq : 35.92 dBA

↟
Results segment # 2: Conf_S (night)
-----------------------------------

Source height = 1.22 m

ROAD (0.00 + 33.93 + 0.00) = 33.93 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
   -90    -57   0.58  62.48   0.00 -17.75 -10.80   0.00   0.00   0.00  33.93
--------------------------------------------------------------------------------

Segment Leq : 33.93 dBA

↟
Results segment # 3: Hurontario (night)
---------------------------------------

Source height = 1.46 m

ROAD (0.00 + 40.91 + 0.00) = 40.91 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
     0     90   0.57  66.87   0.00 -21.65  -4.32   0.00   0.00   0.00  40.91
--------------------------------------------------------------------------------

Segment Leq : 40.91 dBA

Total Leq All Segments: 42.72 dBA

↟
RT/Custom data, segment # 1: LRT (day/night)
--------------------------------------------
1 - Bus:
Traffic volume    :   560/88    veh/TimePeriod
Speed             :    80 km/h

Data for Segment # 1: LRT (day/night)
-------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 358.27 / 358.27 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
```

Reference angle   :   0.00

♠
Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 37.67 + 0.00) = 37.67 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
----
     0   90   0.60 64.09 -22.05 -4.37   0.00   0.00   0.00 37.67

Segment Leq : 37.67 dBA

Total Leq All Segments: 37.67 dBA

♠
Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 32.64 + 0.00) = 32.64 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
----
     0   90   0.60 59.06 -22.05 -4.37   0.00   0.00   0.00 32.64

Segment Leq : 32.64 dBA

Total Leq All Segments: 32.64 dBA

♠

TOTAL Leq FROM ALL SOURCES (DAY): 49.54
                           (NIGHT): 43.13
♠
♠

STAMSON 5.0 NORMAL REPORT Date: 09-08-2023 06:24:48
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 6P.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Level at R6_POW

Road data, segment # 1: Hurontario (day/night)

Car traffic volume : 42930/4770 veh/TimePeriod *
Medium truck volume : 2624/292 veh/TimePeriod *
Heavy truck volume : 2147/239 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 53000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.50
Heavy Truck % of Total Volume : 4.50
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Hurontario (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 354.83 / 354.83 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Central (day/night)

Car traffic volume : 16521/1836 veh/TimePeriod *
Medium truck volume : 1358/151 veh/TimePeriod *
Heavy truck volume : 1111/123 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 21100
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   7.15
    Heavy Truck  % of Total Volume     :   5.85
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Central (day/night)
-----------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 357.24 / 357.24 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Hurontario (day)
-------------------------------------

Source height = 1.46 m

ROAD (0.00 + 50.51 + 0.00) = 50.51 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.57  73.40   0.00 -21.59  -1.30   0.00   0.00   0.00  50.51
-------------------------------------------------------------------------------

Segment Leq : 50.51 dBA

↟
Results segment # 2: Central (day)
----------------------------------

Source height = 1.56 m

ROAD (0.00 + 44.41 + 0.00) = 44.41 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.57  70.31   0.00 -21.59  -4.31   0.00   0.00   0.00  44.41
-------------------------------------------------------------------------------

Segment Leq : 44.41 dBA

Total Leq All Segments: 51.46 dBA

↟
Results segment # 1: Hurontario (night)
---------------------------------------
```

Source height = 1.46 m

ROAD (0.00 + 43.98 + 0.00) = 43.98 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.57	66.87	0.00	-21.59	-1.30	0.00	0.00	0.00	43.98

Segment Leq : 43.98 dBA

↟
Results segment # 2: Central (night)

Source height = 1.55 m

ROAD (0.00 + 37.87 + 0.00) = 37.87 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.57	63.77	0.00	-21.59	-4.31	0.00	0.00	0.00	37.87

Segment Leq : 37.87 dBA

Total Leq All Segments: 44.93 dBA

↟
RT/Custom data, segment # 1: LRT (day/night)
---
1 - Bus:
Traffic volume : 560/88 veh/TimePeriod
Speed : 80 km/h

Data for Segment # 1: LRT (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 354.83 / 354.83 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 40.75 + 0.00) = 40.75 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.60	64.09	-21.98	-1.35	0.00	0.00	0.00	40.75

