Environmental Noise and Vibration Feasibility Study

50 High Street East

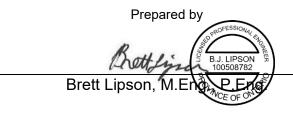
Proposed Residential Development

City of Mississauga

July 17, 2025 Project: 125-0117

Prepared for

1001107672 Ontario Inc.





Version History

Version #	Date	Comments
1.0	July 17, 2025	Prepared for Submission

TABLE OF CONTENTS

EXECUTIVE SUMMARY	. 1
1.0 INTRODUCTION	. 2
1.1 THE SITE AND SURROUNDING AREA	. 2
1.2 THE PROPOSED DEVELOPMENT	. 2
2.0 NOISE SOURCES	. 2
2.1 TRANSPORTATION NOISE SOURCES	. 2
2.1.1 Road Traffic Noise Sources	. 3
2.1.2 Rail Traffic Noise Sources	. 3
2.1.2.1 CN Oakville Subdivision	. 3
2.1.2.2 GO Lakeshore West Line	. 3
2.2 STATIONARY NOISE SOURCES	. 4
3.0 ENVIRONMENTAL NOISE GUIDELINES	. 5
3.1 MECP Publication NPC-300	. 5
3.1.1 Transportation Noise Sources	. 5
3.1.1.1 Architectural Elements	. 5
3.1.1.2 Ventilation	. 5
3.1.1.3 Outdoors	. 5
3.2 REGION OF PEEL	. 6
3.3 FEDERATION OF CANADIAN MUNICIPALITIES AND RAILWAY ASSOCIATION (CANADA	
4.0 NOISE IMPACT ASSESSMENT	. 6
4.1 ANALYSIS METHOD	. 6
4.2 PREDICTED SOUND LEVELS	. 7
4.3 NOISE ABATEMENT REQUIREMENTS	. 8
4.3.1 Indoors	. 8
/cor	าt'd

TABLE OF CONTENTS (continued)

4.	3.1.1	Architectural Elements	. 8
4.	3.1.2	Ventilation Requirements	. 8
4.3.	.2 (Outdoors	. 9
5.0 W	/ARNI	NG CLAUSES	. 9
6.0 C	ONCL	USIONS	11
7.0 R	EFER	ENCES	11
LIST OF	TAB	LES	
TABLE 1	IA	ROAD TRAFFIC DATA	3
TABLE 1	ΙB	RAIL TRAFFIC DATA	4
TABLE 2	2	PREDICTED UNMITIGATED SOUND LEVELS OUTDOORS	7
TABLE 3	3	SUMMARY OF MINIMUM NOISE ABATEMENT MEASURES	10
LIST OF	FIGU	IRES	
FIGURE	1	KEY PLAN	
FIGURE	2A	SITE PLAN	
FIGURE	2B	ROOF DECK PLAN	
LIST OF	APPI	ENDICES	
APPEND	OIX A	ARCHITECTURAL DRAWINGS	
APPEND	DIX B	ROAD AND RAIL TRAFFIC DATA	
APPEND	OIX C	ENVIROMENTAL NOISE GUIDELINES	
APPEND	DIX D	SAMPLE CALCULATION	

Environmental Noise and Vibration

Feasibility Study

50 High Street East

Proposed Residential Development

City of Mississauga

EXECUTIVE SUMMARY

Valcoustics Canada Ltd. (VCL) was retained to prepare an Environmental Noise and Vibration Feasibility Study in support of the Zoning By-law Amendment (ZBA) application submission to the City of Mississauga.

The proposed development consists of an 11-storey residential building. Common outdoor amenity space will be provided at Level 10 and the rooftop.

The significant transportation noise sources in the vicinity are road traffic on Hurontario Street and Lakeshore Road East and rail traffic on the Canadian National Railway (CN) Oakville Subdivision/GO Lakeshore West Line. There are no stationary sources with the potential for significant noise impact on the proposed development.

The sound levels on the subject site have been determined and compared with the applicable Ministry of the Environment, Conservation and Parks (MECP) and the Region of Peel noise quideline limits to determine the need for noise mitigation.

To meet the applicable transportation noise source guideline limits, the noise mitigation requirements are:

- Exterior wall construction meeting a Sound Transmission Class (STC) rating of 45.
- Exterior windows with ratings up to STC 35.
- Mandatory air conditioning for all dwelling units to allow windows to remain closed for noise control purposes.
- A 1.1 m high parapet sound barrier at the rooftop outdoor amenity area.

The proposed development will be greater than 75 m from the CN Oakville Subdivision/GO Lakeshore West Line. Thus, vibration from the railway was not considered further.

1.0 INTRODUCTION

VCL was retained to prepare an Environmental Noise and Vibration Feasibility Study in support of the ZBA application submission to the City of Mississauga.

The predicted sound levels and noise mitigation measures needed for the proposed development to comply with noise guidelines of the MECP and the Region of Peel are outlined herein.

1.1 THE SITE AND SURROUNDING AREA

The proposed development is located at 50 High Street East in the City of Mississauga and is bounded by:

- Existing low-rise and high-rise residential buildings, with Park Street East beyond, to the north;
- Existing high-rise residential buildings with Helene Street North beyond, to the east;
- High Street East, with existing high-rise residential and commercial buildings beyond, to the south;
- Existing low-rise and high-rise residential buildings, with Elizabeth Street North beyond, to the west.

The site is currently occupied by an existing 3-storey residential building that will be demolished as part of the development.

A Key Plan is included as Figure 1.

This report was prepared using the architectural drawings prepared by Chamberlain Architect Services Ltd. dated April 2025. The architectural drawings are included as Appendix A. The Site Plan and Roof Deck Plan from the drawing set are shown as Figures 2A and 2B, respectively.

1.2 THE PROPOSED DEVELOPMENT

The proposed development consists of an 11-storey residential building. Common outdoor amenity space will be provided at Level 10 and the rooftop.

2.0 NOISE SOURCES

2.1 TRANSPORTATION NOISE SOURCES

The significant transportation noise sources in the vicinity are road traffic on Hurontario Street and Lakeshore Road East and rail traffic on the CN Oakville Subdivision/GO Lakeshore West

Line. Traffic volumes on the other roadways in the vicinity are anticipated to be minor and no significant noise impact is expected. Thus, these roads are not considered further in this report.

The traffic data is shown in Appendix B and summarized in Tables 1A and 1B.

2.1.1 Road Traffic Noise Sources

Ultimate traffic data for Hurontario Street and Lakeshore Road East was provided by the City of Mississauga.

TABLE 1A ROAD TRAFFIC DATA

Deadway	A A D T(1)	% Tru	ıcks	Speed Limit	Dov/Night Calit (0/)	
Roadway	AADI	AADT ⁽¹⁾ Medium He		(kph)	Day/Night Split (%)	
Hurontario Street ⁽²⁾	36 800	3.3	2.7	40	90/10	
Lakeshore Road East ⁽²⁾	46 600	2.2	1.8	40	90/10	

Notes:

- (1) AADT Annual Average Daily Traffic
- (2) Ultimate traffic data provided by the City of Mississauga

2.1.2 Rail Traffic Noise Sources

2.1.2.1 CN Oakville Subdivision

Rail traffic data for the CN Oakville Subdivision applicable for the year 2025 was obtained directly from CN. Rail traffic consists of way freight and passenger trains. The rail traffic data was escalated to the year 2035 design condition using a growth rate of 2.5%, compounded annually. This escalation rate is suggested by the MECP for rail traffic data in preparing environmental noise studies.

2.1.2.2 GO Lakeshore West Line

Future GO rail traffic volumes for the GO Lakeshore West Line, applicable to a 10-year time horizon, were provided by Metrolinx in an email received May 9, 2025. The GO Lakeshore West line will consist of both electric and diesel single-locomotive passenger trains.

Metrolinx has not yet made final decisions regarding the electric train technology to be used. In the interim, for the purposes of environmental noise studies, Metrolinx is recommending that the noise level and spectrum of a diesel train be used to model the impact from the electric trains. As recommended by Metrolinx, all future train traffic was modelled using the reference data for diesel trains.

TABLE 1B RAIL TRAFFIC DATA

Track	Period	Train Type	Maximum # of Trains		Maximum # of Locomotives/Train	Maximum Speed (kph)
	Daytime	Way Freight	0 (0)	25	4	97
CN Oakville	Nighttime	Way Freight	5 (6.4)	25	4	97
Subdivision ⁽¹⁾	Daytime	Passenger	14 (17.9)	10	2	153
	Nighttime	Passenger	0 (0)	10	2	153
GO Transit	Daytime	Passenger	354	10	1	137
Lakeshore West Line ⁽²⁾	Nighttime	Passenger	54	10	1	137

Notes:

2.2 STATIONARY NOISE SOURCES

There is an existing Bell utility building located at 80 High Street East, approximately 140 m east of the subject site. The main noise sources at this facility are the rooftop mechanical equipment and emergency generator. VCL conducted noise measurements at this facility in 2022, as part of a different project. Using on the noise model that was built in 2022, it was determined that that the Bell facility would not have a significant impact on the subject site and thus, has not been considered further.

There are existing commercial buildings on Lakeshore Road West, approximately 100 m south of the proposed development. The main noise sources at these facilities are anticipated to be the rooftop mechanical units. Based on the distance separation and the presence of existing residential developments located at a closer setback distances, noise from these facilities is not expected to have a significant impact on the subject site. Thus, these facilities have not been considered further in the assessment.

There is an existing residential building located at 12 Helene St N, immediately east of the subject site. The main noise sources at this building are the rooftop mechanical equipment and a small emergency generator located at grade. During the site visit by VCL staff on June 26, 2025, noise from the rooftop equipment was not audible at the subject site. The emergency generator is located at the east side of the building, approximately 7 m from the existing residential building on the subject site. The onus is on the residential building at 12 Helene St N to ensure that the applicable sound level limits at the existing residential building at 50 High Street are met. Thus, it is expected that by virtue of the limits being met at the existing residential building, they will also be met for the proposed development.

⁽¹⁾ Data obtained from CN for the year 2025. Values shown in brackets have been extrapolated to the year 2035 design condition using a 2.5 % growth rate, compounded annually.

⁽²⁾ Data obtained from GO Transit for the year 2035.

The remaining residential buildings in the vicinity do not appear to have any significant rooftop or at-grade noise sources with the potential to impact the subject site. This was confirmed by VCL staff during the site visit on June 26, 2025, when noise from these buildings was not audible.

During the site visit by VCL staff on June 26, 2025, noise from the above facilities was not audible at the subject site.

ENVIRONMENTAL NOISE GUIDELINES

MECP PUBLICATION NPC-300 3.1

The applicable noise guideline limits for new residential development are those in MECP Publication NPC-300, "Environmental Noise Guideline, Stationary, and Transportation Sources-Approval and Planning". These are discussed briefly below and are summarized in Appendix C.

3.1.1 Transportation Noise Sources

3.1.1.1 Architectural Elements

In the daytime (0700 to 2300), the indoor criterion for road noise is Leq Day (1) of 45 dBA for sensitive spaces such as living/dining rooms, dens and bedrooms. At night, the indoor criterion for road noise is Lea Night (2) of 45 dBA for sensitive spaces such as living/dining rooms and dens and 40 dBA for bedrooms. The indoor criteria for rail noise are 5 dBA lower than those for road noise; that is, 40 dBA for living/dining rooms, dens and bedrooms during the daytime and nighttime periods except for bedrooms where the nighttime indoor criterion is 35 dBA.

