PRELIMINARY NOISE REPORT

CITY PARK HOMES

PROPOSED RESIDENTIAL DEVELOPMENT

12,371 HIGHWAY 48 AND 5,262 – 5,318 MAIN STREET

TOWN OF WHITCHURCH-STOUFFVILLE

FILE NOS: PRE26.002 & PSC.26.W.0034

AUGUST 14TH 2026

CANDEVCON GROUP INC.
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PROJECT NO. W26018

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1. Introduction

CANDEVCON GROUP INC. was retained by City Park Homes to prepare a Preliminary Noise Report for a proposed Mixed-Use Subdivision at 12,371 Highway 48 and 5,262 – 5,318 Main Street, which is immediately east of Highway 48 and north of Main Street in the Town of Whitchurch-Stouffville. **Figure 1** illustrates the location of the proposed Mixed-Use Subdivision. The purpose of this Study is to investigate the potential noise impacts on the proposed Mixed-Use Subdivision and to provide recommendations with respect to noise control measures.

The proposed Mixed-Use Subdivision comprises six (6) 2-storey buildings with 45 traditional townhouse units in total, eight (8) 3-storey buildings with 48 traditional townhouse units in total, five (5) 3-storey buildings with 72 back-to-back townhouse units in total, a hotel with 60 rooms and a retail building. The proposed Concept Plan is provided in **Figure 2**. The surrounding land uses within the vicinity of the proposed Mixed-Use Subdivision are: vacant lands with a commercial development and Millard Street beyond to the north; vacant lands to the east; Main Street to the south; and Highway 48, Fockler Lane and existing residential to the west.

This Study defines the projected sound levels from nearby roads, specifically Highway 48, Main Street and Millard Street, and recommends noise mitigation measures to satisfy the requirements of the Ministry of the Environment, Conservation and Parks (MECP), the Region of York and the Town of Whitchurch-Stouffville.

PRELIMINARY NOISE REPORT

12,371 HIGHWAY 48 AND 5,262 - 5,318 MAIN STREET

TOWN OF WHITCHURCH-STOUFFVILLE

LOCATION PLAN

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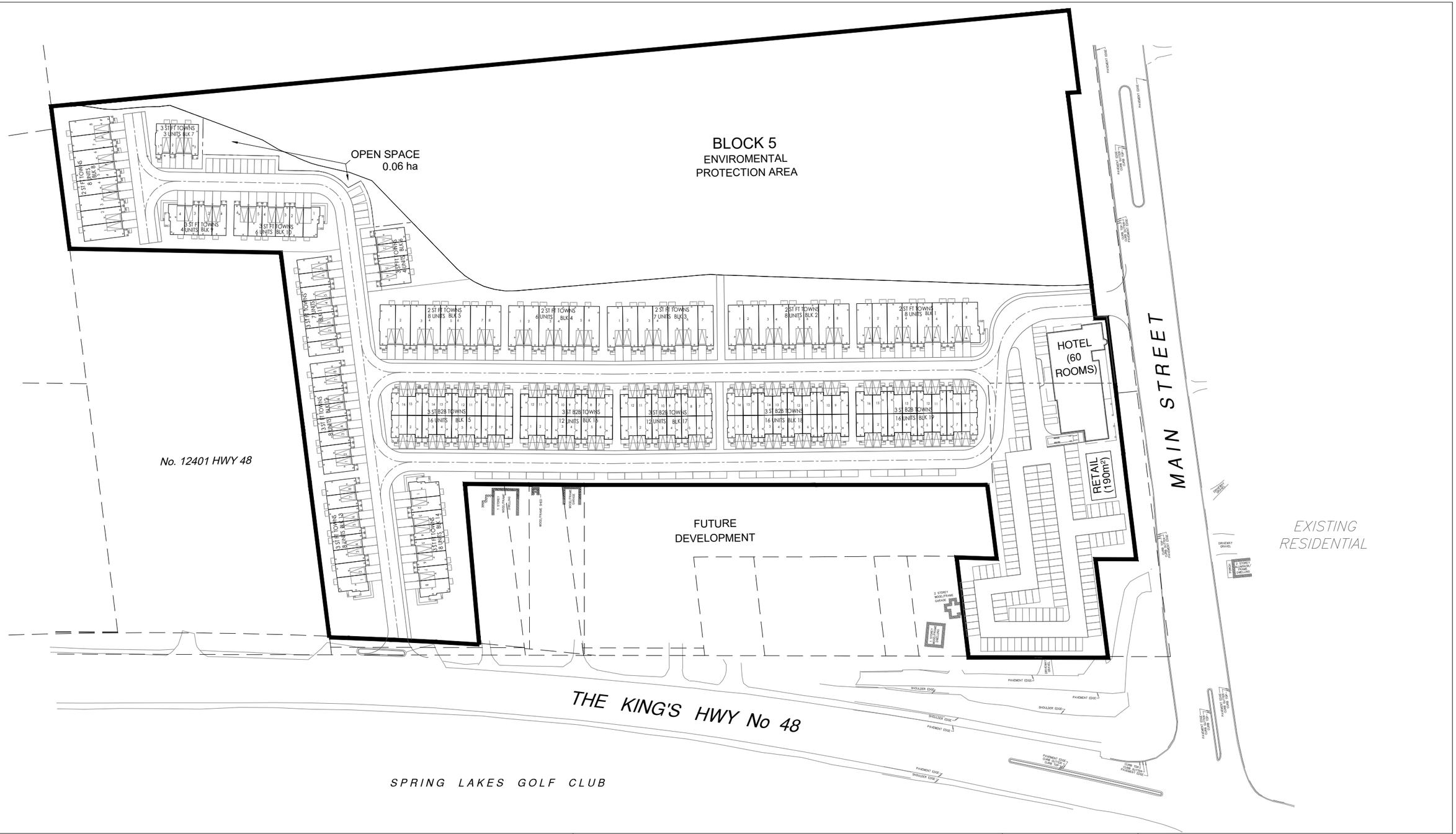
DATE: JUNE. 24th 2026	JOB No. W26018
DESIGN: S.N.	FIG. No. 1
SCALE: N.T.S.	



PRELIMINARY NOISE REPORT

12,371 HIGHWAY 48 AND 5,262 - 5,318 MAIN STREET

TOWN OF WHITCHURCH-STOUFFVILLE

PROPOSED CONCEPT PLAN

CANDEVCON GROUP INC.
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DATE	AUG., 5th 2026	JOB No	W26018
DRAWN	S.G.K.	FIGURE No.	2
SCALE	1:1500		

2. Noise Sources

2.1 Roadway Traffic Noise Sources

The principal roadway noise sources that will impact the proposed Mixed-Use Subdivision are the vehicular traffic on Highway 48 to the west, Main Street to the south and Millard Street to the north.

