

# PRELIMINARY NOISE IMPACT STUDY

## “PORT COLBORNE RESIDENTIAL PROJECT” CITY OF PORT COLBORNE REGIONAL MUNICIPALITY OF NIAGARA

Prepared for:

Elite Cap Inds Holdings Inc.  
Elite Cap PC Holdings Inc.  
Elite P.C.M. Holdings Inc.  
Elite P.C.V. Holdings Inc.  
705 Main P.C. Holdings Inc.  
Elite Capital P.C. Developments Inc.  
Elite 869 Killaly Holdings Inc.  
102-3410 South Service Road  
Burlington, ON  
L7N 3T2

Prepared By:



Nicole Cleaver  
Noise Consultant

Reviewed By:



Frank Westaway  
Qualified Acoustical Consultant

February 2026

Our File No: 26-1003  
dBA Acoustical Consultants Inc.  
P.O. Box 99046  
Stoney Creek, ON  
Heritage Green  
L8J 2P7

## TABLE OF CONTENTS

EXECUTIVE BRIEF SUMMARY.....	Page 3
1.0 INTRODUCTION.....	Page 4
2.0 SITE DESCRIPTION.....	Page 4
3.0 NOISE IMPACT ASSESSMENT.....	Page 5
3.1 Noise Criteria.....	Page 5
3.2 Road Noise.....	Page 6
4.0 RECOMMENDATIONS-NOISE CONTROL.....	Page 8
4.1 Outdoor Living Areas.....	Page 8
4.2 Indoor Noise Levels.....	Page 9
5.0 VENTILATION / WARNING CLAUSES.....	Page 9
6.0 NOISE CONTROL REQUIREMENTS CONFIRMATION.....	Page 10
7.0 REGULATORY CONTEXT.....	Page 11
8.0 STATIONARY NOISE SOURCES.....	Page 11
8.1 Port Colborne Quarry Inc. – Pit 3 Expansion.....	Page 11
8.2 St. Therese Catholic Elementary School.....	Page 12
9.0 SUMMARY OF RECOMMENDATIONS.....	Page 12
10.0 CONCLUSIONS.....	Page 12
FIGURE 1 - Approximate Site Location	
FIGURE 2 - Site Plan	
FIGURE 3 - Receptor Locations	
FIGURE 4 – Approximate Noise Barrier Locations	
APPENDIX “A”	
MTO 2021 AADT Traffic Data – Main Street East	
City of Port Colborne AADT 2022	
Stamson Calculations	
Site Statistics	
Exterior Wall STC Ratings	

## **EXECUTIVE BRIEF SUMMARY**

This executive brief will address the noise findings, recommendations and conclusions relating to the attached preliminary noise study.

The noise study dated February 2026 attached, has appropriately forecasted the area traffic noise levels from Main Street East, Lorraine Road, and Killaly Street East, Port Colborne. The noise study addressed stationary noise (Port Colborne Quarry, Pumping Station, Fire Hall, etc..) that may impact the residential for OPA/ZBA application submission.

Area roadways impact the proposed development and specific site locations and will require noise mitigations by means of noise barriers. Once the dwelling location for each lot has been confirmed an updated noise impact study will be required. The stationary noise impact from the proposed Pumping Station and Fire Hall will require an updated noise study once building details are provided.

Relating to the Port Colborne Quarry, the noise study will be updated at site plan application to address the possible noise impact from the quarry on the proposed development. It should be noted that the Port Colborne quarry has made an environmental air and odour application to the MECP and Aggregate Resources Act, which includes in their applications the proposed development site location.

Prior to Site Plan Approval submission all area stationary noise sources will need to be updated on the noise study.

In conclusion, once the final dwelling locations have been determined an updated noise study will be required to confirm all noise barrier heights and locations, STC values for all windows, walls, and patio doors, and any noise mitigations measures if required for the Fire Hall and Pumping Station.

## 1.0 INTRODUCTION

dBA Acoustical Consultants Inc. has been retained to conduct a preliminary noise impact study for the proposed “Port Colborne Residential Project” located between Elizabeth Street, Main Street East, Lorraine Road and Killaly Street East in Port Colborne, ON.

The purpose of the noise study is to determine the noise impact for OPA/ZBA submission and traffic volumes for Main Street East (Highway 3) and Killaly Street East, and Elizabeth Street, as well as area stationary noise sources that may impact the residential development.

This study will detail noise impacts at the proposed development and recommend noise and vibration control measures necessary (if applicable) to meet Ministry of Environment Conservation and Parks (MECP) Publication NPC-300, Stationary & Transportation Sources-Approval & Planning guidelines, while satisfying the planning requirements of the City of Port Colborne, Regional Municipality of Niagara.

Vibration is considered as Port Colborne Quarries Inc. is located to the north of the proposed development area and will be discussed further in the report. Aircraft is not a concern as the development is located outside the NEF 25 contour of the area. See attached Figure 1 Site Location.

## 2.0 SITE DESCRIPTION

Proposed for the development are 98 single detached 45’ units, 538 single detached 34’ units, 622 single detached 27’ units, 383 Townhouses 20’ units and 362 back-to-back townhouses 21’ units for a total of 2003 units. There are also 2 commercial areas, an elementary school, a fire hall and a pumping station. These areas will require updated noise studies once the site plans have been finalized.

The proposed development location is between Elizabeth Street and Lorraine Road as well as between Killaly Street East, Main Street East (Highway 3). Snider Road and Lorraine Road will not have an acoustical impact on the proposed development due to low traffic volumes as noted in Appendix “A”.

To the north of the proposed development, over 300m away, is Port Colborne Quarries Inc. that will be addressed later in the noise study. To the northwest are a few small commercial businesses as well as a large medical building. Further northwest, west and south are 1-2 storey single family homes. To the east are a few single-family homes, but mostly vacant lands. Local area streets will not have an acoustical impact on the proposed development due to low speed limits, low traffic volumes, distance separation and shielding from existing dwellings. Area stationary noise sources cannot be addressed until the residential dwelling layouts have been finalized.

Main Street East, Killaly Street East and Elizabeth Street are the major road noise sources in the area. Main Street East is a two-lane roadway running east and west. The posted speed limit between Elizabeth Street and Snider Road is 70 km/hr. and increases to 80 km/hr. between Snider Road and Lorraine Road. Killaly Street East is a two-lane roadway running east and west. The speed limit is posted at 50 km/hr. between Elizabeth Street and Snider Road. There is a small portion near the school that is 40 km/hr. at certain times when flashing. The portion of Killaly Street East between Snider Road and Lorraine Road has a posted speed limit of 60 km/hr. See Site Plan in Figure 2. The site plan notes a 14m MTO setback along Main Street East and we have taken that setback into consideration when calculating our distances.

### 3.0 NOISE IMPACT ASSESSMENT

#### 3.1 NOISE CRITERIA

The MECP specifies limits for road and rail noise relative to new residential developments. The MECP Publication NPC-300, Stationary & Transportation Sources-Approval & Planning, specifies the criteria, summarized as follows:

TABLE 1 - Road Traffic Sound Levels Limits	
Time Period	Leq (dBA)
07:00 – 23:00 (16 hr.)	55 Outdoor Living area
07:00 – 23:00 (16 hr.)	55 Plane of Window
23:00 – 07:00 (8 hr.)	50 Plane of Bedroom window

*The OLA refers to an outdoor patio, a backyard, a terrace, or other area where outdoor passive recreation is expected to occur on the residential property. As this is considered a daytime use (07:00 - 23:00) noise levels are calculated at the upper storey bedroom window to represent nighttime (23:00 - 07:00) periods.*

Where noise levels estimated in the Outdoor Living Area (OLA) and at an upper storey window are equal to or less than the values listed in Table 1, no noise control measures are required.

