



DELTA CHI EARLY CHILDHOOD CENTRES

Noise Impact Study

1785 Turner Road, Windsor, Ontario

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1.0

Introduction

1.1

Purpose and Objectives

Dillon Consulting Limited (Dillon) was retained by Delta Chi Early Childhood Centres to complete a Noise Impact Study for a Proposed Development located at 1785 Turner Road, in Windsor, Ontario (the Proposed Development). This Assessment has been completed to determine potential stationary and transportation noise impacts on the Proposed Development.

The Assessment presented herein was prepared in accordance with the guidelines and requirements of the Ontario Ministry of Environment, Conservation and Parks (MECP).

1.2

The Project and Surrounding Areas

At the time of this assessment, the Proposed Development consists of a 1-storey childcare centre.

The subject land is located directly West of Walker Road and North of Tecumseh Road East. The subject land is in proximity to the following zoned land uses:

- North – Institutional and light Industrial
- East – Commercial and light Industrial
- South – Commercial and light Industrial
- West – Residential

The subject site and surrounding area are shown in **Figure 1**. The concept plan is shown in **Appendix A**.

2.0

Transportation Noise

This section investigates noise impacts from nearby transportation sources on the proposed sensitive uses.

The only transportation noise sources that warranted assessment was road traffic along Walker Road and Tecumseh Road. No railways were identified within 300 m of the Proposed Development. Based on a review of the Windsor International Airport 2010 Airport Master Plan, the Proposed Development is located outside of the NEF 25 (Noise Exposure Forecast) and therefore does not require assessment for air traffic noise.

2.1

Transportation Noise Assessment

The transportation sources with the potential to impact the Proposed Development includes road traffic along Walker Road and Tecumseh Road. Impacts from road noise were predicted and compared against the applicable criteria in the MECP's noise guideline publication, *NPC 300 – Environmental Noise Guideline – Stationary and Transportation Sources – Approvals and Planning* (2013). NPC-300 outlines noise level criteria for sensitive land uses, which assist in determining requirements for façade construction, ventilation requirements, warning clauses, and potential noise barriers for the Proposed Development.

2.1.1

Noise Criteria

The applicable transportation noise criteria, as outlined in Part C of NPC-300, is presented in **Table 1** through **Table 4**. **Table 1** summarizes the indoor sound level limits based on the type of space assessed, time of day, transportation noise source, and the maximum allowable equivalent sound levels from road sources. The indoor noise levels are based on the assumption of closed windows and doors.

Table 1: Indoor Sound Level Limits for Road

Type of Space	Time Period	Equivalent Sound Level – L_{eq}
		Road
General offices, reception areas, retail stores, etc.	Daytime 07:00 – 23:00	50 dBA
Living/dining areas of residences, hospitals, nursing homes, schools, daycares, etc.	Daytime 07:00 – 23:00	45 dBA
Living/dining areas of residences, hospitals, nursing homes, etc. (except schools and daycares)	Night-time 23:00 – 07:00	45 dBA
Sleeping quarters of residences	Daytime 07:00 – 23:00	45 dBA
	Night-time 23:00 – 07:00	40 dBA

Sleeping quarters of hotels	Night-time 23:00 – 07:00	45 dBA
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Table 2 outlines the maximum equivalent plane-of-window sound levels for road noise where if exceeded, a detailed building component design assessment is required to meet the indoor sound level limits (see **Table 1**).

Table 2: Requirements for Building Component Assessment

Assessment Location	Time Period	Equivalent Sound Level – L_{eq}
		Road
Plane of window for living area or sleeping quarters	Daytime (07:00 – 23:00)	65 dBA
	Night-time (23:00 – 07:00)	60 dBA

Table 3 summarizes potential noise warning clauses and ventilation requirements that should be used to warn of potential annoyance due to existing noise sources related to road.

Table 3: Ventilation and Warning Clause Requirements for Road Noise

Assessment Location	Time Period	Equivalent Sound Level – L_{eq}	Ventilation and Warning Clause Requirements
Plane of window for living area or sleeping quarters	Daytime (07:00 – 23:00)	≤ 55 dBA	No Requirement
		> 55 dBA and ≤ 65 dBA	Provision for the installation of central air conditioning with a Type C warning clause
		> 65 dBA	Installation of central air conditioning with a Type D warning clause
Plane of window for living area or sleeping quarters	Nighttime (23:00 – 7:00)	≤ 50 dBA	No Requirement
		> 50 dBA and ≤ 60 dBA	Provision for the installation of central air conditioning with a Type C warning clause
		> 60 dBA	Installation of central air conditioning with a Type D warning clause

The applicable noise criteria for Outdoor Living Areas (OLAs) specific to surface transportation are presented in **Table 4**. If the 16-Hour Equivalent Sound Level (Leq 16hr) at an OLA is greater than 55 dBA and less than or equal to 60 dBA, noise control measures may be applied to reduce the sound level to 55 dBA. Otherwise, prospective purchasers or tenants should be informed of potential elevated noise levels by way of warning clause Type A. For a Leq 16h of greater than 60 dBA, noise mitigation measures are required to reduce the noise levels to 55 dBA or less. Whistle noise is not included in the determination of the rail outdoor sound level.

Table 4: OLA Level Limits for Road Noise

Assessment Location	Equivalent Sound Level – Leq 16hr ^[1] Road	Noise Control Measures and Warning Clause Requirements
Outdoor Living Area	≤ 55 dBA	No requirement
	> 55 dBA and ≤ 60 dBA	Installation of noise control measure OR a Type A warning clause
	> 60 dBA	Installation of noise control measure with a Type B warning clause

Notes: [1] Daytime only (07:00 – 23:00)

2.1.2 Transportation Sources

In assessing potential transportation noise impacts on the Proposed Development, road traffic along Walker Road and Tecumseh Road was analyzed as surface transportation sources.