Highway 48 is a north-south highway that is under the jurisdiction of Ministry of Transportation (MTO). Within the vicinity of the proposed Mixed-Use Subdivision, Highway 48 is a four (4) lane roadway with a posted speed limit of 80 km/h. It was assumed that Highway 48 would have a daily volume of 35,000 vehicles, which is a typical assumption for a provincial highway with four (4) lanes. For the purpose of this Study, 15 percent trucks with a ratio of medium to heavy trucks of 1.5 (60/40 percent split) was assumed.

Main Street is an east-west arterial road that is under the jurisdiction of the Town of Whitchurch-Stouffville. The section of Main Street that is adjacent to the Subject Property may be transferred over to the Region of York in the future. As a result, roadway traffic data received from the Region of York for the section of Stouffville Road that is west of Highway 48 was used. (See **Appendix A**) Within the vicinity of the proposed Mixed-Use Subdivision, Main Street comprises four (4) lanes with a posted speed limit of 60 km/h. An operating speed (85th percentile) of 94 km/h was captured by the Region of York. However, the speed limit of the roadway was 80 km/h when the operating speed was captured. As a result, an operating speed of 74 km/h was used. The total percentage of trucks is 5 percent with a ratio of medium to heavy trucks of 0.67 (40/60 percent split). In addition, the maximum grade of the roadway is less than 1%.

2. Noise Sources - Continued

2.1 Roadway Traffic Noise Sources - Continued

Millard Street is a collector road that is under the jurisdiction of the Town of Whitchurch-Stouffville. From Highway 48, the roadway travels easterly before travelling in the south direction at Greenwood Road and connecting with Stouffer Street and Hawthorn Avenue. A daily volume of 8,500 vehicles was assumed, which is a typical assumption for a collector road. Within the vicinity of the proposed Mixed-Use Subdivision, Millard Street comprises two (2) lanes and a posted speed limit of 50 km/h. For the purpose of this Study, the predicted total percentage of trucks is 2 percent with a ratio of medium to heavy trucks of 19 (95/5 percent split).

The percentages of daily traffic to be attributed to the daytime (7:00 a.m. to 11:00 p.m.) and the night-time (11:00 p.m. to 7:00 a.m.) periods were based on the recommended day-night traffic volume split of 85 percent - 15 percent for Highway 48, 89 percent - 11 percent for Main Street and 90 percent - 10 percent for Millard Street.

Table 1 summarizes the projected traffic volumes used in the analysis.

TABLE 1
PROJECTED (ULTIMATE) ROADWAY TRAFFIC VOLUMES

Road Characteristic	Highway 48	Main Street	Millard Street
Jurisdiction	MTO	Town of Whitchurch-Stouffville	Town of Whitchurch-Stouffville
Ultimate No. Lanes	4	4	2
Ultimate AADT	35,000	36,000	8,500[2]
Posted Speed/ Operating Speed	80 km/h	74 km/h	50 km/h
Grade	n/a	1%	n/a
% Trucks **Medium** / **Heavy**	9.00% / 6.00%	2.00% / 3.00%	1.90% / 0.10%
Day/Night Volume Ratio	85%/15%	89%/11%	90%/10%

Note 1: A typical assumption for a provincial highway with four (4) lanes.
Note 2: A typical assumption for a collector road.

2. Noise Sources - Continued

2.2 Other Noise Sources

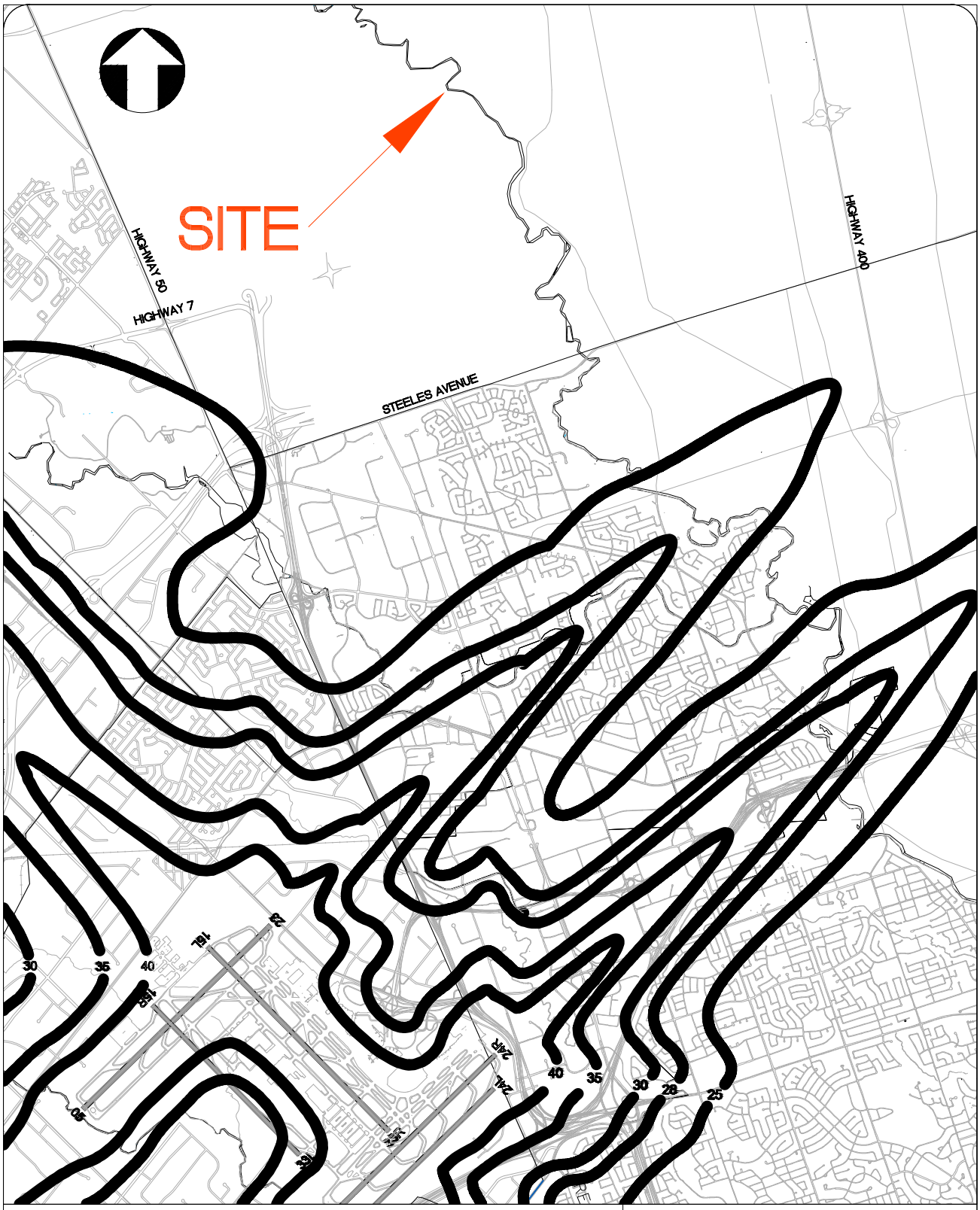
The proposed Mixed-Use Subdivision is not located near any railways or major industrial facilities and is therefore not affected by rail or industrial noise sources.