Where noise levels exceed Table 1 values, the following action is required:

TABLE 2 – Noise Control Requirements		
Time Period	Noise Level Leq (dBA)	Action Required
07:00 - 23:00 Daytime (OLA)	56 to 60	Barrier or Warning Clause Type “A”
07:00 - 23:00 Daytime (OLA)	> 60	Barrier & Warning Clause Type “B”
07:00 – 23:00 Daytime (POW)	>55	Provision for A/C, Warning Clause “C”
07:00 – 23:00 Daytime (POW)	> 65	Central A/C, Warning Clause “D”
07:00 – 23:00 Daytime (POW)	> 65	Building Component Specification
23:00 to 07:00 Nighttime (POW)	> 50-60	Provision for A/C and Warning Clause Type “C”
23:00 to 07:00 Nighttime (POW)	> 60	Building Component Specification
	> 60	Central Air Conditioning and Warning Clause Type “D”

*Where nighttime noise levels exceed 60 dBA, building components must be designed to meet the following Table 3 indoor sound level limits.*

TABLE 3 - Indoor Road/Rail Sound Levels Limits		
Indoor Location	Leq(dBA)	
	Road	Rail
Living/Dining 7:00 – 23:00	45	40
Bedroom 23:00 - 07:00	40	35

### 3.2 ROAD NOISE

Road traffic noise levels were calculated for Main Street East, Killaly Street East and Elizabeth Street, the main road noise sources relative to the proposed site development. MTO traffic data was sourced from the MTO Traffic Volumes 2021 website for the Average Daily and is presented in Appendix “A”. The City of Port Colborne AADT traffic data was sourced from Remington Lee and results were provided via email. The MECF computer program STAMSON version 5.04 was used to carry out prediction calculations (See Appendix “A”). Traffic data is summarized in Table 4.

The daytime/nighttime volume ratio relative to Main Street East 3 is typically calculated using 24-hour noise level as required by the MTO. The percentage of annual growth for Main Street East was forecasted at 2% over 25 years until the year 2036. Truck volumes were factored at 2% medium and 2% heavy of the total vehicle volumes.

The daytime/nighttime volume ratio relative to Killaly Street East and Elizabeth Street are typically calculated using a 90/10 split as required by the MECF. The percentage of annual growth was figured at 2% over 24 years. The AADT (Annual Average Daily Traffic) volumes were used reflective of the worst-case scenario. Truck volumes were factored at 2% medium and 2% heavy of the total vehicle volumes for Killaly Street East and Elizabeth Street.

TABLE 4 – Future Road Traffic Volumes (2036)			
Main Street East (2021)	AADT 11730 Vehicles		
	Cars	Medium Trucks	Heavy Trucks
24 hr	11261	235	235
Killaly Street East (2022) Snider to Lorraine	AADT 3574 Vehicles		
	Cars	Medium Trucks	Heavy Trucks
Day	3089	64	64
Night	343	7	7
Killaly Street East (2022) Snider to Elizabeth	AADT 6092 Vehicles		
	Cars	Medium Trucks	Heavy Trucks
Day	5263	110	110
Night	585	12	12
Elizabeth Street (2022)	AADT 8937 Vehicles		
	Cars	Medium Trucks	Heavy Trucks
Day	7721	161	161
Night	858	18	18

Table 5A summarizes the “free field” traffic noise prediction results of Main Street East and modeled at fifteen (15) receptor locations representative of 1<sup>st</sup> & 3<sup>rd</sup> floors and the OLA’s.

TABLE 5A - Predicted Traffic Noise Levels-Free Field (Killaly Street East)		
Location – Main Street East	L <sub>eq</sub> (dBA)	
	07:00 - 23:00	23:00 - 07:00
R1 – North Façade 1 <sup>st</sup> Floor (1.5m)	64 dBA	64 dBA
R2 – North Façade 3 <sup>rd</sup> Floor (7.5m)	64 dBA	64 dBA
R3 – North Façade OLA	64 dBA	N/A
R3A – North Façade OLA Mitigated 3m	53 dBA	N/A
R4 – North Façade 1 <sup>st</sup> Floor (1.5m)	60 dBA	60 dBA
R5 – North Façade 3 <sup>rd</sup> Floor (7.5m)	60 dBA	60 dBA
R6 – North Façade OLA house as barrier	50 dBA	N/A
R7 – North Façade 1 <sup>st</sup> Floor (1.5m)	65 dBA	65 dBA
R8 – North Façade 3 <sup>rd</sup> Floor (7.5m)	65 dBA	65 dBA
R9 – North Façade OLA	65 dBA	N/A
R9A – North Façade OLA mitigated 3m	54 dBA	N/A
R10 – North Façade 1 <sup>st</sup> Floor (1.5m)	52 dBA	52 dBA
R11 – North Façade 3 <sup>rd</sup> Floor (7.5m)	54 dBA	54 dBA
R12 – North Façade OLA	52 dBA	N/A
R13 – North Façade 1 <sup>st</sup> Floor (1.5m)	53 dBA	53 dBA
R14 – North Façade 3 <sup>rd</sup> Floor (7.5m)	55 dBA	55 dBA
R15 – North Façade OLA	53 dBA	N/A

Table 5B summarizes the “free field” traffic noise prediction results of Killaly Street East modeled at nine (9) receptor locations representative of 1<sup>st</sup> & 3<sup>rd</sup> floors and the OLA’s.

TABLE 5B - Predicted Traffic Noise Levels-Free Field		
Location – Killaly Street East	L <sub>eq</sub> (dBA)	
	07:00 - 23:00	23:00 - 07:00
R16 – South Façade 1 <sup>st</sup> Floor (1.5m)	53 dBA	46 dBA
R17 – South Façade 3 <sup>rd</sup> Floor (7.5m)	53 dBA	46 dBA
R18 – South Façade OLA	53 dBA	N/A
R19 – South Façade 1 <sup>st</sup> Floor (1.5m)	60 dBA	53 dBA
R20 – South Façade 3 <sup>rd</sup> Floor (7.5m)	60 dBA	53 dBA
R21 – South Façade OLA	59 dBA	N/A
R21A – South Façade OLA Mitigated 2.43	50 dBA	N/A
R22 – South Façade 1 <sup>st</sup> Floor (1.5m)	60 dBA	54 dBA
R23 – South Façade 3 <sup>rd</sup> Floor (7.5m)	60 dBA	54 dBA
R24 – South Facade OLA	59 dBA	N/A
R24A – OLA Mitigated 2.43m	51 dBA	N/A

Table 5C summarizes the “free field” traffic noise prediction results of Elizabeth Street modeled at three (3) receptor locations representative of 1<sup>st</sup> & 3<sup>rd</sup> floors and the OLA’s.

TABLE 5B - Predicted Traffic Noise Levels-Free Field		
Location – Elizabeth Street	L <sub>eq</sub> (dBA)	
	07:00 - 23:00	23:00 - 07:00
R25 – West Façade 1 <sup>st</sup> Floor (1.5m)	60 dBA	53 dBA
R26 – West Façade 3 <sup>rd</sup> Floor (7.5m)	60 dBA	54 dBA
R27 – West Façade OLA	58 dBA	N/A
R27A – West Façade OLA Mitigated 2.43m	50 dBA	N/A

## 4.0 RECOMMENDATIONS - NOISE CONTROL

### 4.1 OUTDOOR LIVING AREAS

Calculated noise levels exceed the 55 dBA criteria as outlined in Table 1 for R3, R9, R21, R24 & R27. R3 & R9 will require a 3m noise barrier and R21, R24 & R27 will require a 2.43m noise barrier. Noise Barrier locations in Figure 4 are approximate only as the residential dwelling layouts have not been finalized. This will need to be updated once that information is available.

In compliance with MECP guidelines, a noise barrier must have a minimum surface density of 20kg/m<sup>2</sup> and be designed and constructed without cracks or gaps. Any gaps under the noise barrier that are necessary for drainage purposes must be minimized (2”) and localized and must not deteriorate acoustical performance.

## 4.2 INDOOR NOISE LEVELS

Specific building components (walls, windows, doors etc.) are required and confirmed using the STC (Sound Transmission Class) method and are summarized in Table 6 following, with minimum window, door and wall construction specified throughout the development. The STC values are calculated for each room type, with a minimum of 2 components and based on window to floor ratios of 80% for noise sensitive areas.

TABLE 6 –Door and Window Construction Requirements			
LOCATION	Acoustically Tested Windows STC	Patio Door Construction	Exterior Walls STC
R1 – R15 Bedrooms	Example STC-32	Example STC-32	Example STC-34
Living rooms	STC-32	STC-32	STC-34
R16 – R24 Bedrooms	Example OBC	Example OBC	Example OBC
Living rooms	OBC	OBC	OBC
R25 – R27 Bedrooms	Example OBC	Example OBC	Example OBC
Living rooms	OBC	OBC	OBC

## 5.0 VENTILATION / WARNING CLAUSES

Ventilation and Warning Clause requirements are presented in Table 7 following. It is recommended that the appropriate Warning Clauses be inserted into all Offers and Agreements of Purchase and Sale or Lease. Please note that this is a preliminary noise study and these requirements may change once the residential dwelling layouts have been finalized.