The development area is located directly west of Walker Road and north of Tecumseh Road. Road traffic data in the form of average annual daily traffic (AADT) was requested from the City of Windsor. At the time of this assessment the City had not provided road traffic data. Dillon used traffic data from the 2020 City of Windsor AADT map, outlined in **Appendix B**, along with the following assumptions to represent the AADT for the year 2036:

- A per annum growth rate of 1%
- 8% of vehicles were heavy trucks
- 5% of vehicles were medium trucks
- 90% of traffic volumes occur during the daytime period
- 10% of traffic volumes occur during the nighttime period

The forecasted future (2036) road traffic data is presented in **Table 5**. All traffic data used in modelling road traffic is included in **Appendix B**.

Table 5: Future (2036) Road Traffic Data

Roadway	Forecasted AADT	Medium Trucks (%)	Heavy Trucks (%)	Posted Speed Limit (km/h)
Walker Road	32449	5	8	50
Tecumseh Road	34165	5	8	50

2.1.3 Predicted Sound Level

The noise analysis was completed using Cadna/A, a noise propagation software. The Cadna/A software includes the implementation of the Transportation Noise Model (TNM) roadway algorithm. The model can incorporate various site specific features, such as elevation, berms, absorptive grounds, and barriers to accurately predict noise levels at specific receptors, pertaining to noise emissions from a particular noise source. The model accounts for reduction in sound level due to increased distance and geometrical spreading, air absorption, ground attenuation, and acoustical shielding by intervening structures and topography. The model is considered conservative as it represents atmospheric conditions that promote propagation of sound from source to receptor.

As the current ministry approval model for transportation noise is the Ontario Road Noise Analysis Method for Environment and Transportation (ORNAMENT), the results of the TNM model were confirmed through equivalent modelling at a representative receptor. The model verification is described in **Section 2.1.5**.

2.1.4 Sensitive Receptor Locations

The following noise sensitive points of reception were assessed for transportation noise impacts:

- Façade / window locations of the building
- The proposed outdoor play areas

2.1.5 Predicted Transportation Noise Impacts

Table 6 summarizes the predicted noise levels from the road noise sources at the sensitive receptors within the Proposed Development.

Table 6: Road Noise Prediction Summary Table

Assessment Location	Equivalent Sound Level - $L_{eq}^{[1],[2],[3]}$ [dBA]
	Road Impacts
	Daytime
North Façade	55
East Façade	55
South Façade	54
West Façade	51
Play Area A OLA	55
Play Area B OLA	53
Play Area C OLA	55

Notes: [1] L_{eq} represents maximum predicted impacts all along façades.
 [2] Predicted noise levels that exceed the applicable limits are presented in **bold**.
 [3] OLAs are only assessed during the daytime period.

The predicted transportation sound levels for combined road impacts at the sensitive façades of Proposed Development are presented in **Figure 2**, for daytime impacts.

2.1.6 Façade Construction Recommendations

Based on the predicted façade sound levels shown in **Table 6**, and the threshold criteria outlined in **Table 2**, a detailed building component design analysis is not required for any receptor locations within the Proposed Development. Windows conforming to the Ontario Building Code (OBC) are anticipated to be sufficient to meet the indoor sound level criteria (as outlined in **Table 1**).

2.1.7 Ventilation Requirements and Warning Clauses

Based on the predicted façade sound levels shown in **Table 6**, and the threshold criteria outlined in **Table 3**, no warning clauses or provisions are required.

2.1.8 Outdoor Living Areas (OLAs)

As shown in **Table 4**, the predicted sound levels at the outdoor play area OLAs are less than or equal to 55 dBA. Therefore, no noise control measures or warning clauses are warranted.

2.1.9

TNM Model Verification

For the purpose of verifying the accuracy of the TNM model implemented through Cadna/A, confirmatory modelling was completed using the ministry approved model for transportation noise analysis, ORNAMENT, implemented through STAMSON Version 5.04.

The STAMSON model is capable of incorporating various site specific features, such as elevation, berms, absorptive grounds, and barriers to accurately predict noise levels at specific receptors, pertaining to noise emissions from a particular noise source. The model is considered conservative as it represents atmospheric conditions that promote propagation of sound from source to receptor.

Transportation noise impacts for the Play Area A OLA were predicted using the STAMSON model and compared against the TNM modelling results. the STAMSON model predicted a daytime equivalent sound level of 54 dBA while the TNM model predicted a daytime equivalent sound level of 55 dBA. As these results are within 1 dB, the noise levels predicted by the TNM model in this assessment should be considered accurate.

The STAMSON modelling files have been included in **Appendix C**.

3.0

Stationary Noise Assessment

A review of the site and surrounding area has been conducted to determine potential stationary noise sources associated with commercial and industrial properties in proximity of the proposed development. A site visit was conducted by Dillon personnel on April 8th, 2026, to identify industrial or commercial operations with the potential to affect the Proposed Development.

Within the study area, the following commercial properties and industries were identified to have potential adverse effects on the Proposed Development:

- Croatian St Francis of Assisi Church
- Colonial Tool
- Canadian College of Health Science & Technology (CCHST)
- Sterling Ridge Office
- Long & McQuade

The location of the above noted lands has been shown in **Figure 1**.