The architectural design of the building envelope (walls, windows, etc.) must provide adequate sound isolation to achieve the above indoor sound level limits applying the outdoor sound level predicted at the facades.

3.1.1.2 Ventilation

If the daytime sound level, Leg Day, at the exterior face of a noise sensitive window is greater than 65 dBA, central air conditioning should be provided so that windows can be kept closed for noise control purposes. For daytime sound levels between 56 dBA and 65 dBA inclusive, there need only be the provision for adding air conditioning. A warning clause advising the occupant of the potential interference with some activities is also required. At nighttime, air conditioning would be required when the sound level exceeds 60 dBA (Lea Night) at a noise sensitive window (provision for adding air conditioning is required when the sound level is greater than 50 dBA).

3.1.1.3 Outdoors

For Outdoor Living Areas (OLA's), the guideline objective is Leg Day of 55 dBA with an excess not exceeding 5 dBA considered acceptable if it is technically not practicable to meet the 55 dBA objective, providing warning clauses are also registered on title.

- 16-hour energy equivalent sound level (0700-2300 hours). $L_{\text{eq, Day}}$
- (1) (2) 8-hour energy equivalent sound level (0700-2300 hours).

A balcony or elevated terrace is not considered an OLA unless it is:

- The only OLA for the occupant;
- at least 4 m in depth; and
- unenclosed.

3.2 REGION OF PEEL

The Region of Peel guidelines are essentially the same as the MECP guidelines except that the night-time level for triggering the air conditioning requirement is 1 dBA more stringent (i.e., lower) than the levels specified by the MECP – i.e., mandatory air conditioning for nighttime sound levels of 60 dBA or greater, and the provision for adding air conditioning for levels between 51 to 59 dBA inclusive.

3.3 FEDERATION OF CANADIAN MUNICIPALITIES AND RAILWAY ASSOCIATION OF CANADA

The standard noise mitigation measures required by the Federation of Canadian Municipalities and the Railway Association of Canada (FCM/RAC) are:

- a minimum setback of 30 m from the edge of the railway right-of-way to the closest dwelling facade;
- a safety berm at least 2.5 m above grade at the property line;
- an approximately 3.0 m high acoustic fence atop the safety berm (to achieve a total height of 5.5 m above the top of the rail);
- brick veneer exterior wall construction; and
- warning clauses specific to the railway for all dwellings within 300 m of the right-of-way.

The FCM/RAC guideline identifies standard mitigation requirements for dwellings adjacent to a principal main line (which the CN Oakville Subdivision is considered). However, given the distance separation (over 200 m) and the presence of the existing, intervening residential dwellings, the standard mitigation measures would not be expected to apply to this development, with the exception of the warning clause.

Aside from the "standard" requirements regarding the setback of dwellings and safety berm/sound barrier configuration, the sound level design objectives of FCM/RAC are similar to those of the MECP. See Appendix C. Note that the FCM/RAC also permit modifications to their standard requirements where substantiated by a detailed noise impact assessment.

4.0 NOISE IMPACT ASSESSMENT

4.1 ANALYSIS METHOD

Using the road and rail data in Tables 1A and 1B, the sound levels, in terms of $L_{\text{eq Day}}$ and $L_{\text{eq Night}}$, were determined using STAMSON V5.04 – ORNAMENT, the computerized road traffic noise prediction model of the MECP.

The daytime and nighttime sound levels at the building facades were assessed at a height of 33.8 m, representing the top floor (worst-case) locations.

The daytime sound level at the outdoor amenity areas were assessed at a height of 1.5 m above the terrace floor, at the approximate centre of the space, in accordance with the NPC-300 requirements.

Inherent screening of each building face due to its orientation to the noise source was taken into account. In addition, screening from the existing development in the vicinity was included in the assessment.

4.2 PREDICTED SOUND LEVELS

The highest unmitigated daytime/nighttime sound levels of 67 dBA/63 dBA are predicted to occur at the north façade, the closest to the CN Oakville Subdivision/GO Lakeshore West Line.

The highest unmitigated daytime OLA sound level is predicted to be 64 dBA at the north area of the rooftop outdoor amenity area.

Table 2 summarizes the unmitigated daytime and nighttime sound level predictions. Sample Stamson calculations are included as Appendix D.

TABLE 2 PREDICTED UNMITIGATED SOUND LEVELS OUTDOORS

Location ⁽¹⁾	Source	Distance (m) ⁽²⁾	L _{eq Day} (dBA)	L _{eq Night} (dBA)
	Hurontario Street	265	46	39
Northeast Corner (North Facade)	CN Oakville/GO Lakeshore West	218	67	63
(North Facade)	TOTAL	_	67	63
	Hurontario Street	265	49	42
Northeast Corner	Lakeshore Road East	181	44	38
(East Facade)	CN Oakville/GO Lakeshore West	218	64	60
	TOTAL	_	64	60
	Hurontario Street	265	48	-
Level 10 Outdoor Amenity Area	Lakeshore Road East	142	53	-
Amenity Area	TOTAL	_	54	-
	Hurontario Street	267	49	-
Rooftop Outdoor	Lakeshore Road East	154	47	-
Amenity Area (East Area)	CN Oakville/GO Lakeshore West	246	62	-
, , , , ,	TOTAL	_	62	-
Rooftop Outdoor	Hurontario Street	273	47	-
Amenity Area	CN Oakville/GO Lakeshore West	222	64	-
(North Area)	TOTAL	_	64	-

Notes:

- (1) See Figure 2A.
- (2) Distance indicated is from the centreline of the noise source.

4.3 NOISE ABATEMENT REQUIREMENTS

The noise control measures can generally be classified into two categories which are interrelated, but which can be treated separately for the most part:

- a) Architectural elements to achieve the indoor noise guidelines.
- b) Design features to protect the OLA's.

Noise abatement requirements are summarized on Figures 2A, 2B and in Table 3 along with the notes to Table 3.

4.3.1 Indoors

4.3.1.1 Architectural Elements

The indoor noise guidelines can be achieved by using appropriate construction for exterior walls, windows and doors. To determine the worst-case architectural requirements for the dwelling units, wall and window areas were calculated using the floor plans and elevation drawings. It was assumed that the detailed floor plan for the 2nd floor northwest corner bedroom would be identical to the top floor northeast and northwest units. The west-facing walls and windows were calculated to be 100% and 24%, respectively of the associated floor area. The north-facing walls and windows were calculated to be 77% and 23%, respectively of the associated floor area.

Based on the predicted sound levels and window/wall areas, exterior wall construction meeting STC 45 and exterior windows with ratings up to STC 35 will be required to meet the indoor noise guideline limits for all dwelling units.

With window wall construction, a typical spandrel panel exterior wall with back-up wall assembly (one layer of gypsum board on an independent row of steel studs) is expected to meet at least STC 45.

The window frames themselves must also be designed to ensure that the overall sound isolation performance for the entire window unit meets the sound isolation requirement. This must be confirmed by the window manufacturer through the submission of acoustical test data.

The final sound isolation requirements should be reviewed when full detailed architectural plans are developed. Wall and window constructions should also be reviewed at this point to ensure that they will meet the required sound isolation performance. This is typically required by the City at the time of building permit application.

4.3.1.2 Ventilation Requirements

The predicted sound levels are such that all residential units require mandatory air conditioning to allow windows to remain closed for noise control purposes.

4.3.2 Outdoors

The unmitigated daytime OLA sound levels at the outdoor amenity areas are predicted to be up to 64 dBA, which exceeds the maximum permitted under MECP guidelines. Thus, sound barriers are required.

To mitigate the daytime sound levels to the 55 dBA objective, a 2.6 m high parapet sound barrier would be required. This is not considered feasible or desirable. A 1.1 m high parapet sound barrier would mitigate the daytime OLA sound levels to 59 dBA. This is within the maximum permitted under the MECP guidelines, provided warning clauses are registered on title.

The sound level at the 10th floor outdoor amenity area is predicted to be below 55 dBA, thus, sound barriers are not required at this location.

The sound barriers must be of solid construction with no gaps, cracks or holes (except for small, localized openings where required for water drainage) and must have a minimum surface weight of 20 kg/m². A variety of materials are available, including concrete, masonry, glass, wood, specialty composite materials, or a combination of the above.

The sound barrier location is shown on Figure 2B.

5.0 WARNING CLAUSES

Warning clauses are a tool to inform prospective owners/occupants of potential annoyance due to existing noise sources. Where the guideline sound level limits are exceeded, appropriate warning clauses should be registered on title or included in the development agreement that is registered on title. The warning clauses should also be included in Offers of Purchase and Sale and lease/rental agreements to make future occupants aware of the potential noise situation. Locations requiring warning clauses and the MECP recommended wording are given in Table 3.

TABLE 3 SUMMARY OF MINIMUM NOISE ABATEMENT REQUIREMENTS

Location	Air Conditioning ⁽¹⁾	Exterior Wall ⁽²⁾	Exterior Window ⁽²⁾	Sound Barrier ⁽³⁾	Warning Clauses ⁽⁴⁾
All Dwelling Units	Mandatory	STC 45	Up to STC 35	1.1 m High at the rooftop outdoor amenity area	A + B + C + D

Notes:

- (1) Where methods must be provided to allow windows to remain closed for noise control purposes, a commonly used technique is that of air conditioning.
- (2) STC Sound Transmission Class Rating (Reference ASTM-E413).

The requirements are based on the floor plans and elevation drawings prepared by Chamberlain Architect Services Ltd. dated April 2025 and the assumption that the 2nd floor detailed floor plan is applicable to the remaining floors. The requirements should be checked once full detailed suite layouts become available.

A sliding glass walkout door should be considered as a window and be included in the percentage of glazing.

- (3) Sound barriers must be of solid construction having a minimum face density of 20 kg/m² with no gaps or cracks.
- (4) Warning clauses to be registered on title and be included in Offers of Purchase and Sale and Leases on designated units:
 - A. "Purchasers and tenants/lessees are advised that despite the inclusion of noise control features in this development and within the building units, sound levels due to increasing road traffic may on occasion 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".
 - B. "This dwelling 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".
 - C. "Purchasers/tenants are advised that due to the proximity of the existing residential, commercial and utility buildings, sound levels from these facilities may at times be audible."
 - D. "Canadian National Railways, Metrolinx or its affiliated railway companies has or have a railway right-of-way within 300 m from this dwelling unit. There may be alterations to or expansions of the railway facilities of such right-of-way in the future, including the possibility that Canadian National Railways, Metrolinx or its affiliated railway companies as aforesaid, or their assigns or successors may expand their business operations. Such expansion may affect the living and business environment of the residents, tenants and their visitors, employees, customers and patients in the vicinity, notwithstanding the inclusion of any noise and vibration attenuating features in the design of the development. Canadian National Railways, Metrolinx, its affiliated railway companies and their successors and assigns will not be responsible for any complaints or claims arising from use of such facilities and/or operations on, over or under the aforesaid right-of-way."
- (5) All exterior doors shall be fully weather-stripped.

6.0 ENVIRONMENTAL VIBRATION

The CN Oakville/GO Lakeshore West line is approximately 218 m from the subject site, which is significantly greater than the 75 m maximum setback required for vibration assessments. There are existing residential buildings located between the rail line and the subject site. In addition, there is no heavy industry (such as stamping plants) in the vicinity. Thus, environmental vibration has not been considered further in this assessment.

7.0 CONCLUSIONS

With the incorporation of the recommended noise mitigation measures, the applicable MECP noise guidelines can be met, and a suitable acoustical environment provided for the occupants.