TABLE 7 – Ventilation and Warning Clause Requirements		
LOCATION	VENTILATION	WARNING CLAUSE
R1 – R15	Central Air Conditioning	Type “D”
R16 – R24	Provisions for Air Conditioning	Type “C”
R25 – R27	Provisions for Air Conditioning	Type “C”

### TYPE C: R16 – R27

“This dwelling unit had been fitted with a forced air heating system and the ducting, etc. was sized to accommodate central air conditioning. Installation of central air conditioning by the occupant will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the Municipality’s and the MECP’s noise criteria. (Note: The location and installation of the outdoor air conditioning device should be done so as to comply with noise criteria of MOE Publication NPC-216, Residential Air Conditioning Devices and thus minimize the noise impacts both on and in the immediate vicinity of the subject property.)”

**TYPE D: R1 – R15**

“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 Municipality’s and the MECP’s noise criteria.”

**6.0 NOISE CONTROL REQUIREMENTS CONFIRMATION**

The following Table 8 summarizes the highest roadway noise levels (Table 5) for the daytime/nighttime hours and recommends air conditioning, warning clauses, and indoor noise level limits criteria for R1 – R15. Provisions for Air Conditioning, Warning Clauses and OBC. Table 8 shows that with the Warning Clause and STC requirements listed below the development will meet the minimum MECP required indoor noise level limits.

**TABLE 8 - Noise Control Requirements Confirmation – Main Street East (R1 - R15)**

Time Period	Predicted Impact, Leq (dBA)	A/C Req.	Warning Clause	Indoor Limits, Leq (dBA)		Window / Floor Area Ratio (%)	Wall / Floor Area Ratio (%)	STC Requirements			
				Living, Dining, and Den Areas	Sleeping Quarters			Living, Dining, and Den Areas		Sleeping Quarters	
				Road	Road			Window	Wall	Window	Wall
Day	66	Y	D	45	45	80%	100%	32	34	32	34
Night	59	P	C	45	40	80%	100%	24	26	30	32

The daytime A/C requirements and Warning Clauses supersede the nighttime requirements.

**TABLE 8 - Noise Control Requirements Confirmation - Killaly Street East (R16 – R24)**

Time Period	Predicted Impact, Leq (dBA)	A/C Req.	Warning Clause	Indoor Limits, Leq (dBA)		Window / Floor Area Ratio (%)	Wall / Floor Area Ratio (%)	STC Requirements			
				Living, Dining, and Den Areas	Sleeping Quarters			Living, Dining, and Den Areas		Sleeping Quarters	
				Road	Road			Window	Wall	Window	Wall
Day	60	P	C	45	45	80%	100%	26	28	26	28
Night	54	P	C	45	40	80%	100%	20	22	24	26

P = Provisions for Air Conditioning STC Requirements are OBC

**TABLE 8 - Noise Control Requirements Confirmation – Elizabeth Street (R25- R27)**

Time Period	Predicted Impact, Leq (dBA)	A/C Req.	Warning Clause	Indoor Limits, Leq (dBA)		Window / Floor Area Ratio (%)	Wall / Floor Area Ratio (%)	STC Requirements			
				Living, Dining, and Den Areas	Sleeping Quarters			Living, Dining, and Den Areas		Sleeping Quarters	
				Road	Road			Window	Wall	Window	Wall
Day	60	P	C	45	45	80%	100%	26	28	26	28
Night	54	P	C	45	40	80%	100%	20	22	24	26

P = Provisions for Air Conditioning STC requirements are OBC.

## 7.0 REGULATORY CONTEXT

The MECP Publication NPC-300, Stationary & Transportation Sources-Approval & Planning guidelines defines a point of reception/receptor as “any point on the premises of a person where the sound or vibration originating from other than those premises are received.”

The point of reception may be located on any of the following, or zoned for future use, premises including but not limited to the following: residential homes, retirement homes, etc.

The areas surrounding the proposed plant/warehouse building are indicative of a “Class 2 Area” as defined in MECP Publication NPC-300, Stationary & Transportation Sources-Approval & Planning guidelines.

The applicable sound limits are the higher of:

- The existing ambient sound level; or
- The minimum values of Table 8.

*No restrictions apply to stationary sources if the one-hour equivalent sound exposure ( $L_{eq}$ ) is lower than the levels in the following Table 8.*

Main Street East vehicular traffic is the predominate existing ambient (background) noise in this area and has a higher noise level than the following Table 8, Minimum Sound Level Limits.

TABLE 8 Minimum Sound Level Limits (Class 2 Area)	
Time Period	$L_{eq}$ (dBA)
07:00 - 19:00	50
19:00 - 23:00	50
23:00 – 07:00	45

## 8.0 STATIONARY NOISE SOURCES

### 8.1 PORT COLBORNE QUARRY INC. PIT 3 EXTENSION

The Port Colborne Quarry is located at Part of Lot 17, 18, and 19, Concession 2, (formally Township of Humberstone) and Plan 59R-16702 and Owned and Operated by Rankin Construction Inc. Many previous documents had been issued to various agencies for review of technical reports relating to the Pit 3 extension. On January 21, 2022, a Technical Memorandum from Mr. Tomasz Nowak of Golder Inc., an addendum to the December 2020 Noise Impact Assessment Report. In review of all the documents and reports attached to the Port Colborne Quarries for Phase 2 and Phase 3, dBA staff have concluded that these technical reports, including noise and vibration reports, which form part of the have been approved by City of Port Colborne and the Municipality and Region.

The Provincial License application for an aggregate license under the Aggregate Resources Act (ARA) is being considered by the Ministry of Natural Resources and Forestry (MNR). As of April 4, 2025, the application status was still “being Considered” with no Change. In summary, the necessary municipal and provincial approvals are still pending or under appeal, meaning a final, definite approval date for the entire expansion has not yet been reached. Relating to noise and vibration Pit 3, the application has included the proposed site of the Port Colborne residential development. As a result of the Planning Justification Report submitted by IBI Group, dated February 17, 2021, the Port Colborne Quarry will not a noise or vibration on the proposed development.

## **8.2 ST. THERESE CATHOLIC ELEMENTARY SCHOOL**

The St. Therese Catholic Elementary School is located at 530 Killaly Street East, Port Colborne, ON. The school has one rooftop HVAC unit approximately 40m from the proposed development site. The rooftop HVAC unit is exposed approximately 1m above the parapet wall of the rooftop and has several acoustical apparatuses and shroud attached for noise suppression and noise mitigation. The rooftop HVAC unit exhaust and intake vents are situated north and south and directed away from any residential homes of the proposed development. To determine the actual noise impact from the rooftop HVAC unit a further updated noise study will be required once the residential dwelling layouts and elevations have been finalized.

## **9.0 SUMMARY OF RECOMMENDATIONS**

The following noise control measures or equivalent are required to satisfy the indoor and outdoors noise level criterion: The following recommendations are preliminary and may change once the residential layout and elevations have been finalized.

- Acoustically Tested window STC, Patio door STC and Exterior wall STC as noted in Table 6.
- Specific Warning Clauses will be required for specific Receptor Locations in Table 7.
- Central Air and Provisions for Central Air Conditioning will be required for specific Receptor Locations Table 7.
- Specific Receptor Locations rear yards (OLA's) will require a 2.43m or 3m Noise Barrier or equivalent Section 4.0
- Required letter from window company confirming proper STC values for acoustically tested windows are supplied.

It is recommended that a qualified acoustical consultant certify that the required noise control measures have been incorporated into the builder's plans prior to issuance of a building permit.

Prior to issuance of an occupancy permit, it is recommended the qualified acoustical consultant certify that the approved noise control measures have been properly installed.

## **10.0 CONCLUSIONS**

dBA Acoustical Consultants Inc. has provided a preliminary noise impact study for the proposed "Port Colborne Residential Project" located between Elizabeth Street, Main Street East, Lorraine Road and Killaly Street East in Port Colborne, ON.

The preliminary noise study determined the noise impact for OPA/ZBA submission and traffic volumes for Main Street East (Highway 3) and Killaly Street East, and Elizabeth Street, as well as area stationary noise sources that may impact the residential development. As this is a preliminary noise study further updates will be required before Site Plan Approval.

This study detailed noise impacts at the proposed development and recommended noise and vibration control measures necessary (if applicable) to meet Ministry of Environment Conservation and Parks (MECP) Publication NPC-300, Stationary & Transportation Sources-Approval & Planning guidelines, while satisfying the planning requirements of the City of Port Colborne, Regional Municipality of Niagara.

