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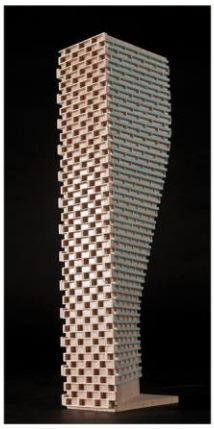
TRANSPORTATION NOISE ASSESSMENT

1560 Scott Street
Ottawa, Ontario

REPORT #20-229-Transportation Noise



December 1, 2021

PREPARED FOR

LaSalle Investment Management
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EXECUTIVE SUMMARY

This report describes a transportation noise and ground vibration assessment undertaken for a proposed mixed-use development located at 1560 Scott Street in Ottawa, Ontario to examine the impact of light rail transit corridor (Confederation Line LRT) and roadway traffic on the development to ensure that future occupants are afforded comfortable use of indoor and outdoor living spaces, as directed by the City of Ottawa's Environmental Noise Control Guidelines (ENCG). As the development is located farther than 75 metres from the Confederation Line LRT, ground vibrations were not considered.

The proposed development is a 29-storey mixed-use apartment building and an addition to the existing Holland Cross complex. The Holland Cross site is located south of Tunney's Pasture and the Confederation Line LRT, and comprises two existing 7-storey office buildings situated along Scott Street and Holland Avenue. The proposed apartment building is located at the corner of Hamilton Avenue and Bullman Street. Figure 1 illustrates a complete site plan with the surrounding context. As Tunney's Pasture Station is located farther than 100 metres from the development, the stationary noise impact of the station was not considered in this study.

The assessment is based on (i) theoretical noise prediction methods that conform to the Ministry of the Environment, Conservation and Parks (MECP) (ii) noise level criteria as specified by the City of Ottawa's Environmental Noise Control Guidelines (ENCG); (iii) future vehicular traffic volumes based on the City of Ottawa's Official Plan roadway classifications; (iv) future rail traffic volumes based on the ultimate buildout LRT volumes were based on our past experience with the Confederation Line LRT; and (v) drawings prepared by N45 Architecture Inc.

Results of the current analysis indicate that noise levels at POW receptors will range between 53 and 61 dBA during the daytime period (07:00-23:00) and between 49 and 54 dBA during the nighttime period (23:00-07:00). The highest noise level (61 dBA) occurs at the north façade of the study building, which is nearest and most exposed to Scott Street and the Confederation Line LRT.

The results of the calculations also indicate that the dwellings should be designed with forced air heating and provisions for the installation of central air conditioning. If installed at the occupants' discretion, air conditioning will allow windows and doors to remain closed providing a quiet and comfortable indoor

environment. Warning clauses will be required to be placed on all Lease, Purchase and Sale Agreements, as summarized in Section 6.

Noise levels at the 5th Floor Terrace (Receptor 6) are expected to approach 60 dBA during the daytime period. If this area is to be used as an outdoor living area, noise control measures are required to reduce the L_{eq} to 55 dBA. Further analysis investigated the noise mitigating impact of incorporating a noise attenuating guardrail with a minimum height of 1.5 m surrounding the terrace. The results of the investigation proved that noise levels can be reduced to 55 dBA. The guardrail must be constructed from materials having a minimum surface density of 20 kg/m^2 (STC rating of 30) and contain no gaps. Design of the guardrail will conform to the requirements outlined in Part 5 of the ENCG. The following information will be required by the City for review prior to the installation of the barrier:

1. Shop drawings, signed and sealed by a qualified Professional Engineer licenced by the Professional Engineers of Ontario, showing the details of the acoustic barrier systems components, including material specifications.
2. Structural drawing(s), signed by a qualified Professional Engineer licenced by the Professional Engineers of Ontario, showing foundation details and specifying design criteria, climatic design loads, as well as applicable geotechnical data used in the design.
3. Layout plan, and wall elevations, showing proposed colours and patterns.

The drawings were updated in November 2021 after the transportation noise assessment was completed. Gradient Wind concluded that the changes to the form of the building will not affect the transportation noise levels at the building façades, and the conclusions.

With regards to stationary noise impacts, a stationary noise study was performed, dated October 10, 2013, by Gradient Wind. This study assessed the impacts of stationary sources (a rooftop makeup air unit and a cooling tower) serving the proposed building on surrounding noise-sensitive areas. We anticipate that the noise levels will be compliant with ENCG and NPC-300 limits with a judicious selection of the equipment. The final selection of the mechanical equipment should be reviewed by a qualified acoustic engineer prior to the installation of the equipment.

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1. INTRODUCTION

Gradient Wind Engineering Inc. (Gradient Wind) was retained by LaSalle Investment Management to undertake a transportation noise assessment for a proposed mixed-use development located at 1560 Scott Street in Ottawa, Ontario. This report summarizes the methodology, results, and recommendations related to the assessment of exterior and interior noise levels generated by local transportation sources.

Our work is based on theoretical noise calculation methods conforming to the Ministry of the Environment, Conservation and Parks (MECP)[1] guidelines, City of Ottawa[2]. Noise calculations were based on architectural drawings prepared by N45 Architecture Inc. with future vehicular traffic volumes based on the City of Ottawa's Official Plan roadway classifications and the ultimate buildout LRT volumes based on the Environmental Assessment for the Confederation Line LRT.

2. TERMS OF REFERENCE

The focus of this study is the proposed mixed-use development is located at 1560 Scott Street in Ottawa. The proposed development is a 29-storey mixed-use apartment building and an addition to the existing Holland Cross complex. The Holland Cross site is located south of Tunney's Pasture and the LRT Confederation Line rail corridor and comprises two existing 7-storey office buildings, situated along Scott Street and Holland Avenue.

The major source of transportation noise impacting the site is the Confederation Line LRT, Scott Street located to the north of the site, Holland Avenue located to the west of the site and Parkdale Avenue located to the east of the site. There are no other major roads or railways within 100 metres of the site. As the development is located farther than 75 metres from the Confederation Line LRT and farther than 100 metres from the Tunney's Pasture Station ground vibrations generated by LRT or the stationary noise impact from the station were not considered in this study. Figure 1 illustrates a complete site plan with the surrounding context.

[1] Ontario Ministry of the Environment and Climate Change – Environmental Noise Guidelines, Publication NPC-300, Queens Printer for Ontario, Toronto, 2013
[2] City of Ottawa Environmental Noise Control Guidelines, January 2016

3. OBJECTIVES

The principal objectives of this study are to (i) calculate the future noise levels on the study buildings produced by local roadway traffic, and (ii) ensure that interior and exterior noise levels do not exceed the allowable limits specified by the City of Ottawa's Environmental Noise Control Guidelines as outlined in Section 4.2 of this report.

4. METHODOLOGY

4.1 Noise Background

Noise can be defined as any obtrusive sound. It is created at a source, transmitted through a medium, such as air, and intercepted by a receiver. Noise may be characterized in terms of the power of the source or the sound pressure at a specific distance. While the power of a source is characteristic of that particular source, the sound pressure depends on the location of the receiver and the path that the noise takes to reach the receiver. Measurement of noise is based on the decibel unit, dBA, which is a logarithmic ratio referenced to a standard noise level (2×10^{-5} Pascals). The 'A' suffix refers to a weighting scale, which better represents how the noise is perceived by the human ear. With this scale, a doubling of power results in a 3 dBA increase in measured noise levels and is just perceptible to most people. An increase of 10 dBA is often perceived to be twice as loud.

4.2 Transportation Noise

4.2.1 Criteria for Transportation Noise

For vehicle traffic, the equivalent sound energy level, L_{eq}, provides a measure of the time-varying noise levels, which is well correlated with the annoyance of sound. It is defined as the continuous sound level that has the same energy as a time-varying noise level over a period of time. For road and railways including LRT, the L_{eq} is commonly calculated on the basis of a 16-hour (L_{eq16}) daytime (07:00-23:00) / 8-hour (L_{eq8}) nighttime (23:00-07:00) split to assess its impact on residential buildings. The City of Ottawa's Environmental Noise Control Guidelines (ENCG) specifies that the recommended indoor noise limit range for roadway and LRT noise is 45 (during daytime) and 40 (during nighttime) for residences, as listed in Table 1. However, to account for deficiencies in building construction and control peak noise, these levels should be targeted toward 42, 37 for living areas during the daytime and sleeping quarters during the nighttime respectively.

TABLE 1: INDOOR SOUND LEVEL CRITERIA (ROADWAYS & LRT)[3]

Type of Space	Time Period	Leq (dBA)
		Road / LRT
General offices, reception areas, **retail stores**, etc.	07:00 – 23:00	50
Living/dining/den areas of residences, hospitals, schools, nursing/retirement homes, day-care centres, theatres, places of worship, libraries, individual or semi-private offices, conference rooms, etc.	07:00 – 23:00	45
Sleeping quarters of hotels/motels	23:00 – 07:00	45
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	23:00 – 07:00	40

Predicted noise levels at the plane of window (POW) dictate the action required to achieve the recommended sound levels. An open window is considered to provide a 10 dBA reduction in noise while a standard closed window is capable of providing a minimum 20 dBA noise reduction[4]. Therefore, where noise levels exceed 55 dBA daytime and 50 dBA nighttime, the ventilation for the building should consider the need for having windows and doors closed, which normally triggers the need for forced air heating with provision for central air conditioning. Where noise levels exceed 65 dBA daytime and 60 dBA nighttime building components will require higher levels of sound attenuation[5].

The sound level criterion for outdoor living areas is 55 dBA, which applies during the daytime (07:00 to 23:00). When noise levels exceed 55 dBA, mitigation must be provided to reduce noise levels where technically and administratively feasible to acceptable levels at or below the criterion.

[3] Adapted from ENCG 2016 – Tables 2.2b and 2.2c
[4] Burberry, P.B. (2014). Mitchell's Environment and Services. Routledge, Page 125
[5] MOECP, Environmental Noise Guidelines, NPC 300 – Part C, Section 7.1.3

4.2.2 Theoretical Transportation Noise Predictions

Noise predictions were performed with the aid of the MECP computerized noise assessment program, STAMSON 5.04, for transportation noise analysis. Appendix A includes the STAMSON 5.04 input and output data.

Roadway and light rail traffic noise calculations were performed by treating each road and railway segment as separate line sources of noise. Existing building locations and the study building were considered as noise barriers partially or fully obstructing exposure to the source where appropriate. In addition to the roadway and LRT volumes summarized in Table 2 below, theoretical noise predictions were also based on the following parameters:

(i) Noise receptors were strategically placed at seven (7) locations around the proposed building (see Figure 2).
(ii) Ground surfaces were taken as reflective due to the presence of hard ground (pavement and concrete areas).
(iii) The topography surrounding the study building was assumed to be a flat/gentle slope.
(iv) LRT is located in a trench approximately 6 metres below the local grade of the study site.
(v) Plane of window (POW) receptor heights were taken to be at the centre of the highest storey window at 87 metres.
(vi) The Outdoor living area (OLA) receptors were taken 1.5 metres above the terrace floor level.
(vii) Receptor distance and exposure angles are outlined in Figures 3-6.

4.2.3 Roadway and Light Rail Traffic Volumes

The ENCG dictates that noise calculations should consider future sound levels based on roadways' classification and the railway transit systems at the mature state of development. Therefore, traffic volumes are based on the roadway classifications outlined in the City of Ottawa's Official Plan (OP) and Transportation Master Plan[6] which provide additional details on future roadway expansions and the ultimate buildout LRT volumes were used which were established in the Confederation Line West Extension Environmental Assessment Study. Average Annual Daily Traffic (AADT) volumes are then based

[6] City of Ottawa Transportation Master Plan, November 2013

on data in Table B1 of the ENCG for each roadway classification. Table 2 (below) summarizes the AADT values of roadways and the volume of the Confederation Line LRT considered in the assessment.

TABLE 2: TRANSPORTATION TRAFFIC DATA

Segment	Roadway / LRT Traffic Data	Speed Limit (km/h)	Traffic Volumes
Scott Street	4-Lane Urban Arterial Undivided (4-UAU)	50	**30,000**
Parkdale Avenue	2-Lane Urban Arterial (2-UAU)	50	**15,000**
Holland Avenue	4-Lane Major Collector	40	**24,000**
Confederation Line LRT	LRT	70	**540/60***

* Daytime/nighttime volumes

5. RESULTS AND DISCUSSION

5.1 Transportation Noise Levels

The results of the roadway and railway noise calculations are summarized in Table 3 below. A complete set of input and output data from all STAMSON 5.04 calculations are available in Appendix A.

TABLE 3: EXTERIOR NOISE LEVELS DUE TO TRANSPORTATION NOISE SOURCES

Receptor Number	Receptor Type / Location	Receptor Height Above Grade (m)	Transportation Noise Levels (dBA)	
			Day	Night
1	POW / North Façade 29th Floor	87	61	54
2	POW / West Façade 29th Floor	87	56	49
3	POW / South Façade 29th Floor	87	57	50
4	POW / East Façade 3rd Floor	87	58	50
5	OLA / East Terrace 28th Floor	84	53	N/A*
6	OLA / East Terrace 5th Floor	16	60	N/A*
7	OLA / West Terrace 29th Floor	87	53	N/A*

* OLA noise levels during the nighttime are not considered as per the ENCG

Results of the current analysis indicate that noise levels at POW receptors will range between 53 and 61 dBA during the daytime period (07:00-23:00) and between 49 and 54 dBA during the nighttime period (23:00-07:00). The highest noise level (61 dBA) occurs at the north façade of the study building, which is nearest and most exposed to Scott Street and the Confederation Line LRT. The noise level at the terrace (OLA Receptor 6) exceeds the 55 dBA ENCG criteria. Therefore, a noise barrier investigation was conducted.

