REPORT

3056 NEYAGAWA BOULEVARD

OAKVILLE, ONTARIO

NOISE AND VIBRATION IMPACT STUDY

RWDI #2402704

December 17, 2024

SUBMITTED TO

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VERSION HISTORY

Index	Date	Description	Prepared by	Reviewed by
1	August 21, 2024	Final	Andrew Lambert	Gillian Redman
2	December 17, 2024	Unit Correction	Kathryn Kim	Ben Coulson

EXECUTIVE SUMMARY

RWDI was retained to prepare a Noise and Vibration Impact Study for the proposed mixed-use development located in Oakville, Ontario. The proposed development will consist of 7 buildings:

- 26-storey building on top of a 6-storey mixed-use podium;
- 18-storey residential building with a 5-storey podium;
- 18-storey residential building with a 6-storey podium;
- 24-storey residential building with a 6- and 8-storey podium;
- 28-storey residential building with an 8-storey podium;
- 15-storey residential building with a 6-storey podium; and
- 25-storey residential building with a 6-storey podium.

This assessment was completed to support the Zoning Bylaw Amendment (ZBA) submission as required by Halton Region.

The following noise control measures are recommended for the proposed development:

1. Installation of central air-conditioning so that all suites' windows can remain closed.
2. The inclusion of noise warning clauses related to:
    a. Transportation sound levels at the building façade and in the outdoor amenity areas
    b. Proximity to commercial land-use
3. Minimum sound isolation performance:
    a. Suite bedroom window glazing with minimum sound isolation performance up to STC-31.
    b. Suite exterior balcony door with minimum sound isolation performance up to STC-28.
4. Construction of perimeter noise barriers along the outdoor amenity areas if feasible, with the applicable warning clause.

The potential noise levels from stationary sources of sound were evaluated, including sound from surrounding commercial uses and the adjacent Sixteen Mile Sports Complex. Based on the noise modeling results mitigation measures are required for compatibility. A number of mitigation measures are available to achieve compatibility which may include a combination of at-source mitigation, at-receptor mitigation, and/or a Class 4 designation. With mitigation measures in place, the proposed development can be compatible with stationary noise sources.

At this stage in design the noise levels produced by the development on itself, and its surroundings could not be quantitatively assessed. However, the effect on both the building itself and its surroundings is expected to be feasible to meet the applicable criteria. We recommend that the building design is evaluated prior to building permit to ensure that the acoustical design is adequately implemented to meet the applicable criteria.

Based on the results of the analysis, including implementation of the recommendations presented in this report, the proposed development can be compatible with the surrounding land uses for noise and vibration.

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1 INTRODUCTION

RWDI was retained to prepare a Noise and Vibration Impact Study for the proposed mixed-use development located in Oakville, Ontario. The proposed development site is located at 3056 Neyagawa Boulevard adjacent to the Sixteen Mile Sports Complex on the west corner of the intersection of Neyagawa Boulevard and Dundas Street West.

The proposed development will consist of approximately 2,278 residential units in seven buildings that make up three blocks:

- **Block 1:**
  - 26-storey building on top of a 6-storey mixed-use podium; and
  - 18-storey residential building with a 5-storey podium.
- **Block 2:**
  - 18-storey residential building with a 6-storey podium;
  - 24-storey residential building with a 6- and 8-storey podium; and
  - 28-storey residential building with an 8-storey podium.
- **Block 3:**
  - 15-storey residential building with a 6-storey podium; and
  - 25-storey residential building with a 6-storey podium.

The context site plan is shown in **Figure 1**.

The site is exposed to noise from road traffic from: Neyagawa Boulevard to the northeast, and Dundas Street West to the southeast. Sound from stationary sources includes mechanical equipment at the Sixteen Mile Sports Complex as well as surrounding residential and commercial uses.

There are no significant sources of vibration in the area.

This assessment was completed to support the Zoning Bylaw Amendment (ZBA) submission as required by the Town of Oakville. This assessment was based on design drawings dated March 2024. A copy of the drawings are included in **Appendix A.**

2 APPLICABLE CRITERIA

Applicable criteria for transportation noise sources (road) and stationary noise sources are adopted from the Ontario Ministry of the Environment, Conservation and Parks (MECP) Environmental Noise Guideline, NPC-300 (MOE, 2013). A summary of the applicable criteria is included in **Appendix B**.

Due to its proximity to major roadways, the proposed development site would be characterized as a “Class 1 Area”, which is defined according to NPC-300 as an area with an acoustical environment typical of a major population centre, where the background sound level is dominated by the activities of people, usually road traffic, often referred to as "urban hum."

3 THE EFFECTS OF THE ENVIRONMENT ON THE PROPOSED DEVELOPMENT

3.1 Transportation Source Assessment

3.1.1 Road Traffic Volume Data

The Turning Movement Counts (TMCs) at Neyagawa Boulevard and Dundas Street West were obtained from Halton Region. The TMCs provided detailed traffic volumes for the two peak time periods: 07:00 to 09:00 and 16:00 to 18:00. The TMCs were used to determine the traffic volume and types of vehicles on each link during the AM and PM peaks and 8-hour interval which were assumed to be 9%, 10% and 60% of the Annual Average Daily Traffic (AADT), respectively. An 85%/15% daytime/nighttime arterial road split was applied for Neyagawa Boulevard and Dundas Street West.

The maximum AADTs obtained from the approximation of each of these three time periods was used for the AADT for the respective roadway.

The traffic volumes for each of the respective roadways were increased at a rate of 2% per year to represent the predicted 10-year horizon volumes.

A summary of the traffic data used is included in **Table 1** below with more detailed information included in **Appendix C**.

Table 1: Road Traffic Volumes

Roadway	2034 Future Traffic (AADT)	% Day/Night	Speed Limit (km/hr)	% Trucks
Neyagawa Boulevard	24,395	85% /15%	60	3
Dundas Street West	49,772	85% / 15%	70	4

3.1.2 Representative Receptors

The selection of receptors affected by transportation noise sources was based on the drawings reviewed for this assessment. Using the "building evaluation" feature of Cadna/A, each façade of the residential buildings was assessed.

Outdoor Living Areas (OLAs) would include outdoor areas intended and designed for the quiet enjoyment of the outdoor environment and which are readily accessible from the building. OLAs may include any common outdoor amenity spaces associated with a multi-unit residential development (e.g. courtyards, roof-top terraces), and/or private backyards and terraces with a minimum depth of 4 m provided they are the only outdoor living area for the occupant. Daytime sound levels were assessed at the following identified OLAs:

- OLA_01: Block 1 northwest amenity
- OLA_02: Block 2 southwest amenity

The OLAs are indicated in **Figure 2**.

3.1.3 Analysis and Results

Sound levels due to the adjacent roads were predicted using emission algorithms from the Ontario Road Noise Analysis Method for Environment and Transportation (ORNAMENT) (MOE, 1989) and then implemented in the Cadna/A software package using the ISO-9613 line source algorithms.

To assess the effect of transportation noise on suites, the maximum sound level on each façade was determined and the results are summarized in **Table 2**.

Table 2: Predicted Ground Transportation Source Sound Levels – Plane of Window

Building	Worst-Case Façade	Road		Notes
		Day L_{EQ}, 16hr	Night L_{EQ}, 8hr	
Building 1	Northeast	67 dBA	63 dBA	2
Building 2	Northeast	67 dBA	63 dBA	2
Building 3	Northeast	59 dBA	54 dBA	1
Building 4	Northeast	57 dBA	53 dBA	1
Building 5	Southeast	62 dBA	58 dBA	1
Building 6	Southeast	68 dBA	63 dBA	2
Building 7	Southeast	71 dBA	66 dBA	2

Note(s):

1. Applicable for low and medium density developments: Provision for future installation of air-conditioning, warning clause "Type C". Applicable for high density developments: Installation of air-conditioning to allow for windows and doors to remain closed, warning clause "Type D". Refer to **Appendix D** for guidance regarding air-conditioning as a noise mitigation measure.
2. The acoustical performance of building components must be specified to meet the indoor sound level criteria. Installation of air conditioning to allow for windows and doors to remain closed, warning clause "Type D". Refer to **Appendix D** for guidance regarding air-conditioning as a noise mitigation measure.

Predicted sound levels at the OLAs due to transportation noise are summarized in **Table 3**.

Table 3: Transportation Sound Levels in Outdoor Living Areas (OLAs)

Receptor	Description	Daytime L_{EQ}, 16hr	Notes
OLA_01	Block 1 Amenity	60 dBA	2
OLA_02	Block 2 Amenity	56 dBA	2

Note(s):

1. The predicted sound level meets the NPC-300 criterion for OLAs. Noise control measures are not required.
2. For OLA sound levels >55 dBA and ≤60 dBA, noise controls may be applied to meet the 55 dBA criterion. If noise control measures are not provided, a warning clause "Type A" is recommended. Noise mitigation is recommended to meet the ≤55 dBA OLA sound level criterion. If noise controls are not feasible to meet the 55 dBA criterion for technical, economic or administrative reasons, an exceedance of 5 dB may be acceptable (to a maximum sound level of 60 dBA). In this case, a warning clause "Type B" is recommended.

3.2 Stationary Source Assessment

Stationary sources could be grouped into two categories: those that have a permit with the Ontario Ministry of the Environment, Conservation and Parks (MECP) through an Environmental Compliance Approval (ECA) or Environmental Activity and Sector Registry (EASR); and those that are exempt from ECA or EASR permit requirements.

In the case where a stationary source has an Environmental Compliance Approval (ECA) or Environmental Activity and Sector Registry (EASR) permit with the MECP, and would be put in a position where it is no longer in compliance with the applicable sound level criteria due to the encroachment of the proposed new development, source specific mitigation and/or formal classification of the proposed development lands as a "Class 4 Area" (refer to C.4.4.2 "Class 4 Area" in NPC-300) would be required. In this case, coordination and agreements between the stationary source owner, proposed new development owner, and the land-use planning authority are recommended.

In the case where a stationary source is exempt from ECA or EASR permit requirements, the noise provisions of the applicable Municipal Code and guidance from NPC-300 would be applicable. In this case, mitigation of sound levels due to stationary sources may be for due diligence purposes to avoid nuisance complaints from future occupants of the proposed new development. Mitigation could be in the form of mitigation at the source (with agreement from the stationary source owner) and/or mitigation at the receptor through site and building element design (e.g., building orientation, acoustical barriers, façade sound insulation design).

In the area surrounding the proposed development, stationary sources associated with the community centre/sports complex, commercial buildings, and residential buildings are considered. The community centre/sports complex operates under a Certificate of Approval (historical equivalent of an ECA or EASR) issued in December 2009. Regulatory changes in the past 15 years have adjusted the permitting requirements for facilities such as sports complexes. Based on a review of the equipment included in the Certificate of Approval, it may be exempt from ECA or EASR permit requirements under current regulations.

3.2.1 Stationary Source Modeling

Stationary sources of noise surrounding the proposed development were identified using a combination of publicly available aerial and street-level imagery, business listing, and the MECP Access Environment database. This information was further validated during a site visit on June 14, 2024.

The site visit found that the cooling towers on the adjacent sports complex were significant at the property line of the new development. One of the sports complex cooling towers and a dehumidifier that were in operation during the site visit were measured and the other sources were estimated using proxy data.

The car wash to the southeast of site was observed during operations. It included fast-closing doors so that sound from the car wash was only audible as vehicles were leaving the car wash. The other potential noise sources in the area were not audible over vehicle traffic.

3.2.1.1 Representative Receptors

The worst-case receptor locations at the proposed development were assessed. The most significant sources of stationary noise in the area are the sports complex to the northwest and the commercial plaza to the northeast. Representative façade receptors were selected to capture the worst-case façade levels from the two source directions.

3.2.1.2 Sources and Sound Power Levels

RWDI proxy data were used for the sound power levels of the sports complex HVAC units, chillers, and one of the cooling towers that were not in operation at the time of the site visit. The dehumidifier and cooling tower that were in operation were measured. The sound power levels used in the modeling are presented in **Table 4**. The locations of the sources summarized in **Table 4** and are illustrated in **Figure 3**.