In addition to the above commercial and industrial properties, industrial operations located to the northwest of the Proposed Development (Windsor Rubber Processing and Motipark Finished Vehicle Logistics, north of Seneca Street) were evaluated for potential impact. These facilities are situated beyond an existing neighborhood of two-storey residential dwellings along Durham Place and Byng Road, which serve as closer, intervening noise-sensitive receptors. To verify this, Dillon completed a screening-level model based on the major potential noise sources observed during site visits. Factoring in the greater setback distance, the acoustical shielding provided by intervening buildings, and the presence of closer sensitive uses, the predicted sound levels are anticipated to be below the NPC-300 sound level limits at the Proposed Development. As such, these operations were excluded from the detailed quantitative modelling.

The following sections provide an assessment of the potential noise impacts from the commercial and industrial lands on the Proposed Development.

3.1

Noise Criteria

NPC-300 defines sound level limits for noise impacts from stationary sources on noise sensitive land uses. A noise sensitive land use is defined as a property of a person that accommodates a dwelling, a noise sensitive commercial purpose, or a noise sensitive institutional purpose. This definition includes:

- Permanent, seasonal, and rental residences;
- Hotels, motels, and campgrounds;
- Schools, universities, libraries, and daycare centres;
- Hospitals and clinics, nursing/retirement homes; and

- Places of worship.

Points of reception (POR) for dwellings are located at the centre of any window on a noise sensitive space, with a first-storey height of 1.5 m and subsequent storeys separated by 3 m. A dwelling may have an outdoor point of reception (OPR) located on its property within 30 m of its façade at a height of 1.5 m, typically in back or front yards, terraces, or patios.

In NPC-300, areas are divided into four classes based on their existing background acoustical environment:

- Class 1 – Urban Area;
- Class 2 – Semi-Urban/Semi-Rural Area;
- Class 3 – Rural Area; and
- Class 4 – Areas of Redevelopment and Infill.

The sound level limits for outdoor and plane-of-window PORs for continuous noise are outlined in **Table 7**.

Table 7: Stationary Source Continuous Noise Exclusionary Limits

Assessment Location	Time of Day	Class 1 Area	Class 2 Area	Class 3 Area	Class 4 Area
Plane of window for living area or sleeping quarters ^[1]	Daytime (07:00 to 19:00)	50 dBA	50 dBA	45 dBA	60 dBA
	Evening (19:00 to 23:00)	50 dBA	50 dBA	40 dBA	60 dBA
	Nighttime (23:00 to 07:00)	45 dBA	45 dBA	40 dBA	55 dBA
Outdoor points of reception	Daytime (07:00 to 19:00)	50 dBA	50 dBA	45 dBA	55 dBA
	Evening (19:00 to 23:00)	50 dBA	45 dBA	40 dBA	55 dBA

Table Note: [1] The plane of window for living area or sleeping quarters will be referred to as the “façade” of a receptor.

Based on observations made during the site visit completed on April 8th, 2026, the existing background acoustical environment of the Proposed Development’s lands are considered Class 1 – Urban Area.

3.2

Stationary Noise Modelling

The noise sources of the surrounding area that require assessment for stationary noise impacts include rooftop heating, ventilation, air conditioning (HVAC), exhaust fans, truck deliveries, and pneumatic air tools. To gain a further understanding of the surrounding commercial and industrial uses, Dillon reached out to Croatian St Francis of Assisi Church and Colonial Tool, to inquire about their operations and potential sources of noise. At the time of this assessment, Dillon has not received any operational information from the surrounding commercial or industrial properties. Based on observations during the site visit and a review of satellite imagery, it was determined that the properties of the surrounding

industries contain approximately 29 five-ton, and 7 ten-ton rooftop HVAC units, 4 exhaust vents, 1 truck delivery route, and 2 instances of pneumatic air tool use.

It was assumed that all HVAC units and exhaust fans would operate continuously during the daytime and evening periods. During daytime periods at Colonial Tool it was assumed there would be two truck deliveries per hour, and two instances of air tool usage for a duration of one minute per hour.

This assessment relied on utilizing sound data from Dillon's reference library. The sound power levels associated with the surrounding industrial operations were selected based on Dillon's experience with similar industries. Sound power levels and source locations used in the analysis are provided in **Appendix D**.

Dillon developed an outdoor noise propagation model, using Cadna/A, based on International Organization for Standardization (ISO) Standard 9613, Part 1: Calculation of the absorption of sound by the atmosphere, 1993 and Part 2: General method of calculation (ISO-9613-2:1996). The model is capable of incorporating various site-specific features, such as elevation, berms, absorptive grounds, and barriers to accurately predict noise levels at specific receptors, pertaining to noise emissions from a particular source / sources. The ISO based model accounts for reduction in sound level due to increased distance and geometrical spreading, air absorption, ground attenuation, and acoustical shielding by intervening structures and topography. The model is considered conservative as it represents atmospheric conditions that promote propagation of sound from the source to the receiver.

The following assumptions were incorporated in the noise propagation modelling:

- A global ground absorption coefficient of 0.30, representing a mix of reflective and absorptive grounds of the area surrounding the Proposed development;
- Second order reflection was incorporated in the noise model; and
- The ground within the study area is considered to be generally flat.

The façades and outdoor points of reception (OPRs) of the Proposed Development were modelled based on the concept plan dated January 21st, 2026.

3.3

Predicted Sound Levels

Impacts from the surrounding area's noise sources were predicted through noise propagation modelling. **Table 8 through Table 12** below summarize the worst-case predicted noise impacts on the façades and outdoor points of reception on the Proposed Development.