The approvals and administrative procedures are available to ensure that the acoustical requirements are implemented. Warning clauses are recommended to advise the future occupants of the potential noise situation.

8.0 REFERENCES

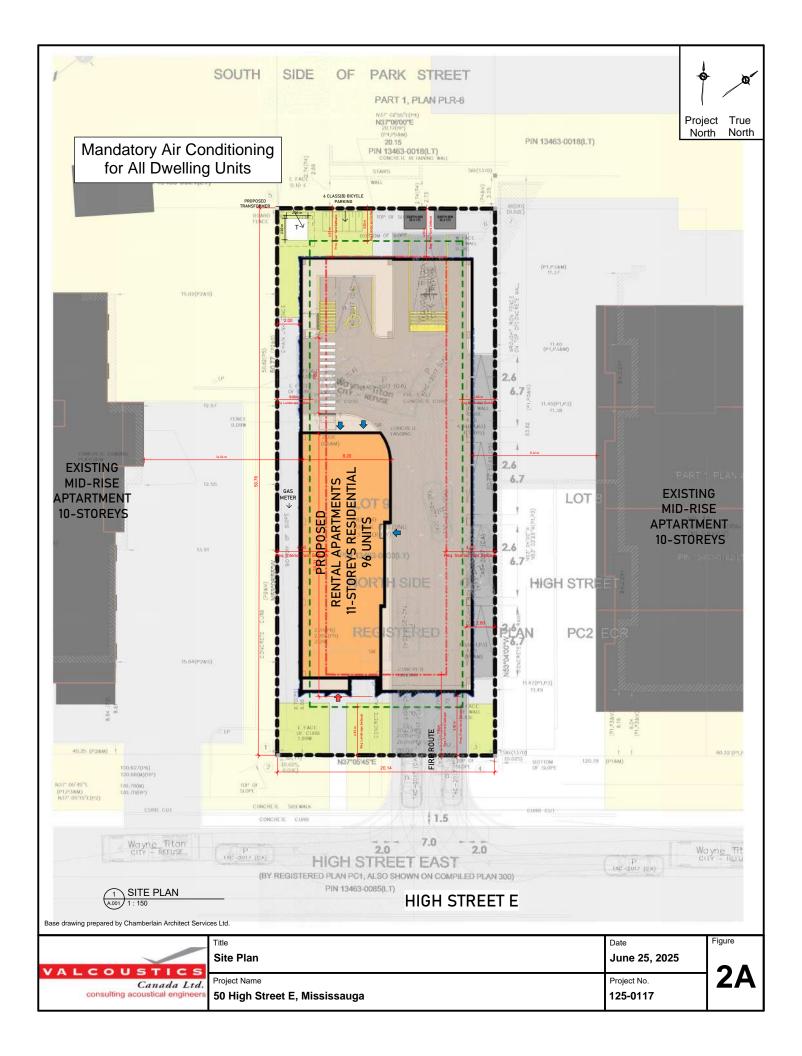
- 1. "Environmental Noise Guideline Stationary, and Transportation Sources, Approval and Planning", Ontario Ministry of the Environment, Publication NPC-300, October 2013.
- 2. PC STAMSON 5.04, "Computer Program for Road Traffic Noise Assessment", Ontario Ministry of the Environment.
- 3. Building Practice Note No. 56: "Controlling Sound Transmission into Buildings", by J. D. Quirt, Division of Building Research, National Council of Canada, September 1985.
- 4. "Environmental Noise Assessment in Land-Use Planning 1987", Ontario Ministry of the Environment, February 1987, ISBN 0-7729-2804-5.
- 5. "General Guidelines for the Preparation of Acoustical Reports in the Region of Peel", Region of Peel. November 2012.

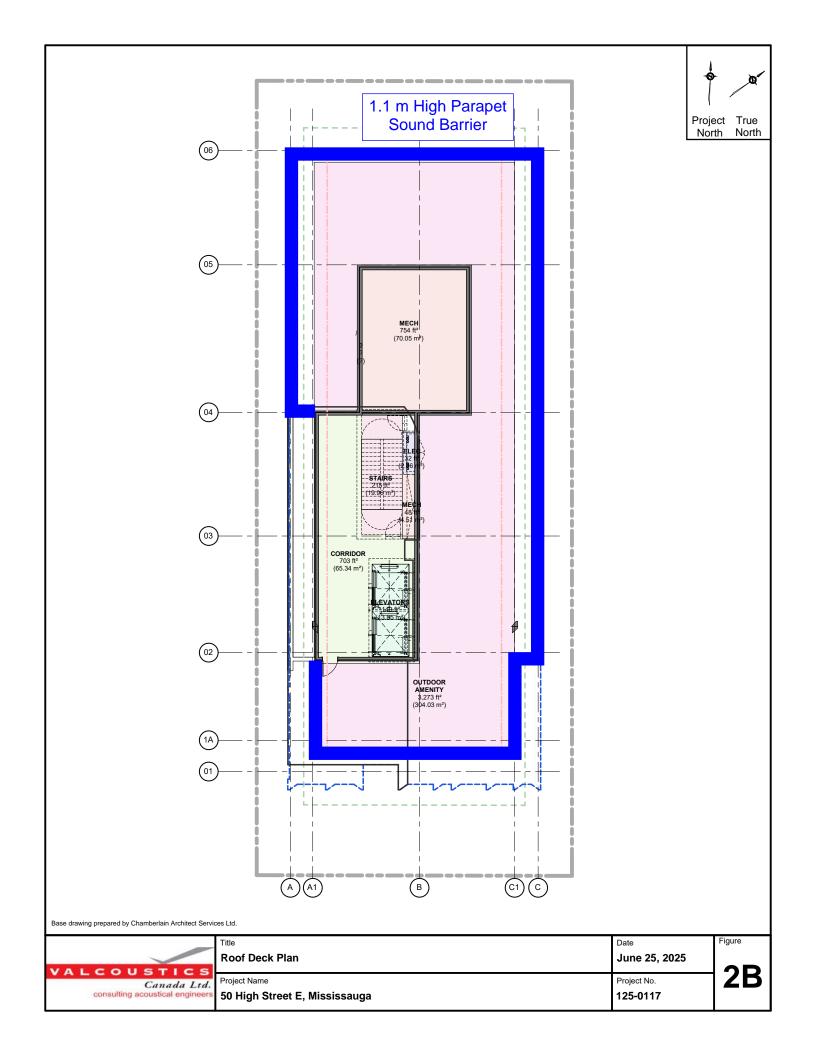
BL\sk 50 High Street E, Mississauga - Noise v1_0.docx



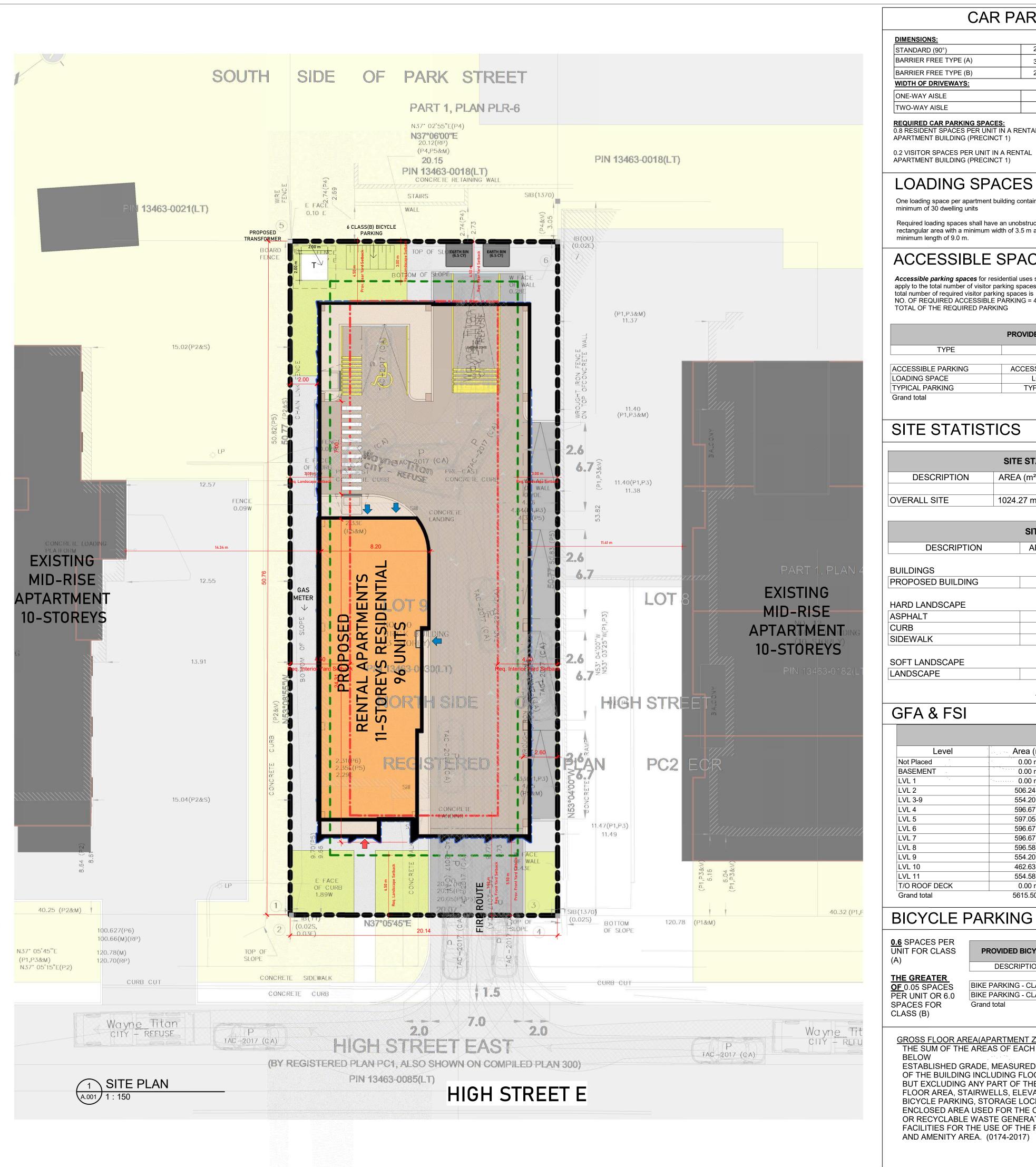


1	Key Plan	June 25, 2025	
	Project Name	Project No.	l
	50 High Street E, Mississauga	125-0117	





APPENDIX A ARCHITECTURAL DRAWINGS



CAR PARKING

NSIONS:	
DARD (90°)	2.60 x 5.20 m
RIER FREE TYPE (A)	3.40 x 5.20 m
RIER FREE TYPE (B)	2.40 x 5.20 m

WIDTH OF DRIVEWAYS: 5.50 m 7.00 m

REQUIRED CAR PARKING SPACES: 0.8 RESIDENT SPACES PER UNIT IN A RENTAL APARTMENT BUILDING (PRECINCT 1)

0.2 VISITOR SPACES PER UNIT IN A RENTAL APARTMENT BUILDING (PRECINCT 1)

REQUIRED CAR PARKING SPACES: RESIDENT SPACES = 0.8 * 96

UNITS = 77 RESIDENT SPACES VISITOR SPACES = 0.2 * 96 UNITS = 20 VISITOR SPACES

One loading space per apartment building containing a minimum of 30 dwelling units

Required loading spaces shall have an unobstructed rectangular area with a minimum width of 3.5 m and a minimum length of 9.0 m.