However, a hotel and a retail building is proposed by the Mixed-Use Subdivision. A noise assessment that will review potential stationary noise sources will be prepared at the Site Plan Application Stage when final plans are available.

2.3 Aircraft Noise

The 2000 Noise Exposure Forecast and the 1996 Noise Exposure Projections Composite Noise Contour Maps for the Lester B. Pearson International Airport were obtained from Transport Canada. Aircraft noise exposure is rated by Transport Canada in terms of Noise Exposure Forecasts (NEF) for five-year time periods and Noise Exposure Projections (NEP) for longer time periods. NEF contours are available for 2000 and NEP contours are available for 1996. **Figure 3** shows the 1996 NEP/2000 NEF composite noise contours in the area of the proposed Mixed-Use Subdivision. The composite contour depicts the worst-case of the 1996 NEP and the 2000 NEF at all locations.

The proposed Mixed-Use Subdivision is well outside the NEP/NEF 25 contour (the lowest threshold of Noise Exposure Projections); therefore, there are no specific noise concerns or requirements in relation to the attenuation of aircraft noise at the proposed Mixed-Use Subdivision.



PEARSON INTERNATIONAL AIRPORT
1996 NEP AND 2000 NEF
COMPOSITE NOISE CONTOURS

CANDEVCON GROUP INC.
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DATE: APR. 22, 2026	JOB No. W26018
DESIGN: B.W.	FIG. No. 3

2. Noise Sources - Continued

2.4 Noise Criteria

Noise impacts from the road traffic were assessed using the principles and procedures in the MECP's Environmental Noise Guideline[1], the Region of York's Standard Operating Procedures (SOP) for Traffic Noise Mitigation[2] and the Region of York's Traffic Noise Mitigation Policy for Regional Roads[3]. The sound level limits contained in the Environmental Noise Guideline have been used as criteria for acceptability. The criteria are summarized in **Table 2**.

TABLE 2
MECP NOISE CRITERIA (ROAD TRAFFIC)

Location	Outdoor	Indoor
Outdoor Living Area	55 dBA (7 am - 11 pm) L_{eq} (16 hour)	N/A
Bedroom Window	50 dBA (11 pm - 7 am) L_{eq} (8 hour)	40 dBA (11 pm - 7 am) L_{eq} (8 hour)
Living Room Window	55 dBA (7 am - 11 pm) L_{eq} (16 hour)	45 dBA (7 am - 11 pm) L_{eq} (16 hour)

An outdoor living area (OLA) in a residential development generally refers to a rear yard, a rooftop, and a patio or a balcony having a minimum depth of 4 metres. For the traditional townhouse units, an outdoor living area will be provided in the form of a rear yard.

[1] Environmental Noise Guideline, Stationary and Transportation Sources-Approval and Planning, Publication NPC-300: Ministry of the Environment, Conservation and Parks, August 2013.

[2] Standard Operating Procedures (SOP's) for Traffic Noise Mitigation on Regional Roads, Transportation Services -York Region, November 2019.

[3] York Region Traffic Noise Mitigation Policy for Regional Roads, York Region, March 23rd 2006.

2. Noise Sources - Continued

2.4 Noise Criteria - Continued

The MECP's criteria specifies that, in those cases where daytime sound levels in the outdoor living area exceed 60 dBA L_{eq}, noise mitigation measures such as barriers are required to attenuate the sound levels to 60 dBA L_{eq} or less (55 dBA L_{eq} being the desired level). If the sound levels exceed the noise criteria by no more than 5 dBA after noise mitigation measures are implemented due to technical, economic or administrative reasons, a warning clause in all Offers of Purchase and Sale is required. Where the sound levels exceed the noise criteria by no more than 5 dBA, noise mitigation measures to attenuate the sound levels to the desired 55 dBA L_{eq} limit can be implemented or a warning clause in all Offers of Purchase and Sale is required.

For residential buildings (including the rooms of hotels), the MECP has ventilation requirements which are based on the sound level at the exterior building facade. Where the daytime (7:00-23:00) sound level in the plane of a bedroom or living/dining room window is greater than 65 dBA L_{eq} and/or where the night-time (23:00-7:00) sound level in the plane of a bedroom or living/dining room window is greater than 60 dBA L_{eq}, central air conditioning is required. Where the daytime (7:00-23:00) sound level in the plane of a bedroom or living/dining room window is greater than 55 dBA L_{eq} and less than or equal to 65 dBA L_{eq}, and/or where the night-time (23:00-7:00) sound level in the plane of a bedroom or living/dining room window is greater than 50 dBA L_{eq} and less than or equal to 60 dBA L_{eq}, forced air heating with provision for central air conditioning is required. Residences with ventilation requirements must provide a warning clause in all Offers of Purchase and Sale. The wording for such Warning Clauses is provided in **Appendix B**.

In addition, where the daytime (7:00-23:00) sound levels outside the bedroom or living/dining room window exceed 65 dBA L_{eq} and/or where the night-time (23:00-7:00) sound levels outside the bedroom or living/dining room window exceed 60 dBA L_{eq}, building components including windows, walls and doors, where applicable, should be designed so that the indoor sound levels comply with the sound level limit criteria specified in **Table 2**.

2. Noise Sources - Continued

2.5 Projected Sound Levels

Using the road traffic data in **Table 1**, L_{eq} sound levels were projected for critical locations within the proposed Mixed-Use Subdivision.

For the traditional townhouse units, daytime sound levels were projected for an outdoor living area at a point located 3 metres from the rear wall of the building facade and 1.5 metres above the ground.

For the 2-storey townhouse buildings, daytime sound levels were projected for the first storey facade at a height of 1.5 metres above the ground and night-time sound levels were projected for the second storey building facade at a height of 4.5 metres above the ground. For the 3-storey townhouse buildings, daytime sound levels were projected for the second storey facade at a height of 4.5 metres above the ground and night-time sound levels were projected for the third storey building facade at a height of 7.5 metres above the ground. At the time this Study was prepared, the number of floors provided by the hotel was not available. This Study assumed that the hotel comprises five (5) floors. As a result, daytime and night-time sound levels for the hotel were projected for the building façade at a height of 13.5 metres above the ground (the fifth storey facade).

All of the sound level projections were calculated using the computerized model[4] of the MECP's ORNAMENT procedure[5]. The results from the Stamson 5.04 model are summarized in **Table 3**, assuming no acoustical barriers. Typical computer reports are included in **Appendix C**.

[4] STAMSON 5.04 computer model, Ministry of the Environment, Conservation and Parks, 2000.

[5] ORNAMENT, Ontario Road Noise Analysis Method for Environment and Transportation, Technical Document, Ministry of the Environment, Conservation and Parks 1989.