Segment Leq : 40.75 dBA

Total Leq All Segments: 40.75 dBA

↟

Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 35.72 + 0.00) = 35.72 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.60	59.06	-21.98	-1.35	0.00	0.00	0.00	35.72

Segment Leq : 35.72 dBA

Total Leq All Segments: 35.72 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 51.82
(NIGHT): 45.42

↟

↟

STAMSON 5.0 NORMAL REPORT Date: 09-08-2023 06:27:03
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 7P.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Level at R7_POW

Road data, segment # 1: Hurontario (day/night)

Car traffic volume : 42930/4770 veh/TimePeriod *
Medium truck volume : 2624/292 veh/TimePeriod *
Heavy truck volume : 2147/239 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 53000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.50
Heavy Truck % of Total Volume : 4.50
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Hurontario (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 360.56 / 360.56 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Central (day/night)

Car traffic volume : 16521/1836 veh/TimePeriod *
Medium truck volume : 1358/151 veh/TimePeriod *
Heavy truck volume : 1111/123 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 21100
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   7.15
    Heavy Truck  % of Total Volume     :   5.85
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Central (day/night)
-----------------------------------------
Angle1   Angle2           :   0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 268.02 / 268.02 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Results segment # 1: Hurontario (day)
-------------------------------------

Source height = 1.46 m

ROAD (0.00 + 50.40 + 0.00) = 50.40 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.57  73.40   0.00 -21.70  -1.30   0.00   0.00   0.00  50.40
-------------------------------------------------------------------------------

Segment Leq : 50.40 dBA

↟
Results segment # 2: Central (day)
----------------------------------

Source height = 1.56 m

ROAD (0.00 + 46.37 + 0.00) = 46.37 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.57  70.31   0.00 -19.64  -4.31   0.00   0.00   0.00  46.37
-------------------------------------------------------------------------------

Segment Leq : 46.37 dBA

Total Leq All Segments: 51.85 dBA

↟
Results segment # 1: Hurontario (night)
---------------------------------------
```

Source height = 1.46 m

ROAD (0.00 + 43.87 + 0.00) = 43.87 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.57	66.87	0.00	-21.70	-1.30	0.00	0.00	0.00	43.87

Segment Leq : 43.87 dBA

↟
Results segment # 2: Central (night)

Source height = 1.55 m

ROAD (0.00 + 39.82 + 0.00) = 39.82 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.57	63.77	0.00	-19.64	-4.31	0.00	0.00	0.00	39.82

Segment Leq : 39.82 dBA

Total Leq All Segments: 45.31 dBA

↟
RT/Custom data, segment # 1: LRT (day/night)
---
1 - Bus:
Traffic volume : 560/88 veh/TimePeriod
Speed : 80 km/h

Data for Segment # 1: LRT (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 360.56 / 360.56 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 40.64 + 0.00) = 40.64 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.60	64.09	-22.09	-1.35	0.00	0.00	0.00	40.64

Segment Leq : 40.64 dBA

Total Leq All Segments: 40.64 dBA

Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 35.61 + 0.00) = 35.61 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.60	59.06	-22.09	-1.35	0.00	0.00	0.00	35.61

Segment Leq : 35.61 dBA

Total Leq All Segments: 35.61 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 52.16
(NIGHT): 45.75

STAMSON 5.0 NORMAL REPORT Date: 09-08-2023 18:22:05
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 8p.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Impact at R8_POW

Road data, segment # 1: Conf_N (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 2.75
Heavy Truck % of Total Volume : 2.25
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Conf_N (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 474.92 / 474.92 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Hurontario (day/night)

Car traffic volume : 42930/4770 veh/TimePeriod *
Medium truck volume : 2624/292 veh/TimePeriod *
Heavy truck volume : 2147/239 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 53000
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Hurontario (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 366.12 / 366.12 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 3: Central (day/night)
-------------------------------------------
Car traffic volume  : 16521/1836  veh/TimePeriod  *
Medium truck volume :  1358/151   veh/TimePeriod  *
Heavy truck volume  :  1111/123   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  21100
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   7.15
    Heavy Truck  % of Total Volume     :   5.85
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Central (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 259.86 / 259.86 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Results segment # 1: Conf_N (day)
---------------------------------
```

Source height = 1.22 m

ROAD (0.00 + 41.00 + 0.00) = 41.00 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.58	69.01	0.00	-23.68	-4.33	0.00	0.00	0.00	41.00