5.2 Noise Control Measures for Transportation Traffic Noise

As the results indicate, the noise levels at Plane of Window receptors do not exceed 65 dBA during daytime and 60 dBA during nighttime, therefore, upgraded building components will not be required. Building components compliant with the Ontario Building Code will be sufficient.

The results of the calculations also indicate that the buildings should be designed with forced air heating and provisions for the installation of central air conditioning. In addition to ventilation requirements, warning clauses will also be required to be placed on all Lease, Purchase and Sale Agreements, as summarized in Section 6.

5.3 Noise Barrier Calculation

Noise levels at the 5th Floor Terrace (Receptor 6) are expected to approach 60 dBA during the daytime period. If this area is to be used as an outdoor living area, noise control measures are required to reduce the L_{eq} to 55 dBA. Further analysis investigated the noise mitigating impact of incorporating a noise attenuating guardrail with a height of 1.1 m (base case) surrounding the terrace. Results of the investigation proved that noise levels can be reduced to 55 dBA using a guardrail with a minimum height of 1.5 metres (from the walking surface). The guardrail must be constructed from materials having a minimum surface density of 20 kg/m^2 (STC rating of 30). Table 4 summarizes the results of the barrier investigation.

TABLE 4: RESULTS OF NOISE BARRIER INVESTIGATION

Receptor Number	Receptor Height (m)	Barrier Height (m)	Daytime Leq Noise Levels (dBA)	
			With Barrier	Without Barrier
6	16	15.6	60	57
6	**16**	**16**	**60**	**55**

6. CONCLUSIONS AND RECOMMENDATIONS

Results of the current analysis indicate that noise levels at POW receptors will range between 53 and 61 dBA during the daytime period (07:00-23:00) and between 49 and 54 dBA during the nighttime period (23:00-07:00). The highest noise level (61 dBA) occurs at the north façade of the study building, which is nearest and most exposed to Scott Street and the Confederation Line LRT.

Noise levels at the 5th Floor Terrace (Receptor 6) are expected to approach 60 dBA during the daytime period. If this area is to be used as an outdoor living area, noise control measures are required to reduce the L_{eq} to 55 dBA. Further analysis investigated the noise mitigating impact of incorporating a noise attenuating guardrail. Results of the investigation proved that noise levels can be reduced to 55 dBA using a guardrail with a minimum height of 1.5 m surrounding the terrace. The guardrail must be constructed from materials having a minimum surface density of 20 kg/m^2 (STC rating of 30) and contain no gaps. Design of the guardrail will conform to the requirements outlined in Part 5 of the ENCG. The following information will be required by the City for review prior to the installation of the barrier:

1. Shop drawings, signed and sealed by a qualified Professional Engineer licenced by the Professional Engineers of Ontario, showing the details of the acoustic barrier systems components, including material specifications.
2. Structural drawing(s), signed by a qualified Professional Engineer licenced by the Professional Engineers of Ontario, showing foundation details and specifying design criteria, climatic design loads, as well as applicable geotechnical data used in the design.
3. Layout plan, and wall elevations, showing proposed colours and patterns.

The results of the calculations also indicate that the dwellings should be designed with forced air heating and provisions for the installation of central air conditioning. If installed at the occupants' discretion, air conditioning will allow windows and doors to remain close providing a quiet and comfortable indoor environment. Warning clauses will be required to be placed on all Lease, Purchase and Sale Agreements, as summarized below:

> *"Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing roadway traffic may, on occasion, interfere with some activities of the dwelling occupants, as the sound levels exceed the sound level limits of the City and the Ministry of the Environment, Conservation and Parks.*
>
> *To help address the need for sound attenuation this development includes:*
>
> - *an acoustic barrier*
>
> *To ensure that provincial sound level limits are not exceeded it is important to maintain these sound attenuation features.*
>
> *This dwelling unit has also been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the City and the Ministry of the Environment."*

In addition, the Rail Construction Program Office recommends that the warning clause identified below to be included in all agreements of purchase and sale and lease agreements for the proposed development including those prepared prior to the registration of the Site Plan Agreement:

> *"The Owner hereby acknowledges and agrees:*
>
> *i) The proximity of the proposed development of the lands described in Schedule "A" hereto (the "Lands") to the City's existing and future transit operations, may result in noise, vibration, electromagnetic interferences, stray current transmissions, smoke and particulate matter (collectively referred to as "Interferences") to the development;*

ii) *It has been advised by the City to apply reasonable attenuation measures with respect to the level of the Interferences on and within the Lands and the proposed development; and*

iii) *The Owner acknowledges and agrees all agreements of purchase and sale and lease agreements, and all information on all plans and documents used for marketing purposes, for the whole or any part of the subject lands, shall contain the following clauses which shall also be incorporated in all transfer/deeds and leases from the Owner so that the clauses shall be covenants running with the lands for the benefit of the owner of the adjacent road:*

'The Transferee/Lessee for himself, his heirs, executors, administrators, successors and assigns acknowledges being advised that a public transit light-rail rapid transit system (LRT) is proposed to be located in proximity to the subject lands, and the construction, operation and maintenance of the LRT may result in environmental impacts including, but not limited to noise, vibration, electromagnetic interferences, stray current transmissions, smoke and particulate matter (collectively referred to as the Interferences) to the subject lands. The Transferee/Lessee acknowledges and agrees that despite the inclusion of noise control features within the subject lands, Interferences may continue to be of concern, occasionally interfering with some activities of the occupants on the subject lands.

The Transferee covenants with the Transferor and the Lessee covenants with the Lessor that the above clauses verbatim shall be included in all subsequent lease agreements, agreements of purchase and sale and deeds conveying the lands described herein, which covenants shall run with the lands and are for the benefit of the owner of the adjacent road.'"

The drawings were updated in November 2021 after the transportation noise assessment was completed. Gradient Wind concluded that the changes to the form of the building will not affect the transportation noise levels at the building façades, and the conclusions.

With regards to stationary noise impacts, a stationary noise study was performed, dated October 10, 2013, by Gradient Wind. This study assessed the impacts of stationary sources (a rooftop makeup air unit and a cooling tower) serving the proposed building on surrounding noise-sensitive areas. We anticipate that the noise levels will be compliant with ENCG and NPC-300 limits with a judicious selection of the equipment. The final selection of the mechanical equipment should be reviewed by a qualified acoustic engineer prior to the installation of the equipment.

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

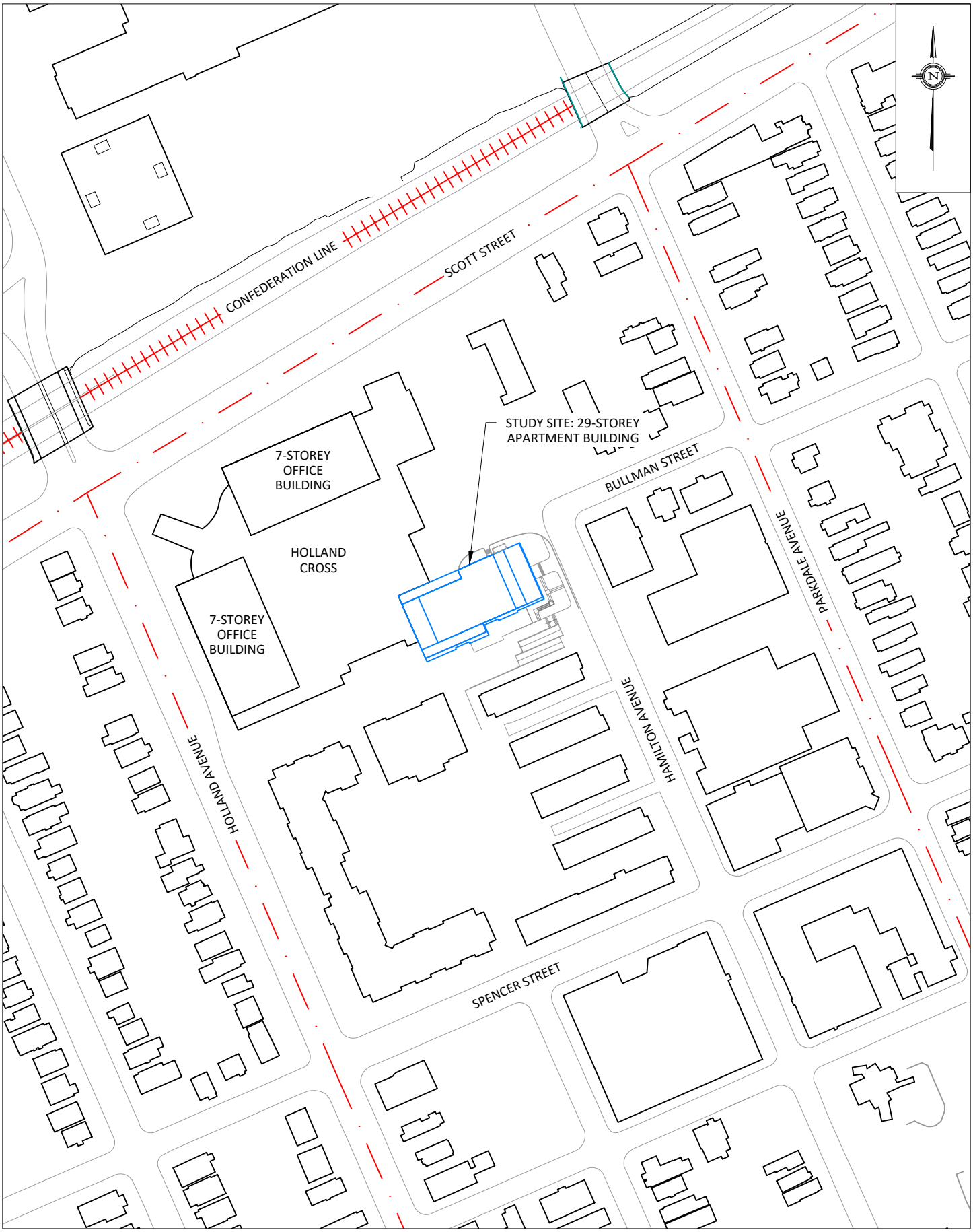
Sincerely,

Gradient Wind Engineering Inc.

Efser Kara, MSc, LEED GA
Acoustic Scientist

Joshua Foster, P.Eng.
Principal

Gradient Wind File#20-229 – Transportation Noise



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SCALE	1:2000 (APPROX.)
DRAWING NO.	GW20-229-1
DATE	OCTOBER 26, 2020
DRAWN BY	E.K.
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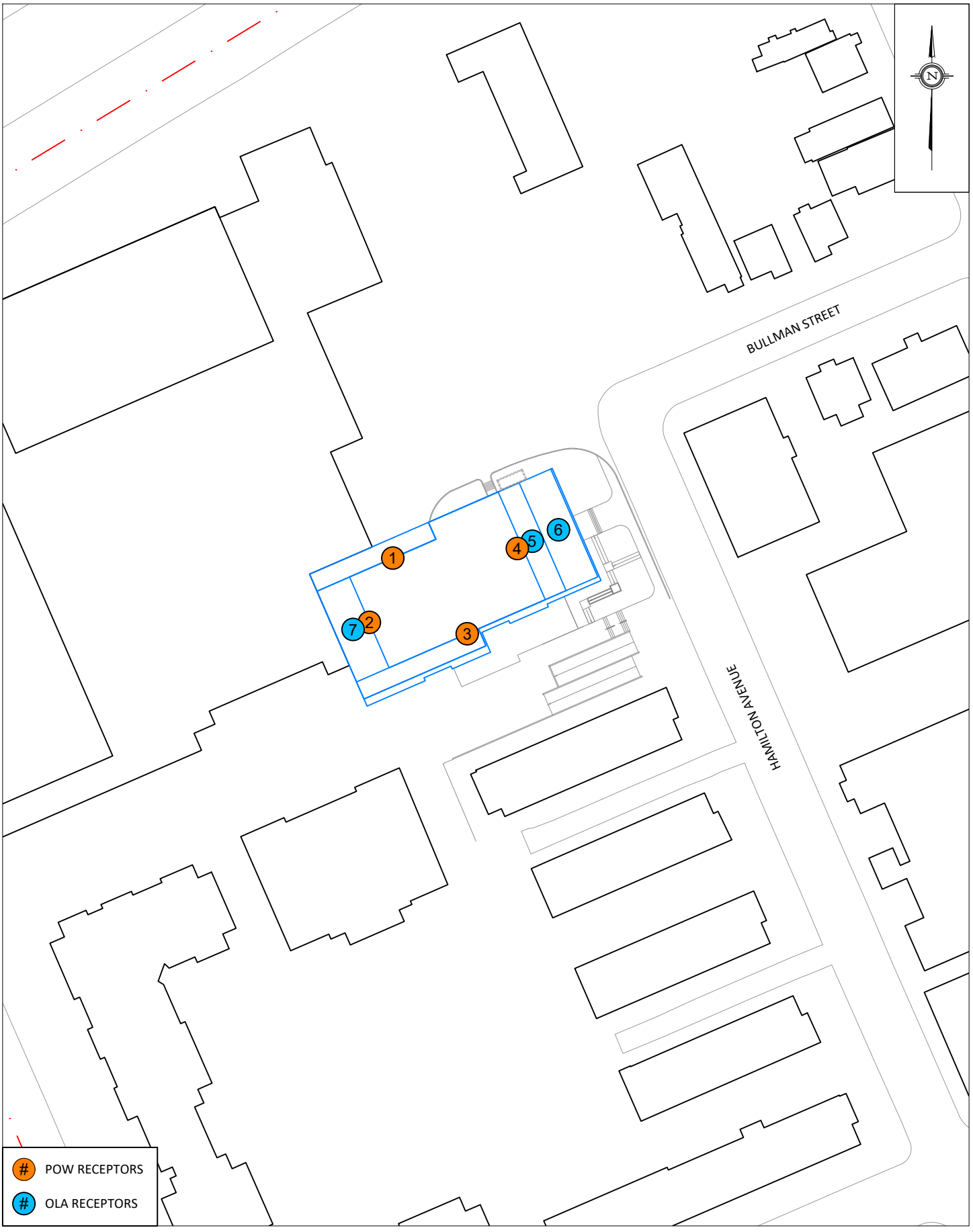