2. Noise Sources - Continued

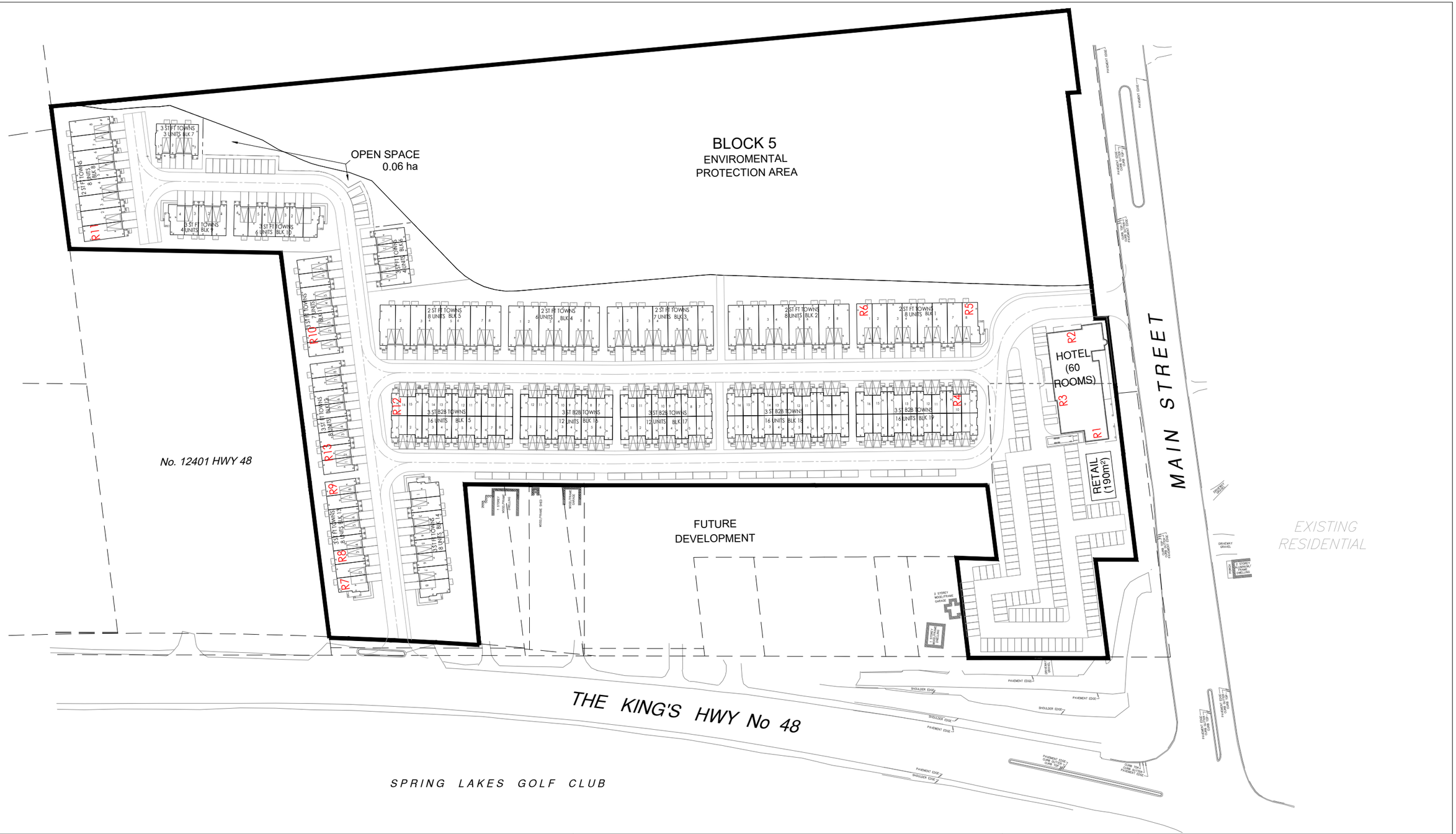
2.5 Projected Sound Levels - Continued

TABLE 3
PROJECTED L_{eq} SOUND LEVELS – WITHOUT ACOUSTIC BARRIER

Location	Daytime L_{eq} – Rear Yard	Night-time L_{eq} – Facade	Daytime L_{eq} – Façade
R1	n/a	64 dBA (5^{th})	70 dBA (5^{th})
R2	n/a	58 dBA (5^{th})	64 dBA (5^{th})
R3	n/a	57 dBA (5^{th})	62 dBA (5^{th})
R4	n/a	51 dBA (3^{rd})	55 dBA (2^{nd})
R5	59 dBA (1^{st})	55 dBA (2^{nd})	60 dBA (1^{st})
R6	56 dBA (1^{st})	51 dBA (2^{nd})	56 dBA (1^{st})
R7	67 dBA (1^{st})	65 dBA (3^{rd})	69 dBA (2^{nd})
R8	64 dBA (1^{st})	61 dBA (3^{rd})	65 dBA (2^{nd})
R9	61 dBA (1^{st})	58 dBA (3^{rd})	62 dBA (2^{nd})
R10	55 dBA (1^{st})	53 dBA (3^{rd})	56 dBA (2^{nd})
R11	55 dBA (1^{st})	51 dBA (2^{nd})	55 dBA (1^{st})
R12	n/a	43 dBA (3^{rd})	46 dBA (2^{nd})

Note: Where the sound level was projected with regards to elevation is in brackets.

Figure 4 illustrates the receptor locations which were analysed in this study.



PRELIMINARY NOISE REPORT

12,371 HIGHWAY 48 AND 5,262 - 5,318 MAIN STREET

TOWN OF WHITCHURCH-STOUFFVILLE

RECEPTOR LOCATION PLAN

CANDEVCON GROUP INC.
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DATE	AUG., 12th 2026	JOB No	W26018
DRAWN	S.N.	FIGURE No.	4
SCALE	1:1500		

3. Noise Attenuation Measures

3.1 Outdoor Recreation Areas

For all of the dwelling units in Blocks 13 and 14, the outdoor daytime sound levels exceed 60 dBA L_{eq}. Therefore, noise mitigation measures such as barriers are required to attenuate the sound levels to 60 dBA L_{eq} or less (55 dBA L_{eq} being the desired level).

For all of the dwelling units in Blocks 1 and 12 and the townhouse unit in Block 11 that is closest to Highway 48, the outdoor daytime sound levels exceed the noise criteria by no more than 5 dBA. Therefore, noise mitigation measures to attenuate the sound levels to the desired 55 dBA L_{eq} limit can be implemented or a warning clause in all Offers of Purchase and Sale is required.

The MECP's criteria specifies that, in those cases where daytime sound levels in the outdoor living area exceed 60 dBA L_{eq}, noise mitigation measures such as barriers are required to attenuate the sound levels to 60 dBA L_{eq} or less (55 dBA L_{eq} being the desired level). If the sound levels exceed the noise criteria by no more than 5 dBA after noise mitigation measures are implemented due to technical, economic or administrative reasons, a warning clause in all Offers of Purchase and Sale is required. Where the sound levels exceed the noise criteria by no more than 5 dBA, noise mitigation measures to attenuate the sound levels to the desired 55 dBA L_{eq} limit can be implemented or a warning clause in all Offers of Purchase and Sale is required. The wording for such Warning Clauses is provided in **Appendix B**.