Segment Leq : 41.00 dBA

↟

Results segment # 2: Hurontario (day)

Source height = 1.46 m

ROAD (0.00 + 47.28 + 0.00) = 47.28 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.57	73.40	0.00	-21.80	-4.32	0.00	0.00	0.00	47.28

Segment Leq : 47.28 dBA

↟

Results segment # 3: Central (day)

Source height = 1.56 m

ROAD (0.00 + 49.59 + 0.00) = 49.59 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.57	70.31	0.00	-19.43	-1.30	0.00	0.00	0.00	49.59

Segment Leq : 49.59 dBA

Total Leq All Segments: 51.96 dBA

↟

Results segment # 1: Conf_N (night)

Source height = 1.22 m

ROAD (0.00 + 34.47 + 0.00) = 34.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.58	62.48	0.00	-23.68	-4.33	0.00	0.00	0.00	34.47

```
--------------------------------------------------------------------------------

Segment Leq : 34.47 dBA

↟
Results segment # 2: Hurontario (night)
---------------------------------------

Source height = 1.46 m

ROAD (0.00 + 40.76 + 0.00) = 40.76 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
   -90      0   0.57  66.87   0.00 -21.80  -4.32   0.00   0.00   0.00  40.76
--------------------------------------------------------------------------------

Segment Leq : 40.76 dBA

↟
Results segment # 3: Central (night)
------------------------------------

Source height = 1.55 m

ROAD (0.00 + 43.04 + 0.00) = 43.04 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
   -90     90   0.57  63.77   0.00 -19.43  -1.30   0.00   0.00   0.00  43.04
--------------------------------------------------------------------------------

Segment Leq : 43.04 dBA

Total Leq All Segments: 45.42 dBA

↟
RT/Custom data, segment # 1: LRT (day/night)
--------------------------------------------
1 - Bus:
Traffic volume    :   560/88    veh/TimePeriod
Speed             :    80 km/h

Data for Segment # 1: LRT (day/night)
-------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 366.12 / 366.12 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
```

Reference angle   :   0.00

↟
Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 37.52 + 0.00) = 37.52 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.60	64.09	-22.20	-4.37	0.00	0.00	0.00	37.52

Segment Leq : 37.52 dBA

Total Leq All Segments: 37.52 dBA

↟
Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 32.49 + 0.00) = 32.49 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.60	59.06	-22.20	-4.37	0.00	0.00	0.00	32.49

Segment Leq : 32.49 dBA

Total Leq All Segments: 32.49 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 52.11
                          (NIGHT): 45.64
↟
↟

STAMSON 5.0 NORMAL REPORT Date: 21-11-2023 19:27:34
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 9o.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Impact at R9_OLA

Road data, segment # 1: Conf_N (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 2.75
Heavy Truck % of Total Volume : 2.25
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Conf_N (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 471.44 / 471.44 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Conf_M (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Conf_M (day/night)
----------------------------------------
Angle1   Angle2           : -30.00 deg   37.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 375.30 / 375.30 m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 3: Conf_S (day/night)
----------------------------------------
Car traffic volume  : 27018/3002  veh/TimePeriod  *
Medium truck volume :   782/87    veh/TimePeriod  *
Heavy truck volume  :   640/71    veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  31600
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Conf_S (day/night)
----------------------------------------
Angle1   Angle2           : -90.00 deg   -66.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 178.81 / 178.81 m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 4: Central (day/night)
----------------------------------------
Car traffic volume  : 16521/1836  veh/TimePeriod  *
```

```
Medium truck volume :  1358/151   veh/TimePeriod  *
Heavy truck volume  :  1111/123   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  21100
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   7.15
    Heavy Truck  % of Total Volume     :   5.85
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 4: Central (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 281.65 / 281.65 m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

♠
Road data, segment # 5: Hurontario (day/night)
----------------------------------------------
Car traffic volume  : 42930/4770  veh/TimePeriod  *
Medium truck volume :  2624/292   veh/TimePeriod  *
Heavy truck volume  :  2147/239   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  53000
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 5: Hurontario (day/night)
--------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
```

```
Surface                    :      1       (Absorptive ground surface)
Receiver source distance   : 382.83 / 382.83 m
Receiver height            :   1.50 / 1.50   m
Topography                 :      1       (Flat/gentle slope; no barrier)
Reference angle            :   0.00
```

↟