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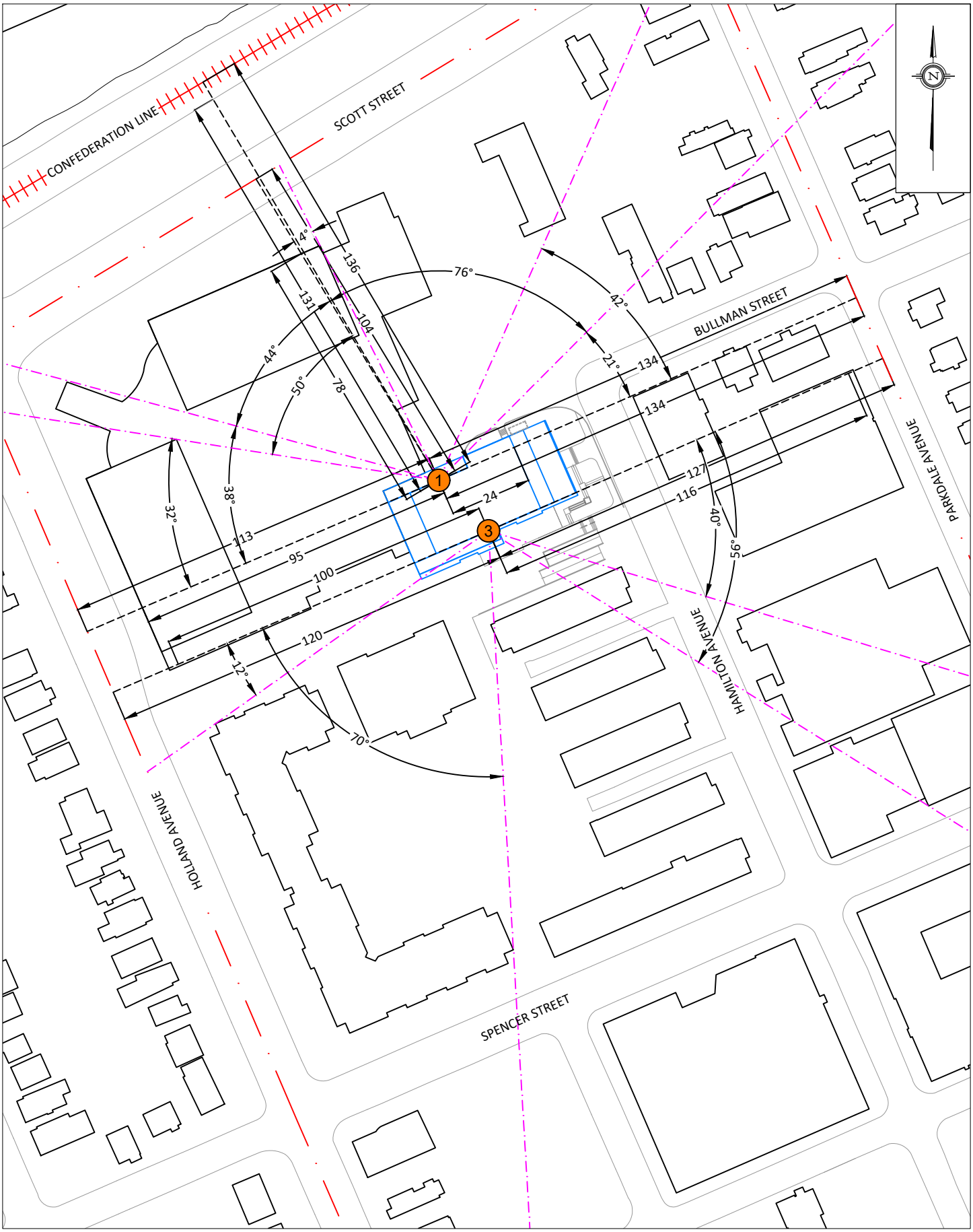
PROJECT	1560 SCOTT STREET, OTTAWA TRANSPORTATION NOISE ASSESSMENT		DESCRIPTION
SCALE	1:1000 (APPROX.)	DRAWING NO.	GW20-229-2
DATE	OCTOBER 26, 2020	DRAWN BY	E.K.

FIGURE 2:
RECEPTOR LOCATIONS



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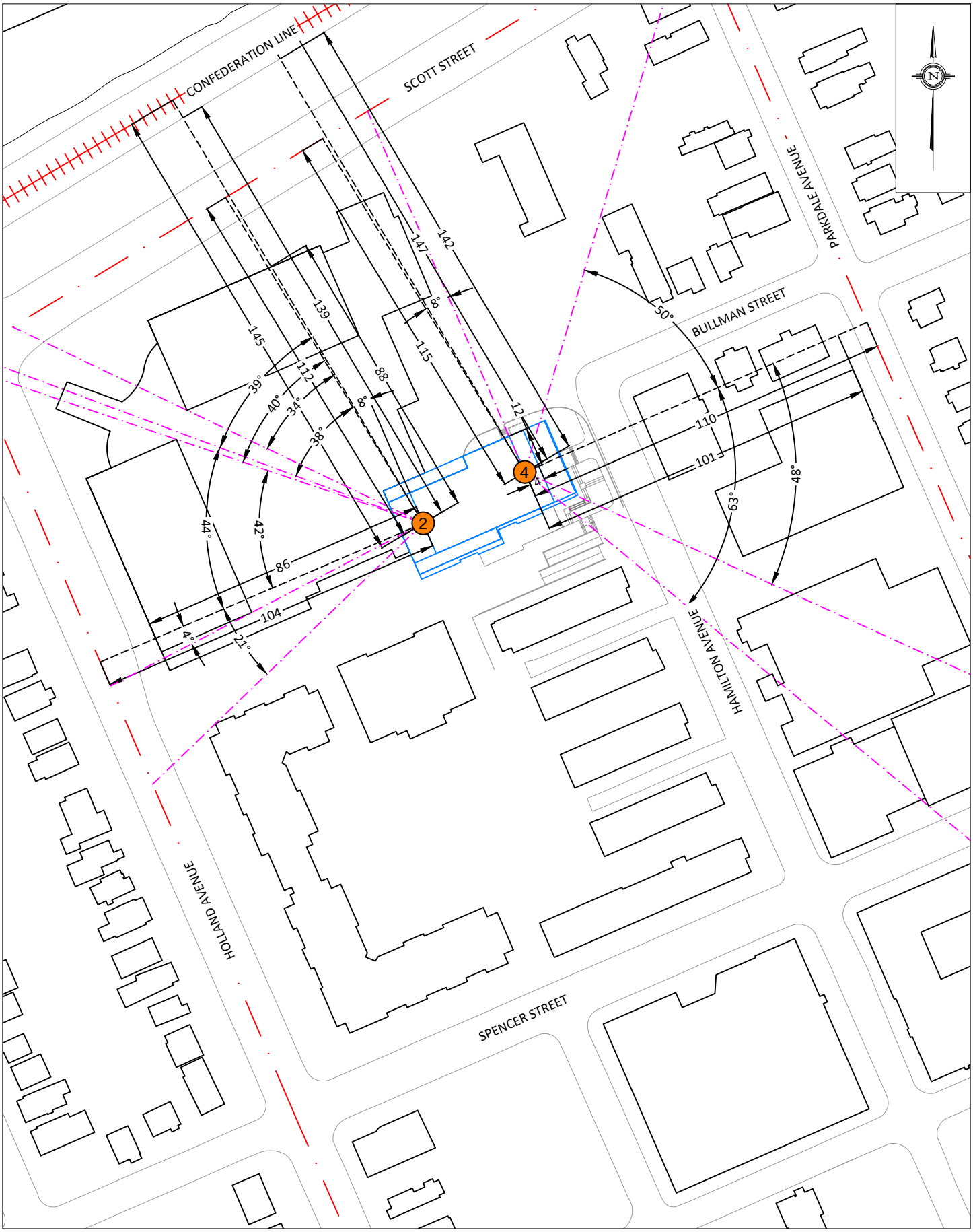
SCALE	1:1500 (APPROX.)	DRAWING NO.	GW20-229-3
DATE	OCTOBER 26, 2020	DRAWN BY	E.K.

FIGURE 3:
STAMSON INPUT DATA
FOR RECEPTORS 1 & 3



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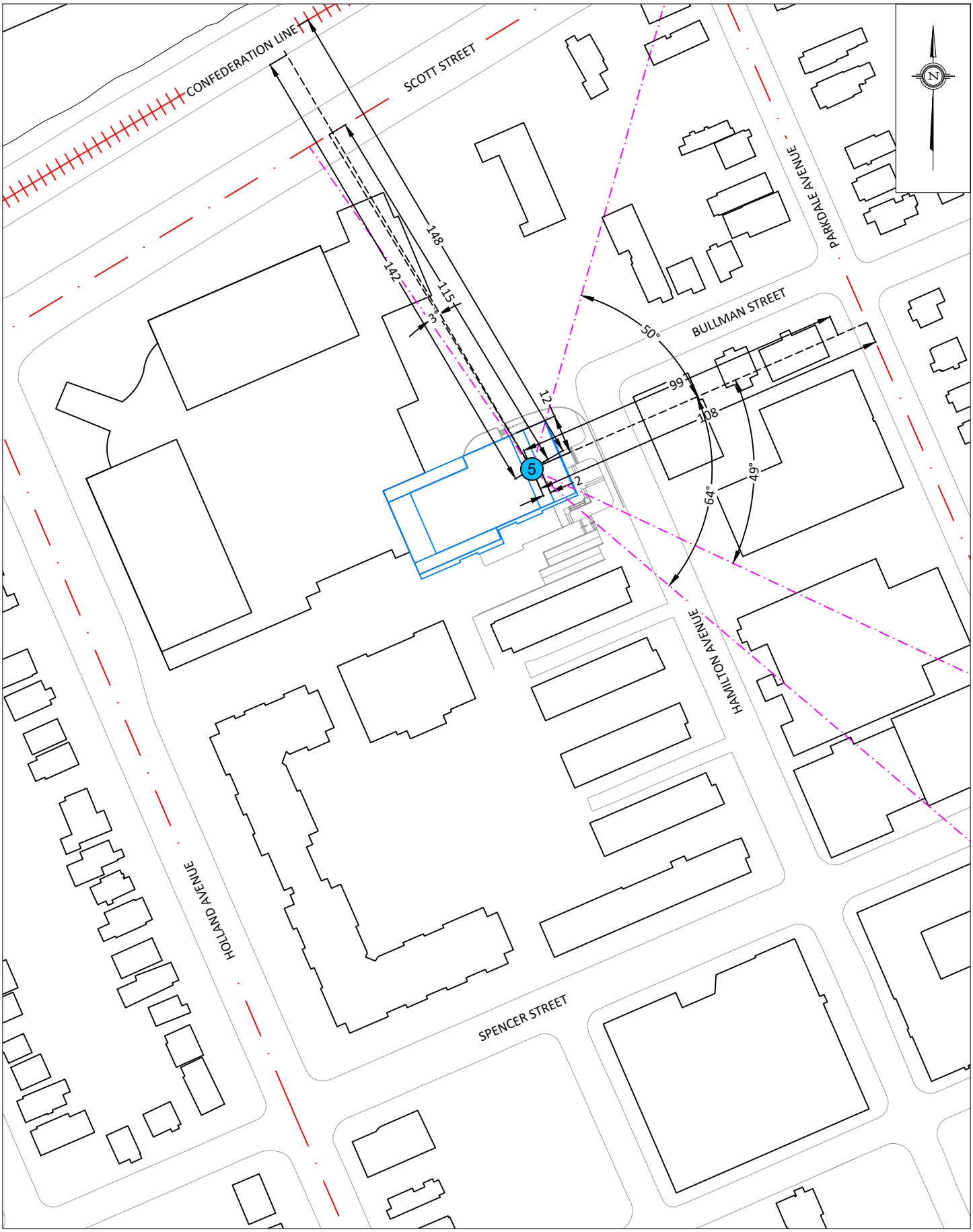
PROJECT	1560 SCOTT STREET, OTTAWA TRANSPORTATION NOISE ASSESSMENT		DESCRIPTION
SCALE	1:1500 (APPROX.)	DRAWING NO.	GW20-229-4
DATE	OCTOBER 26, 2020	DRAWN BY	E.K.