# FIGURE 1 APPROXIMATE SITE LOCATION

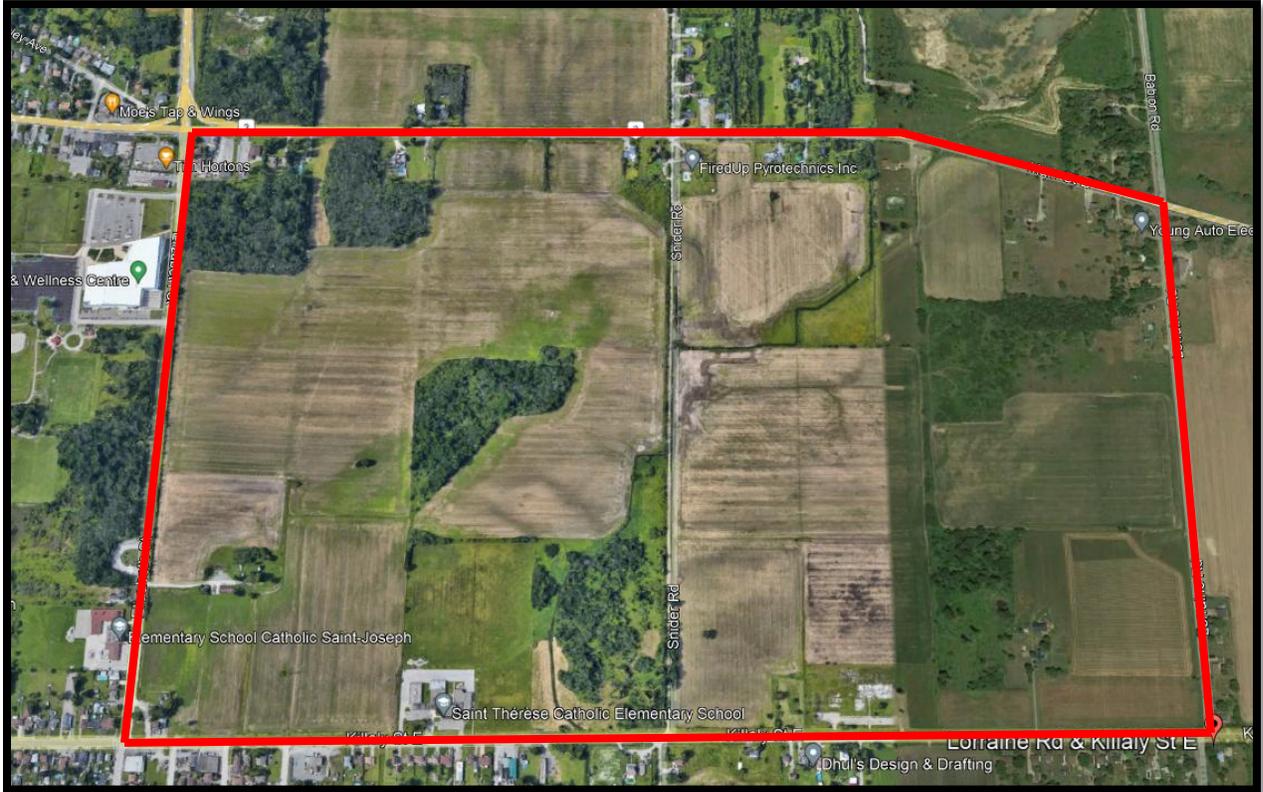


FIGURE 2  
SITE PLAN

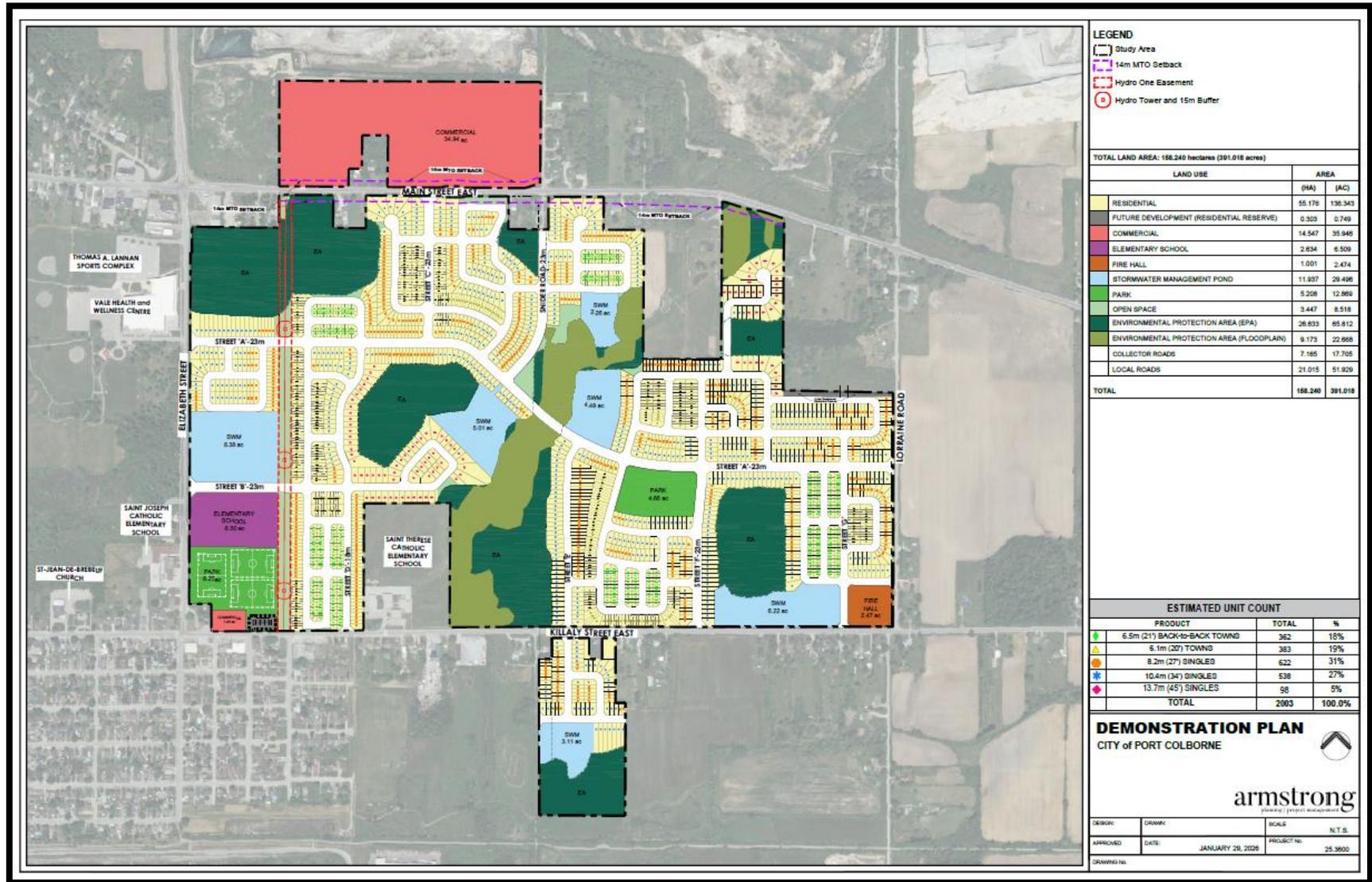