Table 4: Stationary Source Sound Power Level Assumptions

Source Description	Source ID (As shown in Figure 3)	Proxy Data / Calculation	Sound Power Level (dBA)	Duty Cycle	
				Daytime and Evening (07:00h–23:00h)	Nighttime (23:00h–07:00h)
1-Fan HVAC Unit	HVAC_1F	Proxy Data	82	Continuous	30 min/hour
2-Fan HVAC Unit	HVAC_2F	Proxy Data	85	Continuous	30 min/hour
3-Fan HVAC Unit	HVAC_3F	Proxy Data	87	Continuous	30 min/hour
Makeup Air Unit	MUA	Proxy Data	85	Continuous	Continuous
Car Wash	CarWash	Proxy Data	88	Continuous	Continuous
Dehumidifier	Dehumidifier	Measurement	99	Continuous	Continuous
Chiller	Chiller	Proxy Data	92	Continuous	Continuous
Single Fan Cooling Tower	CT_1F	Proxy Data	101	Continuous	Continuous
Double Fan Cooling Tower - Fans	CT_2F_Fans	Measurement	101	Continuous	Continuous
Double Fan Cooling Tower – Inlet	CT_2F_Inlet	Measurement	95	Continuous	Continuous
Double Fan Cooling Tower - Casing	CT_2F_Casing	Measurement	89	Continuous	Continuous

The assumed sound power level values and duty-cycles for the stationary sources are assumed based on the source type. Continuous operation of the HVAC units and all equipment at area facilities represent the worst-case hour for the daytime periods. For the nighttime periods, HVAC equipment is expected to operate at a 50% duty cycle while the other mechanical equipment is conservatively assumed to operate continuously.

3.2.1.3 Analysis and Results

Stationary source noise modelling was carried out using the Cadna/A software package, a commercially available implementation of the ISO 9613 (ISO, 1994 and ISO, 1996) algorithms. The predicted sound levels are assessed against both the Class 1and Class 4 limits (refer to **Appendix A**).

The predicted worst-case 1-hour sound levels from existing stationary sources are presented in **Table 5**.

Table 5: Predicted Sound Levels at Worst-case Receptor Locations – Continuous Stationary Sources

Receptor	Time Period	Predicted Sound Level $L_{EQ,1hr}$	Sound Level Criteria		Notes
			Class 1 L_{EQ-1hr}	Class 4 L_{EQ-1hr}	
NE Façade Plane of Window (facing commercial plaza)	Daytime-Evening 0700-2300h	52 dBA	62 dBA[2]	62 dBA[2]	Meets Class 1 and Class 4 criteria
	Nighttime 2300-0700h	49 dBA	52 dBA[2]	55 dBA	Meets Class 1 and Class 4 criteria
NW Façade Plane of Window (facing sports complex)	Daytime-Evening 0700-2300h	63 dBA	50 dBA	60 dBA	Exceeds Class 1 and Class 4 criteria
	Nighttime 2300-0700h	63 dBA	45 dBA	55 dBA	Exceeds Class 1 and Class 4 criteria
Outdoor Amenity	Daytime-Evening 0700-2300h [1]	53 dBA	50 dBA	55 dBA	Exceeds Class 1 Meets Class 4 criteria

Note(s):
[1] Outdoor areas are not assessed during the nighttime period.
[2] Criteria are the higher of the ambient due to road traffic or 50 dBA during the daytime-evening and 45 dBA at night. In these cases, elevated ambient sound levels applied due to road traffic noise.

As shown in **Table 5**, the portion of the development that faces the commercial plaza to the northeast meets the Class 1 and Class 4 criteria due to elevated ambient levels during the daytime-evening and nighttime. Ambient road noise modeling was undertaken for Neyagawa Boulevard and Dundas Street West using an Institute of Traffic Engineers (ITE) distribution to represent the quietest daytime and nighttime hours. For the area of the development that faces the commercial plaza this background level was 62 dBA during the daytime and 52 dBA during the nighttime. Some isolated lower portions of the NE façade that are screened by the podium edge from the roads may exceed at nighttime.

The portion of the development that faces the sports complex to the northwest exceeds the Class 1 and Class 4 criteria. This area of the development is not predicted to have elevated sound level criteria due to distance setbacks from the roadways.

3.3 Recommendations

Based on the noise assessment results, the following recommendations were determined for the project for both transportation sources and stationary sources.

3.3.1 Transportation Sources

The following recommendations are provided to address transportation sources.

3.3.1.1 Building Façade Components

Due to the elevated transportation sound levels in the area, acoustical design of the façade components including spandrel, window glazing, and exterior doors, are recommended to be specified for the proposed development. Preliminary window glazing and exterior balcony door sound isolation requirements were determined based on the following assumptions:

- Typical residential living room:
  - Glazing 60% of façade, Door: 20% of façade
  - 55% Façade to floor area Ratio
  - Intermediate absorption finishes/furniture
- Typical residential bedroom:
  - Glazing 80% of façade, Door: N/A
  - 81% Façade to floor area Ratio
  - High absorption finishes/furniture

Based on the predicted plane of window sound levels and the assumptions listed above, recommendations for the minimum sound insulation ratings for the building components were determined using the National Research Council of Canada "BPN-56 method" (NRCC, 1985). The reported results are in terms of Sound Transmission Class (STC) ratings as summarized in **Table 6**.

Table 6: Recommended Façade Component Minimum Sound Insulation Rating

Portion of Development	Worst-Case Façade	Window Glazing	Exterior Door
Building 1	Northeast	STC 27	STC 25
Building 2	Northeast	STC 27	STC 25
Building 6	Southeast	STC 28	STC 25
Building 7	Southeast	STC 31	STC 28

The maximum requirement for the window glazing was determined to be STC 31, and STC 28 for the exterior door, which can be achieved by various double-glazed configurations of insulated glazing units.

Taking into account the assumptions used as a basis to determine the glazing requirements, the applicable indoor transportation source sound level criteria are predicted to be achieved.

We recommend that the façade construction is reviewed during detailed design to ensure that the indoor sound level limits will be met, and that the window/door supplier is requested to provide STC laboratory test reports as part of shop drawing submittal to confirm that the glazing/door components will meet the minimum STC requirements.

3.3.1.2 Ventilation Recommendations

Due to the transportation sound levels at the façade, central air conditioning is recommended for the proposed development to allow for windows and doors to remain closed as a noise mitigation measure. Prospective purchasers or tenants should be informed by a warning clause "Type D" (see **Appendix E**).

3.3.1.3 Outdoor Living Areas

Due to exposure to transportation sources along the nearby Neyagawa Boulevard and Dundas Street West, sound levels in OLAs are predicted to be elevated. The daytime average sound levels for the OLAs included in the assessment are in the range of 56-60 dBA. To reduce the transportation sound levels in OLAs to meet the applicable criteria, noise barriers are recommended.

The recommended geometry of the noise barriers to meet 55 dBA are included in **Figure 4**. The barrier heights are summarized in **Table 7**. General guidance with respect to noise barrier design is included with **Appendix D**.

Table 7: Barrier Height Recommendations for OLAs

Receptor	Description	Predicted OLA Sound Level	Barrier Height (m) to Meet Sound Level Criterion	
		Daytime L_{EQ}, 16hr	≤ 55 dBA[1]	≤ 60 dBA
OLA_01	Block 1 Amenity	60 dBA	3.1 m[2]	-
OLA_02	Block 2 Amenity	56 dBA	1.5 m[2]	-

Note(s):
[1] Refer to **Figure 4** for barrier geometry to meet 55 dBA.
[2] If noise control measures are not provided, a warning clause "Type A" is recommended (see **Appendix E**).

3.3.2 Stationary Sources

Based on the results from the noise modelling, mitigation measures to achieve compatibility with the stationary sources are required. As impacts from the sports complex are driving the results, it is expected that by managing the sound from the sports complex, compatibility for all sources will be achieved.

To achieve compliance with the applicable sound level limits, a combination of the following measures are likely to be required:

- Refinement of the operating scenario for all equipment:
  - Conservative operating assumptions (e.g., 100% operation) may be overstating the sound levels during the more stringent nighttime hours.
- At-source mitigation on the cooling towers associated with the sports complex:
  - Mitigation could include exhaust silencers, intake silencers, or low-noise fans.
- At-receptor mitigation on the proposed development:
  - Class 4 designation would be required and mitigation could include enclosed noise buffers, upgraded façade construction, and provision of air-conditioning.

A Class 4 designation for the proposed development would be recommended to ease the compatibility between the proposed development and the sportsplex. In this case, a Class 4 designation alone would not resolve the compatibility concerns but could be used in conjunction with the above-mentioned mitigation measures.

Due to the proximity of the proposed development to the commercial facilities, a warning clause similar to "Type E" (see **Appendix E**) is recommended to inform prospective occupants of the potential for audible noise from these facilities and any mitigation measures that have been implemented as a result.

3.3.3 Warning Clauses

The following warning clauses are recommended for the proposed development:

1. NPC-300 Type A to address transportation sound levels in Outdoor Living Areas (OLAs)
2. NPC-300 Type C or D to address transportation sound levels at the plane of window
3. NPC-300 Type E or similar to address proximity to commercial/industrial facilities

Warning clauses are recommended to be included on all development agreements, offers of purchase and agreements of purchase and sale or lease. The wording of the recommended warning clauses is included with **Appendix E**.

4 THE EFFECTS OF THE PROPOSED DEVELOPMENT ON ITS SURROUNDINGS AND ON ITSELF

On-site stationary sources for the development are expected to consist of HVAC related equipment in the roof-top mechanical penthouse as well as various exhaust fans. Further, consideration should be given to control airborne and structure-borne noise generated within the proposed development.

Within the development itself the main sources of noise that are likely to affect the uses of the building are the mechanical systems. Provided that best practices for the acoustical design of the building are followed, noise from building services equipment is expected to meet the applicable sound level criteria.

The potential noise effect of the proposed development should be reviewed during detailed design to ensure the applicable sound level criteria will be achieved.

5 CONCLUSIONS

RWDI was retained to prepare a Noise and Vibration Impact Study for the proposed mixed-use development located in Oakville, Ontario.

The following noise control measures are recommended for the proposed development:

1. Installation of central air-conditioning so that all suites' windows can remain closed.

2. The inclusion of noise warning clauses related to:
    a. Transportation sound levels at the building façade and in the outdoor amenity areas.
    b. Proximity to stationary noise sources.
3. Minimum sound isolation performance:
    a. Suite bedroom window glazing with minimum sound isolation performance up to STC-31.
    b. Suite exterior balcony door with minimum sound isolation performance up to STC-28.
4. Construction of perimeter noise barriers along the outdoor amenity areas (as shown in **Figure 4**) if feasible, with the applicable warning clause.

The potential noise levels from stationary sources of sound were evaluated including sound from surrounding commercial uses and the adjacent Sixteen Mile Sports Complex. Based on the noise modeling results, mitigation measures are required for compatibility. A number of mitigation measures are available to achieve compatibility which may include a combination of at-source mitigation, at-receptor mitigation, and/or a Class 4 designation. With mitigation measures in place, the proposed development can be compatible with stationary sources of noise.

At this stage in design the noise levels produced by the development on itself and its surroundings could not be quantitatively assessed. However, the effect on both the building itself and its surroundings is expected to be feasible to meet the applicable criteria. The building design should be evaluated prior to building permit to ensure that the acoustical design is adequately implemented to meet the applicable criteria.

Based on the results of the analysis including implementation of the recommendations included with this assessment, the proposed development can meet the applicable sound and vibration criteria.