FIGURE 4:
STAMSON INPUT DATA
FOR RECEPTORS 2 & 4



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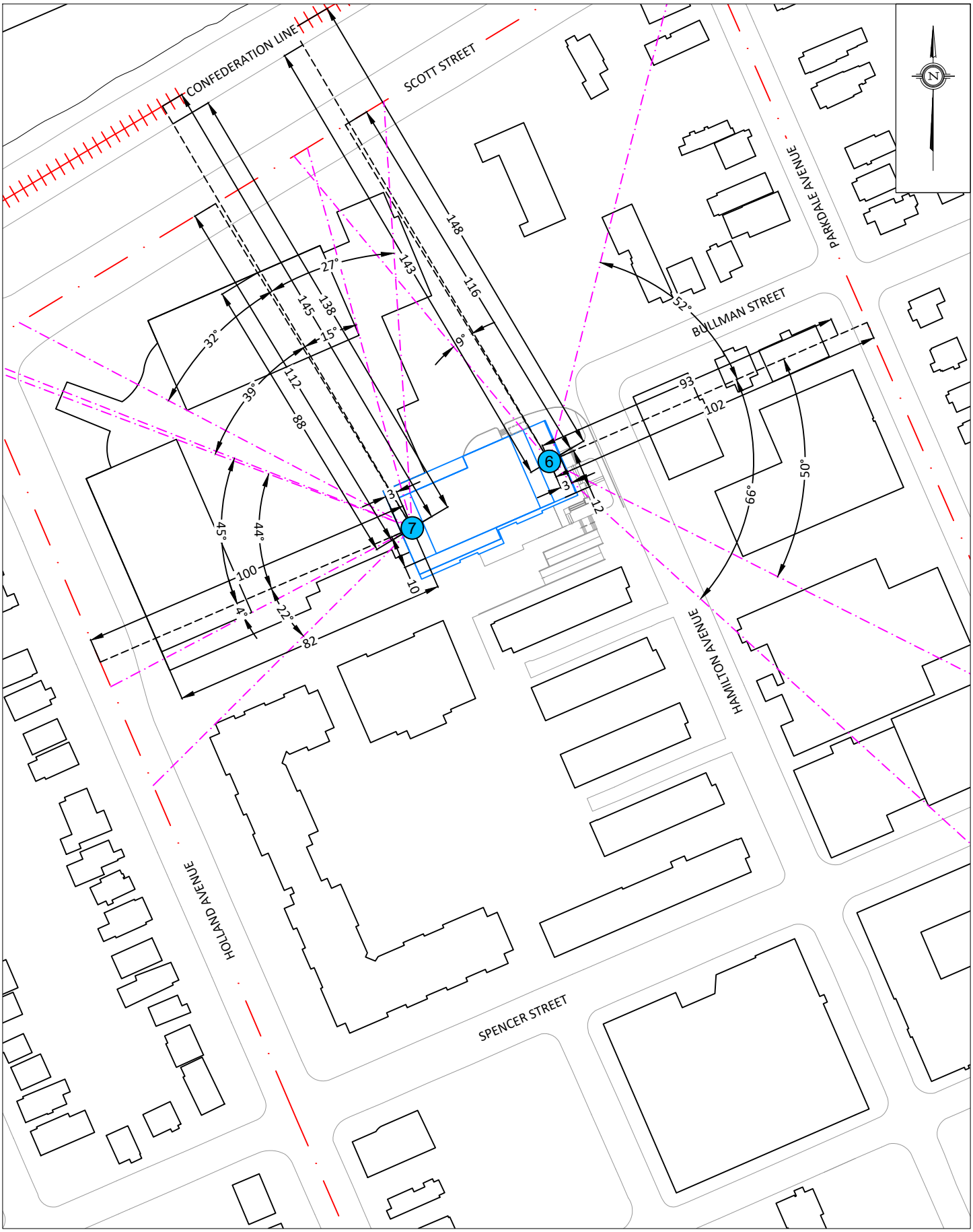
SCALE	1:1500 (APPROX.)
DRAWING NO.	GW20-229-5
DATE	OCTOBER 26, 2020
DRAWN BY	E.K.

DESCRIPTION

FIGURE 5:
STAMSON INPUT DATA
FOR RECEPTOR 5



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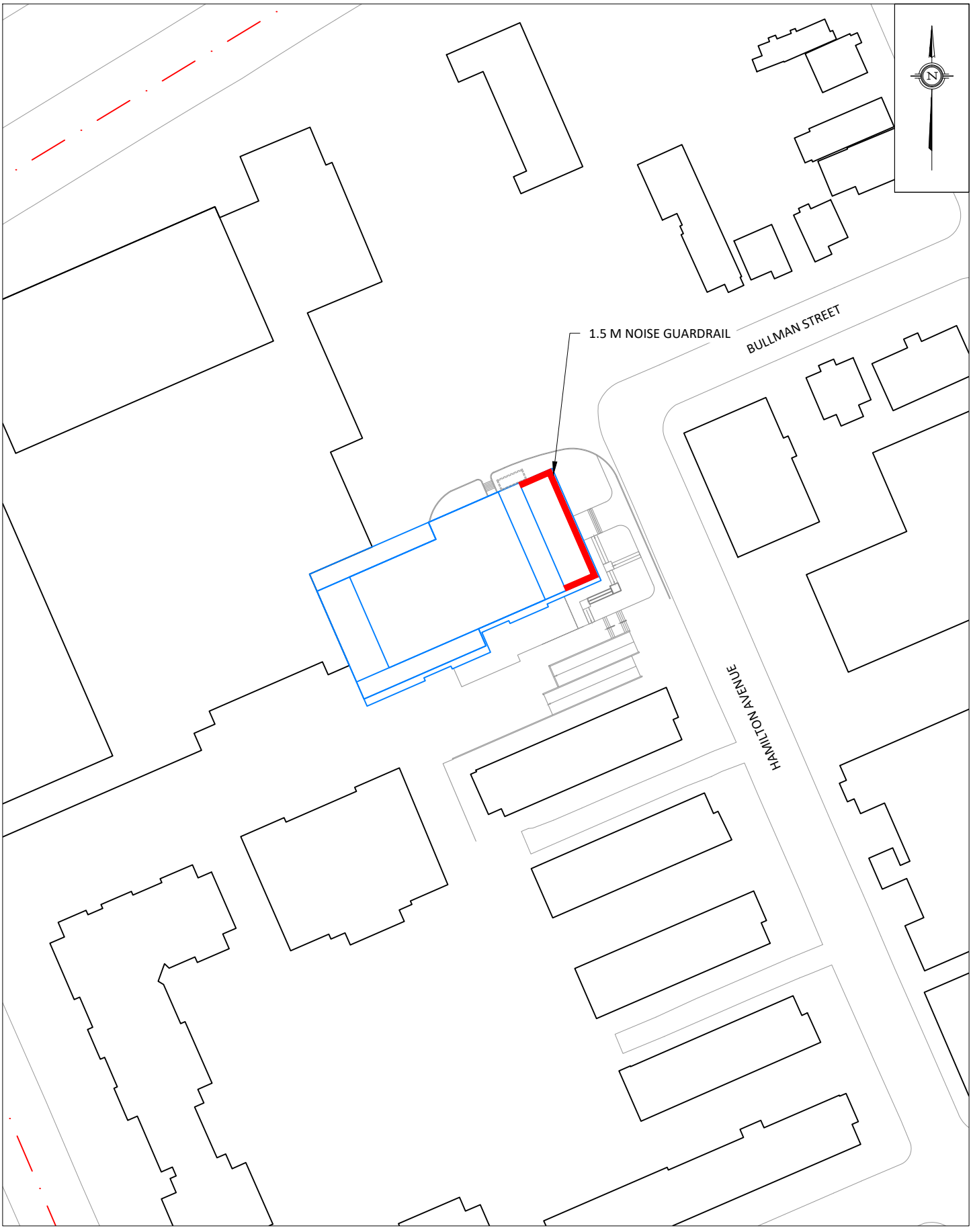
SCALE	1:1500 (APPROX.)	DRAWING NO.	GW20-229-6
DATE	OCTOBER 26, 2020	DRAWN BY	E.K.

FIGURE 6:
STAMSON INPUT DATA
FOR RECEPTORS 6 & 7



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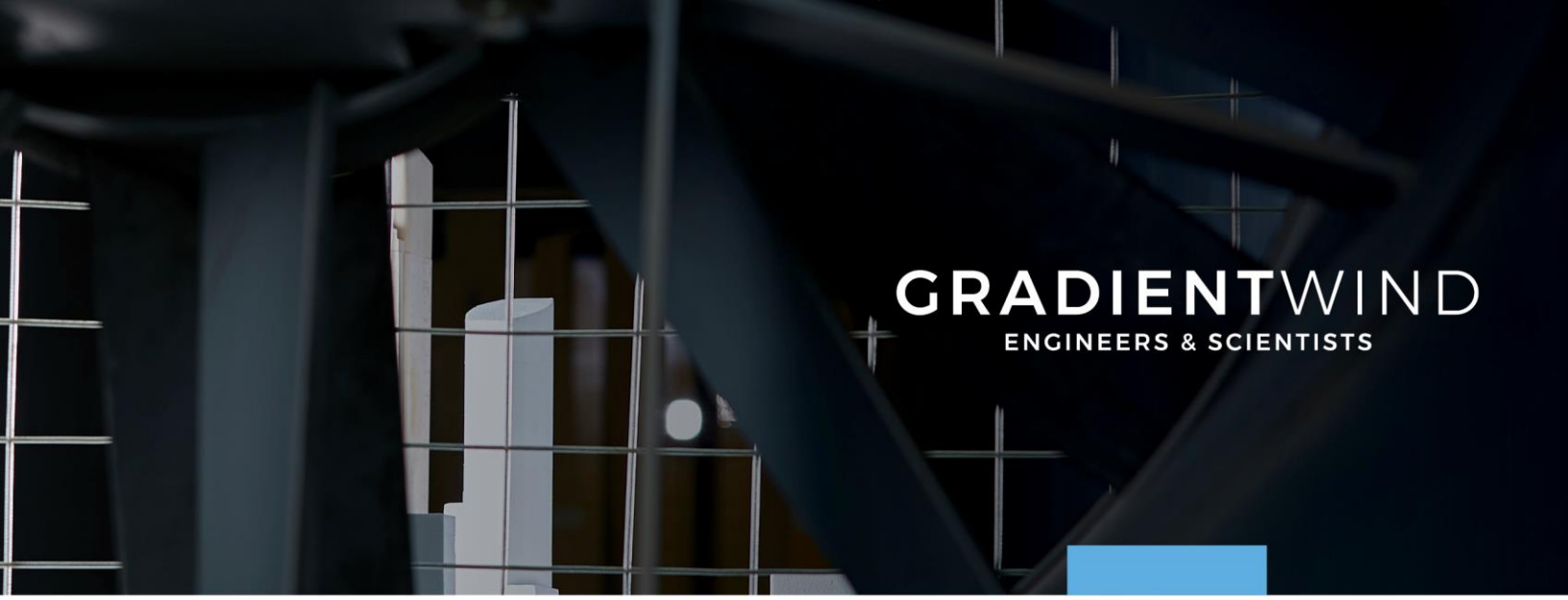
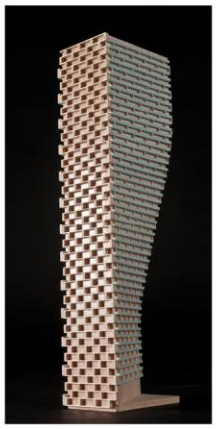
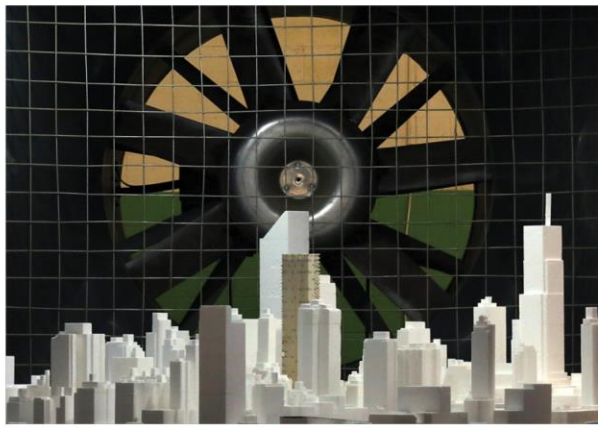
SCALE	1:1000 (APPROX.)	DRAWING NO.	GW20-229-7
DATE	OCTOBER 26, 2020	DRAWN BY	E.K.