REQUIRED LOADING SPACES: BUILDING CONTAINS 96 **DWELLING UNITS** REQUIRED LOADING SPACES = 1

ACCESSIBLE SPACES

Accessible parking spaces for residential uses shall only apply to the total number of visitor parking spaces required, If total number of required visitor parking spaces is 13-100, then NO. OF REQUIRED ACCESSIBLE PARKING = 4% OF THE TOTAL OF THE REQUIRED PARKING

REQUIRED ACCESSIBLE SPACES:
NO. OF VISITOR SPACE = 20 SPACES NO. OF ACCESSIBLE PARKING SPACES = 4% * 20 = 0.8 = 1 ACCESSIBLE SPACE (TYPE A)

PROVIDED PARKING SPACES					
TYPE	DESCRIPTION	COUNT			
ACCESSIBLE PARKING	ACCESSIBLE PARKING - 5.20m X 3.40m	1			
LOADING SPACE	LOADING (9.00m x 3.50 m)	1			
TYPICAL PARKING	TYPICAL PARKING 6.7m X 2.6m	4			
Grand total		6			

SITE STATISTICS

SITE STATISTICS OVERALL						
DESCRIPTION	AREA (m²)	AREA (ft²)	AREA (HA)	PERCENTAGE (%)		
OVERALL SITE	1024.27 m ²	11025 ft ²	0.102 hectare	100.0%		

SITE STATISTICS

DESCRIPTION	AREA (SM)	AREA (SF)	PERCENTAGE
		'	
BUILDINGS			
PROPOSED BUILDING	186.15 m ²	2,004 ft ²	18.18%
	186.15 m²	2,004 ft ²	18.18%
HARD LANDSCAPE			
ASPHALT	506.94 m²	5,457 ft ²	49.5%
CURB	15.69 m²	169 ft²	1.53%
SIDEWALK	208.19 m ²	2,241 ft ²	20.33%
	730.81 m²	7,866 ft ²	71.36%
SOFT LANDSCAPE			
LANDSCAPE	107.22 m²	1,154 ft²	10.47%
	107.22 m²	1,154 ft²	10.47%

1,024.19 m²

11,024 ft²

100%

REQUIRED LOADING SPACES: BUILDING CONTAINS 85 UNITS

CLASS (A) = 0.6 * 96 UNITS= 58 SPACES

CLASS (B) = 0.05 * 96 UNITS = 5

SPACES

GFA / FSI			
Level	Area (m²)	Area (ft²)	FSI
Not Placed	0.00 m²	0.0 ft ²	0
BASEMENT	0.00 m ²	0.0 ft ²	0
LVL 1	······ 0.00 m²	0.0 ft ²	0
LVL 2	506.24 m²	5449.1 ft ²	0.080002
LVL 3-9	554.20 m²	5965.3 ft ²	0.08758
LVL 4	596.67 m²	6422.5 ft ²	0.094293
LVL 5	597.05 m²	6426.6 ft ²	0.094352
LVL 6	596.67 m²	6422.5 ft ²	0.094292
LVL 7	596.67 m²	6422.5 ft ²	0.094292
LVL 8	596.58 m²	6421.6 ft ²	0.094278
LVL 9	554.20 m²	5965.4 ft ²	0.087581
LVL 10	462.63 m²	4979.7 ft ²	0.07311
LVL 11	554.58 m²	5969.5 ft ²	0.087641
T/O ROOF DECK	0.00 m²	0.0 ft ²	0
Grand total	5615.50 m²	60444.8 ft ²	0.887419

BICYCLE PARKING

¢ CDACEC DED		
<u>6</u> SPACES PER NIT FOR CLASS N)	PROVIDED BICYCLE PAR	KING
')	DESCRIPTION	COUNT
HE GREATER		
F 0.05 SPACES	BIKE PARKING - CLASS (A)	51
ER UNIT OR 6.0	BIKE PARKING - CLASS (B)	6
PACES FOR	Grand total	57

GROSS FLOOR AREA(APARTMENT ZONE) THE SUM OF THE AREAS OF EACH STOREY OF A BUILDING ABOVE OR ESTABLISHED GRADE, MEASURED FROM THE EXTERIOR OF OUTSIDE WALLS OF THE BUILDING INCLUDING FLOOR AREA OCCUPIED BY INTERIOR WALLS BUT EXCLUDING ANY PART OF THE BUILDING USED FOR MECHANICAL FLOOR AREA, STAIRWELLS, ELEVATORS, MOTOR VEHICLE PARKING,

BICYCLE PARKING, STORAGE LOCKERS, BELOW-GRADE STORAGE, ANY ENCLOSED AREA USED FOR THE COLLECTION OR STORAGE OF DISPOSABLE OR RECYCLABLE WASTE GENERATED WITHIN THE BUILDING, COMMON FACILITIES FOR THE USE OF THE RESIDENTS OF THE BUILDING, A DAY CARE AND AMENITY AREA. (0174-2017)

ZONING INFO

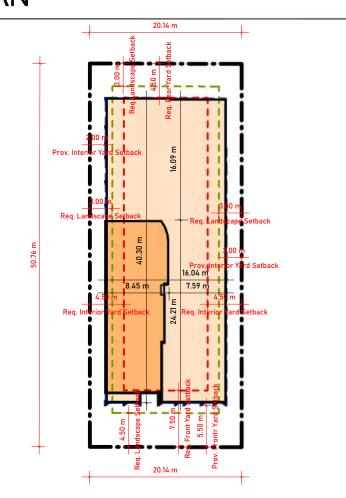
CITY: City of Missisauga PROPERTY ADDRESS: 50 High Street E, Mississauga **LOT AREA**: 1,020 m² ZONE CODE : RA1-6 **ZONE DESCRIPTION**: Apartment, Long-Term Care, Retirement **ZONE CATEGORY :** Residential BY-LAW: 0225-2007
DESIGNATION: Residential High Density **Z-Area:** Z08

	REQUIRED	PROPOSED
LOT AREA (MIN.)	-	1,022 m²
LOT FRONTAGE (MIN.)	30.00 m	16.1 m
LOT COVERAGE (MAX)	-	19.21 %
** BUILDING HEIGHT		
• MINIMUM		40.90m 41.Storeya
MAXIMUM	13.00 m - 4 Storeys	40.80m - 11 Storeys
** LANDSCAPE BUFFER		
LANDSCAPING BUFFER ABUTING A STREET	4.50 m	5.50 m
LANDSCAPING BUFFER ABUTING LOT LINE	3.00 m	2.00 m
MINIMUM LANDSCAPED AREA	40% OF LOT AREA	31.2%
** REQUIRED YARDS (MIN.)		
FRONT SIDE YARD (MIN.)	7.50 m	5.50 m
REAR SIDE YARD (MIN.)	4.50 m	4.50 m
INTERIOR SIDE YARD (MIN.)	4.50 m	2.00 m
EXTERIOR SIDE YARD (MIN.)	7.50 m	
EXTERIOR SIDE YARD (MAX.)	-	_
** AMENITY SPACES	8	×××
TOTAL AMENITY SPACES AREA	The greater of 5.6m2 per dwelling unit or 10% of the site area	510.34 m2
	= 476 m2	
AMENITY OUTDOOR AREA	Min. 55 m2	73.9 m2

KEY PLAN

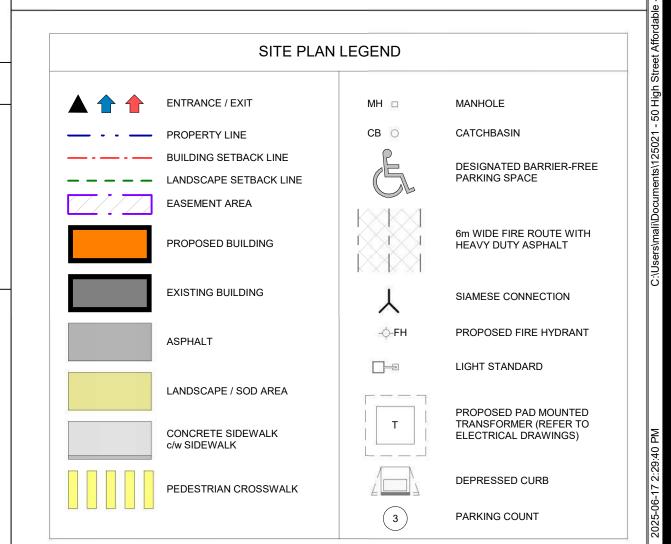


SETBACK PLAN



SETBACK PLAN

KEY LEGEND





Chamberlain Architect Services Limited

www.chamberlainIPD.com

4671 Palladium Way (Unit 1) Burlington, Ontario. L7M 0W9 Phone: 905.631.7777

ISSUED

DO NOT SCALE DRAWINGS. USE ONLY DRAWINGS MARKED "ISSUED FOR CONSTRUCTION". VERIFY CONFIGURATIONS AND DIMENSIONS ON SITE BEFORE BEGINNING WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY ERRORS, OMISSIONS OR DISCREPANCIES.

CHAMBERLAIN CONSTRUCTION SERVICES LIMITED HAVE SIMILAR OWNERSHIP. CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT. CONSTRUCTING A SUBSTANTIALLY SIMILAR BUILDING WITHOUT PERMISSION MAY INFRINGE THE COPYRIGHT OWNER'S RIGHTS. MAKING MINOR CHANGES TO PLANS DOES NOT NECESSARILY AVOID COPYRIGHT INFRINGEMENT. INNOCENT INFRINGEMENT IS NOT A DEFENSE TO COPYRIGHT INFRINGEMENT. ©

HAMBERLAIN ARCHITECT SERVICES LIMITED AND

CONSTRUCTION NORTH TRUE NORTH

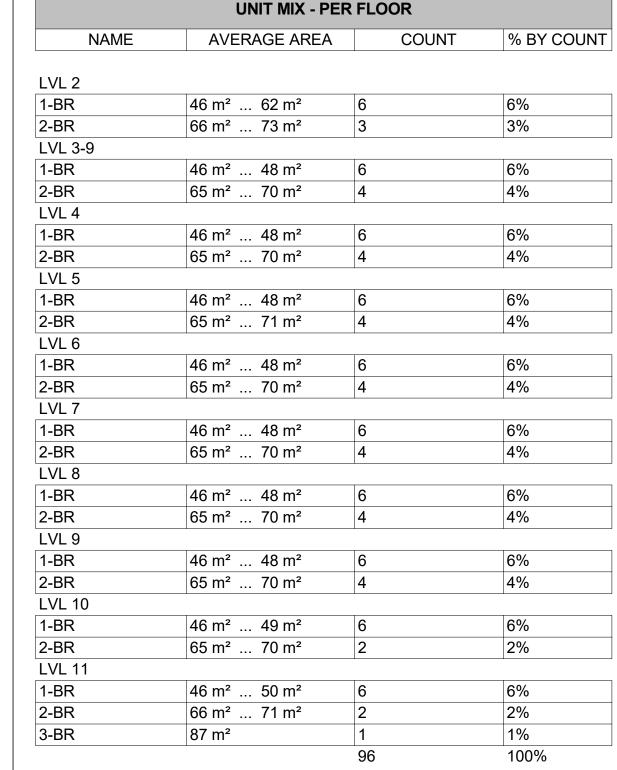
> 50 High Street Affordable

50 High Street E, Mississauga

SITE PLAN

April 2025 SM SCALE As indicated PROJECT NO. 125021





UNIT MIX			
NAME	AVERAGE AREA	COUNT	% BY COUNT
1-BR	46 m ² 62 m ²	60	63%
2-BR	65 m ² 73 m ²	35	36%
3-BR	87 m²	1	1%
	,	96	100%



4671 Palladium Way (Unit 1) Burlington, Ontario. L7M 0W9 CANADA

Phone: 905.631.7777
www.chamberlainIPD.com

NO. ISSUED DATE

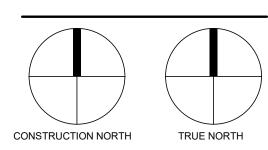
DO NOT SCALE DRAWINGS. USE ONLY DRAWINGS MARKED "ISSUED FOR CONSTRUCTION". VERIFY CONFIGURATIONS AND DIMENSIONS ON SITE BEFORE BEGINNING WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY ERRORS, OMISSIONS OR DISCREPANCIES.