6 REFERENCES

1. Ontario Ministry of the Environment (MOE), August 2013, Publication NPC-300, Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning (MOE, 2013).
2. Ontario Ministry of the Environment (MOE), 1989, ORNAMENT Ontario Road Noise Analysis Method for Environment and Transportation, Technical Publication (MOE, 1989)
3. Controlling Sound Transmission into Buildings (BPN-56), National Research Council Canada (NRCC, 1985).
4. Institute of Transportation Engineers (ITE), 2010, *Traffic Engineering Handbook, 6th Edition* (ITE, 2010)
5. International Organization for Standardization (ISO), 1994b, International Standard ISO 9613-1:1994, Acoustics – Attenuation of Sound during propagation outdoors. Part 1: Calculation of the absorption of sound by the atmosphere. (ISO, 1994)
6. International Organization for Standardization (ISO), 1996, International Standard ISO 9613-2:1996, Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation (ISO, 1996)

7 STATEMENT OF LIMITATIONS

This report entitled "3056 Neyagawa Blvd" was prepared by Rowan Williams Davies & Irwin Inc. ("RWDI") for Neatt Communities ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared. Because the contents of this report may not reflect the final design of the Project or subsequent changes made after the date of this report, RWDI recommends that it be retained by Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the Project.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

FIGURES

Context Site Plan

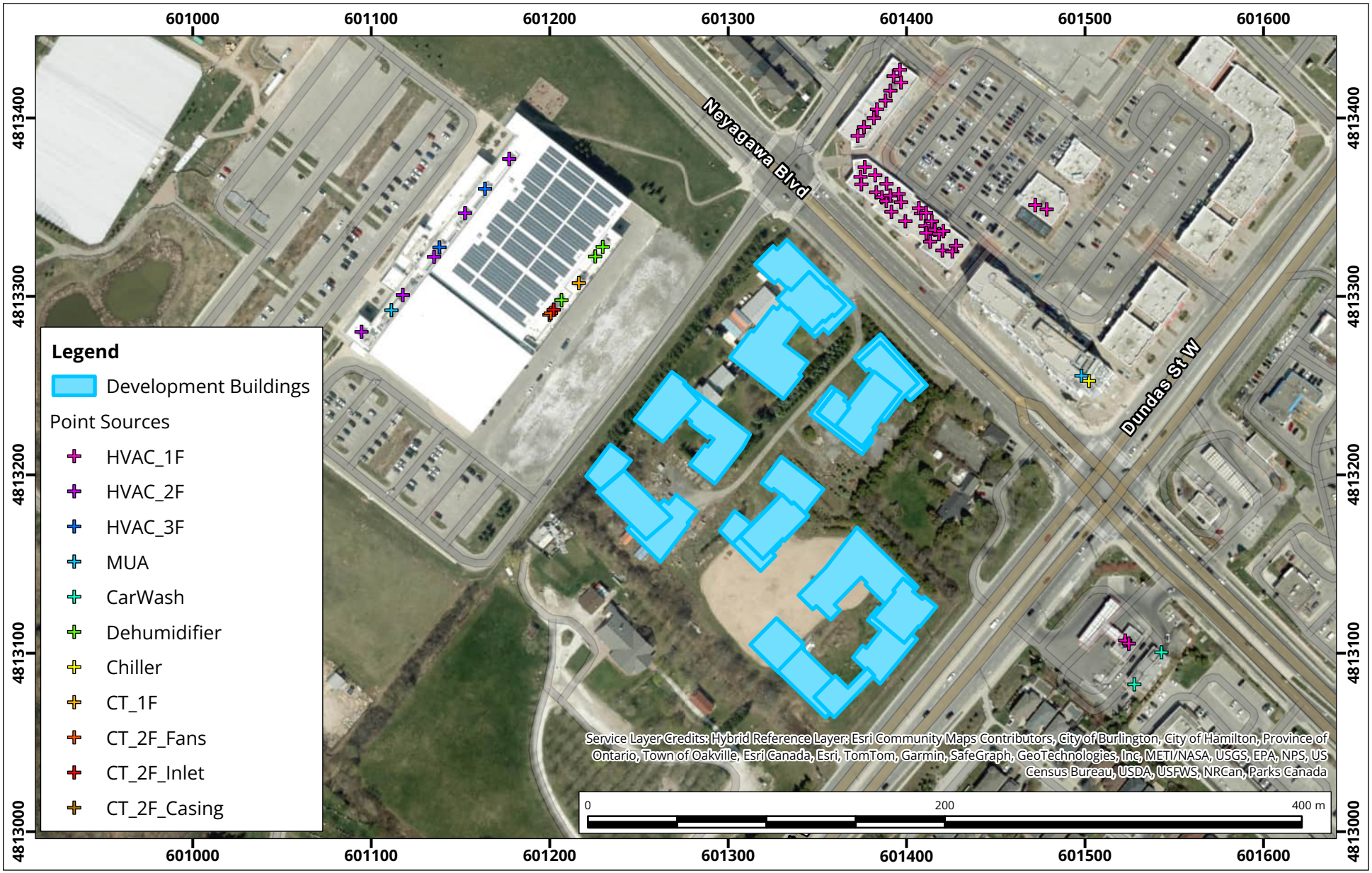
3056 Neyagawa Blvd, Oakville

Drawn by:	GER	Figure:	1
Project #:			2402704
Date:			2024-12-17

Outdoor Living Areas (OLAs)

3056 Neyagawa Blvd, Oakville

Drawn by:	GER	Figure:	2
Project #:			2402704
Date:			2024-12-17



Stationary Sources

Location of Stationary Sources in Relation to the Proposed Development

Map Projection: NAD 1983 UTM Zone 17N

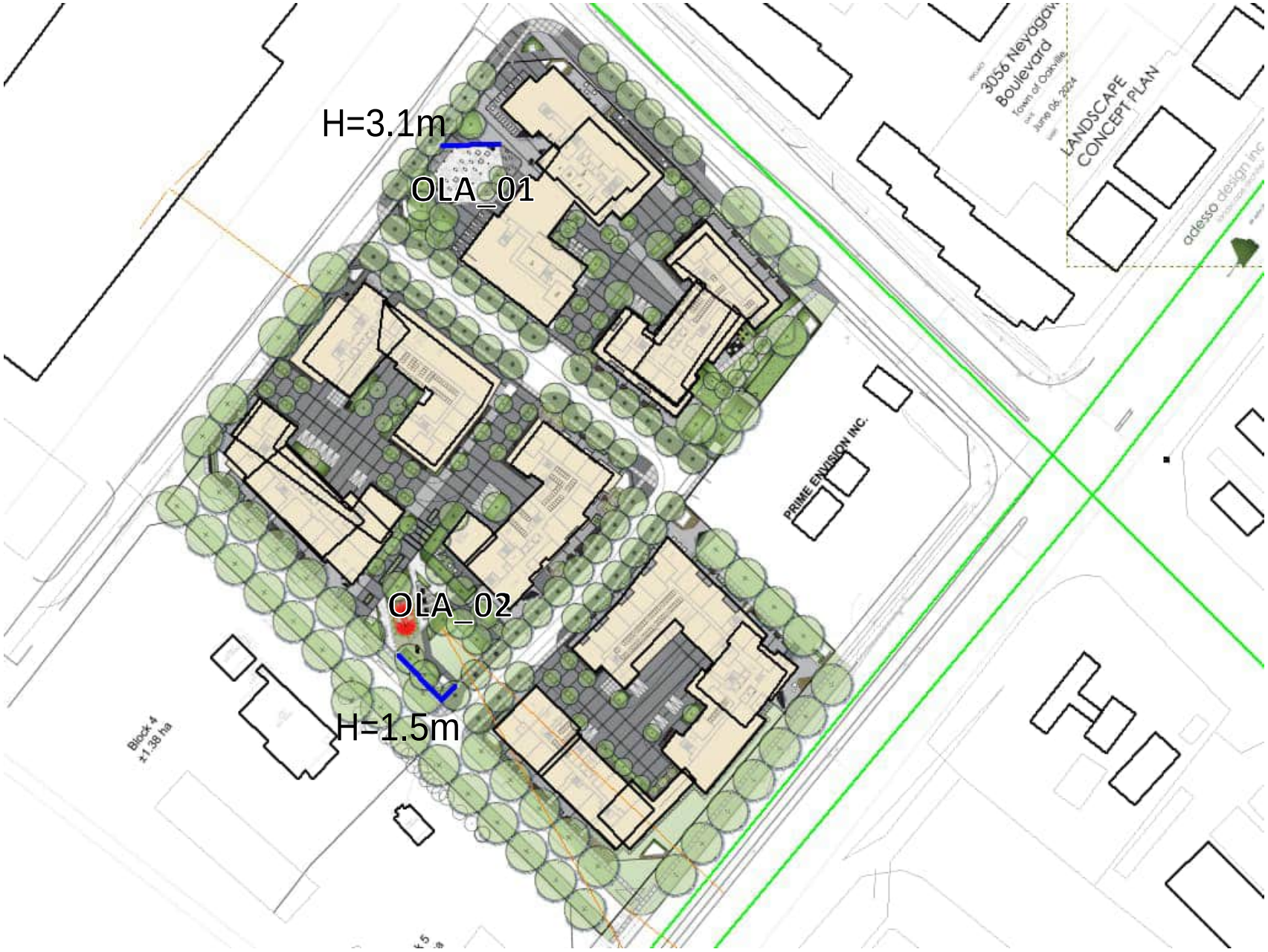
3056 Neyagawa Boulevard - Oakville, Ontario

True North

Project #: 2402704

Drawn by:CWM	Figure: 3
Approx. Scale:	1:3,000
Date Revised:	Aug 20, 2024

Map Document: \\gue-nsif-f01\volam-jobs-dfs\jobs\2024\2402704\03WorkItems\20Environmental Noise\Analysis\08ArcGIS\3056 Neyagawa Boulevard - Oakville, Ontario.aprx



OLA Noise Mitigation to meet 55 dBA

3056 Neyagawa Blvd, Oakville

Drawn by:	GER	Figure:	4
Project #:			2402704
Date:			2024-12-17

APPENDIX A

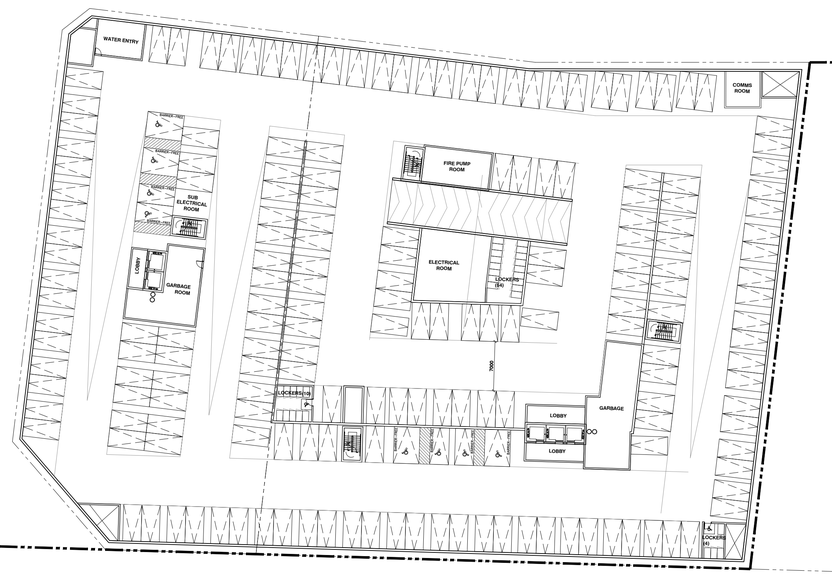
FUTURE EXTENSION OF SIXTEEN MILE DRIVE

ck 4
8 ha

5
ha

POATE PROJECT

NEYAGAWA BOULEVARD



PRIME ENVISION INC.