Table 8: Croatian St Francis of Assisi Church Noise Impacts Summary

Point of Reception	Maximum Leq (1 hour) (dBA)		MECP Class 1 Compliance
	Daytime (07:00-19:00)	Evening (19:00-23:00)	

North Façade	48	48	Yes
East Façade	46	46	Yes
South Façade	28	28	Yes
West Façade	36	36	Yes
Play Area A OPR	38	38	Yes
Play Area B OPR	30	30	Yes
Play Area C OPR	49	49	Yes

Table 9: Colonial Tool Noise Impacts Summary

Point of Reception	Maximum Leq (1 hour) (dBA)		MECP Class 1 Compliance
	Daytime (07:00-19:00)	Evening (19:00-23:00)	
North Façade	44	44	Yes
East Façade	46	46	Yes
South Façade	25	25	Yes
West Façade	24	24	Yes
Play Area A OPR	44	43	Yes
Play Area B OPR	26	26	Yes
Play Area C OPR	40	39	Yes

Table 10: Canadian College of Health Science & Technology (CCHST) Noise Impacts

Point of Reception	Maximum Leq (1 hour) (dBA)		MECP Class 1 Compliance
	Daytime (07:00-19:00)	Evening (19:00-23:00)	
North Façade	47	47	Yes
East Façade	48	48	Yes
South Façade	32	32	Yes
West Façade	34	34	Yes
Play Area A OPR	48	48	Yes

Play Area B OPR	34	34	Yes
Play Area C OPR	48	48	Yes

Table 11: Sterling Ridge Noise Impacts Summary

Point of Reception	Maximum Leq (1 hour) (dBA)		MECP Class 1 Compliance
	Daytime (07:00-19:00)	Evening (19:00-23:00)	
North Façade	36	36	Yes
East Façade	46	46	Yes
South Façade	44	44	Yes
West Façade	33	33	Yes
Play Area A OPR	48	48	Yes
Play Area B OPR	44	44	Yes
Play Area C OPR	39	39	Yes

Table 12: Long & McQuade Noise Impacts Summary

Point of Reception	Maximum Leq (1 hour) (dBA)		MECP Class 1 Compliance
	Daytime (07:00-19:00)	Evening (19:00-23:00)	
North Façade	32	32	Yes
East Façade	48	48	Yes
South Façade	47	47	Yes
West Façade	38	38	Yes
Play Area A OPR	48	48	Yes
Play Area B OPR	48	48	Yes
Play Area C OPR	37	37	Yes

The predicted stationary noise impacts are shown graphically in **Figure 3** through **Figure 7**.

As shown in **Table 8** through **Table 12**, the stationary noise impacts from the commercial lands are predicted to be in compliance with the MECP Class 1 noise level limits.

While outdoor play areas associated with daycares are technically exempt from stationary noise exclusionary limits under MECP NPC-300, they have been conservatively assessed as Outdoor Points of Reception to provide a comprehensive assessment.

4.0 Conclusions

Dillon Consulting Limited was retained by Delta Chi Early Childhood Centres to complete a Noise Impact Assessment in support of the Proposed Development.

The assessment presented in this report was prepared in accordance with the guidelines and requirements of the Ontario MECP.

4.1 Transportation Noise Assessment

A transportation noise assessment has been completed to assess potential noise impacts from Walker Road and Tecumseh Road East.

Acoustic modelling was performed for the transportation noise from Walker Road and Tecumseh Road East which determined that predicted noise levels on the Proposed Development are below the applicable criteria.

4.2 Stationary Noise Assessment

A stationary noise assessment has been completed to assess potential noise impacts from the surrounding commercial and industrial lands.

Acoustic modelling was performed for the surrounding commercial and industrial lands which determined that predicted noise levels on the Proposed Development are below the applicable criteria.

5.0

References

Ontario Ministry of Environment Publication NPC-300, Environmental Noise Guideline, Stationary and Transportation Sources- Approval and Planning, October 2013.

Guidelines for New Development in Proximity to Railway Operations, Railway Association of Canada and Federation of Canadian Municipalities, May 2013.

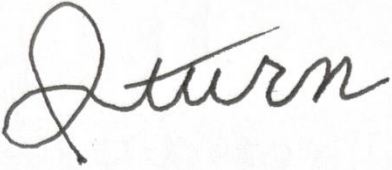
MECP Environmental land use planning guides, 1995.

6.0

Closure

This Noise Impact Study has been prepared based on the information provided and/or approved by Delta Chi Early Childhood Centres. This report is intended to provide a reasonable review of available information within an agreed work scope, schedule, and budget. This report was prepared by Dillon for the sole benefit of Delta Chi Early Childhood Centres. The material in the report reflects Dillon's judgement in light of the information available to Dillon at the time of this report preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Dillon accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

We trust that the report is to your satisfaction. Please do not hesitate to contact the undersigned if you have any further questions on this report.