CHAMBERLAIN ARCHITECT SERVICES LIMITED AND CHAMBERLAIN CONSTRUCTION SERVICES LIMITED HAVE SIMILAR OWNERSHIP.

CHAMBERI AIN ARCHITECT SERVICES LIMITED

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT. CONSTRUCTING A SUBSTANTIALLY SIMILAR BUILDING WITHOUT PERMISSION MAY INFRINGE THE COPYRIGHT OWNER'S RIGHTS. MAKING MINOR CHANGES TO PLANS DOES NOT NECESSARILY AVOID COPYRIGHT INFRINGEMENT. INNOCENT INFRINGEMENT IS NOT A DEFENSE TO COPYRIGHT INFRINGEMENT. ©

SEAL



50 High Street Affordable

50 High Street E, Mississauga

SHEET NAME

OVERALL FLOOR PLANS I

START DATE	April 2025
DRAWN BY	MK
CHECKED BY	SM
SCALE	1 : 100
PROJECT NO.	125021



NAME	AVERAGE AREA	COUNT	% BY COUNT
LVL 2			
1-BR	46 m² 62 m²	6	6%
2-BR	66 m ² 73 m ²	3	3%
LVL 3-9			
1-BR	46 m² 48 m²	6	6%
2-BR	65 m ² 70 m ²	4	4%
LVL 4			
1-BR	46 m² 48 m²	6	6%
2-BR	65 m² 70 m²	4	4%
LVL 5			
1-BR	46 m² 48 m²	6	6%
2-BR	65 m ² 71 m ²	4	4%
LVL 6			
1-BR	46 m² 48 m²	6	6%
2-BR	65 m ² 70 m ²	4	4%
LVL 7			
1-BR	46 m² 48 m²	6	6%
2-BR	65 m ² 70 m ²	4	4%
LVL 8	•		
1-BR	46 m ² 48 m ²	6	6%
2-BR	65 m ² 70 m ²	4	4%
LVL 9			·
1-BR	46 m ² 48 m ²	6	6%
2-BR	65 m ² 70 m ²	4	4%
LVL 10			·
1-BR	46 m ² 49 m ²	6	6%
2-BR	65 m ² 70 m ²	2	2%
LVL 11			
1-BR	46 m² 50 m²	6	6%
2-BR	66 m ² 71 m ²	2	2%
3-BR	87 m²	1	1%
		96	100%

UNIT MIX				
NAME	AVERAGE AREA	COUNT	% BY COUNT	
1-BR	46 m ² 62 m ²	60	63%	
2-BR	65 m ² 73 m ²	35	36%	
3-BR	87 m ²	1	1%	
		96	100%	



4671 Palladium Way (Unit 1) Burlington, Ontario. L7M 0W9 CANADA

Phone: 905.631.7777
www.chamberlainIPD.com

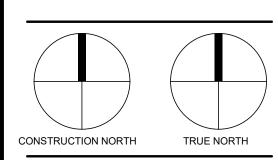
NO. ISSUED DATE

DO NOT SCALE DRAWINGS. USE ONLY DRAWINGS MARKED "ISSUED FOR CONSTRUCTION". VERIFY CONFIGURATIONS AND DIMENSIONS ON SITE BEFORE BEGINNING WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY ERRORS, OMISSIONS OR DISCREPANCIES.

CHAMBERLAIN ARCHITECT SERVICES LIMITED AND CHAMBERLAIN CONSTRUCTION SERVICES LIMITED HAVE SIMILAR OWNERSHIP.

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT. CONSTRUCTING A SUBSTANTIALLY SIMILAR BUILDING WITHOUT PERMISSION MAY INFRINGE THE COPYRIGHT OWNER'S RIGHTS. MAKING MINOR CHANGES TO PLANS DOES NOT NECESSARILY AVOID COPYRIGHT INFRINGEMENT. INNOCENT INFRINGEMENT. SOOT A DEFENSE TO COPYRIGHT INFRINGEMENT.

SEAL



50 High Street Affordable

50 High Street E, Mississauga

SHEET NAM

OVERALL FLOOR PLANS II

START DATE	April 2025
DRAWN BY	MK
CHECKED BY	SM
SCALE	1 : 100
PROJECT NO.	125021



UNIT MIX - PER FLOOR				
NAME	AVERAGE AREA	COUNT	% BY COUNT	
LVL 2				
1-BR	46 m ² 62 m ²	6	6%	
2-BR	66 m ² 73 m ²	3	3%	
LVL 3-9				
1-BR	46 m ² 48 m ²	6	6%	
2-BR	65 m ² 70 m ²	4	4%	
LVL 4				
1-BR	46 m ² 48 m ²	6	6%	
2-BR	65 m ² 70 m ²	4	4%	
LVL 5				
1-BR	46 m² 48 m²	6	6%	
2-BR	65 m ² 71 m ²	4	4%	
LVL 6				
1-BR	46 m ² 48 m ²	6	6%	
2-BR	65 m ² 70 m ²	4	4%	
LVL 7	·			
1-BR	46 m ² 48 m ²	6	6%	
2-BR	65 m ² 70 m ²	4	4%	
LVL 8		•		
1-BR	46 m ² 48 m ²	6	6%	
2-BR	65 m ² 70 m ²	4	4%	
LVL 9				
1-BR	46 m² 48 m²	6	6%	
2-BR	65 m ² 70 m ²	4	4%	
LVL 10				
1-BR	46 m² 49 m²	6	6%	
2-BR	65 m ² 70 m ²	2	2%	
LVL 11			-	
1-BR	46 m ² 50 m ²	6	6%	
2-BR	66 m ² 71 m ²	2	2%	
3-BR	87 m²	1	1%	
		96	100%	

	UNIT MIX				
NAME	AVERAGE AREA	COUNT	% BY COUNT		
1-BR	46 m ² 62 m ²	60	63%		
2-BR	65 m ² 73 m ²	35	36%		
3-BR	87 m²	1	1%		
		96	100%		



4671 Palladium Way (Unit 1) Burlington, Ontario. L7M 0W9 CANADA

Phone: 905.631.7777
www.chamberlainIPD.com

NO. ISSUED DATE

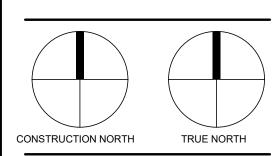
DO NOT SCALE DRAWINGS. USE ONLY DRAWINGS MARKED "ISSUED FOR CONSTRUCTION". VERIFY CONFIGURATIONS AND DIMENSIONS ON SITE BEFORE BEGINNING WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY ERRORS, OMISSIONS OR DISCREPANCIES.

CHAMBERLAIN ARCHITECT SERVICES LIMITED AND CHAMBERLAIN CONSTRUCTION SERVICES LIMITED HAVE SIMILAR OWNERSHIP.

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT CONSTRUCTING A SUBSTANTIALLY

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT. CONSTRUCTING A SUBSTANTIALLY SIMILAR BUILDING WITHOUT PERMISSION MAY INFRINGE THE COPYRIGHT OWNER'S RIGHTS. MAKING MINOR CHANGES TO PLANS DOES NOT NECESSARILY AVOID COPYRIGHT INFRINGEMENT. INNOCENT INFRINGEMENT IS NOT A DEFENSE TO COPYRIGHT INFRINGEMENT. ©

SEAL



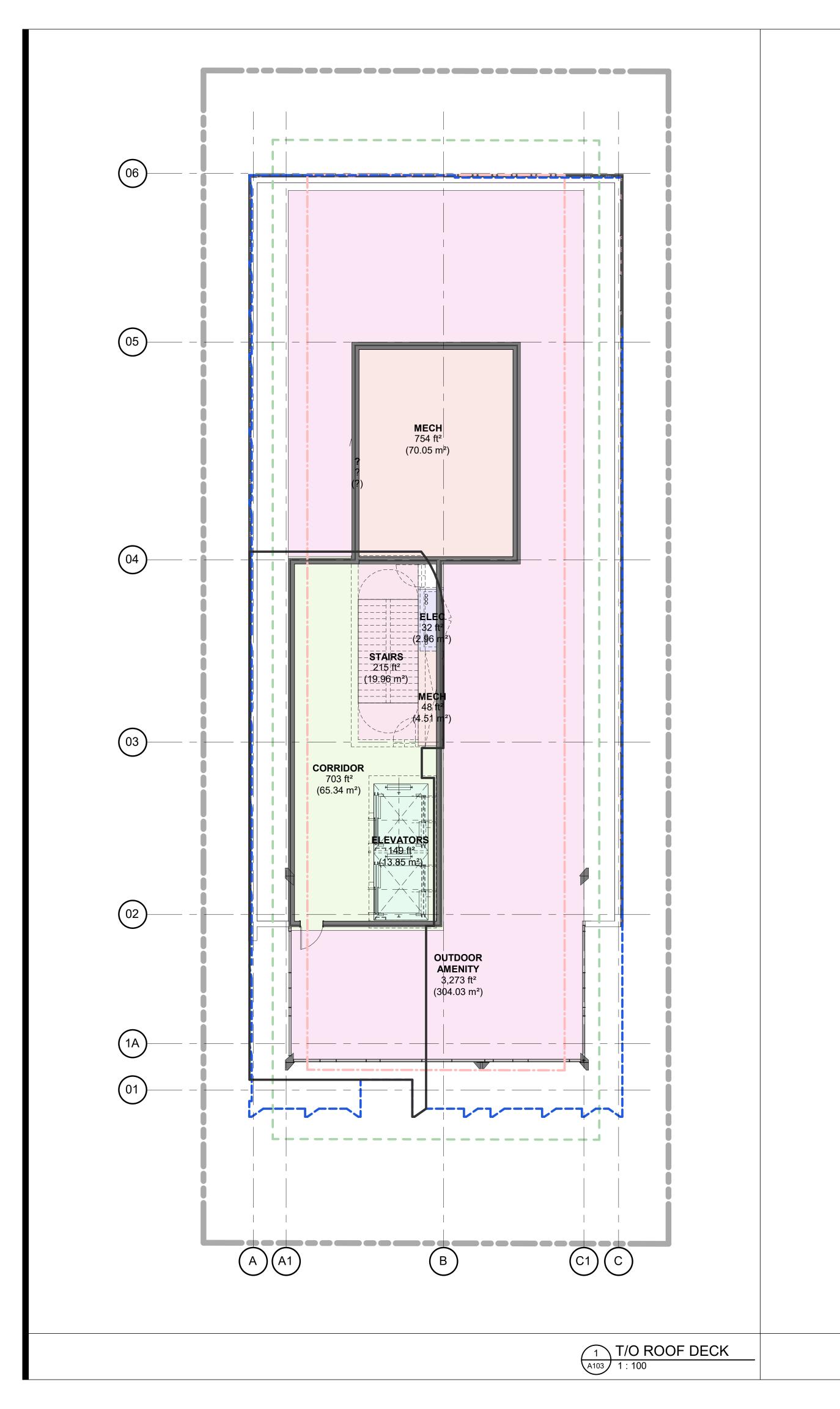
50 High Street Affordable

50 High Street E, Mississauga

SHEET NAME

OVERALL FLOOR PLANS III

START DATE	April 2025
DRAWN BY	Author
CHECKED BY	Checker
SCALE	1 : 100
PROJECT NO.	125021