NO.	REVISIONS	DATE
02		
01		

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3056 NEYAGAWA
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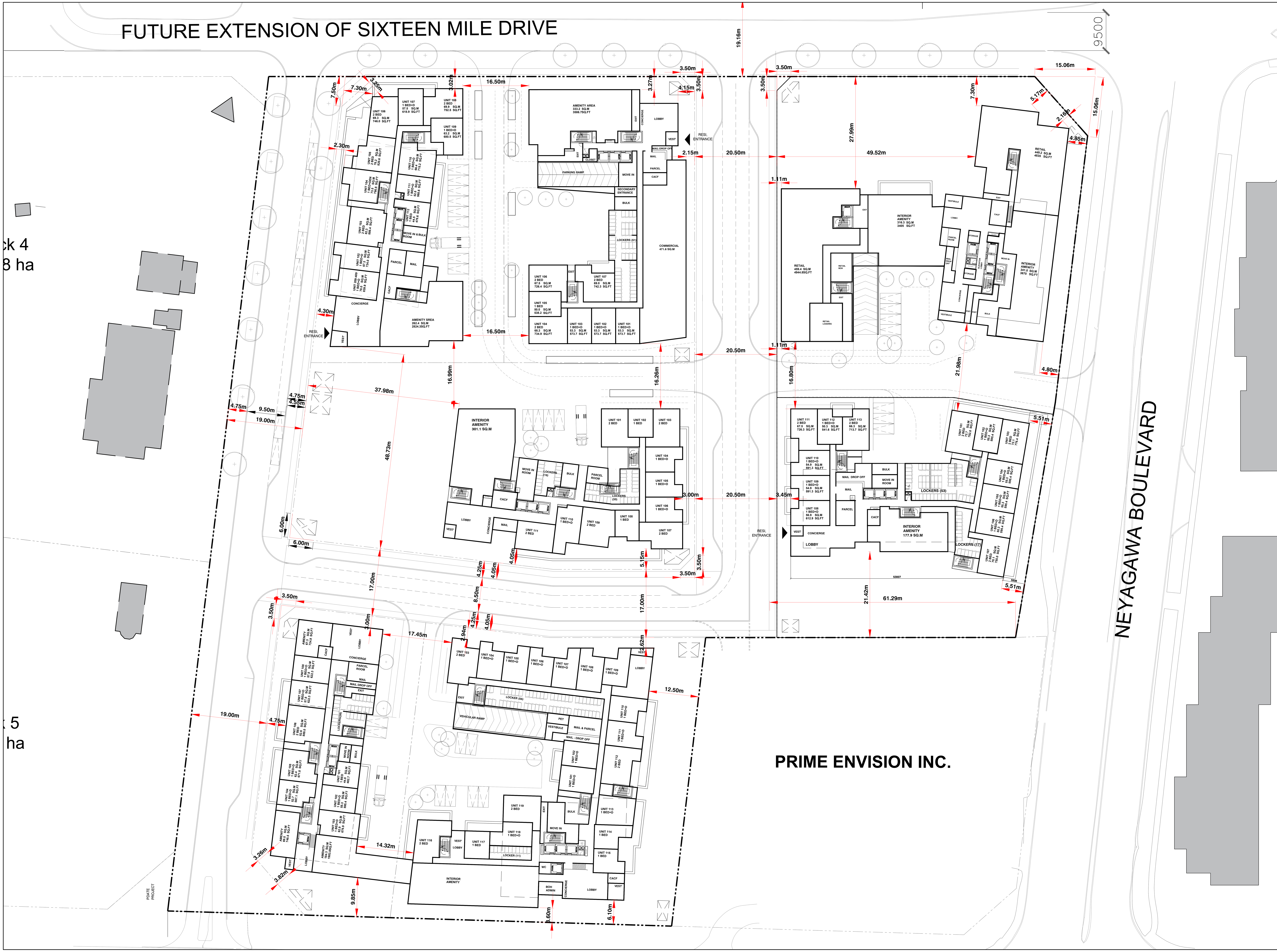
Drawn: SR	Scale: 1:400
Checked: CW	Date: MARCH 2024

Title: LEVEL P1

Project No.	Drawing No.
23-109	**A203**



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OAKVILLE, ON

Drawn	Scale
SR	1:400
Checked	Date
CW	MARCH 2024

Title
LEVEL 1

Project No.	Drawing No.
23-109	A204

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

NEYAGAWA BOULEVARD

ck 4
8 ha

5
ha

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Title: LEVEL 2

Project No.: 23-109

Drawing No.: **A205**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

ck 4
8 ha

t 5
ha

REFER TO LEVEL 2

REFER TO LEVEL 2

REFER TO LEVEL 2

REFER TO LEVEL 2

REFER TO LEVEL 2

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NEYAGAWA BOULEVARD

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Title: LEVEL 3

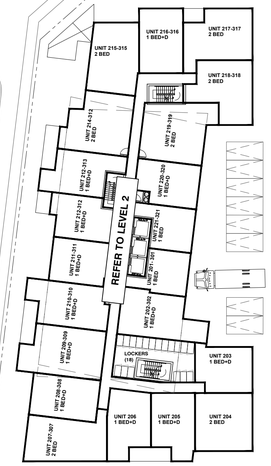
Project No.	Drawing No.
23-109	**A206**

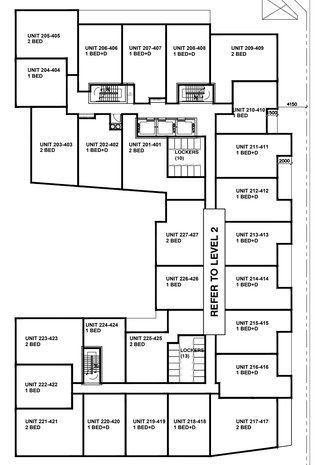
FUTURE EXTENSION OF SIXTEEN MILE DRIVE

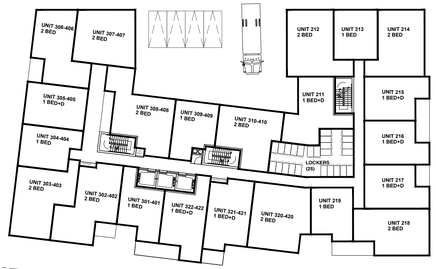
9500

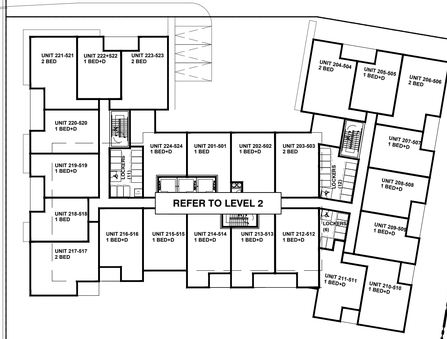
ck 4
8 ha

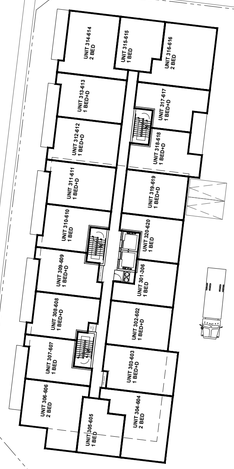
t 5
ha











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Title: LEVEL 4

Project No.	Drawing No.
23-109	**A207**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

ck 4
8 ha

t 5
ha

NEYAGAWA BOULEVARD

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Title: LEVEL 5

Project No.	Drawing No.
23-109	**A208**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

ck 4
8 ha

t 5
ha

NEYAGAWA BOULEVARD

REFER TO LEVEL 5

REFER TO LEVEL 3

REFER TO LEVEL 2

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OAKVILLE, ON

Drawn: SR	Scale: 1:400
Checked: CW	Date: MARCH 2024

Title: LEVEL 6

Project No.	Drawing No.
23-109	**A209**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

NEYAGAWA BOULEVARD

ck 4
8 ha

5
ha

UNIT 711
1 BED
UNIT 712
1 BED+D
UNIT 710
2 BED
UNIT 713
2 BED
UNIT 709
2 BED
UNIT 714
2 BED
UNIT 708
1 BED
UNIT 715
1 BED+D
UNIT 707
1 BED+D
UNIT 716
1 BED+D
UNIT 706
1 BED
UNIT 705
1 BED+D
UNIT 704
2 BED
UNIT 703
2 BED

UNIT 704-1004
2 BED
UNIT 705-1005
1 BED
UNIT 706-1006
1 BED+D
UNIT 707-1007
1 BED
UNIT 708-1008
2 BED
UNIT 709-1009
1 BED
UNIT 703-1003
2 BED
UNIT 702-1002
1 BED+D
UNIT 701-1001
1 BED+D
UNIT 711-1011
1 BED
UNIT 710-1010
2 BED

UNIT 705-2405
2 BED
UNIT 704-2404
1 BED+D
UNIT 703-2403
1 BED
UNIT 702-2402
2 BED
UNIT 706-2406
1 BED
UNIT 701-2401
1 BED
UNIT 707-2407
1 BED
UNIT 712-2412
1 BED
UNIT 708-2408
2 BED
UNIT 709-2409
1 BED+D
UNIT 710-2410
1 BED
UNIT 711-2411
2 BED

UNIT 710
2 BED
UNIT 711
2 BED
UNIT 709
1 BED+D
UNIT 712
1 BED
UNIT 713
1 BED
LOCKERS
(05)
UNIT 705
1 BED
UNIT 706
1 BED+D
UNIT 707
1 BED
UNIT 708
2 BED
UNIT 704
2 BED
UNIT 702
1 BED+D
UNIT 701
1 BED
UNIT 716
1 BED
UNIT 717
1 BED+D
UNIT 718
2 BED
UNIT 715
1 BED
UNIT 714
2 BED

UNIT 610-1810
2 BED
UNIT 611-1811
1 BED
UNIT 612-1812
1 BED
UNIT 601-1801
1 BED
UNIT 602-1802
1 BED + D
UNIT 603-1803
2 BED
REFER TO LEVEL 6
UNIT 609-1809
2 BED
UNIT 608-1808
1 BED+D
UNIT 607-1807
1 BED+D
UNIT 606-1806
1 BED+D
UNIT 605-1805
1 BED
UNIT 604-1804
2 BED

UNIT 610-1010
2 BED
UNIT 611-1011
1 BED
UNIT 609-1009
1 BED+D
UNIT 612-1012
1 BED
UNIT 608-1008
1 BED+D
UNIT 607-1007
1 BED+D
UNIT 606-1006
1 BED+D
UNIT 605-1005
1 BED
UNIT 603-1003
2 BED
UNIT 604-1004
2 BED

UNIT 711-2311
1 BED
714.1 SQ.FT
UNIT 712-2312
1 BED + D
804.5 SQ.FT
UNIT 701-2301
1 BED
465.3 SQ.FT
UNIT 702-2302
2 BED
709.8 SQ.FT
UNIT 713-2313
1 BED + D
804.5 SQ.FT
UNIT 703-2303
1 BED
465.3 SQ.FT
UNIT 714-2314
1 BED
465.3 SQ.FT
UNIT 715-2315
1 BED
465.3 SQ.FT
UNIT 716-2316
2 BED
709.8 SQ.FT
UNIT 717-2317
1 BED + D
804.5 SQ.FT
UNIT 718-2318
2 BED
709.8 SQ.FT
UNIT 719-2319
1 BED
465.3 SQ.FT
UNIT 720-2320
1 BED
465.3 SQ.FT
UNIT 721-2321
1 BED + D
804.5 SQ.FT
UNIT 722-2322
2 BED
714.1 SQ.FT

UNIT 610-1610
2 BED
UNIT 611-1611
1 BED
UNIT 609-1609
1 BED+D
UNIT 612-1612
1 BED
UNIT 608-1608
1 BED+D
UNIT 607-1607
1 BED+D
UNIT 606-1606
1 BED+D
UNIT 605-1605
1 BED
UNIT 603-1603
2 BED
UNIT 604-1604
2 BED

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Title: LEVEL 7

Project No.	Drawing No.
23-109	**A210**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

NEYAGAWA BOULEVARD

ck 4
8 ha

5
ha

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REFER TO LEVEL 7

REFER TO LEVEL 6

NO.	REVISIONS	DATE
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Title: LEVEL 8

Project No.	Drawing No.
23-109	**A211**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

NEYAGAWA BOULEVARD

ck 4
8 ha

5
ha

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REFER TO LEVEL 7

REFER TO LEVEL 6

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Title: LEVEL 9-15

Project No.	Drawing No.
23-109	**A212**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

NEYAGAWA BOULEVARD

ck 4
8 ha

5
ha

REFER TO LEVEL 09

UNIT 906-1606 2 BED
UNIT 905-1605 2 BED
UNIT 907-1607 1 BED+D
UNIT 906-1606 1 BED
UNIT 905-1605 1 BED+D
UNIT 904-1604 2 BED
UNIT 903-1603 2 BED
UNIT 902-1602 1 BED
UNIT 901-1601 1 BED
UNIT 910-1610 2 BED
UNIT 711-1611 1 BED+D
UNIT 710-1612 1 BED
UNIT 709-1609 2 BED