DILLON CONSULTING LIMITED

Jacob Turner
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Associate

Figures

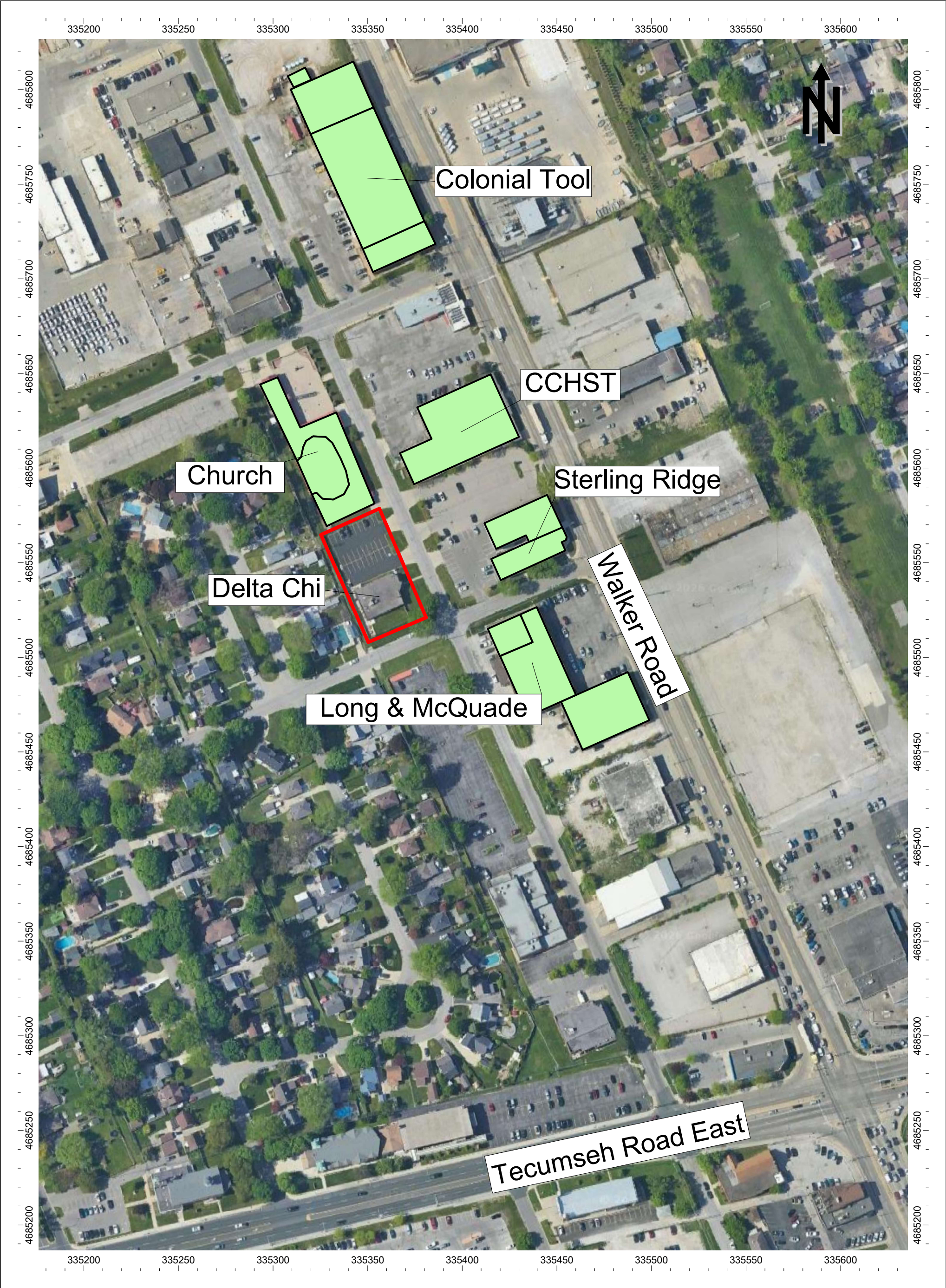
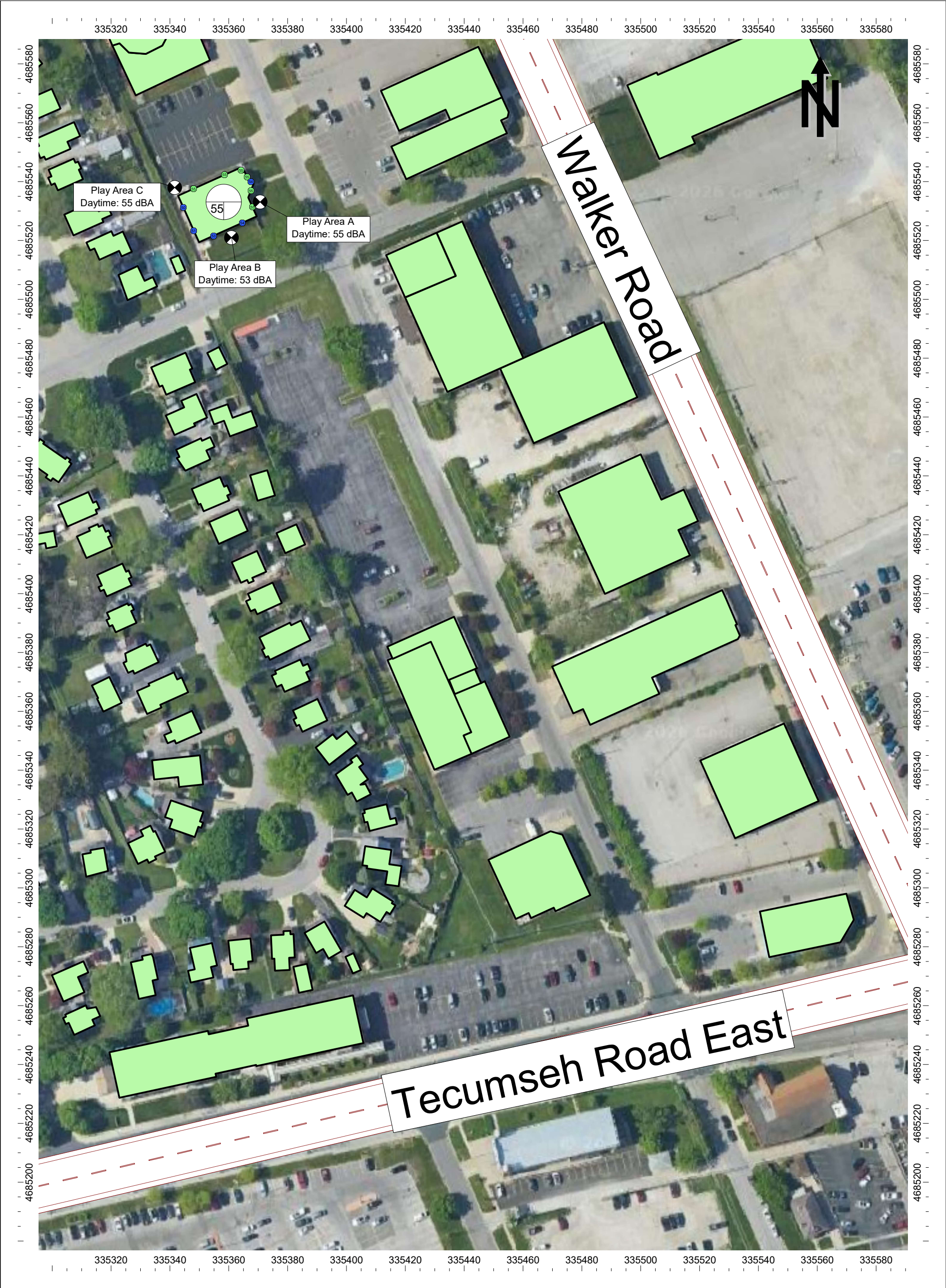
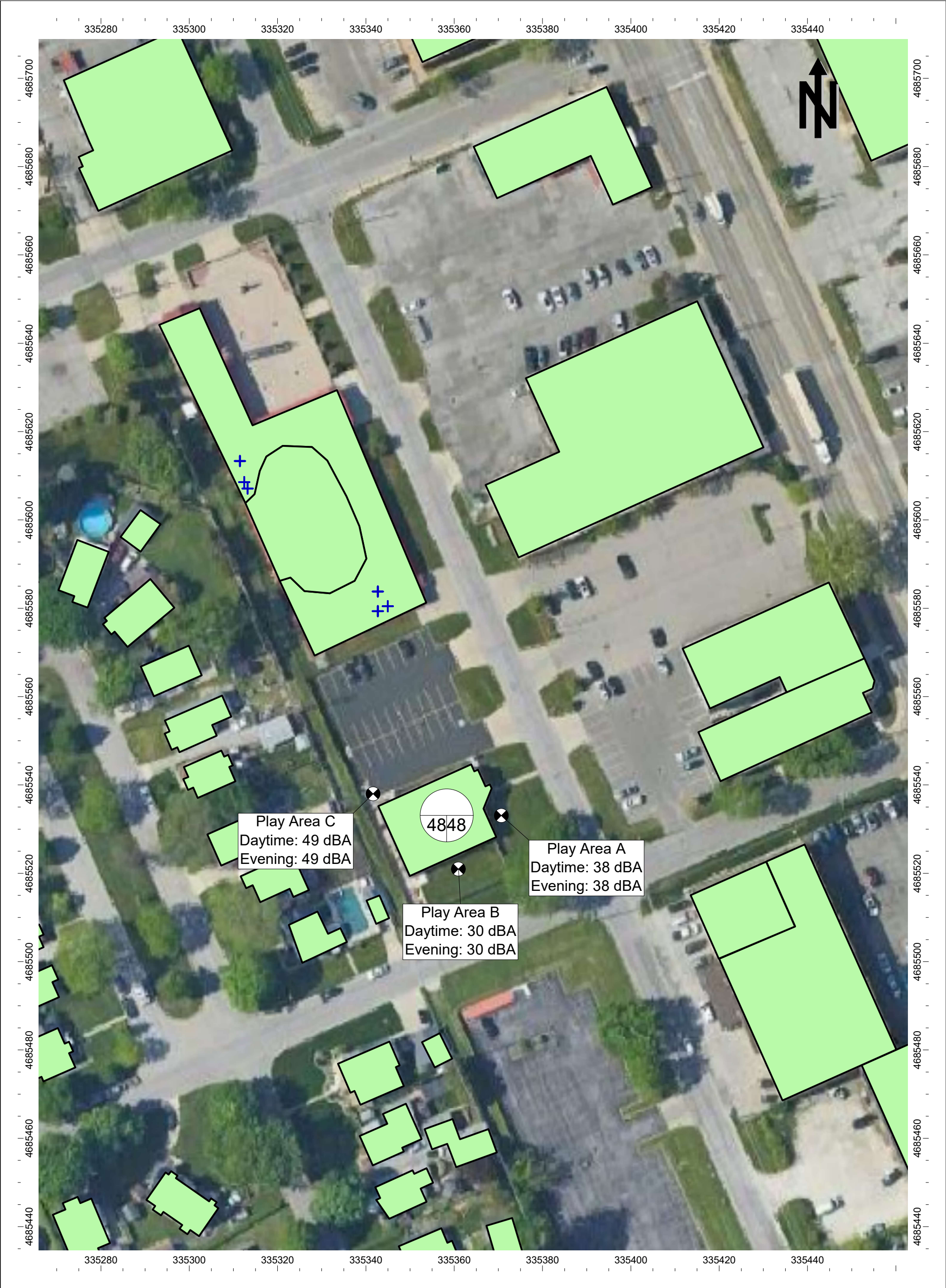