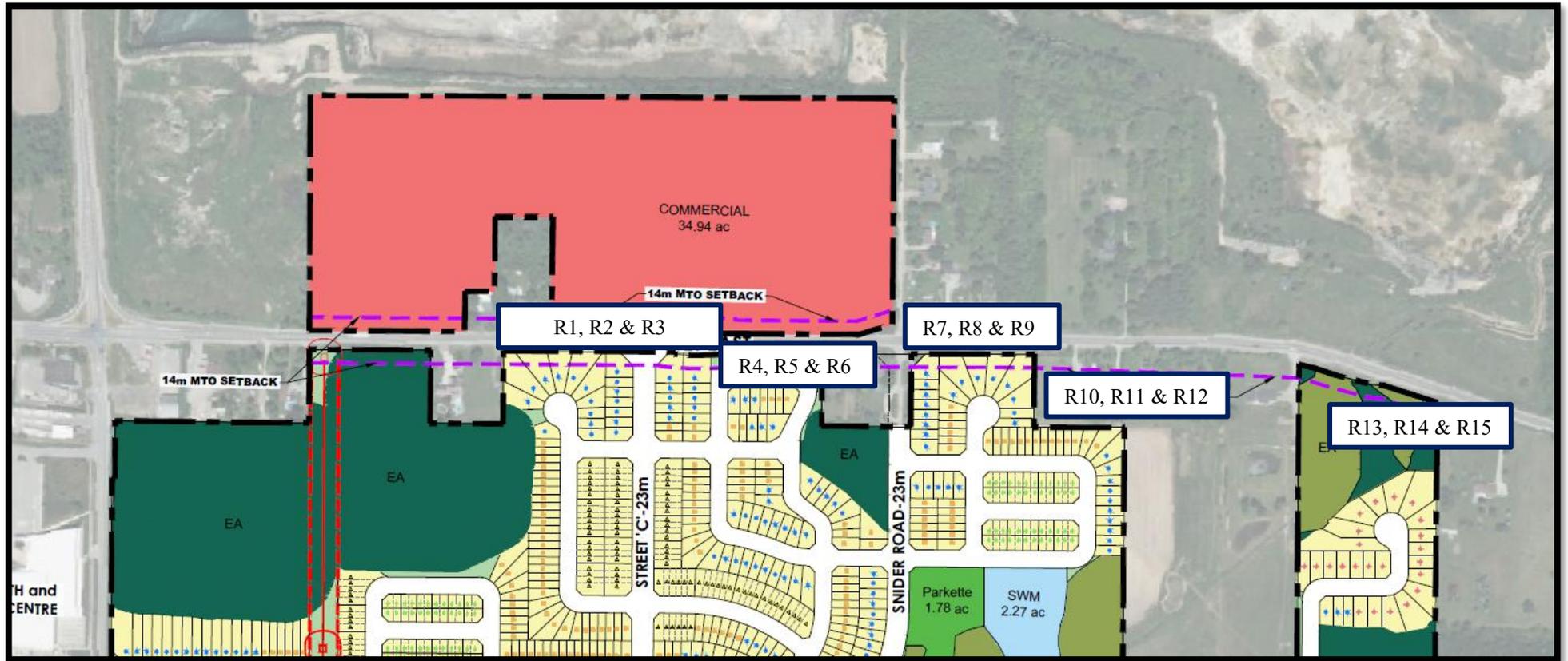
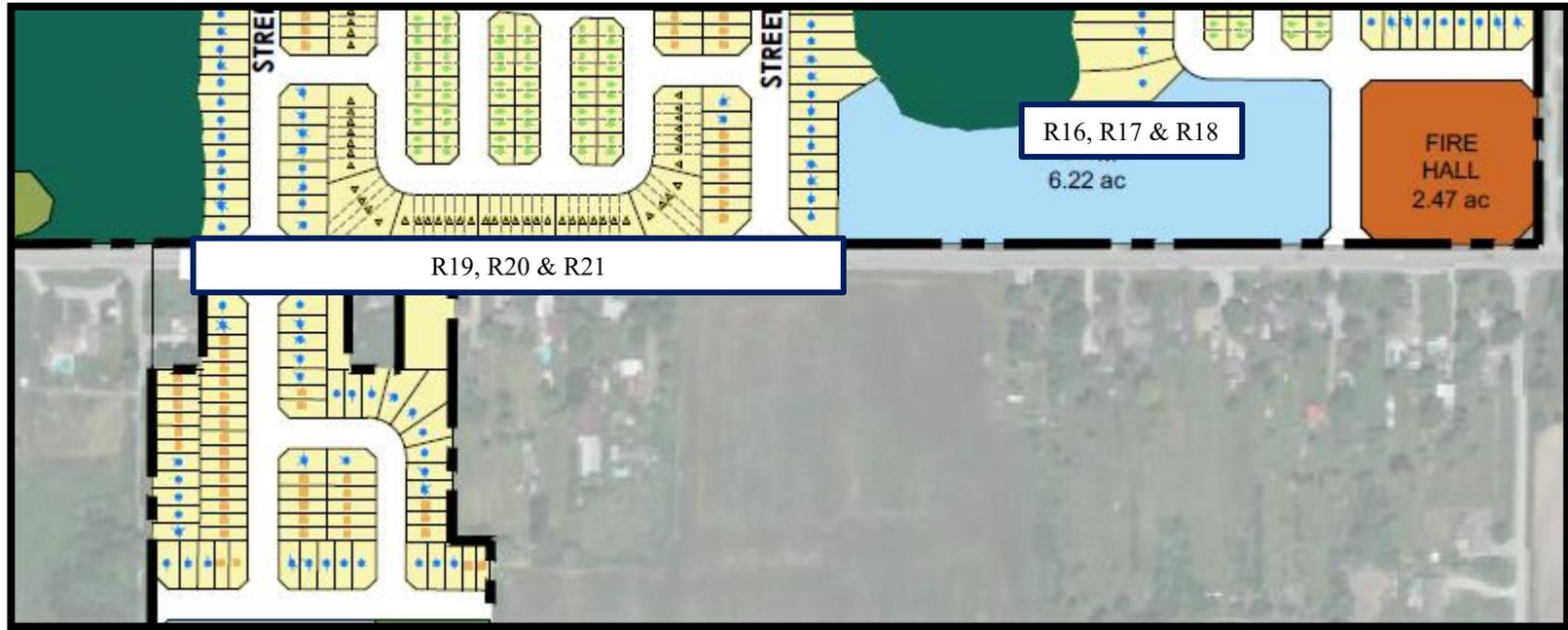
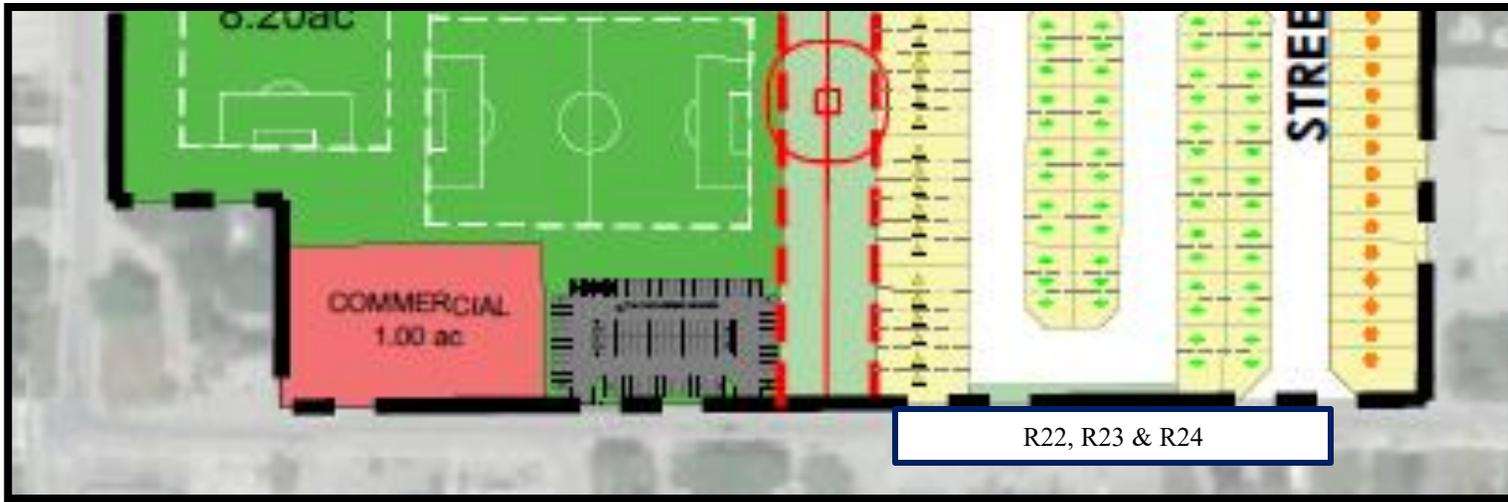