REFER TO LEVEL 7

UNIT 704-1804 2 BED 67.7 SQ.M 729.0 SQ.FT
UNIT 705-1805 1 BED 49.5 SQ.M 532.3 SQ.FT
UNIT 706-1806 1 BED+D 55.2 SQ.M 594.4 SQ.FT
UNIT 707-1807 1 BED 49.4 SQ.M 532.3 SQ.FT
UNIT 708-1808 2 BED 72.4 SQ.M 779.5 SQ.FT
UNIT 709-1809 1 BED 42.5 SQ.M 457.6 SQ.FT
UNIT 703-1803 2 BED 71.5 SQ.M 769.9 SQ.FT
UNIT 702-1802 1 BED+D 60.3 SQ.M 648.6 SQ.FT
UNIT 701-1801 1 BED+D 55.3 SQ.M 594.9 SQ.FT
UNIT 711-1811 1 BED+D 58.2 SQ.M 626.7 SQ.FT
UNIT 710-1810 2 BED 70.1 SQ.M 754.1 SQ.FT

REFER TO LEVEL 7

UNIT 705-2405 2 BED 68.9 SQ.M 742.3 SQ.FT
UNIT 704-2404 1 BED+D 49.9 SQ.M 537.0 SQ.FT
UNIT 703-2403 1 BED 46.8 SQ.M 503.7 SQ.FT
UNIT 702-2402 2 BED 63.6 SQ.M 684.6 SQ.FT
UNIT 706-2406 1 BED 44.9 SQ.M 483.8 SQ.FT
UNIT 707-2407 1 BED 43.7 SQ.M 470.8 SQ.FT
UNIT 708-2408 2 BED 68.3 SQ.M 734.8 SQ.FT
UNIT 709-2409 1 BED+D 49.1 SQ.M 528.6 SQ.FT
UNIT 710-2410 1 BED 47.1 SQ.M 507.7 SQ.FT
UNIT 701-2401 1 BED 56.3 SQ.M 606.3 SQ.FT
UNIT 712-2412 1 BED 47.9 SQ.M 514.1 SQ.FT
UNIT 711-2411 1 BED 58.0 SQ.M 624.1 SQ.FT

REFER TO LEVEL 9

UNIT 905-2505 1 BED
UNIT 906-2506 1 BED+D
UNIT 907-2507 1 BED
UNIT 908-2508 1 BED
UNIT 909-2509 2 BED
UNIT 904-2504 2 BED
UNIT 903-2503 2 BED
UNIT 902-2502 1 BED+D
UNIT 901-2501 1 BED
UNIT 912-2512 1 BED
UNIT 911-2511 1 BED+D
UNIT 910-2510 2 BED

REFER TO LEVEL 6

UNIT 610-1610 2 BED 64.2 SQ.M 690.6 SQ.FT
UNIT 611-1611 1 BED 49.8 SQ.M 535.2 SQ.FT
UNIT 612-1612 1 BED 45.7 SQ.M 492.1 SQ.FT
UNIT 601-1601 1 BED 45.7 SQ.M 492.1 SQ.FT
UNIT 602-1602 1 BED + D 54.3 SQ.M 584.4 SQ.FT
UNIT 603-1603 2 BED 64.1 SQ.M 689.6 SQ.FT
UNIT 609-1609 2 BED 63.8 SQ.M 686.5 SQ.FT
UNIT 608-1608 1 BED+D 54.8 SQ.M 590.3 SQ.FT
UNIT 607-1607 1 BED+D 50.2 SQ.M 540.3 SQ.FT
UNIT 606-1606 1 BED+D 50.4 SQ.M 542.6 SQ.FT
UNIT 605-1605 1 BED 45.5 SQ.M 489.4 SQ.FT
UNIT 604-1804 2 BED 64.0 SQ.M 688.4 SQ.FT

BLOCK-3
BUILDING-6
6 LEVELS
HEIGHT:19.60

BLOCK-3
BUILDING-6
15 LEVELS
FFE @ GROUND:158.60
BUILDING HEIGHT:47.20
GEODETIC HEIGHT:205.80

REFER TO LEVEL 7

UNIT 711-2311 1 BED 58.2 SQ.M 626.7 SQ.FT
UNIT 712-2312 1 BED 47.9 SQ.M 514.1 SQ.FT
UNIT 701-2301 1 BED 56.3 SQ.M 606.3 SQ.FT
UNIT 702-2302 2 BED 63.6 SQ.M 684.6 SQ.FT
UNIT 710-2310 1 BED+D 47.1 SQ.M 507.7 SQ.FT
UNIT 703-2303 1 BED 46.8 SQ.M 503.7 SQ.FT
UNIT 709-2309 1 BED 49.1 SQ.M 528.6 SQ.FT
UNIT 704-2304 1 BED 49.9 SQ.M 537.0 SQ.FT
UNIT 708-2308 2 BED 68.3 SQ.M 734.8 SQ.FT
UNIT 705-2305 2 BED 68.9 SQ.M 742.3 SQ.FT
UNIT 706-2306 1 BED 44.9 SQ.M 483.8 SQ.FT
UNIT 707-2307 1 BED 43.7 SQ.M 470.8 SQ.FT

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Title
LEVEL 16

Project No.	Drawing No.
23-109	**A219**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

NEYAGAWA BOULEVARD

ck 4
8 ha

5
ha

BLOCK-3
BUILDING-6
6 LEVELS
HEIGHT:19.60

BLOCK-3
BUILDING-6
15 LEVELS
FFE @ GROUND:158.60
BUILDING HEIGHT:47.20
GEODETIC HEIGHT:205.80

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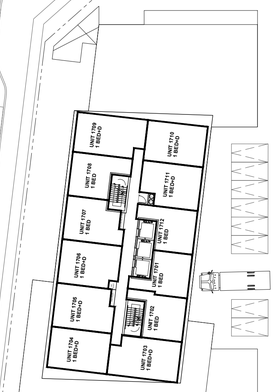

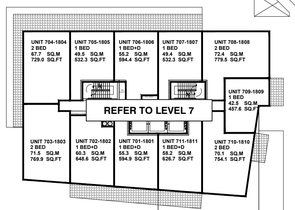

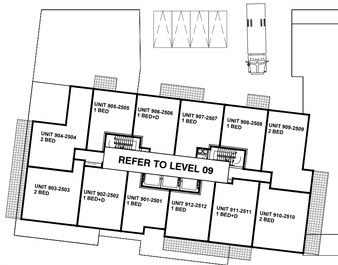

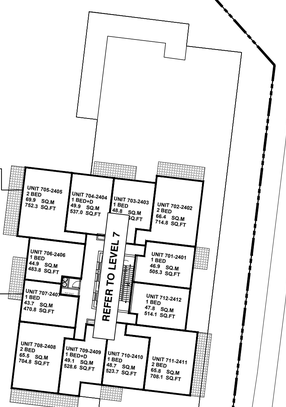

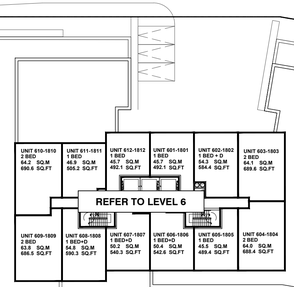

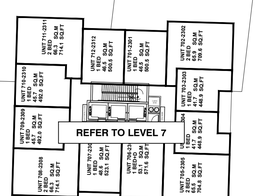

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OAKVILLE, ON

Drawn: SR	Scale: 1:400
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Title: LEVEL 17

Project No.	Drawing No.
23-109	**A220**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

NEYAGAWA BOULEVARD

ck 4
8 ha

5
ha

REFER TO LEVEL 7

REFER TO LEVEL 09

REFER TO LEVEL 6

REFER TO LEVEL 7

BLOCK-3
BUILDING-6
6 LEVELS
HEIGHT:19.60

BLOCK-3
BUILDING-6
15 LEVELS
FFE @ GROUND:158.60
BUILDING HEIGHT:47.20
GEODETIC HEIGHT:205.80

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Title: LEVEL 18

Project No.	Drawing No.
23-109	**A221**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

ck 4
8 ha

5
ha

BLOCK-2
BUILDING-3
18 LEVELS
FFE@GROUND:159.50
BUILDING HEIGHT:57.60
GEODETIC HEIGHT: 217.10

BLOCK-2
BUILDING-3
6 LEVELS
HEIGHT:20.70

REFER TO LEVEL 18

REFER TO LEVEL 7

BLOCK-1
BUILDING-2
18 LEVELS
FFE @ GROUND:159.25
BUILDING HEIGHT:56.50
GEODETIC HEIGHT:215.75

BLOCK-1
BUILDING-2
5 LEVELS
HEIGHT:16.60

REFER TO LEVEL 10

BLOCK-3
BUILDING-6
6 LEVELS
HEIGHT:19.60

BLOCK-3
BUILDING-6
15 LEVELS
FFE @ GROUND:158.60
BUILDING HEIGHT:47.20
GEODETIC HEIGHT:205.80

REFER TO LEVEL 7

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NEYAGAWA BOULEVARD

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Title: LEVEL 19

Project No.	Drawing No.
23-109	**A222**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

BLOCK-2
BUILDING-3
18 LEVELS
FFE@GROUND:159.50
BUILDING HEIGHT:57.60
GEODETIC HEIGHT: 217.10

BLOCK-2
BUILDING-3
6 LEVELS
HEIGHT:20.70

REFER TO LEVEL 18

REFER TO LEVEL 7

BLOCK-1
BUILDING-2
18 LEVELS
FFE @ GROUND:159.25
BUILDING HEIGHT:56.50
GEODETIC HEIGHT:215.75

BLOCK-1
BUILDING-2
5 LEVELS
HEIGHT:16.60

REFER TO LEVEL 10

BLOCK-3
BUILDING-6
6 LEVELS
HEIGHT:19.60

BLOCK-3
BUILDING-6
15 LEVELS
FFE @ GROUND:158.60
BUILDING HEIGHT:47.20
GEODETIC HEIGHT:205.80

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NEYAGAWA BOULEVARD

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NO.	REVISIONS	DATE
02		
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OAKVILLE, ON

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Title: LEVEL 24

Project No.	Drawing No.
23-109	**A227**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

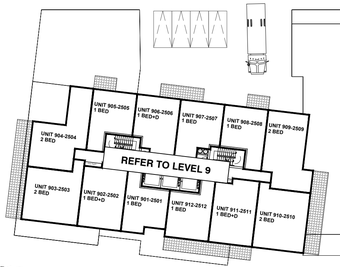
BLOCK-2
BUILDING-4
8 LEVELS
HEIGHT:26.80

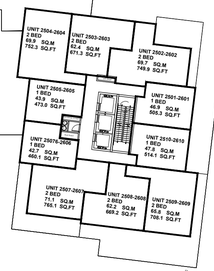
BLOCK-2
BUILDING-4
24 LEVELS
FFE @ GROUND:159.15
BUILDING HEIGHT:76
GEODETIC HEIGHT:235.15

BLOCK-2
BUILDING-4
6 LEVELS
HEIGHT:20.80

BLOCK-2
BUILDING-3
18 LEVELS
FFE@GROUND:159.50
BUILDING HEIGHT:57.60
GEODETIC HEIGHT: 217.10

BLOCK-2
BUILDING-3
6 LEVELS
HEIGHT:20.70





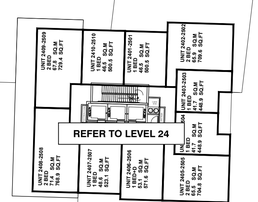
BLOCK-1
BUILDING-2
18 LEVELS
FFE @ GROUND:159.25
BUILDING HEIGHT:56.50
GEODETIC HEIGHT:215.75

BLOCK-1
BUILDING-2
5 LEVELS
HEIGHT:16.60

NEYAGAWA BOULEVARD

BLOCK-3
BUILDING-6
6 LEVELS
HEIGHT:19.60

BLOCK-3
BUILDING-6
15 LEVELS
FFE @ GROUND:158.60
BUILDING HEIGHT:47.20
GEODETIC HEIGHT:205.80



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OAKVILLE, ON

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Title: LEVEL 25

Project No.	Drawing No.
23-109	**A228**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