	UNIT MIX - PEI	K FLOOK	
NAME	AVERAGE AREA	COUNT	% BY COUNT
LVL 2			
1-BR	46 m ² 62 m ²	6	6%
2-BR	66 m ² 73 m ²	3	3%
LVL 3-9		,	
1-BR	46 m² 48 m²	6	6%
2-BR	65 m ² 70 m ²	4	4%
LVL 4			
1-BR	46 m² 48 m²	6	6%
2-BR	65 m ² 70 m ²	4	4%
LVL 5	-		,
1-BR	46 m² 48 m²	6	6%
2-BR	65 m² 71 m²	4	4%
LVL 6			
1-BR	46 m² 48 m²	6	6%
2-BR	65 m² 70 m²	4	4%
LVL 7			
1-BR	46 m² 48 m²	6	6%
2-BR	65 m² 70 m²	4	4%
LVL 8			
1-BR	46 m² 48 m²	6	6%
2-BR	65 m ² 70 m ²	4	4%
LVL 9			
1-BR	46 m ² 48 m ²	6	6%
2-BR	65 m² 70 m²	4	4%
LVL 10			
1-BR	46 m² 49 m²	6	6%
2-BR	65 m² 70 m²	2	2%
LVL 11	1	1	1
1-BR	46 m ² 50 m ²	6	6%
2-BR	66 m² 71 m²	2	2%
3-BR	87 m²	1	1%
		96	100%

UNIT MIX				
NAME	AVERAGE AREA	COUNT	% BY COUNT	
1-BR	46 m² 62 m²	60	63%	
2-BR	65 m² 73 m²	35	36%	
3-BR	87 m²	1	1%	
		96	100%	



4671 Palladium Way (Unit 1) Burlington, Ontario. L7M 0W9 CANADA

Phone: 905.631.7777
www.chamberlainIPD.com

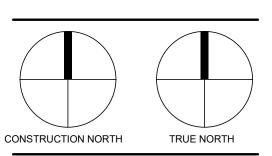
NO. ISSUED DATE

DO NOT SCALE DRAWINGS. USE ONLY DRAWINGS MARKED "ISSUED FOR CONSTRUCTION". VERIFY CONFIGURATIONS AND DIMENSIONS ON SITE BEFORE BEGINNING WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY ERRORS, OMISSIONS OR DISCREPANCIES.

CHAMBERLAIN ARCHITECT SERVICES LIMITED AND CHAMBERLAIN CONSTRUCTION SERVICES LIMITED HAVE SIMILAR OWNERSHIP.

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT. CONSTRUCTING A SUBSTANTIALLY SIMILAR BUILDING WITHOUT PERMISSION MAY INFRINGE THE COPYRIGHT OWNER'S RIGHTS. MAKING MINOR CHANGES TO PLANS DOES NOT NECESSARILY AVOID COPYRIGHT INFRINGEMENT. INNOCENT INFRINGEMENT IS NOT A DEFENSE TO COPYRIGHT INFRINGEMENT. ©

SEAL



50 High Street Affordable

> 50 High Street E, Mississauga

SHEET NAM

OVERALL FLOOR PLANS IV

START DATE	April 2025
DRAWN BY	Author
CHECKED BY	Checker
SCALE	1 : 100
PROJECT NO.	125021





4671 Palladium Way (Unit 1) Burlington, Ontario. L7M 0W9 CANADA

Phone: 905.631.7777
www.chamberlainIPD.com

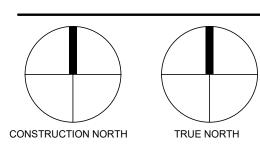
NO. ISSUED DATE

DO NOT SCALE DRAWINGS. USE ONLY DRAWINGS MARKED "ISSUED FOR CONSTRUCTION". VERIFY CONFIGURATIONS AND DIMENSIONS ON SITE BEFORE BEGINNING WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY ERRORS, OMISSIONS OR DISCREPANCIES.

CHAMBERLAIN ARCHITECT SERVICES LIMITED AND CHAMBERLAIN CONSTRUCTION SERVICES LIMITED HAVE SIMILAR OWNERSHIP.

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT. CONSTRUCTING A SUBSTANTIALLY SIMILAR BUILDING WITHOUT PERMISSION MAY INFRINGE THE COPYRIGHT OWNER'S RIGHTS. MAKING MINOR CHANGES TO PLANS DOES NOT NECESSARILY AVOID COPYRIGHT INFRINGEMENT. INNOCENT INFRINGEMENT IS NOT A DEFENSE TO COPYRIGHT INFRINGEMENT. ©

SEAL



50 High Street Affordable

50 High Street E, Mississauga

SHEET NA

EXTERIOR ELEVATION I

<u>.</u>		
	START DATE	April 2025
	DRAWN BY	Author
	CHECKED BY	Checker
	SCALE	1 : 100
	PROJECT NO.	125021

A201

1 EAST ELEVATION 1:100





4671 Palladium Way (Unit 1) Burlington, Ontario. L7M 0W9 CANADA

Phone: 905.631.7777
www.chamberlainIPD.com

NO. ISSUED DATE

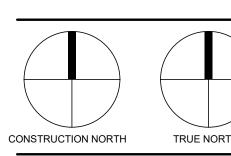
DO NOT SCALE DRAWINGS. USE ONLY DRAWINGS MARKED "ISSUED FOR CONSTRUCTION". VERIFY CONFIGURATIONS AND DIMENSIONS ON SITE BEFORE BEGINNING WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY ERRORS, OMISSIONS OR DISCREPANCIES.

CHAMBERLAIN ARCHITECT SERVICES LIMITED AND CHAMBERLAIN CONSTRUCTION SERVICES LIMITED HAVE SIMILAR OWNERSHIP.

CHAMBERLAIN ARCHITECT SERVICES LIMITED

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT. CONSTRUCTING A SUBSTANTIALLY SIMILAR BUILDING WITHOUT PERMISSION MAY INFRINGE THE COPYRIGHT OWNER'S RIGHTS. MAKING MINOR CHANGES TO PLANS DOES NOT NECESSARILY AVOID COPYRIGHT INFRINGEMENT. INNOCENT INFRINGEMENT IS NOT A DEFENSE TO COPYRIGHT INFRINGEMENT. ©

SEAL



50 High Street Affordable

50 High Street E, Mississauga

SHEET NAI

WEST ELEVATION
1: 100

EXTERIOR ELEVATION II

START DATE	April 2025
DRAWN BY	Author
CHECKED BY	Checker
SCALE	1 : 100
PROJECT NO.	125021







4671 Palladium Way (Unit 1) Burlington, Ontario. L7M 0W9 CANADA

Phone: 905.631.7777
www.chamberlainIPD.com

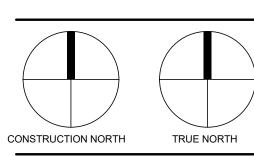
NO. ISSUED DATE

DO NOT SCALE DRAWINGS. USE ONLY DRAWINGS MARKED "ISSUED FOR CONSTRUCTION". VERIFY CONFIGURATIONS AND DIMENSIONS ON SITE BEFORE BEGINNING WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY ERRORS, OMISSIONS OR DISCREPANCIES.

CHAMBERLAIN ARCHITECT SERVICES LIMITED AND CHAMBERLAIN CONSTRUCTION SERVICES LIMITED HAVE SIMILAR OWNERSHIP.

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT. CONSTRUCTING A SUBSTANTIALLY SIMILAR BUILDING WITHOUT PERMISSION MAY INFRINGE THE COPYRIGHT OWNER'S RIGHTS. MAKING MINOR CHANGES TO PLANS DOES NOT NECESSARILY AVOID COPYRIGHT INFRINGEMENT. INNOCENT INFRINGEMENT IS NOT A DEFENSE TO COPYRIGHT INFRINGEMENT. ©

SEAL



50 High Street Affordable

> 50 High Street E, Mississauga

SHEET NAM

SOUTH ELEVATION

A203 1: 100

EXTERIOR ELEVATION III

April 2025

DRAWN BY

Author

CHECKED BY

Checker

SCALE

1:100

PROJECT NO.

125021





4671 Palladium Way (Unit 1) Burlington, Ontario. L7M 0W9 CANADA

Phone: 905.631.7777
www.chamberlainIPD.com

NO. ISSUED DATE

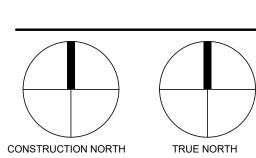
DO NOT SCALE DRAWINGS. USE ONLY DRAWINGS MARKED "ISSUED FOR CONSTRUCTION". VERIFY CONFIGURATIONS AND DIMENSIONS ON SITE BEFORE BEGINNING WORK. NOTIFY ARCHITECT IMMEDIATELY OF ANY ERRORS, OMISSIONS OR DISCREPANCIES.

CHAMBERLAIN ARCHITECT SERVICES LIMITED AND CHAMBERLAIN CONSTRUCTION SERVICES LIMITED HAVE SIMILAR OWNERSHIP.

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT CONSTRUCTING A SUBSTANTIALLY

CHAMBERLAIN ARCHITECT SERVICES LIMITED HAS COPYRIGHT. CONSTRUCTING A SUBSTANTIALLY SIMILAR BUILDING WITHOUT PERMISSION MAY INFRINGE THE COPYRIGHT OWNER'S RIGHTS. MAKING MINOR CHANGES TO PLANS DOES NOT NECESSARILY AVOID COPYRIGHT INFRINGEMENT. INNOCENT INFRINGEMENT IS NOT A DEFENSE TO COPYRIGHT INFRINGEMENT. ©

SEAL



50 High Street Affordable

> 50 High Street E, Mississauga

SHEET NA

BUILDING SECTIONS

April 2025
Author
Checker
1 : 100
125021

APPENDIX B ROAD AND RAIL TRAFFIC DATA

Brett Lipson

From: Sarangan Srikanth <Sarangan.Srikanth@cn.ca>

Sent: Monday, May 5, 2025 5:25 PM

To: Brett Lipson

Subject: RE: Rail Data Request (VCL File: 1250117)

Follow Up Flag: Follow up Flag Status: Flagged

This Message Is From an Untrusted Sender

You have not previously corresponded with this sender.

Report Suspicious

Hello Brett,

This location in question is not CN right of way. Since we have operating rights, please find the information below:

Typical daily traffic volumes at this site location are as follows:

*Maximum train speed is given in Miles per Hour

	0700-2300			
Type of Train	Volumes	Max.Consist	Max. Speed	Max. Power
Freight	0	140	60	4
Way Freight	0	25	60	4
Passenger	14	10	95	2

	2300-0700			
Type of Train	Volumes	Max.Consist	Max. Speed	Max. Power
Freight	0	140	60	4
Way Freight	5	25	60	4
Passenger	0	10	95	2

The volumes recorded reflect westbound and eastbound freight and passenger operations on CN's Oakville Subdivision.