3.2 Minimum Barrier Requirements

For all of the dwelling units in Blocks 13 and 14, the outdoor daytime sound levels exceed 60 dBA L_{eq}. Therefore, noise mitigation measures such as barriers are required to attenuate the sound levels to 60 dBA L_{eq} or less (55 dBA L_{eq} being the desired level).

3. Noise Attenuation Measures - Continued

3.2 Minimum Barrier Requirements - Continued

For all of the dwelling units in Blocks 1 and 12 and the townhouse unit in Block 11 that is closest to Highway 48, the outdoor daytime sound levels exceed the noise criteria by no more than 5 dBA. Therefore, noise mitigation measures to attenuate the sound levels to the desired 55 dBA L_{eq} limit can be implemented or a warning clause in all Offers of Purchase and Sale is required.

To attenuate the outdoor daytime sound levels, the following recommendations are proposed:

- A 1.8m high acoustic fence that will run along the east and south property lines of Block 1,
- A 2.4m high acoustic fence that will run along the north and west property lines of the townhouse unit in Block 13 that is closest to Highway 48,
- For the balance of the townhouse units in Block 13, all of the townhouse units in Block 12 and the townhouse unit in Block 11 that is closest to Highway 48, a 2.2m high acoustic fence will run along the north property line.
- A 2.4m high acoustic fence that will run along the south and west property lines of the townhouse unit in Block 14 that is closest to Highway 48,
- For the balance of the townhouse units in Block 14, a 2.2m high acoustic fence will run along the south property line.

Table 4 summarizes the projected sound level at the concerned dwelling units with the recommended barrier height in place.

3. Noise Attenuation Measures - Continued

3.2 Minimum Barrier Requirements - Continued

TABLE 4
PROJECTED L_{eq} SOUND LEVELS - WITH ACOUSTICAL BARRIER

Location	Recommended Barrier Height	Daytime L_{eq} Rear yard (Recommended Barrier Height)
R5	1.8m	55 dBA
R7	2.4m	60 dBA
R13	2.2m	55 dBA

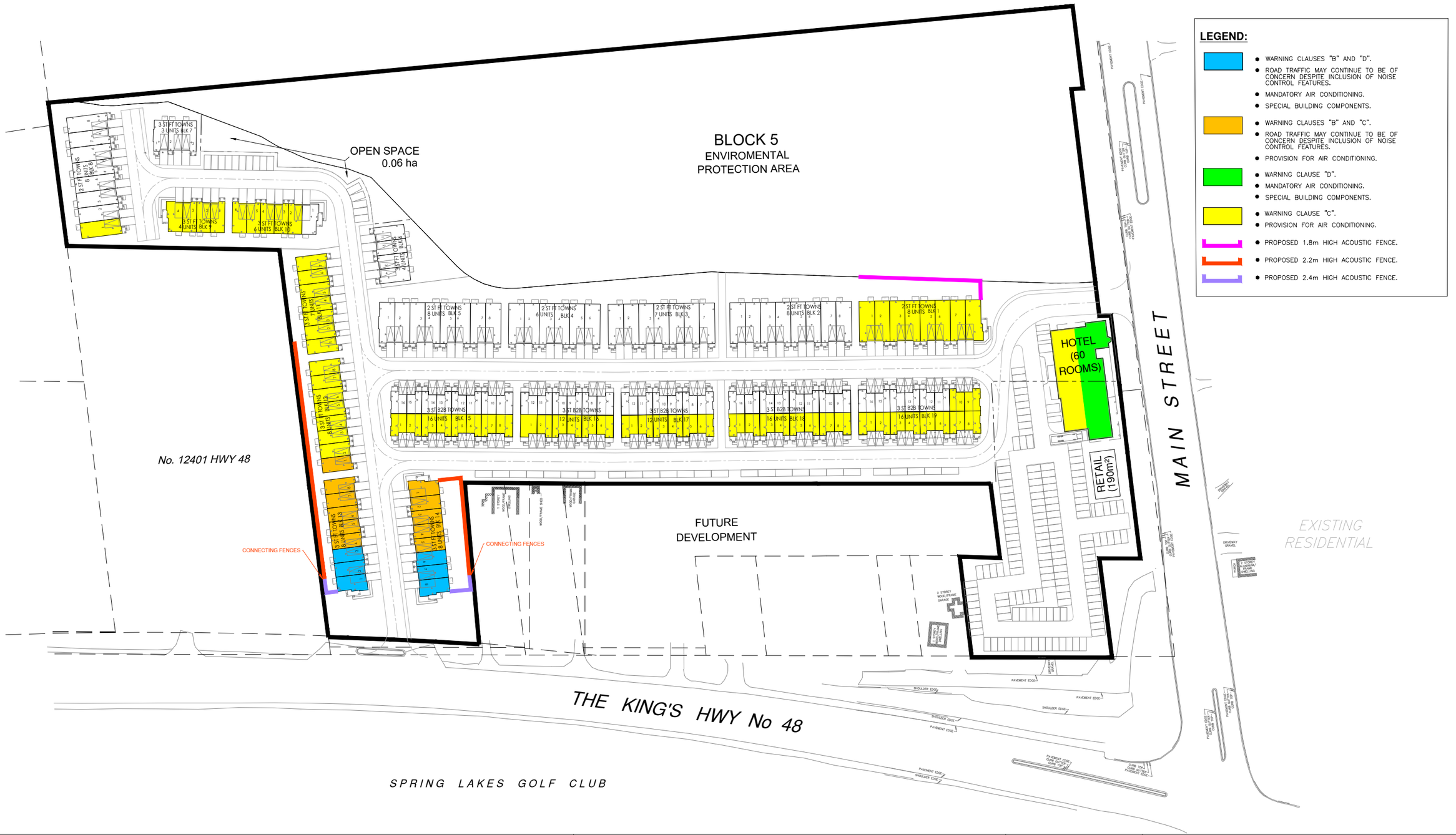
The location and length of the acoustic barriers are illustrated in **Figure 5.** The MECP's guidelines require that acoustical fencing be solid, with no gaps or holes and have a minimum surface density of 20 kg/m^2 (4 lb/ft^2).

With the recommended measures, the outdoor daytime sound levels will exceed the noise criteria by no more than 5 dBA for all of the townhouse units in Blocks 13 and 14 and the townhouse unit in Block 12 that is closest to Highway 48. As a result, a warning clause in all Offers of Purchase and Sale is required.

3.3 Ventilation Requirements

The MECP have ventilation requirements for residential buildings (including the rooms of hotels) which are based on the sound levels at the exterior building facades outside of a bedroom or a living/dining room window during the daytime and night-time.