Figure 1
Project # 25-2569
Apr 2026

Subject Site and Surrounding Area	
1785 Turner Road, Windsor, Ontario	





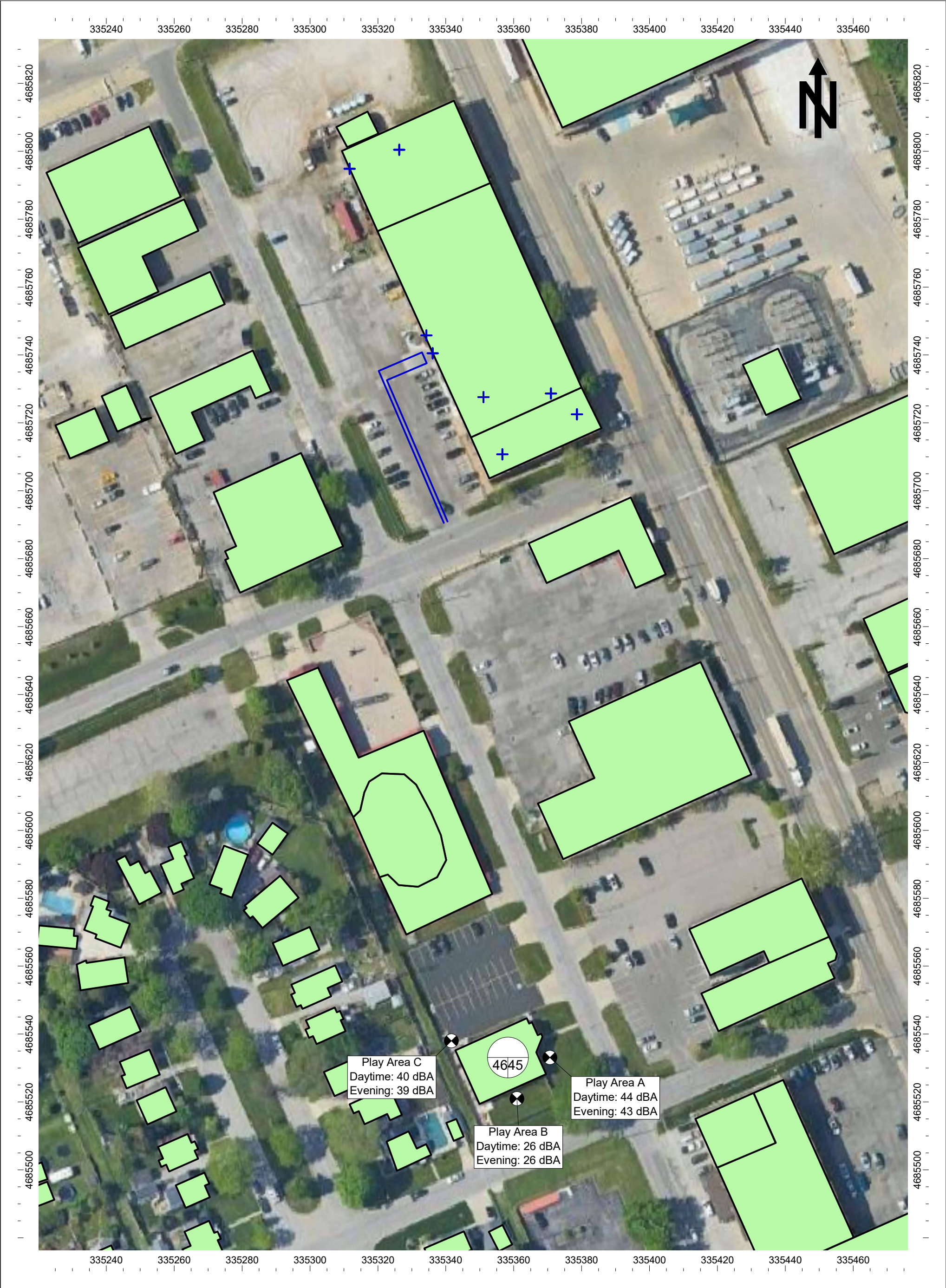
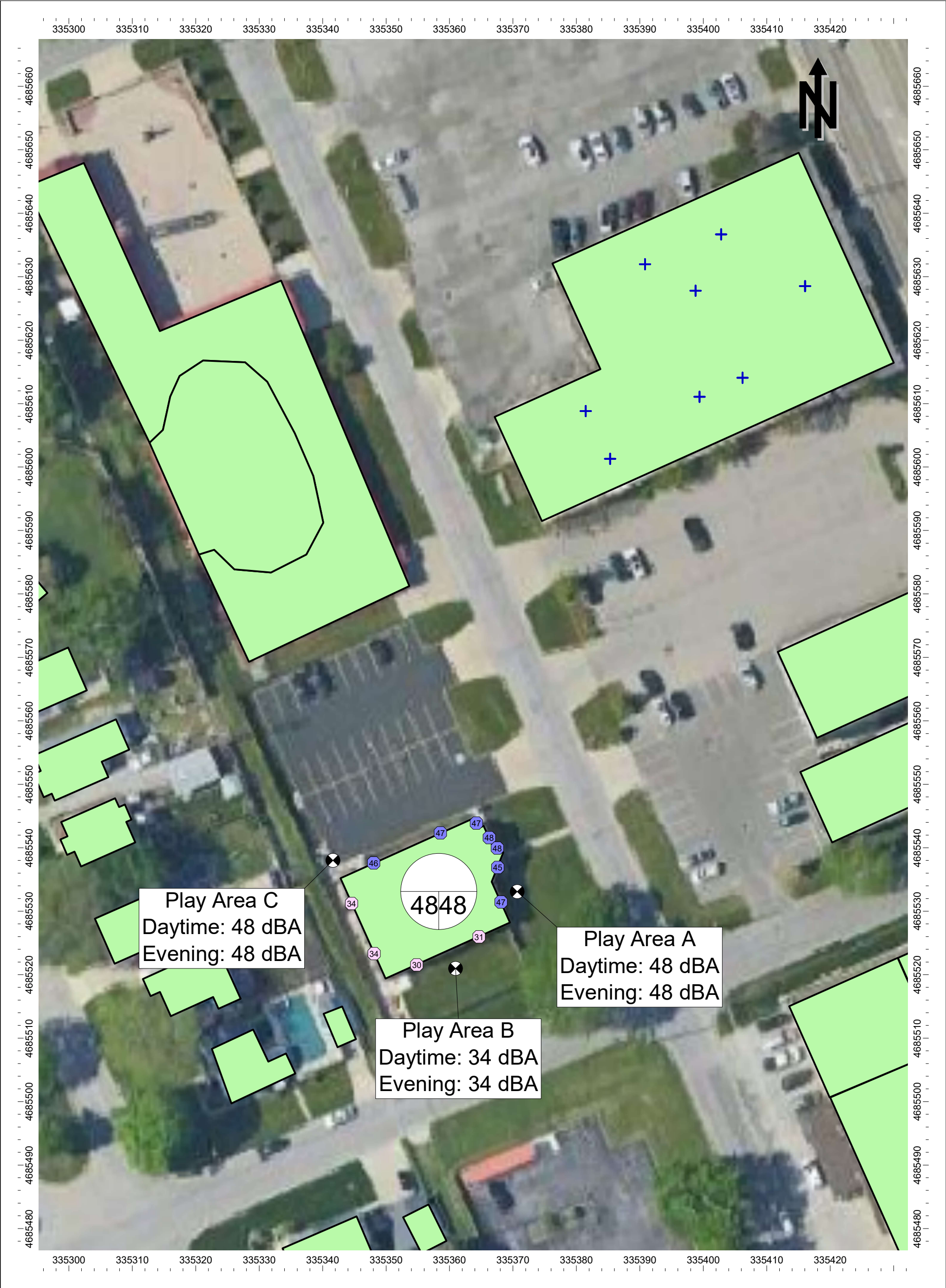