Brett Lipson

From: Rail Data Requests < RailDataRequests@metrolinx.com>

Sent: Friday, May 9, 2025 3:29 PM

To: Brett Lipson

Subject: RE: Rail Data Request (VCL File: 1250117)

Follow Up Flag: Follow up Flag Status: Flagged

Hello,

Further to your request dated April 29th, 2025, the subject lands High St (Between Hurontario St and Stavebank Rd) are located within 300 metres of the Metrolinx Oakville Subdivision (which carries Lakeshore West GO rail service).

It's anticipated that GO rail service on this Subdivision will be comprised of diesel and electric trains. The GO rail fleet combination on this Subdivision will consist of up to 1 locomotive and 10 passenger cars. The typical GO rail weekday train volume forecast near the subject lands, including both revenue and equipment trips is in the order of 408 trains. The planned detailed trip breakdown is listed below:

	1 Diesel Locomotives	1 Electric Locomotive		1 Diesel Locomotive	1 Electric Locomotive
Day (0700- 2300)	132	222	Night (2300- 0700)	20	34

The current track design speed near the subject lands is 85 mph (137km/h).

There are two anti-whistling by-laws in affect near the subject lands at Revus Ave and Stavebank Rd at railway crossings.

With respect to future electrified rail service, Metrolinx is committed to finding the most sustainable solution for electrifying the GO rail network and we are currently working towards the next phase.

Options have been studied as part of the Transit Project Assessment Process (TPAP) for the GO Expansion program, currently in the Development Phase. ONxpress will be responsible for selecting and delivering the right trains and infrastructure to unlock the benefits of GO Expansion. Construction to support GO Expansion is currently underway.

However, we can advise that train noise is dominated by the powertrain at lower speeds and by the wheel-track interaction at higher speeds. Hence, the noise level and spectrum of electric trains is expected to be very similar at higher speeds, if not identical, to those of equivalent diesel trains.

Given the above considerations, it would be prudent at this time, for the purposes of acoustical analyses for development in proximity to Metrolinx corridors, to assume that the acoustical characteristics of electrified and diesel trains are equivalent. In light of the aforementioned information, acoustical models should employ diesel train parameters as the basis for analyses. We anticipate that additional information regarding specific operational parameters for electrified trains will become available in the future once the proponent team is selected.

Operational information is subject to change and may be influenced by, among other factors, service planning priorities, operational considerations, funding availability and passenger demand.

It should be noted that this information only pertains to Metrolinx rail service. It would be prudent to contact other rail operators in the area directly for rail traffic information pertaining to non-Metrolinx rail service.

I trust this information is useful. Should you have any questions or concerns, please do not hesitate to contact me.

Best Regards,

Lucy Wu
Summer Student, Third-Party Adjacent Works (ACR), Formerly Third-Party Projects Review (TPPR)
Real Estate & Development
20 Bay Street, Suite 600 | Toronto, ON | M5J 2N8

⇒ METROLINX

From: Brett Lipson blipson@valcoustics.com

Sent: Monday, April 28, 2025 4:31 PM

To: Rail Data Requests < Rail Data Requests @metrolinx.com>

Subject: Rail Data Request (VCL File: 1250117)

EXTERNAL SENDER: Do not click any links or open any attachments unless you trust the sender and know the content is safe.

EXPÉDITEUR EXTERNE: Ne cliquez sur aucun lien et n'ouvrez aucune pièce jointe à moins qu'ils ne proviennent d'un expéditeur fiable, ou que vous ayez l'assurance que le contenu provient d'une source sûre.

Good Afternoon,

We are currently working on a noise report for a development located on High St in Mississauga, near the Port Credit GO station. Can you please provide the future rail traffic data for the GO Lakeshore West Line between Hurontario St. and Stavebank Rd in Mississauga?

	Date:	19/Jun/25		NOISE REPORT FOR PRO	OPOSED DEVELOPMENT	•
	REQU	JESTED BY:	Location:	1. Hurontario St		
MISSISSAUGA NA	ame:	Brett Lipson, M.Eng., P.Eng.		2. Lakeshore Rd		
Comp	any:	Valcoustics				
	Fax#	905-764-5223 ext. 249				
	PREI	PARED BY:	·			
Na	ame:	Naveda Dukhan				
-	Tel#:	905-615-3200 ext 8948	ID#	651		
			ON SITE '	TRAFFIC DATA		
Specific				Street Names		
		Hurontatio St	Lakeshore Rd			
AADT:		36800	46600			
# of Lanes:		4	4			
% Trucks:		6%	4%			
Medium/Heavy Truck Ra	itio:	55/45	55/45			
Day/Night Split:		90/10	90/10			
Posted Speed Limit:		40km/hr	40km/hr			
Gradient of Road:		2%	2%			
Ultimate R.O.W.:		36m	26.0 m			
Comments:		Ultimate Traffic Data Only (2041)				

APPENDIX C ENVIRONMENTAL NOISE GUIDELINES

APPENDIX C ENVIRONMENTAL NOISE GUIDELINES MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP)

Reference: MECP Publication NPC-300, October 2013: "Environmental Noise Guideline, Stationary and Transportation Source – Approval and Planning".

SPACE	SOURCE	TIME PERIOD	CRITERION
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	Road Rail Aircraft	07:00 to 23:00 07:00 to 23:00 24-hour period	45 dBA 40 dBA NEF/NEP 5
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	Road Rail Aircraft	23:00 to 07:00 23:00 to 07:00 24-hour period	45 dBA 40 dBA NEF/NEP 5
Sleeping quarters	Road Rail Aircraft	07:00 to 23:00 07:00 to 23:00 24-hour period	45 dBA 40 dBA NEF/NEP 0
Sleeping quarters	Road Rail Aircraft	23:00 to 07:00 23:00 to 07:00 24-hour period	40 dBA 35 dBA NEF/NEP 0
Outdoor Living Areas	Road and Rail	07:00 to 23:00	55 dBA
Outdoor Point of Reception	Aircraft	24-hour period	NEF/NEP 30#
	Stationary Source Class 1 Area	07:00 to 19:00 ⁽¹⁾ 19:00 to 23:00 ⁽¹⁾	50* dBA 50* dBA
	Class 2 Area	07:00 to 19:00 ⁽²⁾ 19:00 to 23:00 ⁽²⁾	50* dBA 45* dBA
	Class 3 Area	07:00 to 19:00 ⁽³⁾ 19:00 to 23:00 ⁽³⁾	45* dBA 40* dBA
	Class 4 Area	07:00 to 19:00 ⁽⁴⁾ 19:00 to 23:00 ⁽⁴⁾	55* dBA 55* dBA

SPACE	SOURCE	TIME PERIOD	CRITERION
Plane of a Window of Noise Sensitive Spaces	Stationary Source Class 1 Area	07:00 to 19:00 ⁽¹⁾	50* dBA
Noise Sensitive Spaces	Class I Alea	19:00 to 23:00 ⁽¹⁾	50° dBA 50° dBA
		23:00 to 07:00 ⁽¹⁾	45* dBA
	Class 2 Area	07:00 to 19:00 ⁽²⁾	50* dBA
		19:00 to 23:00 ⁽²⁾	50* dBA
	Class 3 Area	23:00 to 07:00 ⁽²⁾ 07:00 to 19:00 ⁽³⁾	45* dBA 45* dBA
	Class 3 Alea	19:00 to 23:00 ⁽³⁾	45 dBA 45* dBA
		23:00 to 07:00 ⁽³⁾	40* dBA
	Class 4 Area	07:00 to 19:00 ⁽⁴⁾	60* dBA
		19:00 to 23:00 ⁽⁴⁾	60* dBA
		23:00 to 07:00 ⁽⁴⁾	55* dBA

Reference: MECP Publication ISBN 0-7729-2804-5, 1987: "Environmental Noise Assessment in Land-Use Planning".

EXCESS ABOVE RECOMMENDED SOUND LEVEL LIMITS (dBA)	CHANGE IN SUBJECTIVE LOUDNESS ABOVE	MAGNITUDE OF THE NOISE PROBLEM	NOISE CONTROL MEASURES (OR ACTION TO BE TAKEN)
No excess (<55 dBA)	_	No expected noise problem	None
1 to 5 inclusive (56 to 60 dBA)	Noticeably louder	Slight noise impact	If no physical measures are taken, then prospective purchasers or tenants should be made aware by suitable warning clauses.
6 to 10 inclusive (61 - 65 dBA)	Almost twice as loud	Definite noise impact	Recommended.
11 to 15 inclusive (66 - 70 dBA)	Almost three times as loud	Serious noise impact	Strongly Recommended.
16 and over (>70 dBA)	Almost four times as loud	Very serious noise impact	Strongly Recommended (may be mandatory).

may not apply to in-fill or re-development. or the minimum hourly background sound exposure $L_{\text{eq(1)}}$, due to road traffic, if higher.

⁽¹⁾ (2) (3) (4)

Class 1 Area: Urban.
Class 2 Area: Urban during day; rural-like evening and night.

Class 3 Area: Rural.

Class 4 Area: Subject to land use planning authority's approval.

APPENDIX D SAMPLE CALCULATIONS

STAMSON 5.04 NORMAL REPORT Date: 15-07-2025 26:36:15 MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS / NOISE ASSESSMENT Filename: ne nf.te Time Period: Day/Night 16/8 hours Description: Northeast corner, north facade Rail data, segment # 1: CN Oakville (day/night) ! Trains ! Speed !# loc !# Cars! Eng !Cont Train Type ! !(km/h) !/Train!/Train! type !weld ______ * 1. Way Freight ! 0.0/6.4 ! 97.0 ! 4.0 ! 25.0 !Diesel! Yes * 2. Passenger ! 17.9/0.0 ! 153.0 ! 2.0 ! 10.0 !Diesel! Yes * 3. GO ! 354.0/54.0 ! 137.0 ! 1.0 ! 10.0 !Diesel! Yes * 3. GO * The identified number of trains have been adjusted for future growth using the following parameters: ! Unadj. ! Annual % ! Years of ! ! Trains ! Increase ! Growth ! Train type: No Name ----+ 1. Way Freight ! 0.0/5.0 ! 2.50 ! 10.00 2. Passenger ! 14.0/0.0 ! 2.50 ! 10.00 3. GO ! 354.0/54.0 ! 2.50 ! 0.00 ! Data for Segment # 1: CN Oakville (day/night) _____ Angle1 Angle2 : -90.00 deg 90.00 deg Wood depth : 0 (No woods No of house rows : 1 / 1
House density : 70 %
Surface : 1 (No woods.) (Absorptive ground surface) Receiver source distance : 218.00 / 218.00 m Receiver height : 33.80 / 33.80 mTopography 1 (Flat/gentle slope; no barrier) No Whistle Reference angle : 0.00 Results segment # 1: CN Oakville (day) LOCOMOTIVE (0.00 + 66.43 + 0.00) = 66.43 dBAAngle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq ______ -90 90 0.00 82.21 -11.62 0.00 0.00 -4.15 0.00 66.43 WHEEL (0.00 + 58.81 + 0.00) = 58.81 dBAAngle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq ______ -90 90 0.00 74.59 -11.62 0.00 0.00 -4.15 0.00 58.81 Segment Leq: 67.12 dBA