For the hotel rooms immediately adjacent to Main Street and the three (3) townhouse units in Blocks 13 and 14 that are closest to Highway 48, since the daytime sound level in the plane of a bedroom or living/dining room window is greater than 65 dBA L_{eq} and/or the night-time sound level in the plane of a bedroom or living/dining room window is greater than 60 dBA L_{eq}, central air conditioning and a corresponding warning clause is required.



PRELIMINARY NOISE REPORT

12,371 HIGHWAY 48 AND 5,262 - 5,318 MAIN STREET

TOWN OF WHITCHURCH-STOUFFVILLE

NOISE MITIGATION PLAN

CANDEVCON GROUP INC.
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DATE	AUG., 13th 2026	JOB No	W26018
DRAWN	B.W.	FIGURE No.	5
SCALE	1:1500		

3. Noise Attenuation Measures - Continued

3.3 Ventilation Requirements - Continued

For the balance of the townhouse units in Blocks 13 and 14, the balance of the rooms in the hotel, all of the townhouse units in Blocks 1, 9, 11 and 12, the townhouse units in Blocks 15 to 19 that are facing Highway 48, the two (2) townhouse units (Units 9 and 10) at the southeast corner of Block 19, the five (5) townhouse units in Block 10 that are closest to Millard Street and the townhouse unit in Block 8 that is closest to Highway 48, since the daytime sound level in the plane of a bedroom or living/dining room window is greater than 55 dBA L_{eq} and less than or equal to 65 dBA L_{eq} and/or the night-time sound level in the plane of a bedroom or living/dining room window is greater than 50 dBA L_{eq} and less than or equal to 60 dBA L_{eq}, forced air heating with provision for central air conditioning and a corresponding warning clause is required.

3.4 Façade Components

To comply with the MECP's interior sound level criteria of 40 dBA L_{eq} (night-time) for bedrooms and 45 dBA L_{eq} (daytime) for bedrooms/living/dining rooms, STC rating requirements will need to be examined for building facade components, namely walls and windows.

For the hotel rooms immediately adjacent to Main Street and the three (3) townhouse units in Blocks 13 and 14 that are closest to Highway 48, since the daytime sound levels in the plane of a bedroom or living/dining room window exceed 65 dBA L_{eq} and/or the night-time sound levels in the plane of a bedroom or living/dining room window exceed 60 dBA L_{eq}, special building components will be required to satisfy the MECP criteria. Special building components are to be reviewed when the proposed grading becomes available.

4. Summary

For all of the dwelling units in Blocks 13 and 14, the outdoor daytime sound levels exceed 60 dBA L_{eq}. Therefore, noise mitigation measures such as barriers are required to attenuate the sound levels to 60 dBA L_{eq} or less (55 dBA L_{eq} being the desired level).

For all of the dwelling units in Blocks 1 and 12 and the townhouse unit in Block 11 that is closest to Highway 48, the outdoor daytime sound levels exceed the noise criteria by no more than 5 dBA. Therefore, noise mitigation measures to attenuate the sound levels to the desired 55 dBA L_{eq} limit can be implemented or a warning clause in all Offers of Purchase and Sale is required.

To attenuate the outdoor daytime sound levels, the following recommendations are proposed:

- A 1.8m high acoustic fence that will run along the east and south property lines of Block 1,
- A 2.4m high acoustic fence that will run along the north and west property lines of the townhouse unit in Block 13 that is closest to Highway 48,
- For the balance of the townhouse units in Block 13, all of the townhouse units in Block 12 and the townhouse unit in Block 11 that is closest to Highway 48, a 2.2m high acoustic fence will run along the north property line.
- A 2.4m high acoustic fence that will run along the south and west property lines of the townhouse unit in Block 14 that is closest to Highway 48,
- For the balance of the townhouse units in Block 14, a 2.2m high acoustic fence will run along the south property line.

With the recommended measures, the outdoor daytime sound levels will exceed the noise criteria by no more than 5 dBA for all of the townhouse units in Blocks 13 and 14 and the townhouse unit in Block 12 that is closest to Highway 48. As a result, a warning clause in all Offers of Purchase and Sale is required. The wording for such Warning Clauses is provided in **Appendix B**.

4. Summary - Continued

For the hotel rooms immediately adjacent to Main Street and the three (3) townhouse units in Blocks 13 and 14 that are closest to Highway 48, since the daytime sound level in the plane of a bedroom or living/dining room window is greater than 65 dBA L_{eq} and/or the night-time sound level in the plane of a bedroom or living/dining room window is greater than 60 dBA L_{eq}, central air conditioning with a corresponding warning clause and special building components is required. Special building components are to be reviewed when the proposed grading becomes available.

For the balance of the townhouse units in Blocks 13 and 14, the balance of the rooms in the hotel, all of the townhouse units in Blocks 1, 9, 11 and 12, the townhouse units in Blocks 15 to 19 that are facing Highway 48, the two (2) townhouse units (Units 9 and 10) at the southeast corner of Block 19, the five (5) townhouse units in Block 10 that are closest to Millard Street and the townhouse unit in Block 8 that is closest to Highway 48, since the daytime sound level in the plane of a bedroom or living/dining room window is greater than 55 dBA L_{eq} and less than or equal to 65 dBA L_{eq} and/or the night-time sound level in the plane of a bedroom or living/dining room window is greater than 50 dBA L_{eq} and less than or equal to 60 dBA L_{eq}, forced air heating with provision for central air conditioning and a corresponding warning clause is required.

The Noise Mitigation Plan is provided in **Figure 5**.

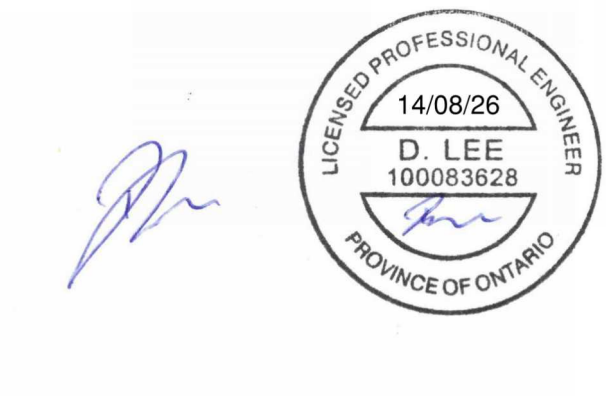
In addition, for the hotel and the retail building being proposed, a noise assessment that will review potential stationary noise sources will be prepared at the Site Plan Application Stage when final plans are available.

4. Summary - Continued

Based on the above analysis, with the recommendations given, the proposed Mixed-Use Subdivision will meet the noise criteria set forth by the Ministry of the Environment, Conservation and Parks, the Region of York and the Town of Whitchurch-Stouffville.

This Report was prepared by:

CANDEVCON GROUP INC.