BLOCK-2
BUILDING-4
8 LEVELS
HEIGHT:26.80

BLOCK-2
BUILDING-4
24 LEVELS
FFE @ GROUND:159.15
BUILDING HEIGHT:76
GEODETIC HEIGHT:235.15

BLOCK-2
BUILDING-4
6 LEVELS
HEIGHT:20.80

BLOCK-2
BUILDING-3
18 LEVELS
FFE@GROUND:159.50
BUILDING HEIGHT:57.60
GEODETIC HEIGHT: 217.10

BLOCK-2
BUILDING-3
6 LEVELS
HEIGHT:20.70

UNIT 2604-2604 2 BED 68.9 SQ.M 742.3 SQ.FT
UNIT 2603-2603 2 BED 62.4 SQ.M 671.3 SQ.FT
UNIT 2602-2602 2 BED 69.7 SQ.M 749.9 SQ.FT
UNIT 2605-2606 1 BED 43.9 SQ.M 473.6 SQ.FT
REFER TO LEVEL 25
UNIT 2601-2601 1 BED 55.3 SQ.M 595.3 SQ.FT
UNIT 2607-2607 1 BED 42.7 SQ.M 460.1 SQ.FT
UNIT 2610-2610 1 BED 47.6 SQ.M 514.1 SQ.FT
UNIT 2607-2607 2 BED 71.1 SQ.M 765.1 SQ.FT
UNIT 2608-2608 2 BED 62.2 SQ.M 669.2 SQ.FT
UNIT 2609-2609 1 BED+D 65.6 SQ.M 706.1 SQ.FT

UNIT 2603-2603 2 BED
UNIT 2604-2604 1 BED+D
UNIT 2605-2605 1 BED
UNIT 2606-2606 1 BED
UNIT 2607-2607 2 BED
UNIT 2602-2602 2 BED
UNIT 2601-2601 1 BED
UNIT 2610-2610 1 BED
UNIT 2609-2609 1 BED+D
UNIT 2608-2608 2 BED

BLOCK-1
BUILDING-2
18 LEVELS
FFE @ GROUND:159.25
BUILDING HEIGHT:56.50
GEODETIC HEIGHT:215.75

BLOCK-1
BUILDING-2
5 LEVELS
HEIGHT:16.60

BLOCK-3
BUILDING-6
6 LEVELS
HEIGHT:19.60

BLOCK-3
BUILDING-6
15 LEVELS
FFE @ GROUND:158.60
BUILDING HEIGHT:47.20
GEODETIC HEIGHT:205.80

BLOCK-3
BUILDING-7
6 LEVELS
HEIGHT:20.60

BLOCK-3
BUILDING-7
25 LEVELS
FFE @ GROUND:158.75
BUILDING HEIGHT:79.40
GEODETIC HEIGHT:238.15

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OAKVILLE, ON

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Title: LEVEL 26

Project No.: 23-109	Drawing No.: **A229**

FUTURE EXTENSION OF SIXTEEN MILE DRIVE

9500

BLOCK-2
BUILDING-4
8 LEVELS
HEIGHT:26.80

BLOCK-2
BUILDING-4
24 LEVELS
FFE @ GROUND:159.15
BUILDING HEIGHT:76
GEODETIC HEIGHT:235.15

BLOCK-2
BUILDING-4
6 LEVELS
HEIGHT:20.80

BLOCK-2
BUILDING-3
18 LEVELS
FFE@GROUND:159.50
BUILDING HEIGHT:57.60
GEODETIC HEIGHT: 217.10

BLOCK-2
BUILDING-3
6 LEVELS
HEIGHT:20.70

BLOCK-1
BUILDING-1
6 LEVELS
HEIGHT:20.70

BLOCK-1
BUILDING-1
26 LEVELS
FFE @ GROUND:159.55
BUILDING HEIGHT:82.20
GEODETIC HEIGHT:241.75

BLOCK-1
BUILDING-2
18 LEVELS
FFE @ GROUND:159.25
BUILDING HEIGHT:56.50
GEODETIC HEIGHT:215.75

BLOCK-1
BUILDING-2
5 LEVELS
HEIGHT:16.60

REFER TO LEVEL 26

UNIT 2603-2603 2 BED
UNIT 2604-2604 1 BED+D
UNIT 2605-2605 1 BED
UNIT 2606-2606 1 BED
UNIT 2607-2607 2 BED
UNIT 2602-2602 2 BED
UNIT 2601-2601 1 BED
UNIT 2610-2610 1 BED
UNIT 2609-2609 1 BED+D
UNIT 2608-2608 2 BED

BLOCK-3
BUILDING-6
6 LEVELS
HEIGHT:19.60

BLOCK-3
BUILDING-6
15 LEVELS
FFE @ GROUND:158.60
BUILDING HEIGHT:47.20
GEODETIC HEIGHT:205.80

BLOCK-3
BUILDING-7
6 LEVELS
HEIGHT:20.60

BLOCK-3
BUILDING-7
25 LEVELS
FFE @ GROUND:158.75
BUILDING HEIGHT:79.40
GEODETIC HEIGHT:238.15

PRIME ENVISION INC.

NEYAGAWA BOULEVARD

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NO.	REVISIONS	DATE
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3056 NEYAGAWA
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Checked	Date
CW	MARCH 2024

Title
LEVEL 27-28

Project No.	Drawing No.
23-109	**A230**

APPENDIX B

CRITERIA

Transportation Sources

Guidance from the Ontario Ministry of the Environment, Conservation and Parks (MECP) NPC-300 Environmental Noise Guideline was used to assess environmental noise generated by transportation-related sources. There are three aspects to consider, which include the following:

i. Transportation source sound levels in indoor living areas (living rooms and sleeping quarters), which determines building façade elements (windows, exterior walls, doors) sound insulation design recommendations.
ii. Transportation source sound levels at the plane of the window, which determines air-conditioning and ventilation system recommendations and associated warning clauses which inform the future occupants that windows and doors must be closed in order to meet the indoor sound level criteria.
iii. Transportation source sound levels in Outdoor Living Areas (OLAs), which determines OLA noise mitigation and related warning clause recommendations.

Road and Rail

Indoor Sound Level Criteria

For assessing sound originating from transportation sources, NPC-300 defines sound level criteria as summarized in **Table 1** for indoor areas of sensitive uses. The specified values are maximum sound levels and apply to the indicated indoor spaces with the windows and doors closed.

Table 1: Indoor Sound Level Criteria for Road and Rail Sources

Type of Space	Source	Sound Level Criteria (Indoors)	
		Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h
Living Quarters Examples: Living, dining and den areas of residences, hospitals, nursing homes, schools and daycare centres	**Road**	45 dBA	
	Rail	40 dBA	
Sleeping Quarters	**Road**	45 dBA	40 dBA
	Rail	40 dBA	35 dBA

NPC-300 also provides guidelines for acceptable indoor sound levels that are extended to land uses and developments which are not normally considered noise sensitive. The guideline sound level criteria presented in **Table 2** are provided to inform good-practice design objectives.

Table 2: Supplementary Indoor Sound Level Criteria for Road and Rail Sources

Type of Space	Source	Sound Level Criteria (Indoors)	
		Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h
General offices, reception areas, retail stores, etc.	**Road**	50 dBA	-
	Rail	45 dBA	-
Theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms, etc.	**Road**	45 dBA	-
	Rail	40 dBA	-
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	**Road**	-	40 dBA
	Rail	-	35 dBA
Sleeping quarters of hotels/motels	**Road**	-	45 dBA
	Rail	-	40 dBA

Outdoor Living Areas (OLAs)

Outdoor Living Areas (OLAs) would include outdoor areas intended and designed for the quiet enjoyment of the outdoor environment and which are readily accessible from the building.

OLAs may include any common outdoor amenity spaces associated with a multi-unit residential development (e.g. courtyards, roof-top terraces), and/or private backyards and terraces with a minimum depth of 4m provided they are the only outdoor living area for the occupant. The sound level criteria for outdoor living areas is summarized in **Table 3**.

Table 3: Sound Level Criteria – Outdoor Living Area

Assessment Location	Sound Level Criteria (Outdoors)	
	Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h
Outdoor Living Area (OLA) (Combined Road and Rail)	55 dBA	-

Outdoor and Plane of Window Sound Levels

In addition to the sound level criteria, noise control measures and requirements for ventilation and warning clauses requirements are recommended for residential land-uses based on predicted transportation source sound levels incident in the plane of window at bedrooms and living/dining rooms, and/or at outdoor living areas. These recommendations are summarized in **Table 4** below.

Table 4: Ventilation, Building Component, and Warning Clauses Recommendations for Road/Rail Sources

Assessment Location	Transportation Sound Level (Outdoors)		Recommendations
	Daytime $L_{eq,16\text{-}hr}$ 07:00h – 23:00h	Nighttime $L_{eq,8\text{-}hr}$ 23:00h – 07:00h	
Plane of Window (Road)	> 65 dBA	> 60 dBA	Installation of air conditioning to allow windows to remained closed. The sound insulation performance of building components must be specified and designed to meet the indoor sound level criteria. Warning clause "Type D" is recommended.
	> 55 dBA	> 50 dBA	Applicable for low and medium density development: Forced-air ventilation system to allow for the future installation of air-conditioning. Warning clause "Type C" is recommended. Applicable for high density development: Air conditioning to allow windows to remained closed. Warning clause "Type D" is recommended.
Plane of Window (Rail [1, 2])	> 60 dBA	> 55 dBA	The acoustical performance of building façade components should be specified such that the indoor sound level limits are predicted to be achieved. Warning clause "Type D" is recommended.
	> 60 dBA ($L_{eq,\ 24hr}$) and < 100m from tracks		Exterior walls consisting of a brick veneer or masonry equivalent for the first row of dwellings. Warning clause "Type D" is recommended.
Outdoor Living Area (Combined Road and Rail [3])	≤ 60 dBA > 55 dBA	-	If sound levels are predicted to exceed 55 dBA, but are less than 60 dBA, noise controls may be applied to reduce the sound level to 55 dBA. If noise control measures are not provided, a warning clause "Type A" is recommended.
	> 60 dBA	-	Noise controls (barriers) should be implemented to meet the 55 dBA criterion. If mitigation is not feasible to meet the 55 dBA criterion for technical, economic or administrative reasons, an exceedance of 5 dB may be acceptable (to a maximum sound level of 60 dBA). In this case a warning clause "Type B" would be recommended.

Note(s):

1. Whistle noise is included (if applicable) in the determination of the sound level at the plane of window.
2. Some railway companies (e.g. CN, CP) may require that the exterior walls include a brick veneer or masonry equivalent for the façade facing the railway line, regardless of the sound level.
3. Whistle noise is not included in the determination of the sound level at the OLA.

Rail Layover Sites

NPC-300 provides a sound level limit for rail layover sites to be the higher of the background sound level or 55 dBA $L_{eq,1\text{-}hr,}$ for any one-hour period.

Rail Vibration Criteria

An assessment of rail vibration is generally recommended for developments within 75m of a rail corridor or rail yard, and adjacent to or within a setback of 15m of a transit (subway or light-rail) rail line.

The generally accepted vibration criterion for sensitive land-uses is the threshold of perception for human exposure to vibration, being a vibration velocity level of 0.14 mm/s RMS in any one-third octave band centre frequency in the range of 4 Hz to 200 Hz.

This vibration criterion is based on a one-second exponential time-averaged maximum hold root-mean-square (RMS) vibration velocity level and is consistent with the Railway Associations of Canada (RAC, 2013) guideline, the U.S. Federal Transit Authority (FTA, 2018) criterion for residential land-uses, the Toronto Transit Commission (TTC) guidelines for the assessment of potential vibration impact of future expansion (MOEE/TTC, 1993).

Aircraft

Land-use compatibility in the vicinity of airports is addressed in Ministry of the Environment, Conservation, and Parks (MECP) Guideline NPC-300 (MOE, 2013). The guideline provides recommendations for ventilation, and noise control for different Noise Exposure Forecast (NEF) values, which would be based on NEF contour maps available from the airport authority. The NEF values can be expressed as $L_{A,eq,24hr}$ sound levels by using the expression NEF = $L_{Aeq,24hr}$ -32 dBA.

Table 5: Indoor Sound Level Criteria for Aircraft Sources

Assessment Location	Indoor Sound Level Criteria NEF ($L_{eq,\ 24hr}$) [1]
Living/dining/den areas of residences, hospitals, schools, nursing/retirement homes, daycare centres, etc.	NEF- 5 (37 dBA)
Sleeping quarters	NEF-0 (32 dBA)

NPC-300 also provides guidelines for acceptable indoor sound levels that are extended to land uses and developments which are not normally considered noise sensitive. The guideline sound level criteria presented in **Table 6** are provided to inform good-practice design objectives.