FIGURE 3  
RECEPTOR LOCATIONS



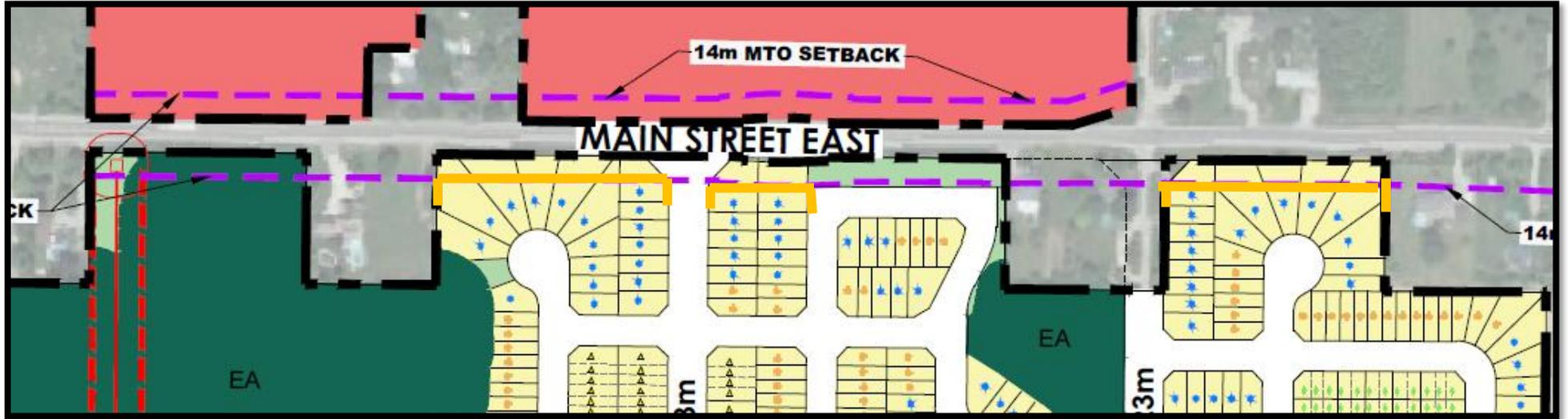






## APPROXIMATE NOISE BARRIER LOCATIONS

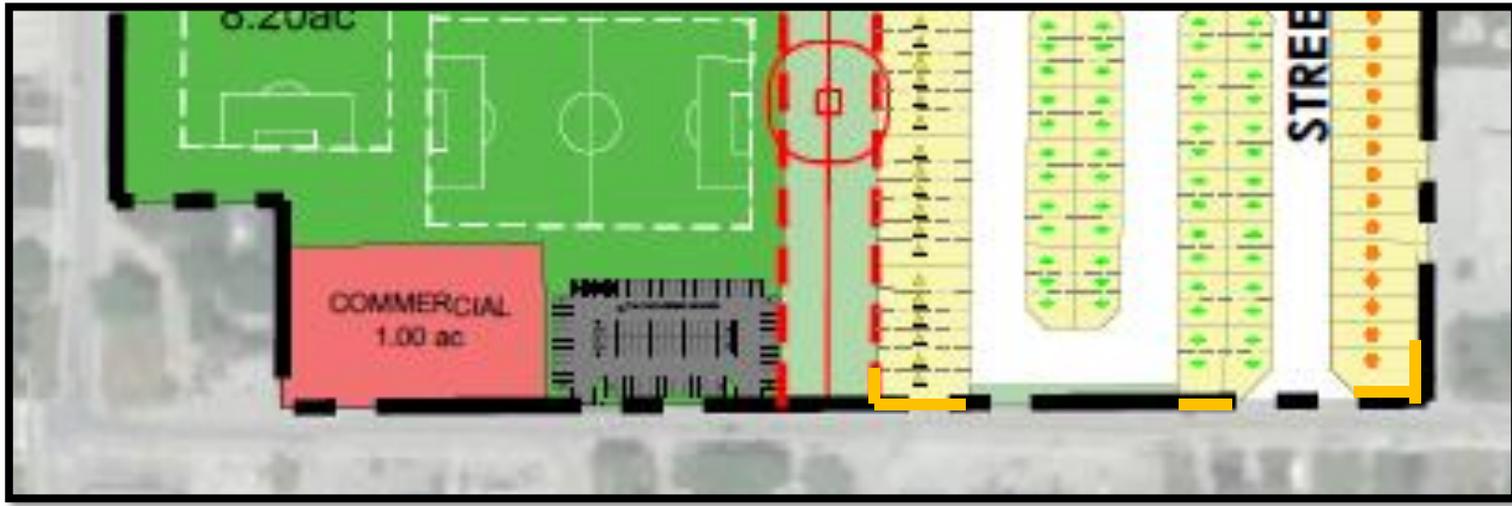
### 3m NOISE BARRIER LOCATIONS



## 2.43M NOISE BARRIER LOCATIONS



## 2.43m NOISE BARRIER LOCATIONS



## 2.43m NOISE BARRIER LOCATIONS



## APPENDIX “A”

## MTO 2021 AADT TRAFFIC DATA MAIN STREET EAST (HIGHWAY 3)

Highway	Location Description From	Location Description To	Distance (KM)	2021 AADT
3	FORT ERIE NIAGARA BLVD START OF NA	ROSE HILL RD END OF NA	5.6	
3	ROSE HILL RD END OF NA	RIDGE RD	5.2	11,200
3	RIDGE RD	REG RD 116 GORHAM RD (S) VICTORIA RD (N)	1.1	10,700
3	REG RD 116 GORHAM RD (S) VICTORIA RD (N)	NEFF RD (N) SHERKSTON RD (S)	7.4	9,550
3	NEFF RD (N) SHERKSTON RD (S)	NIAGARA RD 5 (S) E JCT KILLALY ST	3.1	8,750
3	NIAGARA RD 5 (S) E JCT KILLALY ST	HWY 140 PORT COLBORNE START OF NA	4.4	7,150
3	HWY 140 PORT COLBORNE START OF NA	0.1 KM E OF TOWNLINE RD END OF NA	3.4	
3	0.1 KM E OF TOWNLINE RD END OF NA	GOLF COURSE RD. 30 (S)	4.7	4,650

---

## CITY OF PORT COLBORNE 2022 AADT TRAFFIC DATA KILLALY STREET EAST & ELIZABETH STREET

Good afternoon,

Our most recent traffic data is from a 2022 road classification study, but it is as follows:

### **Killaly Street East:**

- **Elizabeth to Snider**
  - AADT: 3787
  - Classification: Urban Collector
  - Posted Speed: 50km/h (*flashing 40km/h from James St to Snider Rd*)
  - ***\*\*This is pending Community Safety Zone implementation in 2026 for St Therese School, and new fixed speed limit of 40km/h\*\****
- **Snider to Lorraine**
  - AADT: 2223
  - Classification: Urban Local (*formerly Rural Local*)
  - Posted Speed: 60km/h

### **Elizabeth Street:**

- **Main Street East to Killaly Street East**
  - AADT: 5556
  - Classification: Urban Collector
  - Posted Speed: 50km/h (*segment by Ecole St-Joseph is 40km/h*)

### **Lorraine Road:**

- **Main Street East to Killaly Street East**
  - AADT: 100
  - Classification: Urban Local (*formerly Rural Local*)
  - Posted Speed: 60km/h

### **Snider Road:**

- **Main Street East to Killaly Street East**
  - AADT: <100
  - Classification: Urban Local (*formerly Rural Local – unimproved*)
  - Posted Speed: N/A

Kind Regards,



**PORT COLBORNE**



[www.portcolborne.ca](http://www.portcolborne.ca)

**Remington Lee**  
*Design Technologist / Project Coordinator*  
City of Port Colborne

---

**Phone** 905-228-8154

**Email** [Remington.Lee@portcolborne.ca](mailto:Remington.Lee@portcolborne.ca)

## STAMSON CALCULATIONS

STAMSON 5.04 SUMMARY REPORT Date: 04-03-2026 10:53:27  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rkillala.te Time Period: 24 hours

**Description: R1 North Facade 1st Floor**

**TOTAL Leq FROM ALL SOURCES:**

**63.91**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 70 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 25.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 63.91 ! 63.91
-----+-----+-----+-----
Total 63.91 dBA
```

STAMSON 5.04                      SUMMARY REPORT                      Date: 04-03-2026 10:14:12  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r2killa.te                      Time Period: 24 hours

**Description: R2 North Facade 3rd Floor**

**TOTAL Leq FROM ALL SOURCES:**

**63.91**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 70 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 25.00 m
Receiver height : 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 63.91 ! 63.91
-----+-----+-----+-----
Total 63.91 dBA
```

STAMSON 5.04                      SUMMARY REPORT                      Date: 04-03-2026 10:16:40  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r3killa.te                      Time Period: 24 hours

**Description: R3 North Facade OLA**  
**TOTAL Leq FROM ALL SOURCES:**

**63.91**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 70 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 25.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 63.91 ! 63.91
-----+-----+-----+-----
Total 63.91 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 04-03-2026 10:18:29  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r3akilla.te Time Period: 24 hours