FIGURE 7:
NOISE GUARDRAIL LOCATION







APPENDIX A

STAMSON 5.04 – INPUT AND OUTPUT DATA

127 WALGREEN ROAD, OTTAWA, ON, CANADA K0A 1L0 | 613 836 0934
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STAMSON 5.0 NORMAL REPORT Date: 27-10-2020 16:12:36
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r1.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: Scott St1 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Scott St1 (day/night)

Angle1 Angle2 : -82.00 deg -50.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 104.00 / 104.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -82.00 deg Angle2 : -50.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 95.00 / 95.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 2: Scott St2 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Scott St2 (day/night)

Angle1 Angle2 : -50.00 deg -44.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 104.00 / 104.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 3: Scott St3 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: Scott St3 (day/night)

Angle1 Angle2 : -44.00 deg 4.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 104.00 / 104.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -44.00 deg Angle2 : 4.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 78.00 / 78.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 4: Scott St4 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 4: Scott St4 (day/night)

Angle1 Angle2 : 4.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 104.00 / 104.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 5: HollandAv1 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 5: HollandAv1 (day/night)

Angle1 Angle2 : 0.00 deg 32.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 113.00 / 113.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 0.00 deg Angle2 : 32.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 95.00 / 95.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 6: HollandAv2 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 6: HollandAv2 (day/night)

Angle1 Angle2 : 32.00 deg 38.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 113.00 / 113.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 7: ParkdaleAv1 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 7: ParkdaleAv1 (day/night)

Angle1 Angle2 : -42.00 deg -21.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 134.00 / 134.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 8: ParkdaleAv2 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 8: ParkdaleAv2 (day/night)

Angle1 Angle2 : -21.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 134.00 / 134.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -21.00 deg Angle2 : 0.00 deg
Barrier height : 88.50 m
Barrier receiver distance : 24.00 / 24.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Scott St1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 8.89 ! 8.89

ROAD (0.00 + 36.28 + 0.00) = 36.28 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-82 -50 0.00 71.49 0.00 -8.41 -7.50 0.00 0.00 -19.29 36.28

Segment Leq : 36.28 dBA

Results segment # 2: Scott St2 (day)

Source height = 1.50 m

ROAD (0.00 + 48.31 + 0.00) = 48.31 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-50 -44 0.00 71.49 0.00 -8.41 -14.77 0.00 0.00 0.00 48.31

Segment Leq : 48.31 dBA

Results segment # 3: Scott St3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 22.87 ! 22.87

ROAD (0.00 + 45.27 + 0.00) = 45.27 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-44 4 0.00 71.49 0.00 -8.41 -5.74 0.00 0.00 -12.07 45.27

Segment Leq : 45.27 dBA

Results segment # 4: Scott St4 (day)

Source height = 1.50 m

ROAD (0.00 + 59.87 + 0.00) = 59.87 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
4 90 0.00 71.49 0.00 -8.41 -3.21 0.00 0.00 0.00 59.87

Segment Leq : 59.87 dBA

Results segment # 5: HollandAv1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 15.12 ! 15.12

ROAD (0.00 + 32.46 + 0.00) = 32.46 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
0 32 0.00 68.73 0.00 -8.77 -7.50 0.00 0.00 -20.00 32.46

Segment Leq : 32.46 dBA

Results segment # 6: HollandAv2 (day)

Source height = 1.50 m

ROAD (0.00 + 45.19 + 0.00) = 45.19 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
32 38 0.00 68.73 0.00 -8.77 -14.77 0.00 0.00 0.00 45.19

Segment Leq : 45.19 dBA

Results segment # 7: ParkdaleAv1 (day)

Source height = 1.50 m

ROAD (0.00 + 49.64 + 0.00) = 49.64 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-42 -21 0.00 68.48 0.00 -9.51 -9.33 0.00 0.00 0.00 49.64

Segment Leq : 49.64 dBA

Results segment # 8: ParkdaleAv2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

1.50 ! 87.00 ! 71.69 ! 71.69

ROAD (0.00 + 29.64 + 0.00) = 29.64 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-21 0 0.00 68.48 0.00 -9.51 -9.33 0.00 0.00 -20.00 29.64

Segment Leq : 29.64 dBA

Total Leq All Segments: 60.81 dBA

Results segment # 1: Scott St1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 8.89 ! 8.89

ROAD (0.00 + 28.69 + 0.00) = 28.69 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-82 -50 0.00 63.89 0.00 -8.41 -7.50 0.00 0.00 -19.29 28.69

Segment Leq : 28.69 dBA

Results segment # 2: Scott St2 (night)

Source height = 1.50 m

ROAD (0.00 + 40.71 + 0.00) = 40.71 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-50 -44 0.00 63.89 0.00 -8.41 -14.77 0.00 0.00 0.00 40.71

Segment Leq : 40.71 dBA

Results segment # 3: Scott St3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 22.87 ! 22.87

ROAD (0.00 + 37.68 + 0.00) = 37.68 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-44 4 0.00 63.89 0.00 -8.41 -5.74 0.00 0.00 -12.07 37.68

Segment Leq : 37.68 dBA

Results segment # 4: Scott St4 (night)

Source height = 1.50 m

ROAD (0.00 + 52.28 + 0.00) = 52.28 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
4 90 0.00 63.89 0.00 -8.41 -3.21 0.00 0.00 0.00 52.28

Segment Leq : 52.28 dBA

Results segment # 5: HollandAv1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 15.12 ! 15.12

ROAD (0.00 + 24.86 + 0.00) = 24.86 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
0 32 0.00 61.13 0.00 -8.77 -7.50 0.00 0.00 -20.00 24.86

Segment Leq : 24.86 dBA

Results segment # 6: HollandAv2 (night)

Source height = 1.50 m

ROAD (0.00 + 37.59 + 0.00) = 37.59 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
32 38 0.00 61.13 0.00 -8.77 -14.77 0.00 0.00 0.00 37.59

Segment Leq : 37.59 dBA

Results segment # 7: ParkdaleAv1 (night)

Source height = 1.50 m

ROAD (0.00 + 42.04 + 0.00) = 42.04 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-42 -21 0.00 60.88 0.00 -9.51 -9.33 0.00 0.00 0.00 42.04

Segment Leq : 42.04 dBA

Results segment # 8: ParkdaleAv2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

1.50 ! 87.00 ! 71.69 ! 71.69

ROAD (0.00 + 22.04 + 0.00) = 22.04 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-21 0 0.00 60.88 0.00 -9.51 -9.33 0.00 0.00 -20.00 22.04

Segment Leq : 22.04 dBA

Total Leq All Segments: 53.21 dBA

RT/Custom data, segment # 1: Conf.Line1 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 1: Conf.Line1 (day/night)

Angle1 Angle2 : -82.00 deg -50.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 136.00 / 136.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -82.00 deg Angle2 : -50.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 95.00 / 95.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

RT/Custom data, segment # 2: Conf.Line2 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 50 km/h

Data for Segment # 2: Conf.Line2 (day/night)

Angle1 Angle2 : -50.00 deg -44.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 136.00 / 136.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -50.00 deg Angle2 : -44.00 deg
Barrier height : 0.00 m
Barrier receiver distance : 131.00 / 131.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

RT/Custom data, segment # 3: Conf.Line3 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 50 km/h

Data for Segment # 3: Conf.Line3 (day/night)

Angle1 Angle2 : -44.00 deg 4.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 136.00 / 136.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -44.00 deg Angle2 : 4.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 78.00 / 78.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

RT/Custom data, segment # 4: Conf.Line4 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 50 km/h

Data for Segment # 4: Conf.Line4 (day/night)

Angle1 Angle2 : 4.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 136.00 / 136.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 4.00 deg Angle2 : 90.00 deg
Barrier height : 0.00 m
Barrier receiver distance : 131.00 / 131.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Conf.Line1 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 26.58 ! 26.58

RT/Custom (0.00 + 40.93 + 0.00) = 40.93 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-82 -50 0.00 63.44 -9.57 -7.50 0.00 0.00 -5.43 40.93

Segment Leq : 40.93 dBA

Results segment # 2: Conf.Line2 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! -2.10 ! -2.10

RT/Custom (0.00 + 26.23 + 0.00) = 26.23 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-50 -44 0.00 60.51 -9.57 -14.77 0.00 0.00 -9.94 26.23

Segment Leq : 26.23 dBA

Results segment # 3: Conf.Line3 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 37.39 ! 37.39

RT/Custom (0.00 + 45.20 + 0.00) = 45.20 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-44 4 0.00 60.51 -9.57 -5.74 0.00 0.00 0.00 45.20*
-44 4 0.00 60.51 -9.57 -5.74 0.00 0.00 0.00 45.20
---

* Bright Zone !

Segment Leq : 45.20 dBA

Results segment # 4: Conf.Line4 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! -2.10 ! -2.10

RT/Custom (0.00 + 38.75 + 0.00) = 38.75 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
4 90 0.00 60.51 -9.57 -3.21 0.00 0.00 -8.98 38.75

Segment Leq : 38.75 dBA

Total Leq All Segments: 47.28 dBA

Results segment # 1: Conf.Line1 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 26.58 ! 26.58

RT/Custom (0.00 + 34.40 + 0.00) = 34.40 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-82 -50 0.00 56.91 -9.57 -7.50 0.00 0.00 -5.43 34.40

Segment Leq : 34.40 dBA

Results segment # 2: Conf.Line2 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! -2.10 ! -2.10

RT/Custom (0.00 + 19.69 + 0.00) = 19.69 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-50 -44 0.00 53.98 -9.57 -14.77 0.00 0.00 -9.94 19.69

Segment Leq : 19.69 dBA

Results segment # 3: Conf.Line3 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 87.00 ! 37.39 ! 37.39

RT/Custom (0.00 + 38.67 + 0.00) = 38.67 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-44	4	0.00	53.98	-9.57	-5.74	0.00	0.00	0.00	38.67*
-44	4	0.00	53.98	-9.57	-5.74	0.00	0.00	0.00	38.67

* Bright Zone !

Segment Leq : 38.67 dBA

Results segment # 4: Conf.Line4 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! -2.10 ! -2.10

RT/Custom (0.00 + 32.22 + 0.00) = 32.22 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
4 90 0.00 53.98 -9.57 -3.21 0.00 0.00 -8.98 32.22

Segment Leq : 32.22 dBA

Total Leq All Segments: 40.75 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.99
(NIGHT): 53.45

STAMSON 5.0 NORMAL REPORT Date: 27-10-2020 15:26:54
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r2.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: Scott St1 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Scott St1 (day/night)

Angle1 Angle2 : -90.00 deg -40.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 112.00 / 112.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : -40.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 86.00 / 86.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 2: Scott St2 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Scott St2 (day/night)

Angle1 Angle2 : -40.00 deg -34.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 112.00 / 112.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 3: Scott St3 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: Scott St3 (day/night)

Angle1 Angle2 : -34.00 deg 8.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 113.00 / 113.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -34.00 deg Angle2 : 8.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 88.00 / 88.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 4: HollandAv1 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 4: HollandAv1 (day/night)

Angle1 Angle2 : -90.00 deg -21.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 104.00 / 104.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : -21.00 deg
Barrier height : 25.00 m
Barrier receiver distance : 86.00 / 86.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 5: HollandAv2 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 5: HollandAv2 (day/night)

Angle1 Angle2 : -21.00 deg -4.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 104.00 / 104.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 6: HollandAv3 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 6: HollandAv3 (day/night)

Angle1 Angle2 : -4.00 deg 42.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 104.00 / 104.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -4.00 deg Angle2 : 42.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 86.00 / 86.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 7: HollandAv4 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 7: HollandAv4 (day/night)

Angle1 Angle2 : 42.00 deg 44.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 104.00 / 104.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Scott St1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 21.34 ! 21.34

ROAD (0.00 + 47.18 + 0.00) = 47.18 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -40 0.00 71.49 0.00 -8.73 -5.56 0.00 0.00 -10.02 47.18

Segment Leq : 47.18 dBA

Results segment # 2: Scott St2 (day)

Source height = 1.50 m

ROAD (0.00 + 47.99 + 0.00) = 47.99 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-40 -34 0.00 71.49 0.00 -8.73 -14.77 0.00 0.00 0.00 47.99

Segment Leq : 47.99 dBA

Results segment # 3: Scott St3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 20.41 ! 20.41

ROAD (0.00 + 40.66 + 0.00) = 40.66 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-34 8 0.00 71.49 0.00 -8.77 -6.32 0.00 0.00 -15.74 40.66

Segment Leq : 40.66 dBA

Results segment # 4: HollandAv1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 16.29 ! 16.29

ROAD (0.00 + 43.37 + 0.00) = 43.37 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -21 0.00 68.73 0.00 -8.41 -4.16 0.00 0.00 -12.78 43.37

Segment Leq : 43.37 dBA

Results segment # 5: HollandAv2 (day)

Source height = 1.50 m

ROAD (0.00 + 50.07 + 0.00) = 50.07 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-21 -4 0.00 68.73 0.00 -8.41 -10.25 0.00 0.00 0.00 50.07

Segment Leq : 50.07 dBA

Results segment # 6: HollandAv3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

1.50 ! 87.00 ! 16.29 ! 16.29

ROAD (0.00 + 34.87 + 0.00) = 34.87 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-4 42 0.00 68.73 0.00 -8.41 -5.93 0.00 0.00 -19.53 34.87

Segment Leq : 34.87 dBA

Results segment # 7: HollandAv4 (day)

Source height = 1.50 m

ROAD (0.00 + 40.78 + 0.00) = 40.78 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
42 44 0.00 68.73 0.00 -8.41 -19.54 0.00 0.00 0.00 40.78

Segment Leq : 40.78 dBA

Total Leq All Segments: 54.24 dBA

Results segment # 1: Scott St1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