Table 6: Supplementary Indoor Sound Level Criteria for Aircraft Sources

Assessment Location	Indoor Sound Level Criteria[1]
General offices, reception areas, retail stores, etc.	NEF-15 (47 dBA)
Individual or semi-private offices, conference rooms, etc.	NEF-10 (42 dBA)
Sleeping quarters of hotels/motels, theatres, libraries, places of worship, etc.	NEF-5 (37 dBA)

Table 7: NPC-300 Sound Level Criteria for Aircraft (Outdoors)

Assessment Location	Outdoor Sound Level Criteria[1]
Outdoor areas, including OLA	NEF-30 (62 dBA)

Table 8: Ventilation, Building Component, and Warning Clauses Recommendations for Aircraft Sources

Assessment Location	Aircraft Sound Level	NPC-300 Requirements
	NEF ($L_{EQ,24\text{-}hr}$)	
Outdoors	≥NEF 30	Air conditioning to allow windows to remained closed. The sound insulation performance of building components must be specified and designed to meet the indoor sound level criteria. Warning clauses "Type D" and "Type B" are recommended.
	< NEF 30 ≥ NEF 25	The sound insulation performance of building components must be specified and designed to meet the indoor sound level criteria. Applicable for low and medium density development: Forced-air ventilation system to allow for the future installation of air-conditioning. Warning clause "Type C" is recommended. Applicable for high density development: Air conditioning to allow windows to remained closed. Warning clause "Type D" is recommended.
	< NEF 25	Further assessment not required

Stationary Sources

NPC-300 Sound Level Criteria – Stationary Sources

Guidance from the MECP NPC-300 Environmental Noise Guideline is used to assess environmental noise generated by stationary sources, for example industrial and commercial facilities.

Noise from stationary sources is treated differently from transportation sources and requires sound levels be assessed for the predictable worst-case one-hour average sound level (L_{eq}) for each period of the day. For assessing sound originating from stationary sources, NPC-300 defines sound level criteria for two types of Points of Reception (PORs): outdoor and plane of window.

The assessment criteria for all PORs is the higher of either the exclusion limit per NPC-300 or the minimum background sound level that occurs or is likely to occur at a POR. The applicable exclusion limit is determined based on the level of urbanization or "Class" of the area. The NPC-300 exclusion limits for continuously operating stationary sources are summarized in **Table 9**.

Table 9: NPC-300 Exclusion Limits – Continuous and Quasi-Steady Impulsive Stationary Sources (LAeq-1hr)

Time Period	Class 1 Area		Class 2 Area		Class 3 Area		Class 4 Area	
	Outdoor	Plane of Window	Outdoor	Plane of Window	Outdoor	Plane of Window	Outdoor	Plane of Window
Daytime 0700-1900h	50 dBA	50 dBA	50 dBA	50 dBA	45 dBA	45 dBA	55 dBA	60 dBA
Evening 1900-2300h	50 dBA	50 dBA	45 dBA	50 dBA	40 dBA	40 dBA	55 dBA	60 dBA
Nighttime 2300-0700h	--	45 dBA	--	45 dBA	--	40 dBA	--	55 dBA

Note(s):

1. The applicable sound level criterion is the background sound level or the exclusion limit, whichever is higher.
2. Class 1, 2 and 3 sound level criteria apply to a window that is assumed to be open.
3. Class 4 area criteria apply to a window that is assumed closed. Class 4 area requires formal designation by the land-use planning authority.
4. Sound level criteria for emergency backup equipment (e.g. generators) operating in non-emergency situations such as testing or maintenance are 5 dB greater than the applicable sound level criteria for stationary sources.

For impulsive sound, other than quasi-steady impulsive sound, from a stationary source, the sound level criteria at a POR is expressed in terms of the Logarithmic Mean Impulse Sound Level (L_{LM}), and is summarized in **Table 10**.

Table 10: NPC-300 Exclusion Limits – Impulsive Stationary Sources (L_{LM})

Time Period	Number of Impulses in Period of One-Hour	Class 1 and 2 Areas		Class 3 Areas		Class 4 Areas	
		Outdoor	Plane of Window	Outdoor	Plane of Window	Outdoor	Plane of Window
Daytime (0700-2300h)	9 or more	50 dBAI	50 dBAI	45 dBAI	45 dBAI	55 dBAI	60 dBAI
Nighttime (2300–0700h)		-	45 dBAI	-	40 dBAI	-	55 dBAI
Daytime (0700-2300h)	7 to 8	55 dBAI	55 dBAI	50 dBAI	50 dBAI	60dBAI	65 dBAI
Nighttime (2300–0700h)		-	50 dBAI	-	45 dBAI	-	60 dBAI
Daytime (0700-2300h)	5 to 6	60 dBAI	60 dBAI	55 dBAI	55 dBAI	65 dBAI	70 dBAI
Nighttime (2300–0700h)		-	55 dBAI	-	50 dBAI	-	65 dBAI
Daytime (0700-2300h)	4	65 dBAI	65 dBAI	60 dBAI	60 dBAI	70 dBAI	75 dBAI
Nighttime (2300–0700h)		-	60 dBAI	-	55 dBAI	-	70 dBAI
Daytime (0700-2300h)	3	70 dBAI	70 dBAI	65 dBAI	65 dBAI	75 dBAI	80 dBAI
Nighttime (2300–0700h)		-	65 dBAI	-	60 dBAI	-	75 dBAI
Daytime (0700-2300h)	2	75 dBAI	75 dBAI	70 dBAI	70 dBAI	80 dBAI	85 dBAI
Nighttime (2300–0700h)		-	70 dBAI	-	65 dBAI	-	80 dBAI
Daytime (0700-2300h)	1	80 dBAI	80 dBAI	75 dBAI	75 dBAI	85 dBAI	90 dBAI
Nighttime (2300–0700h)		-	75 dBAI	-	70 dBAI	-	85 dBAI

Note(s):

1. The applicable sound level criterion is the background sound level or the exclusion limit, whichever is higher.

D-Series Guidelines

The MECP D-series guidelines (MOE, 1995) provide direction for land use planning to maximize compatibility of industrial uses with adjacent land uses. The goal of Guideline D-6 is to minimize encroachment of sensitive land uses on industrial facilities and vice versa, in order to address potential incompatibility due to adverse effects such as noise, odour and dust.

For each class of industry, the guideline provides an estimate of potential influence area and states that this influence area shall be used in the absence of the recommended technical studies. Guideline D-6 also recommends a minimum separation distance between each class of industry and sensitive land uses (see **Table 11**). Section 4.10 of D-6 identifies exceptional circumstances with respect to redevelopment, infill and mixed-use areas. In these cases, the guideline suggests that separation distances at, or less than, the recommended minimum separation distance may be acceptable if a justifying impact assessment is provided.

Table 11: Summary of Guideline D-6

Industry Class	Definition	Potential Influence Area	Recommended Minimum Separation Distance (property line to property line)
Class I	Small scale, self-contained, daytime only, infrequent heavy vehicle movements, no outside storage.	70 m	20 m
Class II	Medium scale, outdoor storage of wastes or materials, shift operations and frequent heavy equipment movement during the daytime.	300 m	70 m
Class III	Large scale, outdoor storage of raw and finished products, large production volume, continuous movement of products and employees during daily shift operations.	1000 m	300 m

Guideline D-6 provides criteria for classifying industrial land uses, based on their outputs, scale of operations, processes, schedule and intensity of operations. **Table 12** provides the classification criteria and examples.

Table 12: Guideline D-6 Industrial Categorization Criteria

Criteria	Class I	Class II	Class III
Outputs	• Sound not audible off property • Infrequent dust and/ or odour emissions and not intense • No ground-borne vibration	• Sound occasionally audible off property • Frequent dust and/ or odour emissions and occasionally intense • Possible ground-borne vibration	• Sound frequently audible off property • Persistent and intense dust and/ or odour emissions • Frequent ground-borne vibration
Scale	• No outside storage • Small scale plant or scale is irrelevant in relation to all other criteria	• Outside storage permitted • Medium level of production	• Outside storage of raw and finished products • Large production levels
Process	• Self-contained plant or building which produces / stores a packaged product • Low probability of fugitive emissions	• Open process • Periodic outputs of minor annoyance • Low probability of fugitive emissions	• Open process • Frequent outputs of major annoyances • High probability of fugitive emissions
Operation / Intensity	• Daytime operations only • Infrequent movement of products and/or heavy trucks	• Shift operations permitted • Frequent movements of products and/or heavy trucks with majority of movements during daytime hours	• Continuous movement of products and employees • Daily shift operations permitted
Examples	• Electronics Manufacturing • Furniture refinishing • Beverage bottling • Auto parts • Packaging services • Dairy distribution • Laundry and linen supply	• Magazine printing • Paint spray booths • Metal command • Electrical production • Dairy product manufacturing • Feed packing plant	• Paint and varnish manufacturing • Organic chemicals manufacturing • Breweries • Solvent recovery plant • Soap manufacturing • Metal manufacturing

APPENDIX C

Dundas St W @ Neyagawa Blvd

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

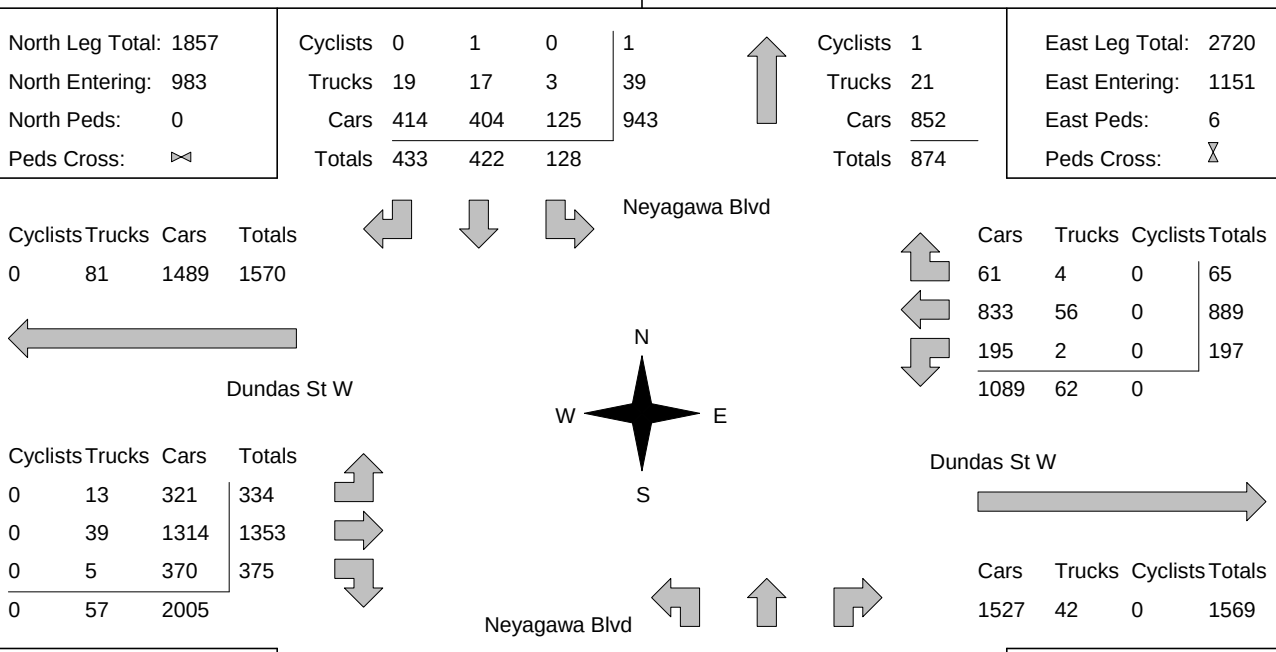
Municipality: Halton Region
Site #: 1000890100
Intersection: Dundas St W & Neyagawa Blvd
TFR File #: 19
Count date: 17-Apr-2024