Brian Wong, P. Eng.
Intermediate Transportation Engineer

David Lee, P. Eng.
Project Manager

APPENDIX A

Roadway Traffic Volume Data

Public Works
Transportation Infrastructure Asset Management

June 12, 2026

Brian Wong
CANDEVCON GROUP INC.
9358 Goreway Drive
Brampton, ON L6P 0M7

Re: Request for Traffic Data
File No. T09, Forecasts - Whitchurch-Stouffville

As requested, the traffic data for your study are summarized below.

	Stouffville Road
Section No.	14-38
Location	West of Highway 48
Existing AADT	21,000 (2024)
Ultimate AADT	36,000
No. of Lanes	4
Posted Speed	Up to 70 km/h
Trucks (Med/Heavy)	2% / 3%
Grade	Up to 4%
Day/Night Split	89/11
Planned ROW	Up to 36 m

I trust that this will be satisfactory for your study. The invoice will be sent to you separately.

Sincerely,

Wenli Gao
Transportation Planning, Forecasting

WG/wg

YORK-#17318794-v1-260040_Wong_Stouffville_west_Hwy48.docx

Brian Wong

From: Gao, Wenli <Wenli.Gao@york.ca>
Sent: June 15, 2026 12:09 PM
To: Brian Wong
Cc: Traffic data; David Lee; Filing West; Ye, Kevin
Subject: RE: W26018 - Highway 48 and Main Street - Traffic Volume Information (Region)

Hi Brian,

Your notes about the speed are valid.

The speed of 94 km/h was recorded on April 26, 2024, when the posted speed limit at that location was 80 km/h. There are no speed data available after 2024.

Regards,

Our working hours may be different. Please do not feel obligated to reply outside of your scheduled working hours. Let's work together to help foster healthy work-life boundaries.

Wenli Gao (she) | Transportation Technologist - Forecasting, Transportation Infrastructure Asset Management
Capital Infrastructure Services, Public Works

1-877-464-9675 ext. 75197

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

From: Brian Wong <brian@candevcon.com>
Sent: Monday, June 15, 2026 11:41 AM
To: Gao, Wenli <Wenli.Gao@york.ca>
Cc: Traffic data <Traffic.data@york.ca>; David Lee <david@candevcon.com>; Filing West <filingwest@candevcon.com>; Ye, Kevin <Kevin.Ye@york.ca>
Subject: RE: W26018 - Highway 48 and Main Street - Traffic Volume Information (Region)

Good Morning Wenli,

Between McCowan Road and Highway 48, Stouffville Road has a posted speed limit of 60 km/h and 70 km/h. Are you able to tell me whether the 85th percentile speed was recorded in a 60 km/h or 70 km/h zone. In addition, I find that an operational speed of 94 km/h to be high even if the posted speed limit is 70km/h. Can you please double check.

If you require any further information, please do not hesitate to contact me.

Brian Wong, P.Eng.

Intermediate Transportation Engineer

CANDEVCON GROUP INC.

CONSULTING ENGINEERS & PLANNERS
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9358 Goreway Drive, Brampton, Ontario, L6P 0M7
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From: Gao, Wenli <Wenli.Gao@york.ca>
Sent: June 15, 2026 11:02 AM
To: Brian Wong <brian@candevcon.com>
Cc: Traffic data <Traffic.data@york.ca>; David Lee <david@candevcon.com>; Filing West <filingwest@candevcon.com>; Ye, Kevin <Kevin.Ye@york.ca>
Subject: RE: W26018 - Highway 48 and Main Street - Traffic Volume Information (Region)

Good morning Brian,

FYI, the 85th percentile speed was recorded as 94 km/h for both directions on Stouffville Rd btwn McCowan Rd and Hwy 48.

Regards,

Our working hours may be different. Please do not feel obligated to reply outside of your scheduled working hours. Let's work together to help foster healthy work-life boundaries.

Wenli Gao **(she)** | Transportation Technologist - Forecasting, Transportation Infrastructure Asset Management
Capital Infrastructure Services, Public Works

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APPENDIX B

Warning Clauses

APPENDIX B
Warning Clauses

Warning Clause "B"

"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 road traffic may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."

Warning Clause "C"

"This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."

Warning Clause "D"

"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."

APPENDIX C

Stamson 5.04 Sound Level Calculations

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STAMSON REPORT – RECEPTOR LOCATION 7
[DAYTIME, REAR YARD, NO ACOUSTIC BARRIER]

```
STAMSON 5.0        NORMAL REPORT        Date: 12-08-2026 10:17:07
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r7d.te               Time Period: 16 hours
Description:


Road data, segment # 1: Highway 48
----------------------------------
Car traffic volume  : 25288 veh/TimePeriod  *
Medium truck volume :  2678 veh/TimePeriod  *
Heavy truck volume  :  1785 veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Highway 48
--------------------------------
Angle1   Angle2           : -90.00 deg   51.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  40.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Highway 48
----------------------------------
Car traffic volume  : 25288 veh/TimePeriod  *
Medium truck volume :  2678 veh/TimePeriod  *
Heavy truck volume  :  1785 veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 2: Highway 48
--------------------------------
Angle1   Angle2           :  51.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1
House density             :     95 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  40.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Road data, segment # 3: Millard
------------------------------
Car traffic volume  :  7497 veh/TimePeriod  *
Medium truck volume :   145 veh/TimePeriod  *
Heavy truck volume  :     8 veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 3: Millard
------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1
House density             :     65 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 247.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Highway 48
------------------------------

Source height = 1.57 m

ROAD (0.00 + 67.31 + 0.00) = 67.31 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj
SubLeq
-------------------------------------------------------------------------
---
   -90     51   0.66  76.47   0.00  -7.06  -2.10   0.00   0.00   0.00
67.31
-------------------------------------------------------------------------
---

Segment Leq : 67.31 dBA

Results segment # 2: Highway 48
------------------------------

Source height = 1.57 m

ROAD (0.00 + 49.50 + 0.00) = 49.50 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj
SubLeq
-------------------------------------------------------------------------
---
    51     90   0.66  76.47   0.00  -7.06 -10.04   0.00  -9.87   0.00
49.50
-------------------------------------------------------------------------
---

Segment Leq : 49.50 dBA
```

```
Results segment # 3: Millard
----------------------------

Source height = 0.57 m

ROAD (0.00 + 34.77 + 0.00) = 34.77 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj
SubLeq
-------------------------------------------------------------------------
---
   -90     90   0.66  60.11   0.00 -20.20  -1.46   0.00  -3.69   0.00
34.77
-------------------------------------------------------------------------
---

Segment Leq : 34.77 dBA

Total Leq All Segments: 67.38 dBA

TOTAL Leq FROM ALL SOURCES:       67.38
```