1.50 ! 87.00 ! 21.34 ! 21.34

ROAD (0.00 + 39.58 + 0.00) = 39.58 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -40 0.00 63.89 0.00 -8.73 -5.56 0.00 0.00 -10.02 39.58

Segment Leq : 39.58 dBA

Results segment # 2: Scott St2 (night)

Source height = 1.50 m

ROAD (0.00 + 40.39 + 0.00) = 40.39 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-40 -34 0.00 63.89 0.00 -8.73 -14.77 0.00 0.00 0.00 40.39

Segment Leq : 40.39 dBA

Results segment # 3: Scott St3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

1.50 ! 87.00 ! 20.41 ! 20.41

ROAD (0.00 + 33.06 + 0.00) = 33.06 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-34 8 0.00 63.89 0.00 -8.77 -6.32 0.00 0.00 -15.74 33.06

Segment Leq : 33.06 dBA

Results segment # 4: HollandAv1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 16.29 ! 16.29

ROAD (0.00 + 35.77 + 0.00) = 35.77 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -21 0.00 61.13 0.00 -8.41 -4.16 0.00 0.00 -12.78 35.77

Segment Leq : 35.77 dBA

Results segment # 5: HollandAv2 (night)

Source height = 1.50 m

ROAD (0.00 + 42.47 + 0.00) = 42.47 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-21 -4 0.00 61.13 0.00 -8.41 -10.25 0.00 0.00 0.00 42.47

Segment Leq : 42.47 dBA

Results segment # 6: HollandAv3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

1.50 ! 87.00 ! 16.29 ! 16.29

ROAD (0.00 + 27.27 + 0.00) = 27.27 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-4 42 0.00 61.13 0.00 -8.41 -5.93 0.00 0.00 -19.53 27.27

Segment Leq : 27.27 dBA

Results segment # 7: HollandAv4 (night)

Source height = 1.50 m

ROAD (0.00 + 33.18 + 0.00) = 33.18 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
42 44 0.00 61.13 0.00 -8.41 -19.54 0.00 0.00 0.00 33.18

Segment Leq : 33.18 dBA

Total Leq All Segments: 46.64 dBA

RT/Custom data, segment # 1: Conf.Line1 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 1: Conf.Line1 (day/night)

Angle1 Angle2 : -90.00 deg -40.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 145.00 / 145.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : -40.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 86.00 / 86.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

RT/Custom data, segment # 2: Conf.Line2 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 2: Conf.Line2 (day/night)

Angle1 Angle2 : -40.00 deg -34.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 145.00 / 145.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -40.00 deg Angle2 : -34.00 deg
Barrier height : 0.00 m
Barrier receiver distance : 139.00 / 139.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

RT/Custom data, segment # 3: Conf.Line3 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 3: Conf.Line3 (day/night)

Angle1 Angle2 : -34.00 deg 8.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 145.00 / 145.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -34.00 deg Angle2 : 8.00 deg
Barrier height : 28.00 m
Barrier receiver distance : 88.00 / 88.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Conf.Line1 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 35.70 ! 35.70

RT/Custom (0.00 + 48.02 + 0.00) = 48.02 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -40 0.00 63.44 -9.85 -5.56 0.00 0.00 -0.28 47.74*
-90 -40 0.00 63.44 -9.85 -5.56 0.00 0.00 0.00 48.02
---

* Bright Zone !

Segment Leq : 48.02 dBA

Results segment # 2: Conf.Line2 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! -1.67 ! -1.67

RT/Custom (0.00 + 29.94 + 0.00) = 29.94 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-40 -34 0.00 63.44 -9.85 -14.77 0.00 0.00 -8.87 29.94

Segment Leq : 29.94 dBA

Results segment # 3: Conf.Line3 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 34.50 ! 34.50

RT/Custom (0.00 + 47.26 + 0.00) = 47.26 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-34 8 0.00 63.44 -9.85 -6.32 0.00 0.00 0.00 47.26*
-34 8 0.00 63.44 -9.85 -6.32 0.00 0.00 0.00 47.26
---

* Bright Zone !

Segment Leq : 47.26 dBA

Total Leq All Segments: 50.70 dBA

Results segment # 1: Conf.Line1 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 35.70 ! 35.70

RT/Custom (0.00 + 41.49 + 0.00) = 41.49 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -40 0.00 56.91 -9.85 -5.56 0.00 0.00 -0.28 41.21*
-90 -40 0.00 56.91 -9.85 -5.56 0.00 0.00 0.00 41.49
---

* Bright Zone !

Segment Leq : 41.49 dBA

Results segment # 2: Conf.Line2 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! -1.67 ! -1.67

RT/Custom (0.00 + 23.41 + 0.00) = 23.41 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-40 -34 0.00 56.91 -9.85 -14.77 0.00 0.00 -8.87 23.41

Segment Leq : 23.41 dBA

Results segment # 3: Conf.Line3 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 87.00 ! 34.50 ! 34.50

RT/Custom (0.00 + 40.73 + 0.00) = 40.73 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-34 8 0.00 56.91 -9.85 -6.32 0.00 0.00 0.00 40.73*
-34 8 0.00 56.91 -9.85 -6.32 0.00 0.00 0.00 40.73
---

* Bright Zone !

Segment Leq : 40.73 dBA

Total Leq All Segments: 44.17 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 55.83
(NIGHT): 48.59

STAMSON 5.0 NORMAL REPORT Date: 27-10-2020 16:52:03
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r3.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: HollandAv1 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HollandAv1 (day/night)

Angle1 Angle2 : -90.00 deg -70.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 120.00 / 120.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: HollandAv2 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HollandAv2 (day/night)

Angle1 Angle2 : -70.00 deg -12.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 120.00 / 120.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -70.00 deg Angle2 : -12.00 deg
Barrier height : 25.00 m
Barrier receiver distance : 100.00 / 100.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 3: HollandAv3 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: HollandAv3 (day/night)

Angle1 Angle2 : -12.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 120.00 / 120.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 4: ParkdaleAv1 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 4: ParkdaleAv1 (day/night)

Angle1 Angle2 : 0.00 deg 40.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 127.00 / 127.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 5: ParkdaleAv2 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 5: ParkdaleAv2 (day/night)

Angle1 Angle2 : 40.00 deg 56.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 127.00 / 127.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 40.00 deg Angle2 : 56.00 deg
Barrier height : 25.00 m
Barrier receiver distance : 116.00 / 116.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 6: ParkdaleAv3 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 6: ParkdaleAv3 (day/night)

Angle1 Angle2 : 56.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 127.00 / 127.00 m
Receiver height : 87.00 / 87.00 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: HollandAv1 (day)

Source height = 1.50 m

ROAD (0.00 + 50.15 + 0.00) = 50.15 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -70 0.00 68.73 0.00 -9.03 -9.54 0.00 0.00 0.00 50.15

Segment Leq : 50.15 dBA

Results segment # 2: HollandAv2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

1.50 ! 87.00 ! 15.75 ! 15.75

ROAD (0.00 + 38.21 + 0.00) = 38.21 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-70 -12 0.00 68.73 0.00 -9.03 -4.92 0.00 0.00 -16.57 38.21

Segment Leq : 38.21 dBA

Results segment # 3: HollandAv3 (day)

Source height = 1.50 m

ROAD (0.00 + 47.94 + 0.00) = 47.94 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-12	0	0.00	68.73	0.00	-9.03	-11.76	0.00	0.00	0.00	47.94

Segment Leq : 47.94 dBA

Results segment # 4: ParkdaleAv1 (day)

Source height = 1.50 m

ROAD (0.00 + 52.67 + 0.00) = 52.67 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	40	0.00	68.48	0.00	-9.28	-6.53	0.00	0.00	0.00	52.67

Segment Leq : 52.67 dBA

Results segment # 5: ParkdaleAv2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 8.90 ! 8.90

ROAD (0.00 + 28.69 + 0.00) = 28.69 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
40 56 0.00 68.48 0.00 -9.28 -10.51 0.00 0.00 -20.00 28.69

Segment Leq : 28.69 dBA

Results segment # 6: ParkdaleAv3 (day)

Source height = 1.50 m

ROAD (0.00 + 51.96 + 0.00) = 51.96 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
56 90 0.00 68.48 0.00 -9.28 -7.24 0.00 0.00 0.00 51.96

Segment Leq : 51.96 dBA

Total Leq All Segments: 57.12 dBA

Results segment # 1: HollandAv1 (night)

Source height = 1.50 m

ROAD (0.00 + 42.55 + 0.00) = 42.55 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -70 0.00 61.13 0.00 -9.03 -9.54 0.00 0.00 0.00 42.55

Segment Leq : 42.55 dBA

Results segment # 2: HollandAv2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

1.50 ! 87.00 ! 15.75 ! 15.75

ROAD (0.00 + 30.61 + 0.00) = 30.61 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-70 -12 0.00 61.13 0.00 -9.03 -4.92 0.00 0.00 -16.57 30.61

Segment Leq : 30.61 dBA

Results segment # 3: HollandAv3 (night)

Source height = 1.50 m

ROAD (0.00 + 40.34 + 0.00) = 40.34 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-12 0 0.00 61.13 0.00 -9.03 -11.76 0.00 0.00 0.00 40.34

Segment Leq : 40.34 dBA

Results segment # 4: ParkdaleAv1 (night)

Source height = 1.50 m

ROAD (0.00 + 45.07 + 0.00) = 45.07 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
0 40 0.00 60.88 0.00 -9.28 -6.53 0.00 0.00 0.00 45.07

Segment Leq : 45.07 dBA

Results segment # 5: ParkdaleAv2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 8.90 ! 8.90

ROAD (0.00 + 21.09 + 0.00) = 21.09 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
40 56 0.00 60.88 0.00 -9.28 -10.51 0.00 0.00 -20.00 21.09

Segment Leq : 21.09 dBA

Results segment # 6: ParkdaleAv3 (night)

Source height = 1.50 m

ROAD (0.00 + 44.37 + 0.00) = 44.37 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
56 90 0.00 60.88 0.00 -9.28 -7.24 0.00 0.00 0.00 44.37

Segment Leq : 44.37 dBA

Total Leq All Segments: 49.52 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 57.12
(NIGHT): 49.52

STAMSON 5.0 NORMAL REPORT Date: 27-10-2020 18:47:10
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r4.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Scott Av (day/night)

Angle1 Angle2 : 8.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 115.00 / 115.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 8.00 deg Angle2 : 90.00 deg
Barrier height : 82.50 m
Barrier receiver distance : 12.00 / 12.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 2: ParkdaleAv1 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: ParkdaleAv1 (day/night)

Angle1 Angle2 : -50.00 deg 48.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 110.00 / 110.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -50.00 deg Angle2 : 48.00 deg
Barrier height : 82.50 m
Barrier receiver distance : 4.00 / 4.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 3: ParkdaleAv2 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: ParkdaleAv2 (day/night)

Angle1 Angle2 : 48.00 deg 63.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 110.00 / 110.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 48.00 deg Angle2 : 63.00 deg
Barrier height : 27.00 m
Barrier receiver distance : 101.00 / 101.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 4: ParkdaleAv3 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 4: ParkdaleAv3 (day/night)

Angle1 Angle2 : 63.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 110.00 / 110.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 63.00 deg Angle2 : 90.00 deg
Barrier height : 82.50 m
Barrier receiver distance : 12.00 / 12.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Scott Av (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 78.08 ! 78.08

ROAD (0.00 + 47.79 + 0.00) = 47.79 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
8 90 0.00 71.49 0.00 -8.85 -3.41 0.00 0.00 -11.44 47.79

Segment Leq : 47.79 dBA

Results segment # 2: ParkdaleAv1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 83.89 ! 83.89

ROAD (0.00 + 57.19 + 0.00) = 57.19 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-50 48 0.00 68.48 0.00 -8.65 -2.64 0.00 0.00 0.00 57.19*
-50 48 0.00 68.48 0.00 -8.65 -2.64 0.00 0.00 0.00 57.19
---

* Bright Zone !

Segment Leq : 57.19 dBA

Results segment # 3: ParkdaleAv2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 8.49 ! 8.49

ROAD (0.00 + 29.04 + 0.00) = 29.04 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
48 63 0.00 68.48 0.00 -8.65 -10.79 0.00 0.00 -20.00 29.04

Segment Leq : 29.04 dBA

Results segment # 4: ParkdaleAv3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 77.67 ! 77.67

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
---
63 90 0.00 68.48 0.00 -8.65 -8.24 0.00 0.00 -9.08 42.51

Segment Leq : 42.51 dBA

Total Leq All Segments: 57.80 dBA

Results segment # 1: Scott Av (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 78.08 ! 78.08

ROAD (0.00 + 40.19 + 0.00) = 40.19 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
8 90 0.00 63.89 0.00 -8.85 -3.41 0.00 0.00 -11.44 40.19

Segment Leq : 40.19 dBA

Results segment # 2: ParkdaleAv1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 83.89 ! 83.89

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
---
-50 48 0.00 60.88 0.00 -8.65 -2.64 0.00 0.00 0.00 49.59*
-50 48 0.00 60.88 0.00 -8.65 -2.64 0.00 0.00 0.00 49.59
---

* Bright Zone !