Total Leg All Segments: 67.12 dBA

```
Results segment # 1: CN Oakville (night)
_____
LOCOMOTIVE (0.00 + 61.87 + 0.00) = 61.87 \text{ dBA}
Angle1 Angle2 Alpha RefLeg D.Adj F.Adj W.Adj H.Adj B.Adj SubLeg
_____
  -90 90 0.00 77.65 -11.62 0.00 0.00 -4.15 0.00 61.87
______
WHEEL (0.00 + 54.10 + 0.00) = 54.10 \text{ dBA}
Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
______
  -90 90 0.00 69.88 -11.62 0.00 0.00 -4.15 0.00 54.10
Segment Leg: 62.54 dBA
Total Leq All Segments: 62.54 dBA
Road data, segment # 1: Hurontario (day/night)
_____
Car traffic volume : 31133/3459 veh/TimePeriod
Medium truck volume : 1093/121 veh/TimePeriod *
Heavy truck volume : 894/99 veh/TimePeriod *
Posted speed limit : 40 km/h
Road gradient : 2 %
Road pavement : 1 (Typical asphalt or concrete)
* Refers to calculated road volumes based on the following input:
   24 hr Traffic Volume (AADT or SADT): 36800
   Percentage of Annual Growth : 0.00
   Number of Years of Growth
                               : 0.00
   Medium Truck % of Total Volume : Heavy Truck % of Total Volume : Day (16 hrs) % of Total Volume :
                                  3.30
Data for Segment # 1: Hurontario (day/night)
_____
Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth
No of house rows
House density

1 /
5 %
1 /
                    : 0
: 1 / 1
                                (No woods.)
                                 (Absorptive ground surface)
Receiver source distance : 265.00 / 265.00 m
Receiver height : 33.80 / 33.80 m
                    :
                        1 (Flat/gentle slope; no barrier)
Topography
Reference angle : 0.00
```

Results segment # 1: Hurontario (day)

Source height = 1.28 m

ROAD (0.00 + 45.71 + 0.00) = 45.71 dBA

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

-90 0 0.00 68.90 0.00 -12.47 -3.01 0.00 -7.71 0.00 45.71

Segment Leq: 45.71 dBA

Total Leq All Segments: 45.71 dBA

Results segment # 1: Hurontario (night)

Source height = 1.28 m

ROAD (0.00 + 39.17 + 0.00) = 39.17 dBA Anglel Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq -90 0 0.00 62.35 0.00 -12.47 -3.01 0.00 -7.71 0.00 39.17

Segment Leq: 39.17 dBA

Total Leq All Segments: 39.17 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 67.15 (NIGHT): 62.56

```
STAMSON 5.04 NORMAL REPORT Date: 15-07-2025 26:36:49
MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS/ NOISE ASSESSMENT
Filename: rt eola.te
                               Time Period: Day/Night 16/8 hours
Description: Rooftop OLA, East Area
Rail data, segment # 1: CN Oakville (day/night)
          ! Trains ! Speed !# loc !# Cars! Eng !Cont
! (km/h) !/Train!/Train! type !weld
Train
Type
* 1. Way Freight! 0.0/6.4 ! 97.0 ! 4.0 ! 25.0 !Diesel! Yes
* 2. Passenger ! 17.9/0.0 ! 153.0 ! 2.0 ! 10.0 !Diesel! Yes
* 3. GO ! 354.0/54.0 ! 137.0 ! 1.0 ! 10.0 !Diesel! Yes
* The identified number of trains have been adjusted for
  future growth using the following parameters:
Train type: ! Unadj.! Annual % ! Years of ! No Name ! Trains! Increase! Growth!
-----+
 1. Way Freight ! 0.0/5.0 ! 2.50 ! 10.00 ! 2. Passenger ! 14.0/0.0 ! 2.50 ! 10.00 ! 3. GO ! 354.0/54.0 ! 2.50 ! 0.00 !
  3. GO
Data for Segment # 1: CN Oakville (day/night)
_____
Angle1 Angle2 : 65.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 246.00 / 246.00 m
Receiver height : 1.50 / 86.75 m

Topography : 4 (Elevated; with barrier)
No Whistle
Barrier angle1 : 65.00 deg Angle2 : 90.00 deg Barrier height : 0.00 m Elevation : 35.90 m
Barrier receiver distance: 6.00 / 6.00 m
Source elevation : 0.00 m
Receiver elevation : 35.90 m
Barrier elevation : 35.90 m
Reference angle : 0.00
```

Results segment # 1: CN Oakville (day)

Barrier height for grazing incidence

Source ! Receiver ! Barrier ! Elevation of Height (m) ! Height (m) ! Barrier Top (m) -----+-----4.00 ! 1.50 ! 0.69 ! 0.50 ! 1.50 ! 0.60 ! 36.59 36.50

LOCOMOTIVE (0.00 + 61.48 + 0.00) = 61.48 dBA

Angle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq ______ 65 90 0.00 82.21 -12.15 -8.57 0.00 0.00 -4.53 56.95* 90 0.00 82.21 -12.15 -8.57 0.00 0.00 0.00 61.48

WHEEL (0.00 + 53.87 + 0.00) = 53.87 dBAAngle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq 90 0.00 74.59 -12.15 -8.57 0.00 0.00 -4.65 49.22* 90 0.00 74.59 -12.15 -8.57 0.00 0.00 0.00 53.87

Segment Leq: 62.17 dBA

Total Leg All Segments: 62.17 dBA

^{*} Bright Zone !

^{*} Bright Zone !

Results segment # 1: CN Oakville (night) _____ Barrier height for grazing incidence -----Source ! Receiver ! Barrier ! Elevation of Height (m) ! Height (m) ! Barrier Top (m)

 4.00!
 86.75!
 83.86!
 119.76

 0.50!
 86.75!
 83.77!
 119.67

 LOCOMOTIVE (0.00 + 56.93 + 0.00) = 56.93 dBAAngle1 Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq ______ 90 0.00 77.65 -12.15 -8.57 0.00 0.00 -0.01 56.92* 90 0.00 77.65 -12.15 -8.57 0.00 0.00 0.00 56.93 65 * Bright Zone ! WHEEL (0.00 + 49.16 + 0.00) = 49.16 dBAAnglel Angle2 Alpha RefLeq D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq ______ 65 90 0.00 69.88 -12.15 -8.57 0.00 0.00 -0.01 49.15* 65 90 0.00 69.88 -12.15 -8.57 0.00 0.00 0.00 49.16 * Bright Zone! Segment Leq: 57.60 dBA Total Leg All Segments: 57.60 dBA Road data, segment # 1: Hurontario (day/night) ______ Car traffic volume : 31133/3459 veh/TimePeriod * Medium truck volume: 1093/121 veh/TimePeriod * Heavy truck volume : 894/99 veh/TimePeriod * Posted speed limit : 40 km/h Road gradient : 2 % Road pavement : 1 (Typical asphalt or concrete) * Refers to calculated road volumes based on the following input: 24 hr Traffic Volume (AADT or SADT): 36800

Number of Years of Growth

Percentage of Annual Growth : 0.00

Medium Truck % of Total Volume : 3.30 Heavy Truck % of Total Volume : 2.70 Day (16 hrs) % of Total Volume : 90.00

File: 125-0117

```
Data for Segment # 1: Hurontario (day/night)
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 1 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 267.00 / 125.00 m
Receiver height : 1.50 / 86.75 m

Topography : 4 (Elevated; with barrier)

Barrier angle1 : -90.00 deg Angle2 : 90.00 deg

Barrier height : 0.00 m

Elevation : 35.90 m
Barrier receiver distance: 4.50 / 10.00 m
Source elevation : 0.00 m
Receiver elevation : 35.90 m
Barrier elevation : 35.90 m
Reference angle : 0.00
Road data, segment # 2: Lakeshore (day/night)
_____
Car traffic volume : 40262/4474 veh/TimePeriod *
Medium truck volume : 923/103 veh/TimePeriod *
Heavy truck volume : 755/84 veh/TimePeriod *
Posted speed limit : 40 km/h
Road gradient :
                             2 %
```

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

Road pavement : 1 (Typical asphalt or concrete)

24 hr Traffic Volume (AADT or SADT): 46600 Percentage of Annual Growth : 0.00 Number of Years of Growth : 0.00 Medium Truck % of Total Volume : 2.20 Heavy Truck % of Total Volume : 1.80 Day (16 hrs) % of Total Volume : 90.00

```
Data for Segment # 2: Lakeshore (day/night)
_____
Angle1 Angle2 : -55.00 deg -18.00 deg
Wood depth : 0
No of house rows : 0 / 0
Surface : 1
                                        (No woods.)
                                0 / 0
                                        (Absorptive ground surface)
Receiver source distance : 154.00 / 154.00 m
Receiver height : 1.50 / 86.75 m

Topography : 4 (Elevated; with barr

Barrier angle1 : -55.00 deg Angle2 : -18.00 deg

Barrier height : 0.00 m

Elevation : 35.90 m
                              4 (Elevated; with barrier)
Barrier receiver distance : 7.00 / 7.00 m
Source elevation : 0.00 m
Receiver elevation : 35.90 m
Barrier elevation : 35.90 m
Reference angle : 0.00
Results segment # 1: Hurontario (day)
______
Source height = 1.28 m
Barrier height for grazing incidence
_____
Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Barrier Top (m)
______
       1.28! 1.50! 0.89! 36.79
ROAD (0.00 + 48.70 + 0.00) = 48.70 dBA
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
______

      -90
      90
      0.00
      68.90
      0.00
      -12.50
      0.00
      0.00
      -7.70
      0.00
      48.70

      -90
      90
      0.00
      68.90
      0.00
      -12.50
      0.00
      0.00
      0.00
      -1.19

55.20*
  -90 90 0.00 68.90 0.00 -12.50 0.00 0.00 0.00 56.39
 * Bright Zone!
Segment Leq: 48.70 dBA
Results segment # 2: Lakeshore (day)
_____
Source height = 1.16 m
```

```
Barrier height for grazing incidence
-----
Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Barrier Top (m)
-----
    1.16! 1.50! -0.15!
                                   35.75
ROAD (0.00 + 46.59 + 0.00) = 46.59 \text{ dBA}
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
  -55 -18 0.00 68.64 0.00 -10.11 -6.87 0.00 0.00 -5.06 46.59
Segment Leg: 46.59 dBA
Total Leg All Segments: 50.78 dBA
Results segment # 1: Hurontario (night)
-----
Source height = 1.28 \text{ m}
Barrier height for grazing incidence
______
Source ! Receiver ! Barrier ! Elevation of
Height (m) ! Height (m) ! Barrier Top (m)
_____
    1.28 ! 86.75 ! 77.04 !
ROAD (0.00 + 53.15 + 0.00) = 53.15 \text{ dBA}
Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq
 -90 90 0.00 62.35 0.00 -9.21 0.00 0.00 0.00 -0.00
53.14*
  -90 90 0.00 62.35 0.00 -9.21 0.00 0.00 0.00 53.15
* Bright Zone !
Segment Leq: 53.15 dBA
Results segment # 2: Lakeshore (night)
_____
```

Source height = 1.16 m

File: 125-0117

Barrier height for grazing incidence

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

------1.16! 86.75! 81.23! 117.13

ROAD (0.00 + 45.13 + 0.00) = 45.13 dBA

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

-55 -18 0.00 62.11 0.00 -10.11 -6.87 0.00 0.00 0.00

45.13*

-18 0.00 62.11 0.00 -10.11 -6.87 0.00 0.00 0.00 45.13

* Bright Zone !

Segment Leq: 45.13 dBA

Total Leq All Segments: 53.79 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 62.47

(NIGHT): 59.11