STAMSON REPORT – RECEPTOR LOCATION 7
[NIGHT-TIME, FACADE, NO ACOUSTIC BARRIER]

```
STAMSON 5.0        NORMAL REPORT        Date: 12-08-2026 10:22:33
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r7n.te               Time Period: 8 hours
Description:


Road data, segment # 1: Highway 48
----------------------------------
Car traffic volume  :  4462 veh/TimePeriod  *
Medium truck volume :   472 veh/TimePeriod  *
Heavy truck volume  :   315 veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Highway 48
--------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  37.00 m
Receiver height           :   7.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Millard
-------------------------------
Car traffic volume  :   833 veh/TimePeriod  *
Medium truck volume :    16 veh/TimePeriod  *
Heavy truck volume  :     1 veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 2: Millard
-----------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1
House density             :     65 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 250.00 m
Receiver height           :   7.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Results segment # 1: Highway 48
------------------------------

Source height = 1.57 m

ROAD (0.00 + 65.02 + 0.00) = 65.02 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj
SubLeq
-------------------------------------------------------------------------
---
   -90     90   0.48  71.94   0.00  -5.80  -1.13   0.00   0.00   0.00
65.02
-------------------------------------------------------------------------
---

Segment Leq : 65.02 dBA

Results segment # 2: Millard
----------------------------

Source height = 0.59 m

ROAD (0.00 + 30.31 + 0.00) = 30.31 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj
SubLeq
-------------------------------------------------------------------------
---
   -90     90   0.51  53.60   0.00 -18.42  -1.19   0.00  -3.69   0.00
30.31
-------------------------------------------------------------------------
---

Segment Leq : 30.31 dBA

Total Leq All Segments: 65.02 dBA

TOTAL Leq FROM ALL SOURCES:       65.02
```

STAMSON REPORT – RECEPTOR LOCATION 7
[DAYTIME, FACADE, NO ACOUSTIC BARRIER]

```
STAMSON 5.0        NORMAL REPORT        Date: 12-08-2026 10:21:44
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r7df.te              Time Period: 16 hours
Description:


Road data, segment # 1: Highway 48
----------------------------------
Car traffic volume  : 25288 veh/TimePeriod  *
Medium truck volume :  2678 veh/TimePeriod  *
Heavy truck volume  :  1785 veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Highway 48
--------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  37.00 m
Receiver height           :   4.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Millard
-------------------------------
Car traffic volume  :  7497 veh/TimePeriod  *
Medium truck volume :   145 veh/TimePeriod  *
Heavy truck volume  :     8 veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 2: Millard
-----------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1
House density             :     65 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 250.00 m
Receiver height           :   4.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Results segment # 1: Highway 48
------------------------------

Source height = 1.57 m

ROAD (0.00 + 69.02 + 0.00) = 69.02 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj
SubLeq
-------------------------------------------------------------------------
---
   -90     90   0.57  76.47   0.00  -6.15  -1.30   0.00   0.00   0.00
69.02
-------------------------------------------------------------------------
---

Segment Leq : 69.02 dBA

Results segment # 2: Millard
----------------------------

Source height = 0.57 m

ROAD (0.00 + 35.55 + 0.00) = 35.55 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj
SubLeq
-------------------------------------------------------------------------
---
   -90     90   0.60  60.11   0.00 -19.52  -1.35   0.00  -3.69   0.00
35.55
-------------------------------------------------------------------------
---

Segment Leq : 35.55 dBA

Total Leq All Segments: 69.02 dBA

TOTAL Leq FROM ALL SOURCES:       69.02
```

STAMSON REPORT – RECEPTOR LOCATION 7
[DAYTIME, REAR YARD, 2.4m HIGH ACOUSTIC BARRIER]

```
STAMSON 5.0        NORMAL REPORT        Date: 12-08-2026 13:46:20
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r7db.te              Time Period: 16 hours
Description:


Road data, segment # 1: Highway 48
----------------------------------
Car traffic volume  : 25288 veh/TimePeriod  *
Medium truck volume :  2678 veh/TimePeriod  *
Heavy truck volume  :  1785 veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Highway 48
--------------------------------
Angle1   Angle2           : -90.00 deg   51.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  40.00 m
Receiver height           :   1.50 m
Topography                :      2       (Flat/gentle slope; with
barrier)
Barrier angle1            : -90.00 deg   Angle2 : 51.00 deg
Barrier height            :   2.40 m
Barrier receiver distance :   2.90 m
Source elevation          :   0.00 m
Receiver elevation        :   0.00 m
Barrier elevation         :   0.00 m
Reference angle           :   0.00
```

```
Road data, segment # 2: Highway 48
----------------------------------
Car traffic volume  : 25288 veh/TimePeriod  *
Medium truck volume :  2678 veh/TimePeriod  *
Heavy truck volume  :  1785 veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 2: Highway 48
--------------------------------
Angle1   Angle2           :  51.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1
House density             :     95 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  40.00 m
Receiver height           :   1.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 3: Millard
------------------------------
Car traffic volume  :  7497 veh/TimePeriod  *
Medium truck volume :   145 veh/TimePeriod  *
Heavy truck volume  :     8 veh/TimePeriod  *
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 3: Millard
-----------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1
House density             :     65 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 247.00 m
Receiver height           :   1.50 m
Topography                :      2       (Flat/gentle slope; with
barrier)
Barrier angle1            : -90.00 deg   Angle2 : 90.00 deg
Barrier height            :   2.40 m
Barrier receiver distance :   3.00 m
Source elevation          :   0.00 m
Receiver elevation        :   0.00 m
Barrier elevation         :   0.00 m
Reference angle           :   0.00
```

```
Results segment # 1: Highway 48
-------------------------------

Source height = 1.57 m

Barrier height for grazing incidence
------------------------------------
Source      ! Receiver    ! Barrier     ! Elevation of
Height  (m) ! Height  (m) ! Height  (m) ! Barrier Top  (m)
------------+-------------+-------------+--------------
       1.57 !        1.50 !        1.50 !         1.50

ROAD (0.00 + 59.51 + 0.00) = 59.51 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj
SubLeq
-------------------------------------------------------------------------
---
   -90     51   0.51  76.47   0.00  -6.45  -1.92   0.00   0.00  -8.59
59.51
-------------------------------------------------------------------------
---

Segment Leq : 59.51 dBA

Results segment # 2: Highway 48
-------------------------------

Source height = 1.57 m

ROAD (0.00 + 49.50 + 0.00) = 49.50 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj
SubLeq
-------------------------------------------------------------------------
---
    51     90   0.66  76.47   0.00  -7.06 -10.04   0.00  -9.87   0.00
49.50
-------------------------------------------------------------------------
---

Segment Leq : 49.50 dBA
```

Results segment # 3: Millard

Source height = 0.57 m

Barrier height for grazing incidence

Source Height (m)	Receiver Height (m)	Barrier Height (m)	Elevation of Barrier Top (m)
0.57	1.50	1.49	1.49

ROAD (0.00 + 32.04 + 0.00) = 32.04 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.66	60.11	0.00	-20.20	-1.46	0.00	-3.69	0.00	34.77
-90	90	0.54	60.11	0.00	-18.78	-1.26	0.00	0.00	-8.04	32.04

Segment Leq : 32.04 dBA

Total Leq All Segments: 59.93 dBA