Segment Leq : 49.59 dBA

Results segment # 3: ParkdaleAv2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 8.49 ! 8.49

ROAD (0.00 + 21.44 + 0.00) = 21.44 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
48 63 0.00 60.88 0.00 -8.65 -10.79 0.00 0.00 -20.00 21.44

Segment Leq : 21.44 dBA

Results segment # 4: ParkdaleAv3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 77.67 ! 77.67

ROAD (0.00 + 34.91 + 0.00) = 34.91 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
63 90 0.00 60.88 0.00 -8.65 -8.24 0.00 0.00 -9.08 34.91

Segment Leq : 34.91 dBA

Total Leq All Segments: 50.20 dBA

RT/Custom data, segment # 1: Conf.Line (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 1: Conf.Line (day/night)

Angle1 Angle2 : 8.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 147.00 / 147.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 8.00 deg Angle2 : 90.00 deg
Barrier height : 0.00 m
Barrier receiver distance : 142.00 / 142.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Conf.Line (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 87.00 ! -2.35 ! -2.35

RT/Custom (0.00 + 40.52 + 0.00) = 40.52 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
8 90 0.00 63.44 -9.91 -3.41 0.00 0.00 -9.59 40.52

Segment Leq : 40.52 dBA

Total Leq All Segments: 40.52 dBA

Results segment # 1: Conf.Line (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! -2.35 ! -2.35

RT/Custom (0.00 + 33.99 + 0.00) = 33.99 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
8 90 0.00 56.91 -9.91 -3.41 0.00 0.00 -9.59 33.99

Segment Leq : 33.99 dBA

Total Leq All Segments: 33.99 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 57.88
(NIGHT): 50.30

STAMSON 5.0 NORMAL REPORT Date: 28-10-2020 12:26:55
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r5.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Scott Av (day/night)

Angle1 Angle2 : -3.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 115.00 / 115.00 m
Receiver height : 84.00 / 84.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -3.00 deg Angle2 : 90.00 deg
Barrier height : 82.50 m
Barrier receiver distance : 12.00 / 12.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 2: ParkdaleAv1 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: ParkdaleAv1 (day/night)

Angle1 Angle2 : -50.00 deg 49.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 108.00 / 108.00 m
Receiver height : 84.00 / 84.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -50.00 deg Angle2 : 49.00 deg
Barrier height : 82.50 m
Barrier receiver distance : 2.00 / 2.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 3: ParkdaleAv2 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: ParkdaleAv2 (day/night)

Angle1 Angle2 : 49.00 deg 64.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 108.00 / 108.00 m
Receiver height : 84.00 / 84.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 49.00 deg Angle2 : 64.00 deg
Barrier height : 27.00 m
Barrier receiver distance : 99.00 / 99.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 4: ParkdaleAv3 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 4: ParkdaleAv3 (day/night)

Angle1 Angle2 : 64.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 108.00 / 108.00 m
Receiver height : 84.00 / 84.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 64.00 deg Angle2 : 90.00 deg
Barrier height : 82.50 m
Barrier receiver distance : 12.00 / 12.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Scott Av (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 84.00 ! 75.39 ! 75.39

ROAD (0.00 + 44.57 + 0.00) = 44.57 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-3 90 0.00 71.49 0.00 -8.85 -2.87 0.00 0.00 -15.21 44.57

Segment Leq : 44.57 dBA

Results segment # 2: ParkdaleAv1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 84.00 ! 82.47 ! 82.47

ROAD (0.00 + 52.31 + 0.00) = 52.31 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-50 49 0.00 68.48 0.00 -8.57 -2.60 0.00 0.00 -5.00 52.31

Segment Leq : 52.31 dBA

Results segment # 3: ParkdaleAv2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 84.00 ! 8.37 ! 8.37

ROAD (0.00 + 29.11 + 0.00) = 29.11 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
49 64 0.00 68.48 0.00 -8.57 -10.79 0.00 0.00 -20.00 29.11

Segment Leq : 29.11 dBA

Results segment # 4: ParkdaleAv3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 84.00 ! 74.83 ! 74.83

ROAD (0.00 + 39.73 + 0.00) = 39.73 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
64 90 0.00 68.48 0.00 -8.57 -8.40 0.00 0.00 -11.77 39.73

Segment Leq : 39.73 dBA

Total Leq All Segments: 53.20 dBA

Results segment # 1: Scott Av (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 84.00 ! 75.39 ! 75.39

ROAD (0.00 + 36.97 + 0.00) = 36.97 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-3 90 0.00 63.89 0.00 -8.85 -2.87 0.00 0.00 -15.21 36.97

Segment Leq : 36.97 dBA

Results segment # 2: ParkdaleAv1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 84.00 ! 82.47 ! 82.47

ROAD (0.00 + 44.71 + 0.00) = 44.71 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-50 49 0.00 60.88 0.00 -8.57 -2.60 0.00 0.00 -5.00 44.71

Segment Leq : 44.71 dBA

Results segment # 3: ParkdaleAv2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 84.00 ! 8.37 ! 8.37

ROAD (0.00 + 21.52 + 0.00) = 21.52 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
49 64 0.00 60.88 0.00 -8.57 -10.79 0.00 0.00 -20.00 21.52

Segment Leq : 21.52 dBA

Results segment # 4: ParkdaleAv3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 84.00 ! 74.83 ! 74.83

ROAD (0.00 + 32.14 + 0.00) = 32.14 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
64 90 0.00 60.88 0.00 -8.57 -8.40 0.00 0.00 -11.77 32.14

Segment Leq : 32.14 dBA

Total Leq All Segments: 45.60 dBA

RT/Custom data, segment # 1: Conf.Line (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 1: Conf.Line (day/night)

Angle1 Angle2 : -3.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 147.00 / 147.00 m
Receiver height : 84.00 / 84.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -3.00 deg Angle2 : 90.00 deg
Barrier height : 0.00 m
Barrier receiver distance : 142.00 / 142.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Conf.Line (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 84.00 ! -2.46 ! -2.46

RT/Custom (0.00 + 40.53 + 0.00) = 40.53 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-3 90 0.00 63.44 -9.91 -2.87 0.00 0.00 -10.12 40.53

Segment Leq : 40.53 dBA

Total Leq All Segments: 40.53 dBA

Results segment # 1: Conf.Line (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 84.00 ! -2.46 ! -2.46

RT/Custom (0.00 + 34.00 + 0.00) = 34.00 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-3 90 0.00 56.91 -9.91 -2.87 0.00 0.00 -10.12 34.00

Segment Leq : 34.00 dBA

Total Leq All Segments: 34.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 53.43
(NIGHT): 45.89

STAMSON 5.0 NORMAL REPORT Date: 28-10-2020 15:05:01
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r6.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Scott Av (day/night)

Angle1 Angle2 : -9.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 116.00 / 116.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -9.00 deg Angle2 : 90.00 deg
Barrier height : 14.50 m
Barrier receiver distance : 12.00 / 12.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 2: ParkdaleAv1 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: ParkdaleAv1 (day/night)

Angle1 Angle2 : -52.00 deg 50.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 102.00 / 102.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -52.00 deg Angle2 : 50.00 deg
Barrier height : 14.50 m
Barrier receiver distance : 3.00 / 3.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 3: ParkdaleAv2 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: ParkdaleAv2 (day/night)

Angle1 Angle2 : 50.00 deg 66.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 102.00 / 102.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 50.00 deg Angle2 : 66.00 deg
Barrier height : 27.00 m
Barrier receiver distance : 93.00 / 93.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 4: ParkdaleAv3 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 4: ParkdaleAv3 (day/night)

Angle1 Angle2 : 66.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 102.00 / 102.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 66.00 deg Angle2 : 90.00 deg
Barrier height : 14.50 m
Barrier receiver distance : 12.00 / 12.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Scott Av (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 14.50 ! 14.50

ROAD (0.00 + 55.01 + 0.00) = 55.01 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-9 90 0.00 71.49 0.00 -8.88 -2.60 0.00 0.00 -5.00 55.01

Segment Leq : 55.01 dBA

Results segment # 2: ParkdaleAv1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 15.57 ! 15.57

ROAD (0.00 + 57.69 + 0.00) = 57.69 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-52 50 0.00 68.48 0.00 -8.33 -2.47 0.00 0.00 0.00 57.69*
-52 50 0.00 68.48 0.00 -8.33 -2.47 0.00 0.00 0.00 57.69
---

* Bright Zone !

Segment Leq : 57.69 dBA

Results segment # 3: ParkdaleAv2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 2.78 ! 2.78

ROAD (0.00 + 29.64 + 0.00) = 29.64 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
50 66 0.00 68.48 0.00 -8.33 -10.51 0.00 0.00 -20.00 29.64

Segment Leq : 29.64 dBA

Results segment # 4: ParkdaleAv3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 14.29 ! 14.29

ROAD (0.00 + 46.38 + 0.00) = 46.38 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
66 90 0.00 68.48 0.00 -8.33 -8.75 0.00 0.00 -5.02 46.38

Segment Leq : 46.38 dBA

Total Leq All Segments: 59.77 dBA

Results segment # 1: Scott Av (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 14.50 ! 14.50

ROAD (0.00 + 47.41 + 0.00) = 47.41 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-9 90 0.00 63.89 0.00 -8.88 -2.60 0.00 0.00 -5.00 47.41

Segment Leq : 47.41 dBA

Results segment # 2: ParkdaleAv1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 15.57 ! 15.57

ROAD (0.00 + 50.09 + 0.00) = 50.09 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-52 50 0.00 60.88 0.00 -8.33 -2.47 0.00 0.00 0.00 50.09*
-52 50 0.00 60.88 0.00 -8.33 -2.47 0.00 0.00 0.00 50.09
---

* Bright Zone !

Segment Leq : 50.09 dBA

Results segment # 3: ParkdaleAv2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 2.78 ! 2.78

ROAD (0.00 + 22.05 + 0.00) = 22.05 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
50 66 0.00 60.88 0.00 -8.33 -10.51 0.00 0.00 -20.00 22.05

Segment Leq : 22.05 dBA

Results segment # 4: ParkdaleAv3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 14.29 ! 14.29

ROAD (0.00 + 38.79 + 0.00) = 38.79 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
66 90 0.00 60.88 0.00 -8.33 -8.75 0.00 0.00 -5.02 38.79

Segment Leq : 38.79 dBA

Total Leq All Segments: 52.17 dBA

RT/Custom data, segment # 1: Conf.Line (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 1: Conf.Line (day/night)

Angle1 Angle2 : -9.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 148.00 / 148.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -9.00 deg Angle2 : 90.00 deg
Barrier height : 0.00 m
Barrier receiver distance : 143.00 / 143.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Conf.Line (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 16.00 ! -4.77 ! -4.77

RT/Custom (0.00 + 35.17 + 0.00) = 35.17 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-9 90 0.00 63.44 -9.94 -2.60 0.00 0.00 -15.73 35.17

Segment Leq : 35.17 dBA

Total Leq All Segments: 35.17 dBA

Results segment # 1: Conf.Line (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 16.00 ! -4.77 ! -4.77

RT/Custom (0.00 + 28.64 + 0.00) = 28.64 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-9 90 0.00 56.91 -9.94 -2.60 0.00 0.00 -15.73 28.64

Segment Leq : 28.64 dBA

Total Leq All Segments: 28.64 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 59.79
(NIGHT): 52.19

STAMSON 5.0 NORMAL REPORT Date: 28-10-2020 15:03:41
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r7.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: Scott St1 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Scott St1 (day/night)

Angle1 Angle2 : -90.00 deg -39.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 112.00 / 112.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : -39.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 10.00 / 10.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 2: Scott St2 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: Scott St2 (day/night)

Angle1 Angle2 : -39.00 deg -32.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 112.00 / 112.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -39.00 deg Angle2 : -32.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 10.00 / 10.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 3: Scott St3 (day/night)

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: Scott St3 (day/night)

Angle1 Angle2 : -32.00 deg 15.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 112.00 / 112.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -32.00 deg Angle2 : 15.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 10.00 / 10.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 4: HollandAv1 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 4: HollandAv1 (day/night)

Angle1 Angle2 : -90.00 deg -22.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 100.00 / 100.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : -22.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 3.00 / 3.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 5: HollandAv2 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 5: HollandAv2 (day/night)

Angle1 Angle2 : -22.00 deg -4.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 100.00 / 100.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -22.00 deg Angle2 : -4.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 3.00 / 3.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 6: HollandAv3 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 6: HollandAv3 (day/night)

Angle1 Angle2 : -4.00 deg 44.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 100.00 / 100.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -4.00 deg Angle2 : 44.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 3.00 / 3.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 7: HollandAv4 (day/night)

Car traffic volume : 19430/1690 veh/TimePeriod *
Medium truck volume : 1546/134 veh/TimePeriod *
Heavy truck volume : 1104/96 veh/TimePeriod *
Posted speed limit : 40 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): 24000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 7: HollandAv4 (day/night)

Angle1 Angle2 : 44.00 deg 45.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 100.00 / 100.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 44.00 deg Angle2 : 45.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 3.00 / 3.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 8: Scott St4 (day/night)

Car traffic volume : 1600/800 veh/TimePeriod
Medium truck volume : 320/160 veh/TimePeriod
Heavy truck volume : 160/80 veh/TimePeriod
Posted speed limit : 100 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 8: Scott St4 (day/night)

Angle1 Angle2 : 15.00 deg 27.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 112.00 / 112.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 15.00 deg Angle2 : 27.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 10.00 / 10.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Scott St1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 79.37 ! 79.37