```
Results segment # 1: Conf_N (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 39.69 + 0.00) = 39.69 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.66  69.01   0.00 -24.86  -4.47   0.00   0.00   0.00  39.69
-------------------------------------------------------------------------------

Segment Leq : 39.69 dBA
```

↟

```
Results segment # 2: Conf_M (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 41.34 + 0.00) = 41.34 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -30     37   0.66  69.01   0.00 -23.21  -4.46   0.00   0.00   0.00  41.34
-------------------------------------------------------------------------------

Segment Leq : 41.34 dBA
```

↟

```
Results segment # 3: Conf_S (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 37.66 + 0.00) = 37.66 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90    -66   0.66  69.01   0.00 -17.87 -13.48   0.00   0.00   0.00  37.66
-------------------------------------------------------------------------------

Segment Leq : 37.66 dBA
```

↟

```
Results segment # 4: Central (day)
```

Source height = 1.56 m

ROAD (0.00 + 47.74 + 0.00) = 47.74 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	70.31	0.00	-21.12	-1.45	0.00	0.00	0.00	47.74

Segment Leq : 47.74 dBA

↟
Results segment # 5: Hurontario (day)

Source height = 1.46 m

ROAD (0.00 + 48.59 + 0.00) = 48.59 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	73.40	0.00	-23.35	-1.46	0.00	0.00	0.00	48.59

Segment Leq : 48.59 dBA

Total Leq All Segments: 52.05 dBA

↟
Results segment # 1: Conf_N (night)

Source height = 1.22 m

ROAD (0.00 + 33.15 + 0.00) = 33.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.66	62.48	0.00	-24.86	-4.47	0.00	0.00	0.00	33.15

Segment Leq : 33.15 dBA

↟
Results segment # 2: Conf_M (night)

Source height = 1.22 m

ROAD (0.00 + 34.80 + 0.00) = 34.80 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq

```
-------------------------------------------------------------------------------
   -30     37   0.66  62.48   0.00 -23.21  -4.46   0.00   0.00   0.00  34.80
-------------------------------------------------------------------------------

Segment Leq : 34.80 dBA

↟
Results segment # 3: Conf_S (night)
-----------------------------------

Source height = 1.22 m

ROAD (0.00 + 31.13 + 0.00) = 31.13 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90    -66   0.66  62.48   0.00 -17.87 -13.48   0.00   0.00   0.00  31.13
-------------------------------------------------------------------------------

Segment Leq : 31.13 dBA

↟
Results segment # 4: Central (night)
-----------------------------------

Source height = 1.55 m

ROAD (0.00 + 41.20 + 0.00) = 41.20 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.66  63.77   0.00 -21.12  -1.45   0.00   0.00   0.00  41.20
-------------------------------------------------------------------------------

Segment Leq : 41.20 dBA

↟
Results segment # 5: Hurontario (night)
---------------------------------------

Source height = 1.46 m

ROAD (0.00 + 42.06 + 0.00) = 42.06 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.66  66.87   0.00 -23.35  -1.46   0.00   0.00   0.00  42.06
-------------------------------------------------------------------------------

Segment Leq : 42.06 dBA

Total Leq All Segments: 45.52 dBA
```

↟
RT/Custom data, segment # 1: LRT (day/night)
---
1 - Bus:
Traffic volume   :   560/88   veh/TimePeriod
Speed   :   80 km/h

Data for Segment # 1: LRT (day/night)

Angle1   Angle2   : -90.00 deg   90.00 deg
Wood depth   :   0   (No woods.)
No of house rows   :   0 / 0
Surface   :   1   (Absorptive ground surface)
Receiver source distance : 382.83 / 382.83 m
Receiver height   :   1.50 / 1.50   m
Topography   :   1   (Flat/gentle slope; no barrier)
Reference angle   :   0.00

↟
Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 39.27 + 0.00) = 39.27 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	64.09	-23.35	-1.46	0.00	0.00	0.00	39.27

Segment Leq : 39.27 dBA

Total Leq All Segments: 39.27 dBA

↟
Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 34.25 + 0.00) = 34.25 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	59.06	-23.35	-1.46	0.00	0.00	0.00	34.25

Segment Leq : 34.25 dBA

Total Leq All Segments: 34.25 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 52.28
(NIGHT): 45.83

↟
↟

STAMSON 5.0 NORMAL REPORT Date: 21-11-2023 19:30:32
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 10o.te Time Period: Day/Night 16/8 hours
Description: Predicted Noise Impact at R10_OLA

Road data, segment # 1: Conf_N (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 2.75
Heavy Truck % of Total Volume : 2.25
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Conf_N (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 494.26 / 494.26 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑
Road data, segment # 2: Conf_M (day/night)

Car traffic volume : 27018/3002 veh/TimePeriod *
Medium truck volume : 782/87 veh/TimePeriod *
Heavy truck volume : 640/71 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 31600
Percentage of Annual Growth : 0.00