**Description: R3a North Facade OLA Mitigated**

**TOTAL Leq FROM ALL SOURCES:**

**53.00**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 70 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 25.00 m
Receiver height : 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : 90.00 deg
Barrier height : 3.00 m
Barrier receiver distance : 3.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Main ! 1.19 ! 53.00 ! 53.00
-----+-----+-----+
Total 53.00 dBA
```





STAMSON 5.04                      SUMMARY REPORT                      Date: 04-03-2026 10:21:57  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r5killa.te                      Time Period: 24 hours

**Description: R5 North Facade 3rd Floor**

**TOTAL Leq FROM ALL SOURCES:                      59.66**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 70 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -45.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 50.00 m
Receiver height : 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 59.66 ! 59.66
-----+-----+-----+-----
Total 59.66 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 04-03-2026 10:26:07  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r6killa.te Time Period: 24 hours

**Description: R6 North Facade OLA**

**TOTAL Leq FROM ALL SOURCES:**

**58.19**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 70 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -45.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 70.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 58.19 ! 58.19
-----+-----+-----+-----
Total 58.19 dBA
```



STAMSON 5.04                      SUMMARY REPORT                      Date: 04-03-2026 10:29:57  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r7killa.te                      Time Period: 24 hours

**Description: R7 North Facade 1st Floor**

**TOTAL Leq FROM ALL SOURCES:**

**65.22**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 25.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 65.22 ! 65.22
-----+-----+-----+-----
Total 65.22 dBA
```



STAMSON 5.04                      SUMMARY REPORT                      Date: 04-03-2026 10:33:37  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r9killa.te                      Time Period: 24 hours

**Description: R9 North Facade OLA**

**TOTAL Leq FROM ALL SOURCES:                      65.22**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 25.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 65.22 ! 65.22
-----+-----+-----+-----
Total 65.22 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 04-03-2026 10:35:09  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r9akilla.te Time Period: 24 hours

**Description: R9a North Facade OLA Mitigated**

**TOTAL Leq FROM ALL SOURCES:**

**54.31**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 25.00 m
Receiver height : 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -90.00 deg Angle2 : 90.00 deg
Barrier height : 3.00 m
Barrier receiver distance : 3.00 m
Source elevation : 0.00 m
Receiver elevation : 0.00 m
Barrier elevation : 0.00 m
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Main ! 1.19 ! 54.31 ! 54.31
-----+-----+-----+
Total 54.31 dBA
```





STAMSON 5.04                      SUMMARY REPORT                      Date: 04-03-2026 10:40:07  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r12killa.te                      Time Period: 24 hours

**Description: R12 North Facade OLA**

**TOTAL Leq FROM ALL SOURCES:**

**52.23**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

```
-----
Angle1 Angle2 : -45.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 90.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 52.23 ! 52.23
-----+-----+-----+-----
Total 52.23 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 04-03-2026 10:41:46  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r13killa.te Time Period: 24 hours

**Description: R13 North Facade 1st Floor**

**TOTAL Leq FROM ALL SOURCES:**

**53.06**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

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

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 53.06 ! 53.06
-----+-----+-----+-----
Total 53.06 dBA
```

STAMSON 5.04                      SUMMARY REPORT                      Date: 04-03-2026 10:43:25  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r14killa.te                      Time Period: 24 hours

**Description: R14 North Facade 3rd Floor**

**TOTAL Leq FROM ALL SOURCES:**

**54.69**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

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

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 54.69 ! 54.69
-----+-----+-----+-----
Total 54.69 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 04-03-2026 10:45:04  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r15killa.te Time Period: 24 hours

**Description: R15 North Facade OLA**  
**TOTAL Leq FROM ALL SOURCES:**

**53.06**

Road data, segment # 1: Main

```
-----
Car traffic volume : 11261 veh/TimePeriod *
Medium truck volume : 235 veh/TimePeriod *
Heavy truck volume : 235 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Main

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

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Main ! 1.19 ! 53.06 ! 53.06
-----+-----+-----+-----
Total 53.06 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 12-01-2026 10:51:33  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r16killa.te Time Period: Day/Night 16/8 hours

**Description: R16 South Facade 1st Floor**

**TOTAL Leq FROM ALL SOURCES**

**(DAY): 52.55**

**(NIGHT): 45.98**

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

```
-----
Car traffic volume : 3089/343 veh/TimePeriod *
Medium truck volume : 64/7 veh/TimePeriod *
Heavy truck volume : 64/7 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 2223
Percentage of Annual Growth : 2.00
Number of Years of Growth : 24.00
Medium Truck % of Total Volume : 2.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00
```

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

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 100.00 / 100.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
```

Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.19 ! 52.55 ! 52.55
-----+-----+-----+
Total 52.55 dBA
```

Result summary (night)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.18 ! 45.98 ! 45.98
-----+-----+-----+
Total 45.98 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 12-01-2026 10:52:45  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r17killa.te Time Period: Day/Night 16/8 hours

**Description: R17 South Facade 3rd Floor**

**TOTAL Leq FROM ALL SOURCES**

**(DAY): 52.55**

**(NIGHT): 45.98**

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

```
-----
Car traffic volume : 3089/343 veh/TimePeriod *
Medium truck volume : 64/7 veh/TimePeriod *
Heavy truck volume : 64/7 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 2223
Percentage of Annual Growth : 2.00
Number of Years of Growth : 24.00
Medium Truck % of Total Volume : 2.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00
```

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

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 100.00 / 100.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
```

Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.19 ! 52.55 ! 52.55
-----+-----+-----+
Total 52.55 dBA
```

Result summary (night)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.18 ! 45.98 ! 45.98
-----+-----+-----+
Total 45.98 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 12-01-2026 11:05:15  
 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r18killa.te Time Period: 16 hours

**Description: R18 South Facade OLA**

**TOTAL Leq FROM ALL SOURCES: 52.55**

Road data, segment # 1: Killaly

```
-----
Car traffic volume : 3089 veh/TimePeriod *
Medium truck volume : 64 veh/TimePeriod *
Heavy truck volume : 64 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Killaly

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 100.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----
1.Killaly ! 1.19 ! 52.55 ! 52.55
-----+-----+-----
Total 52.55 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 12-01-2026 11:08:36  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r19killa.te Time Period: Day/Night 16/8 hours

**Description: R19 South Facade 1st Floor**

**TOTAL Leq FROM ALL SOURCES**

**(DAY): 59.54**

**(NIGHT): 52.97**

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

```
-----
Car traffic volume : 3089/343 veh/TimePeriod *
Medium truck volume : 64/7 veh/TimePeriod *
Heavy truck volume : 64/7 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 2223
Percentage of Annual Growth : 2.00
Number of Years of Growth : 24.00
Medium Truck % of Total Volume : 2.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00
```

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

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
```

Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.19 ! 59.54 ! 59.54
-----+-----+-----+
Total 59.54 dBA
```

Result summary (night)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.18 ! 52.97 ! 52.97
-----+-----+-----+
Total 52.97 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 12-01-2026 11:10:33  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r20killa.te Time Period: Day/Night 16/8 hours

**Description: R20 South Facade 3rd Floor**

**TOTAL Leq FROM ALL SOURCES**

**(DAY): 59.54**

**(NIGHT): 52.97**

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

```
-----
Car traffic volume : 3089/343 veh/TimePeriod *
Medium truck volume : 64/7 veh/TimePeriod *
Heavy truck volume : 64/7 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 2223
Percentage of Annual Growth : 2.00
Number of Years of Growth : 24.00
Medium Truck % of Total Volume : 2.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00
```

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

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
```

Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.19 ! 59.54 ! 59.54
-----+-----+-----+
Total 59.54 dBA
```

Result summary (night)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.18 ! 52.97 ! 52.97
-----+-----+-----+
Total 52.97 dBA
```



STAMSON 5.04 SUMMARY REPORT Date: 12-01-2026 14:31:45  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r22killa.te Time Period: Day/Night 16/8 hours

**Description: R22 South Facade 1st Floor**

**TOTAL Leq FROM ALL SOURCES**

**(DAY): 60.20**

**(NIGHT): 53.62**

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

```
-----
Car traffic volume : 5263/585 veh/TimePeriod *
Medium truck volume : 110/12 veh/TimePeriod *
Heavy truck volume : 110/12 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 3787
Percentage of Annual Growth : 2.00
Number of Years of Growth : 24.00
Medium Truck % of Total Volume : 2.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00
```

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

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
```

Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.19 ! 60.20 ! 60.20
-----+-----+-----+
Total 60.20 dBA
```

Result summary (night)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.18 ! 53.62 ! 53.62
-----+-----+-----+
Total 53.62 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 14-01-2026 09:34:24  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r23killa.te Time Period: Day/Night 16/8 hours

**Description: R23 South Facade 3rd Floor**

**TOTAL Leq FROM ALL SOURCES**

**(DAY): 60.20**

**(NIGHT): 53.62**

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

```
-----
Car traffic volume : 5263/585 veh/TimePeriod *
Medium truck volume : 110/12 veh/TimePeriod *
Heavy truck volume : 110/12 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 3787
Percentage of Annual Growth : 2.00
Number of Years of Growth : 24.00
Medium Truck % of Total Volume : 2.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00
```

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

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
```

Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.19 ! 60.20 ! 60.20
-----+-----+-----+
Total 60.20 dBA
```

Result summary (night)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Killaly ! 1.18 ! 53.62 ! 53.62
-----+-----+-----+
Total 53.62 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 12-01-2026 14:36:55  
 MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r24killala.te Time Period: 16 hours

**Description: R24 South Facade OLA**

**TOTAL Leq FROM ALL SOURCES: 59.23**

Road data, segment # 1: Killaly

```
-----
Car traffic volume : 5263 veh/TimePeriod *
Medium truck volume : 110 veh/TimePeriod *
Heavy truck volume : 110 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Killaly

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 25.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Killaly ! 1.19 ! 59.23 ! 59.23
-----+-----+-----+-----
Total 59.23 dBA
```



STAMSON 5.04                      SUMMARY REPORT                      Date: 12-01-2026 15:25:28  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r25killa.te                      Time Period: Day/Night 16/8 hours

**Description: R25 West Facade 1st Floor**

**TOTAL Leq FROM ALL SOURCES**

**(DAY): 59.57**

**(NIGHT): 53.06**

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

```
-----
Car traffic volume   : 7721/858   veh/TimePeriod *
Medium truck volume : 161/18    veh/TimePeriod *
Heavy truck volume  : 161/18    veh/TimePeriod *
Posted speed limit  : 50 km/h
Road gradient       : 0 %
Road pavement      : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 5556
Percentage of Annual Growth       : 2.00
Number of Years of Growth         : 24.00
Medium Truck % of Total Volume    : 2.00
Heavy Truck % of Total Volume     : 2.00
Day (16 hrs) % of Total Volume    : 90.00
```

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

```
-----
Angle1  Angle2      : -90.00 deg  90.00 deg
Wood depth      : 0 (No woods.)
No of house rows : 0 / 0
Surface         : 1 (Absorptive ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height  : 1.50 / 1.50 m
Topography      : 1 (Flat/gentle slope; no barrier)
```

Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Elizabeth ! 1.19 ! 59.57 ! 59.57
-----+-----+-----+
Total 59.57 dBA
```

Result summary (night)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Elizabeth ! 1.19 ! 53.06 ! 53.06
-----+-----+-----+
Total 53.06 dBA
```

STAMSON 5.04 SUMMARY REPORT Date: 12-01-2026 15:26:15  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r26killa.te Time Period: Day/Night 16/8 hours

**Description: R26 West Facade 3rd Floor**

**TOTAL Leq FROM ALL SOURCES**

**(DAY): 60.09**

**(NIGHT): 53.57**

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

```
-----
Car traffic volume : 7721/858 veh/TimePeriod *
Medium truck volume : 161/18 veh/TimePeriod *
Heavy truck volume : 161/18 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

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

```
24 hr Traffic Volume (AADT or SADT): 5556
Percentage of Annual Growth : 2.00
Number of Years of Growth : 24.00
Medium Truck % of Total Volume : 2.00
Heavy Truck % of Total Volume : 2.00
Day (16 hrs) % of Total Volume : 90.00
```

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

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 20.00 / 20.00 m
Receiver height : 7.50 / 7.50 m
Topography : 1 (Flat/gentle slope; no barrier)
```

Result summary (day)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Elizabeth ! 1.19 ! 60.09 ! 60.09
-----+-----+-----+
Total 60.09 dBA
```

Result summary (night)

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+
1.Elizabeth ! 1.19 ! 53.57 ! 53.57
-----+-----+-----+
Total 53.57 dBA
```

STAMSON 5.04                      SUMMARY REPORT                      Date: 12-01-2026 15:23:00  
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r27killa.te                      Time Period: 16 hours

**Description: R27 West Facade OLA**

**TOTAL Leq FROM ALL SOURCES:                      57.97**

Road data, segment # 1: Elizabeth

```
-----
Car traffic volume : 7721 veh/TimePeriod *
Medium truck volume : 161 veh/TimePeriod *
Heavy truck volume : 161 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)
```

Data for Segment # 1: Elizabeth

```
-----
Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 25.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00
```

Result summary

```
-----
! source ! Road ! Total
! height ! Leq ! Leq
! (m) ! (dBA) ! (dBA)
-----+-----+-----+-----
1.Elizabeth ! 1.19 ! 57.97 ! 57.97
-----+-----+-----+-----
Total 57.97 dBA
```



## SITE STATISTICS

<b>LEGEND</b>			
 Study Area			
 14m MTO Setback			
 Hydro One Easement			
 Hydro Tower and 15m Buffer			
<b>TOTAL LAND AREA: 158.240 hectares (391.018 acres)</b>			
<b>LAND USE</b>		<b>AREA</b>	
		<b>(HA)</b>	<b>(AC)</b>
	RESIDENTIAL	55.176	136.343
	FUTURE DEVELOPMENT (RESIDENTIAL RESERVE)	0.303	0.749
	COMMERCIAL	14.547	35.946
	ELEMENTARY SCHOOL	2.634	6.509
	FIRE HALL	1.001	2.474
	STORMWATER MANAGEMENT POND	11.937	29.496
	PARK	5.208	12.869
	OPEN SPACE	3.447	8.518
	ENVIRONMENTAL PROTECTION AREA (EPA)	26.633	65.812
	ENVIRONMENTAL PROTECTION AREA (FLOODPLAIN)	9.173	22.668
	COLLECTOR ROADS	7.165	17.705
	LOCAL ROADS	21.015	51.929
<b>TOTAL</b>		<b>158.240</b>	<b>391.018</b>

<b>ESTIMATED UNIT COUNT</b>			
	<b>PRODUCT</b>	<b>TOTAL</b>	<b>%</b>
◆	6.5m (21') BACK-to-BACK TOWNS	362	18%
▲	6.1m (20') TOWNS	383	19%
●	8.2m (27') SINGLES	622	31%
✱	10.4m (34') SINGLES	538	27%
◆	13.7m (45') SINGLES	98	5%
	<b>TOTAL</b>	<b>2003</b>	<b>100.0%</b>

## EXTERIOR WALL STC RATINGS

### EXTERIOR WALL STC RATINGS

Wall Configuration	EW1	EW2	EW3	EW4	EW1R	EW2R	EW3R	EW5	EW4R	EW6	EW7 EW5R	EW8
<b>STC Rating</b>	<b>38</b>	<b>40</b>	<b>43</b>	<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>54</b>	<b>55</b>	<b>57</b>	<b>58</b>	<b>62</b>

Source: National Research Council, Division of Building Research

**NOTES:**

- 1 The common structure of walls EW1 to EW5 is composed of 12.7mm gypsum board, vapour barrier and 38x89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in inter-stud cavities.
  - EW1 denotes the common structure, plus sheathing, plus wood siding or metal siding and fibre backer board
  - EW2 denotes the common structure, plus rigid insulation (25 to 30 mm), and wood siding or metal siding and fibre backer board.
  - EW3 denotes simulated mansard with the common structure, plus sheathing, 28 X89 mm framing, sheathing and asphalt roofing material
  - EW4 denotes the common structure, plus sheathing and 20 mm stucco.
  - EW5 denotes the common structure, plus sheathing, 25 mm air space, 100mm brick veneer.
  - EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25 to 50 mm), 100 mm back-up block 100 mm face brick.
  - EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25 to 50 mm), 140mm back-up block, 100 mm face brick.
  - EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25 to 50 mm), 200 mm concrete.
  
- 2 R signifies the mounting of the interior gypsum board on resilient clips.
  
- 3 An exterior wall conforming to rainscreen design principles and composed of 12.7 mm gypsum board, 100 mm concrete block, rigid insulation (25 to 50 mm), 25 mm air space, and 100 mm brick veneer has the same STC as EW6.
  
- 4 An exterior wall described in EW1 with the addition of rigid insulation (25 to 50 mm) between the sheathing and the external finish has the same STC as EW2.