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
---
-90 -39 0.00 71.49 0.00 -8.73 -5.48 0.00 0.00 -12.88 44.41

Segment Leq : 44.41 dBA

Results segment # 2: Scott St2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 79.37 ! 79.37

ROAD (0.00 + 30.64 + 0.00) = 30.64 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-39 -32 0.00 71.49 0.00 -8.73 -14.10 0.00 0.00 -18.01 30.64

Segment Leq : 30.64 dBA

Results segment # 3: Scott St3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 79.37 ! 79.37

ROAD (0.00 + 38.20 + 0.00) = 38.20 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-32 15 0.00 71.49 0.00 -8.73 -5.83 0.00 0.00 -18.73 38.20

Segment Leq : 38.20 dBA

Results segment # 4: HollandAv1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 84.43 ! 84.43

ROAD (0.00 + 49.15 + 0.00) = 49.15 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -22 0.00 68.73 0.00 -8.24 -4.23 0.00 0.00 -7.11 49.15

Segment Leq : 49.15 dBA

Results segment # 5: HollandAv2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 84.43 ! 84.43

ROAD (0.00 + 41.73 + 0.00) = 41.73 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-22 -4 0.00 68.73 0.00 -8.24 -10.00 0.00 0.00 -8.75 41.73

Segment Leq : 41.73 dBA

Results segment # 6: HollandAv3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 84.43 ! 84.43

ROAD (0.00 + 46.17 + 0.00) = 46.17 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-4 44 0.00 68.73 0.00 -8.24 -5.74 0.00 0.00 -8.57 46.17

Segment Leq : 46.17 dBA

Results segment # 7: HollandAv4 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 84.43 ! 84.43

ROAD (0.00 + 29.96 + 0.00) = 29.96 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
44 45 0.00 68.73 0.00 -8.24 -22.55 0.00 0.00 -7.97 29.96

Segment Leq : 29.96 dBA

Results segment # 8: Scott St4 (day)

Source height = 1.67 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.67 ! 87.00 ! 79.38 ! 79.38

ROAD (0.00 + 29.00 + 0.00) = 29.00 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
15 27 0.00 68.08 0.00 -8.73 -11.76 0.00 0.00 -18.59 29.00

Segment Leq : 29.00 dBA

Total Leq All Segments: 52.45 dBA

Results segment # 1: Scott St1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 79.37 ! 79.37

ROAD (0.00 + 36.81 + 0.00) = 36.81 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -39 0.00 63.89 0.00 -8.73 -5.48 0.00 0.00 -12.88 36.81

Segment Leq : 36.81 dBA

Results segment # 2: Scott St2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 79.37 ! 79.37

ROAD (0.00 + 23.05 + 0.00) = 23.05 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-39 -32 0.00 63.89 0.00 -8.73 -14.10 0.00 0.00 -18.01 23.05

Segment Leq : 23.05 dBA

Results segment # 3: Scott St3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 79.37 ! 79.37

ROAD (0.00 + 30.60 + 0.00) = 30.60 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-32 15 0.00 63.89 0.00 -8.73 -5.83 0.00 0.00 -18.73 30.60

Segment Leq : 30.60 dBA

Results segment # 4: HollandAv1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 84.43 ! 84.43

ROAD (0.00 + 41.56 + 0.00) = 41.56 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -22 0.00 61.13 0.00 -8.24 -4.23 0.00 0.00 -7.11 41.56

Segment Leq : 41.56 dBA

Results segment # 5: HollandAv2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 84.43 ! 84.43

ROAD (0.00 + 34.14 + 0.00) = 34.14 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-22 -4 0.00 61.13 0.00 -8.24 -10.00 0.00 0.00 -8.75 34.14

Segment Leq : 34.14 dBA

Results segment # 6: HollandAv3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 84.43 ! 84.43

ROAD (0.00 + 38.57 + 0.00) = 38.57 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-4 44 0.00 61.13 0.00 -8.24 -5.74 0.00 0.00 -8.57 38.57

Segment Leq : 38.57 dBA

Results segment # 7: HollandAv4 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 87.00 ! 84.43 ! 84.43

ROAD (0.00 + 22.36 + 0.00) = 22.36 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
44 45 0.00 61.13 0.00 -8.24 -22.55 0.00 0.00 -7.97 22.36

Segment Leq : 22.36 dBA

Results segment # 8: Scott St4 (night)

Source height = 1.67 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.67 ! 87.00 ! 79.38 ! 79.38

ROAD (0.00 + 29.00 + 0.00) = 29.00 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
15 27 0.00 68.08 0.00 -8.73 -11.76 0.00 0.00 -18.59 29.00

Segment Leq : 29.00 dBA

Total Leq All Segments: 44.94 dBA

RT/Custom data, segment # 1: Conf.Line1 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 1: Conf.Line1 (day/night)

Angle1 Angle2 : -90.00 deg -39.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 145.00 / 145.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : -39.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 10.00 / 10.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

RT/Custom data, segment # 2: Conf.Line2 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 2: Conf.Line2 (day/night)

Angle1 Angle2 : -39.00 deg -32.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 145.00 / 145.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -39.00 deg Angle2 : -32.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 10.00 / 10.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

RT/Custom data, segment # 3: Conf.Line3 (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 3: Conf.Line3 (day/night)

Angle1 Angle2 : -32.00 deg 15.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 145.00 / 145.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -32.00 deg Angle2 : 15.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 10.00 / 10.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

RT/Custom data, segment # 4: Conf.Line4 (day/night)
---
1 - Bus:
Traffic volume : 0/0 veh/TimePeriod
Speed : 50 km/h

Data for Segment # 4: Conf.Line4 (day/night)

Angle1 Angle2 : 15.00 deg 27.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 145.00 / 145.00 m
Receiver height : 87.00 / 87.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 15.00 deg Angle2 : 27.00 deg
Barrier height : 85.50 m
Barrier receiver distance : 10.00 / 10.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Conf.Line1 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 80.62 ! 80.62

RT/Custom (0.00 + 36.37 + 0.00) = 36.37 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -39 0.00 63.44 -9.85 -5.48 0.00 0.00 -11.74 36.37

Segment Leq : 36.37 dBA

Results segment # 2: Conf.Line2 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 80.62 ! 80.62

RT/Custom (0.00 + 23.07 + 0.00) = 23.07 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-39 -32 0.00 63.44 -9.85 -14.10 0.00 0.00 -16.41 23.07

Segment Leq : 23.07 dBA

Results segment # 3: Conf.Line3 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 80.62 ! 80.62

RT/Custom (0.00 + 30.63 + 0.00) = 30.63 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-32 15 0.00 63.44 -9.85 -5.83 0.00 0.00 -17.12 30.63

Segment Leq : 30.63 dBA

Results segment # 4: Conf.Line4 (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
0.50 ! 87.00 ! 80.62 ! 80.62

RT/Custom (0.00 + -38.61 + 0.00) = 0.00 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
15 27 0.00 0.00 -9.85 -11.76 0.00 0.00 -16.99 -38.61

Segment Leq : 0.00 dBA

Total Leq All Segments: 37.55 dBA

Results segment # 1: Conf.Line1 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 87.00 ! 80.62 ! 80.62

RT/Custom (0.00 + 29.83 + 0.00) = 29.83 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-90 -39 0.00 56.91 -9.85 -5.48 0.00 0.00 -11.74 29.83

Segment Leq : 29.83 dBA

Results segment # 2: Conf.Line2 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 87.00 ! 80.62 ! 80.62

RT/Custom (0.00 + 16.54 + 0.00) = 16.54 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-39 -32 0.00 56.91 -9.85 -14.10 0.00 0.00 -16.41 16.54

Segment Leq : 16.54 dBA

Results segment # 3: Conf.Line3 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 87.00 ! 80.62 ! 80.62

RT/Custom (0.00 + 24.10 + 0.00) = 24.10 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-32 15 0.00 56.91 -9.85 -5.83 0.00 0.00 -17.12 24.10

Segment Leq : 24.10 dBA

Results segment # 4: Conf.Line4 (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 87.00 ! 80.62 ! 80.62

RT/Custom (0.00 + -38.61 + 0.00) = 0.00 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
15 27 0.00 0.00 -9.85 -11.76 0.00 0.00 -16.99 -38.61

Segment Leq : 0.00 dBA

Total Leq All Segments: 31.02 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 52.59
(NIGHT): 45.12

STAMSON 5.0 NORMAL REPORT Date: 28-10-2020 17:23:41
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r6b.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 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): 30000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: Scott Av (day/night)

Angle1 Angle2 : -9.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 116.00 / 116.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -9.00 deg Angle2 : 90.00 deg
Barrier height : 16.00 m
Barrier receiver distance : 12.00 / 12.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 2: ParkdaleAv1 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: ParkdaleAv1 (day/night)

Angle1 Angle2 : -52.00 deg 50.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 102.00 / 102.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -52.00 deg Angle2 : 50.00 deg
Barrier height : 16.00 m
Barrier receiver distance : 3.00 / 3.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 3: ParkdaleAv2 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: ParkdaleAv2 (day/night)

Angle1 Angle2 : 50.00 deg 66.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 102.00 / 102.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 50.00 deg Angle2 : 66.00 deg
Barrier height : 27.00 m
Barrier receiver distance : 93.00 / 93.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Road data, segment # 4: ParkdaleAv3 (day/night)

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 4: ParkdaleAv3 (day/night)

Angle1 Angle2 : 66.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 102.00 / 102.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 66.00 deg Angle2 : 90.00 deg
Barrier height : 16.00 m
Barrier receiver distance : 12.00 / 12.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Scott Av (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 14.50 ! 14.50

ROAD (0.00 + 52.42 + 0.00) = 52.42 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-9 90 0.00 71.49 0.00 -8.88 -2.60 0.00 0.00 -7.59 52.42

Segment Leq : 52.42 dBA

Results segment # 2: ParkdaleAv1 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 15.57 ! 15.57

ROAD (0.00 + 51.41 + 0.00) = 51.41 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-52 50 0.00 68.48 0.00 -8.33 -2.47 0.00 0.00 -6.28 51.41

Segment Leq : 51.41 dBA

Results segment # 3: ParkdaleAv2 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 2.78 ! 2.78

ROAD (0.00 + 29.64 + 0.00) = 29.64 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
50 66 0.00 68.48 0.00 -8.33 -10.51 0.00 0.00 -20.00 29.64

Segment Leq : 29.64 dBA

Results segment # 4: ParkdaleAv3 (day)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 14.29 ! 14.29

ROAD (0.00 + 45.17 + 0.00) = 45.17 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
66 90 0.00 68.48 0.00 -8.33 -8.75 0.00 0.00 -6.23 45.17

Segment Leq : 45.17 dBA

Total Leq All Segments: 55.40 dBA

Results segment # 1: Scott Av (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 14.50 ! 14.50

ROAD (0.00 + 44.82 + 0.00) = 44.82 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-9 90 0.00 63.89 0.00 -8.88 -2.60 0.00 0.00 -7.59 44.82

Segment Leq : 44.82 dBA

Results segment # 2: ParkdaleAv1 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 15.57 ! 15.57

ROAD (0.00 + 43.82 + 0.00) = 43.82 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-52 50 0.00 60.88 0.00 -8.33 -2.47 0.00 0.00 -6.28 43.82

Segment Leq : 43.82 dBA

Results segment # 3: ParkdaleAv2 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 2.78 ! 2.78

ROAD (0.00 + 22.05 + 0.00) = 22.05 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
50 66 0.00 60.88 0.00 -8.33 -10.51 0.00 0.00 -20.00 22.05

Segment Leq : 22.05 dBA

Results segment # 4: ParkdaleAv3 (night)

Source height = 1.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)
---+---+---+---
1.50 ! 16.00 ! 14.29 ! 14.29

ROAD (0.00 + 37.58 + 0.00) = 37.58 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
66 90 0.00 60.88 0.00 -8.33 -8.75 0.00 0.00 -6.23 37.58

Segment Leq : 37.58 dBA

Total Leq All Segments: 47.81 dBA

RT/Custom data, segment # 1: Conf.Line (day/night)
---
1 - 4-car SRT:
Traffic volume : 540/60 veh/TimePeriod
Speed : 70 km/h

Data for Segment # 1: Conf.Line (day/night)

Angle1 Angle2 : -9.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 148.00 / 148.00 m
Receiver height : 16.00 / 16.00 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -9.00 deg Angle2 : 90.00 deg
Barrier height : 0.00 m
Barrier receiver distance : 143.00 / 143.00 m
Source elevation : -6.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00

Results segment # 1: Conf.Line (day)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 16.00 ! -4.77 ! -4.77

RT/Custom (0.00 + 35.17 + 0.00) = 35.17 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-9 90 0.00 63.44 -9.94 -2.60 0.00 0.00 -15.73 35.17

Segment Leq : 35.17 dBA

Total Leq All Segments: 35.17 dBA

Results segment # 1: Conf.Line (night)

Source height = 0.50 m

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Height (m) ! Barrier Top (m)

0.50 ! 16.00 ! -4.77 ! -4.77

RT/Custom (0.00 + 28.64 + 0.00) = 28.64 dBA
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
---
-9 90 0.00 56.91 -9.94 -2.60 0.00 0.00 -15.73 28.64

Segment Leq : 28.64 dBA

Total Leq All Segments: 28.64 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 55.44
(NIGHT): 47.86