```
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Conf_M (day/night)
----------------------------------------
Angle1   Angle2           : -27.00 deg   37.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 394.05 / 394.05 m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 3: Conf_S (day/night)
----------------------------------------
Car traffic volume  : 27018/3002  veh/TimePeriod  *
Medium truck volume :   782/87    veh/TimePeriod  *
Heavy truck volume  :   640/71    veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  31600
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   2.75
    Heavy Truck  % of Total Volume     :   2.25
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: Conf_S (day/night)
----------------------------------------
Angle1   Angle2           : -90.00 deg   -63.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 201.63 / 201.63 m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 4: Central (day/night)
----------------------------------------
Car traffic volume  : 16521/1836  veh/TimePeriod  *
```

```
Medium truck volume :  1358/151   veh/TimePeriod  *
Heavy truck volume  :  1111/123   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  21100
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   7.15
    Heavy Truck  % of Total Volume     :   5.85
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 4: Central (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 280.49 / 280.49 m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

♠
Road data, segment # 5: Hurontario (day/night)
----------------------------------------------
Car traffic volume  : 42930/4770  veh/TimePeriod  *
Medium truck volume :  2624/292   veh/TimePeriod  *
Heavy truck volume  :  2147/239   veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

    24 hr Traffic Volume (AADT or SADT):  53000
    Percentage of Annual Growth        :   0.00
    Number of Years of Growth          :   0.00
    Medium Truck % of Total Volume     :   5.50
    Heavy Truck  % of Total Volume     :   4.50
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 5: Hurontario (day/night)
--------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
```

```
Surface                    :      1       (Absorptive ground surface)
Receiver source distance   : 360.05 / 360.05 m
Receiver height            :   1.50 / 1.50   m
Topography                 :      1       (Flat/gentle slope; no barrier)
Reference angle            :   0.00
```

↟

```
Results segment # 1: Conf_N (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 39.35 + 0.00) = 39.35 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.66  69.01   0.00 -25.20  -4.47   0.00   0.00   0.00  39.35
-------------------------------------------------------------------------------

Segment Leq : 39.35 dBA
```

↟

```
Results segment # 2: Conf_M (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 40.79 + 0.00) = 40.79 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -27     37   0.66  69.01   0.00 -23.56  -4.65   0.00   0.00   0.00  40.79
-------------------------------------------------------------------------------

Segment Leq : 40.79 dBA
```

↟

```
Results segment # 3: Conf_S (day)
---------------------------------

Source height = 1.22 m

ROAD (0.00 + 37.63 + 0.00) = 37.63 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90    -63   0.66  69.01   0.00 -18.73 -12.64   0.00   0.00   0.00  37.63
-------------------------------------------------------------------------------

Segment Leq : 37.63 dBA
```

↟

```
Results segment # 4: Central (day)
```

Source height = 1.56 m

ROAD (0.00 + 47.77 + 0.00) = 47.77 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	70.31	0.00	-21.09	-1.45	0.00	0.00	0.00	47.77

Segment Leq : 47.77 dBA

↟
Results segment # 5: Hurontario (day)

Source height = 1.46 m

ROAD (0.00 + 49.03 + 0.00) = 49.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	73.40	0.00	-22.91	-1.46	0.00	0.00	0.00	49.03

Segment Leq : 49.03 dBA

Total Leq All Segments: 52.21 dBA

↟
Results segment # 1: Conf_N (night)

Source height = 1.22 m

ROAD (0.00 + 32.81 + 0.00) = 32.81 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.66	62.48	0.00	-25.20	-4.47	0.00	0.00	0.00	32.81

Segment Leq : 32.81 dBA

↟
Results segment # 2: Conf_M (night)

Source height = 1.22 m

ROAD (0.00 + 34.26 + 0.00) = 34.26 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq

```
--------------------------------------------------------------------------------
   -27     37   0.66  62.48   0.00 -23.56  -4.65   0.00   0.00   0.00  34.26
--------------------------------------------------------------------------------

Segment Leq : 34.26 dBA

↟
Results segment # 3: Conf_S (night)
----------------------------------

Source height = 1.22 m

ROAD (0.00 + 31.10 + 0.00) = 31.10 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
   -90    -63   0.66  62.48   0.00 -18.73 -12.64   0.00   0.00   0.00  31.10
--------------------------------------------------------------------------------

Segment Leq : 31.10 dBA

↟
Results segment # 4: Central (night)
----------------------------------

Source height = 1.55 m

ROAD (0.00 + 41.23 + 0.00) = 41.23 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
   -90     90   0.66  63.77   0.00 -21.09  -1.45   0.00   0.00   0.00  41.23
--------------------------------------------------------------------------------

Segment Leq : 41.23 dBA

↟
Results segment # 5: Hurontario (night)
--------------------------------------

Source height = 1.46 m

ROAD (0.00 + 42.51 + 0.00) = 42.51 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
--------------------------------------------------------------------------------
   -90     90   0.66  66.87   0.00 -22.91  -1.46   0.00   0.00   0.00  42.51
--------------------------------------------------------------------------------

Segment Leq : 42.51 dBA

Total Leq All Segments: 45.68 dBA
```

↑
RT/Custom data, segment # 1: LRT (day/night)
---
1 - Bus:
Traffic volume   :   560/88   veh/TimePeriod
Speed   :   80 km/h

Data for Segment # 1: LRT (day/night)

Angle1   Angle2   : -90.00 deg   90.00 deg
Wood depth   :   0   (No woods.)
No of house rows   :   0 / 0
Surface   :   1   (Absorptive ground surface)
Receiver source distance : 360.05 / 360.05 m
Receiver height   :   1.50 / 1.50   m
Topography   :   1   (Flat/gentle slope; no barrier)
Reference angle   :   0.00

↑
Results segment # 1: LRT (day)

Source height = 0.50 m

RT/Custom (0.00 + 39.72 + 0.00) = 39.72 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
   -90   90   0.66 64.09 -22.91 -1.46   0.00   0.00   0.00 39.72

Segment Leq : 39.72 dBA

Total Leq All Segments: 39.72 dBA

↑
Results segment # 1: LRT (night)

Source height = 0.50 m

RT/Custom (0.00 + 34.69 + 0.00) = 34.69 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
   -90   90   0.66 59.06 -22.91 -1.46   0.00   0.00   0.00 34.69

Segment Leq : 34.69 dBA

Total Leq All Segments: 34.69 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 52.45
(NIGHT): 46.01

↑
↑

APPENDIX C

TRAFFIC VOLUME

NOISE REPORT FOR PROPOSED DEVELOPMENT

Date:	19-Jul-23

REQUESTED BY:

Name:	Thomas Li, MEPP, P.Eng
Company:	SONAIR Environmental Inc.

PREPARED BY:

Name	Naveda Dukhan
Tel#:	905-615-3200 ext 8948

MISSISSAUGA

Location:
1. Central Parkway W
2. Confederation Pkwy
3. Hurontario St.

ID# 598

ON SITE TRAFFIC DATA

Specific	Street Names				
	1. Central Parkway W	2. Confederation Pkwy	3. Hurontario St.		
AADT:	21100	31600	53000		
# of Lanes:	4 lanes	4 lanes	4 lanes		
% Trucks:	13%	5%	10%		
Medium/Heavy Trucks Ratio:	55/45	55/45	55/45		
Day/Night Split:	90/10	90/10	90/10		
Posted Speed Limit:	50km/hr	50km/hr	50km/hr		
Gradient Of Road:	2%	2%	2%		
Ultimate R.O.W:	30m	30m	45m		

Comments:

Ultimate Traffic Data Only (2041)

There is a proposed LRT line along Hurontario Street. Existing lanes may be converted from 6 lanes to 4 lanes with 2 LRT lines in the middle.

Please contact Rory O'Sullivan @ (905) 615-3200 ext. 8813 or Rory.OSullivan@mississauga.ca for more info regarding LRT.