Weather conditions:
Cloudy/Wet

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Dundas St W runs W/E



Comments

Dundas St W @ Neyagawa Blvd

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 14:00:00

One Hour Peak
From: 11:45:00
To: 12:45:00

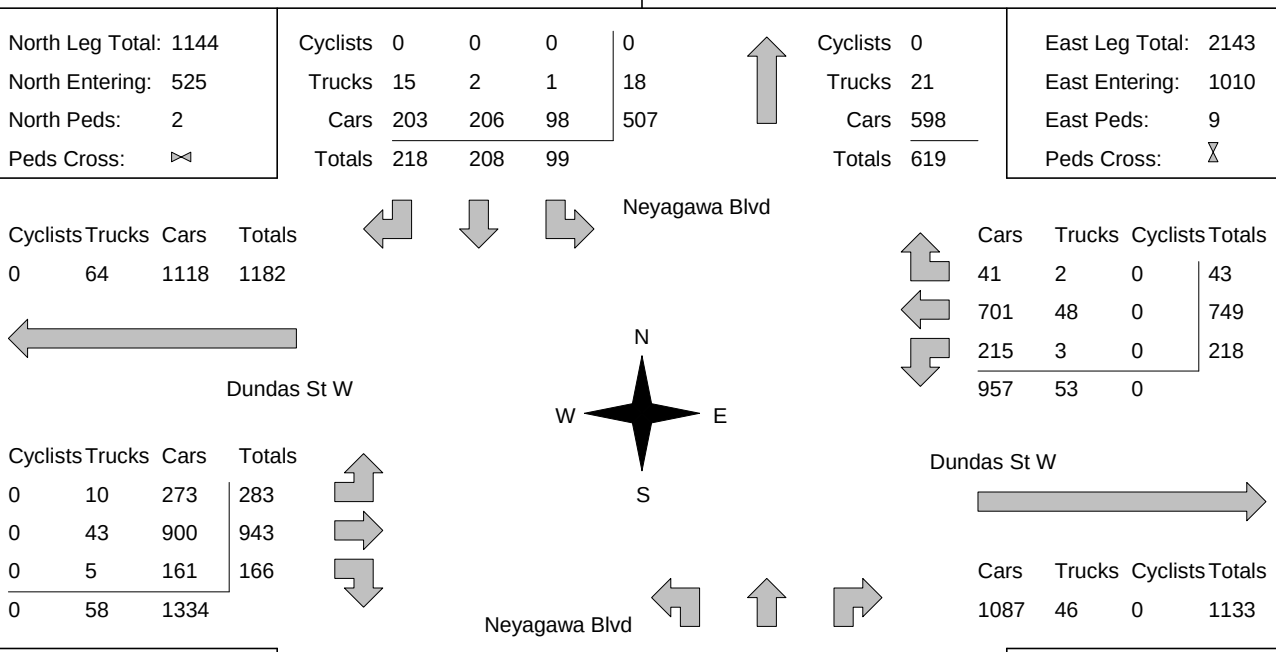
Municipality: Halton Region
Site #: 1000890100
Intersection: Dundas St W & Neyagawa Blvd
TFR File #: 19
Count date: 17-Apr-2024

Weather conditions:
Cloudy/Wet

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Dundas St W runs W/E



Comments

Dundas St W @ Neyagawa Blvd

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 15:30:00
To: 16:30:00

Municipality: Halton Region
Site #: 1000890100
Intersection: Dundas St W & Neyagawa Blvd
TFR File #: 19
Count date: 17-Apr-2024

Weather conditions:
Cloudy/Wet

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Dundas St W runs W/E

North Leg Total: 1806
North Entering: 1028
North Peds: 8
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	18	7	3	28
Cars	517	373	110	1000
Totals	535	380	113	

Cyclists	1
Trucks	21
Cars	756
Totals	778

East Leg Total: 3108
East Entering: 1701
East Peds: 12
Peds Cross: ⧖

Neyagawa Blvd

Cyclists	Trucks	Cars	Totals
0	73	2179	2252

Dundas St W

Cars	Trucks	Cyclists	Totals
85	2	0	87
1376	45	0	1421
191	2	0	193
1652	49	0	

N
W E
S

Cyclists	Trucks	Cars	Totals
0	6	214	220
0	33	1158	1191
0	3	272	275
0	42	1644	

Dundas St W

Cars	Trucks	Cyclists	Totals
1368	39	0	1407

Neyagawa Blvd

Peds Cross: ⧖
West Peds: 5
West Entering: 1686
West Leg Total: 3938

Cars	836
Trucks	12
Cyclists	0
Totals	848

Cars	286	457	100	843
Trucks	10	13	3	26
Cyclists	0	1	0	1
Totals	296	471	103	

Peds Cross: ⋈
South Peds: 3
South Entering: 870
South Leg Total: 1718

Comments

Dundas St W @ Neyagawa Blvd

Total Count Diagram

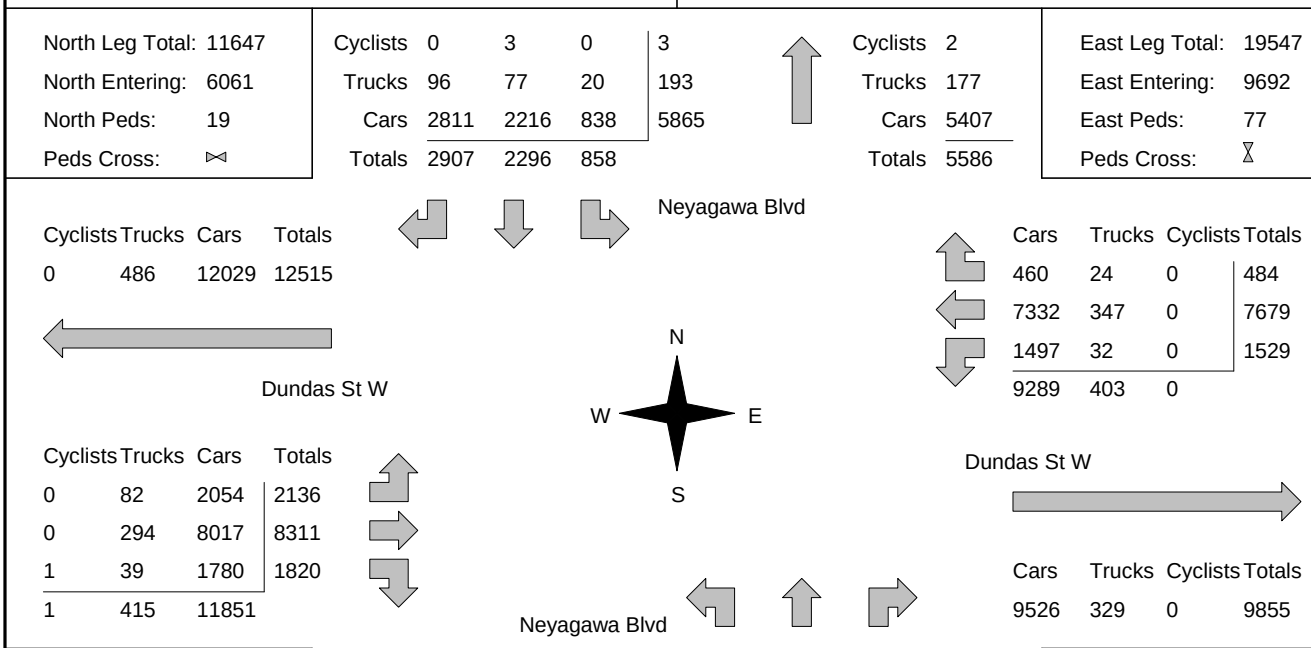
Municipality: Halton Region
Site #: 1000890100
Intersection: Dundas St W & Neyagawa Blvd
TFR File #: 19
Count date: 17-Apr-2024

Weather conditions:
Cloudy/Wet

Person(s) who counted:
Pyramid Traffic Inc

**** Signalized Intersection ****

Major Road: Dundas St W runs W/E



Comments

APPENDIX D

NOISE MITIGATION GUIDANCE

Acoustic/Noise Barrier

Generally, noise controls to attenuate transportation sound levels at Outdoor Living Areas (OLAs) would consist of the implementation of acoustic/noise barriers with materials that would meet the guidance included in NPC-300, for example:

- A wall, berm, wall/berm combination or similar structure, used as a noise control measure, and high enough to break the line-of-sight between the source and the receptor.
- The minimum surface density (face weight) is 20 kg/m^2
    - Many materials could satisfy the surface density requirement, e.g. wood, glass, concrete, Plexiglas, Acrylite.
    - The required thickness can be determined by dividing the 20 kg/m^2 face weight by the material density (kg/m^3). Typically, this would imply:
        - 50 mm (2") thickness of wood
        - 13 mm (0.5") thickness of lighter plastic (like Plexiglas or PVC)
        - 6 mm (0.25") thickness of heavier material (like aluminum, glass, concrete)
- The barrier should be structurally sound, appropriately designed to withstand wind and snow load, and constructed without cracks or surface gaps. Joints between panels may need to be overlapped to ensure surfaces are free of gaps, particularly for wood construction.
- Any gaps under the barrier that are necessary for drainage purposes should be minimized and localized, so that the acoustical performance of the barrier is maintained.
- If a sound absorptive face is to be included in the barrier design, the minimum noise reduction coefficient is recommended to be NRC 0.7.

Building Ventilation and Air Conditioning

The use of air conditioning itself is not a noise control measure; however, it allows for windows and doors to remain closed, thereby reducing the indoor sound levels.

NPC-300 provides the following guidance with respect to implementation of building ventilation and air conditioning:

a. the noise produced by the proposed ventilation system in the space served does not exceed 40 dBA. In practice, this condition usually implies that window air conditioning units are not acceptable;
b. the ventilation system complies with all national, provincial and municipal standards and codes;
c. the ventilation system is designed by a heating and ventilation professional; and
d. the ventilation system enables the windows and exterior doors to remain closed.

Air conditioning systems also need to comply with Publication NPC-216, and/or any local municipal noise by-law that has provisions relating to air conditioning equipment.

APPENDIX E

WARNING CLAUSES

Warning clauses are recommended to be included on all development agreements, offers of purchase and agreements of purchase and sale or lease. Warning clauses may be used individually or in combination.

The following warning clauses are recommended based on the applicable guidelines; however, wording may be modified/customized during consultation with the planning authority to best suit the proposed development:

Transportation Sources

NPC-300 Type A: Recommended to address surface transportation sound levels in OLAs if sound level is in the range of >55 dBA but ≤ 60 dBA, and noise controls have not been provided.

"Purchasers/tenants are advised that sound levels due to increasing road traffic (rail traffic) (air traffic) may occasionally 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."

NPC-300 Type B: Recommended to address surface transportation sound levels in OLAs if the sound level is in the range of >55 dBA but ≤ 60 dBA, and noise controls have been provided. Recommended to address outdoor aircraft sound levels ≥NEF 30.

"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 (rail traffic) (air 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."

NPC-300 Type C: Applicable for low and medium density developments only, recommended to address transportation sound levels at the plane of window.

"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."

NPC-300 Type D: Recommended to address transportation sound levels at the plane of window.

"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."

Proximity to Railway Line: Metrolinx/CN/CP/VIA Warning Clause for developments that are within 300 metres of the right-of-way

"Warning: [Canadian National Railway Company] [Metrolinx / GO] [Canadian Pacific Railway Company] [VIA Rail Canada Inc.] or its assigns or successors in interest has or have a right-of-way within 300 metres from the land the subject hereof. There may be alterations to or expansions of the rail facilities on such right-of-way in the future including the possibility that the railway or its assigns or successors as aforesaid may expand its operations, which expansion may affect the living environment of the residents in the vicinity, notwithstanding the inclusion of any noise and vibration attenuating measures in the design of the development and individual dwelling(s). CNR/Metrolinx/GO/CPR/VIA will not responsible for any complaints or claims arising from use of such facilities and/or operations on, over or under the aforesaid right-of-way."

Stationary Sources

NPC-300 Type E: Recommended to address proximity to commercial/industrial land-use

"Purchasers/tenants are advised that due to the proximity of the adjacent industrial/commercial land-uses, noise from the industrial/commercial land-uses may at times be audible."

NPC-300 Type F: Recommended to for Class 4 Area Notification

"Purchasers/tenants are advised that sound levels due to the adjacent industry (facility) (utility) are required to comply with sound level limits that are protective of indoor areas and are based on the assumption that windows and exterior doors are closed. This dwelling unit has been supplied with a ventilation/air conditioning system which will allow windows and exterior doors to remain closed."