Figure 4	Colonial Tool Predicted Stationary Noise Impacts 1785 Turner Road, Windsor, Ontario	
Project # 25-2569		
Apr 2026		



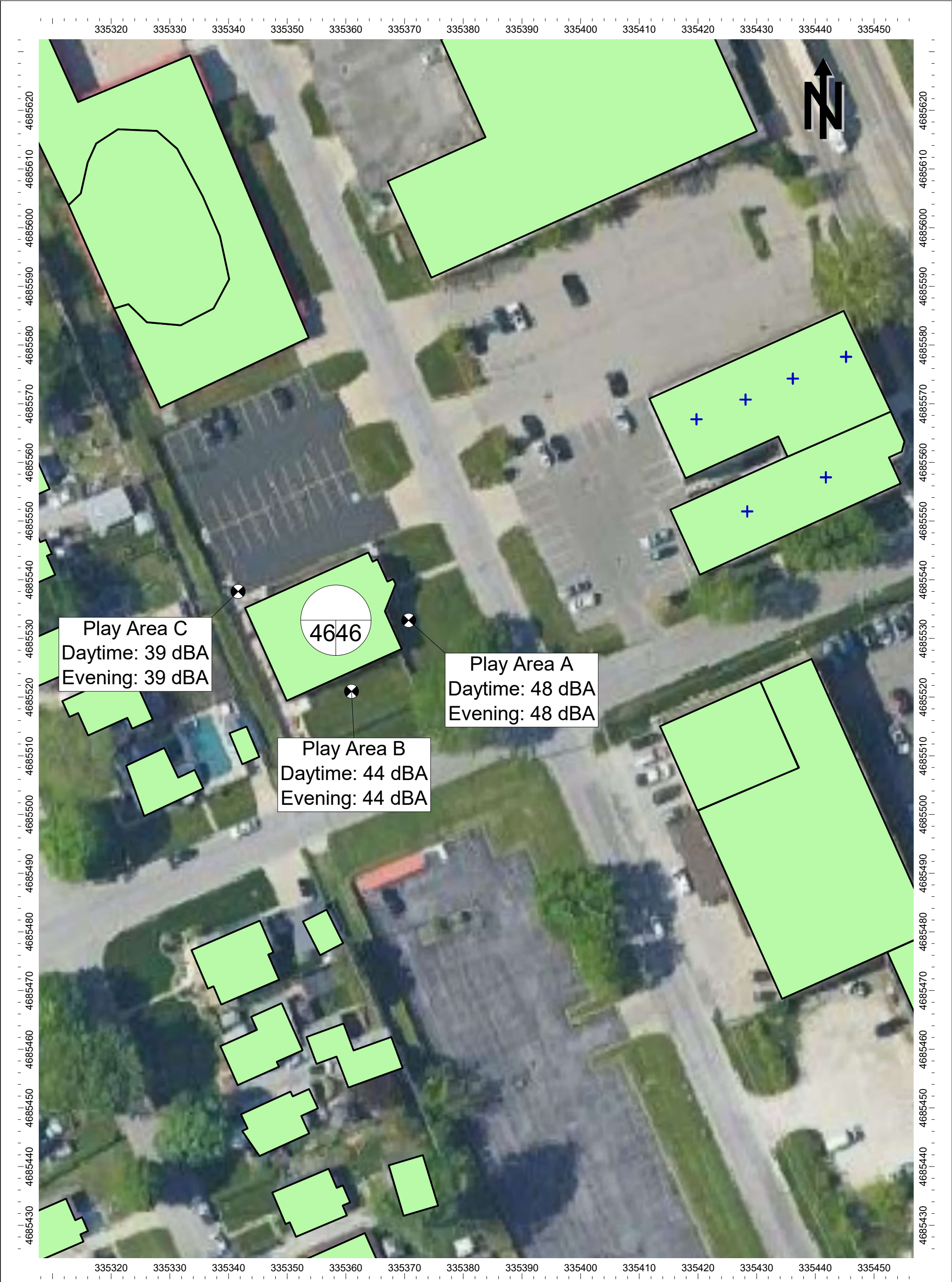


Figure 6
Project # 25-2569
Apr 2026

Sterling Ridge Predicted Stationay Noise Impacts

1785 Turner Road, Windsor, Ontario



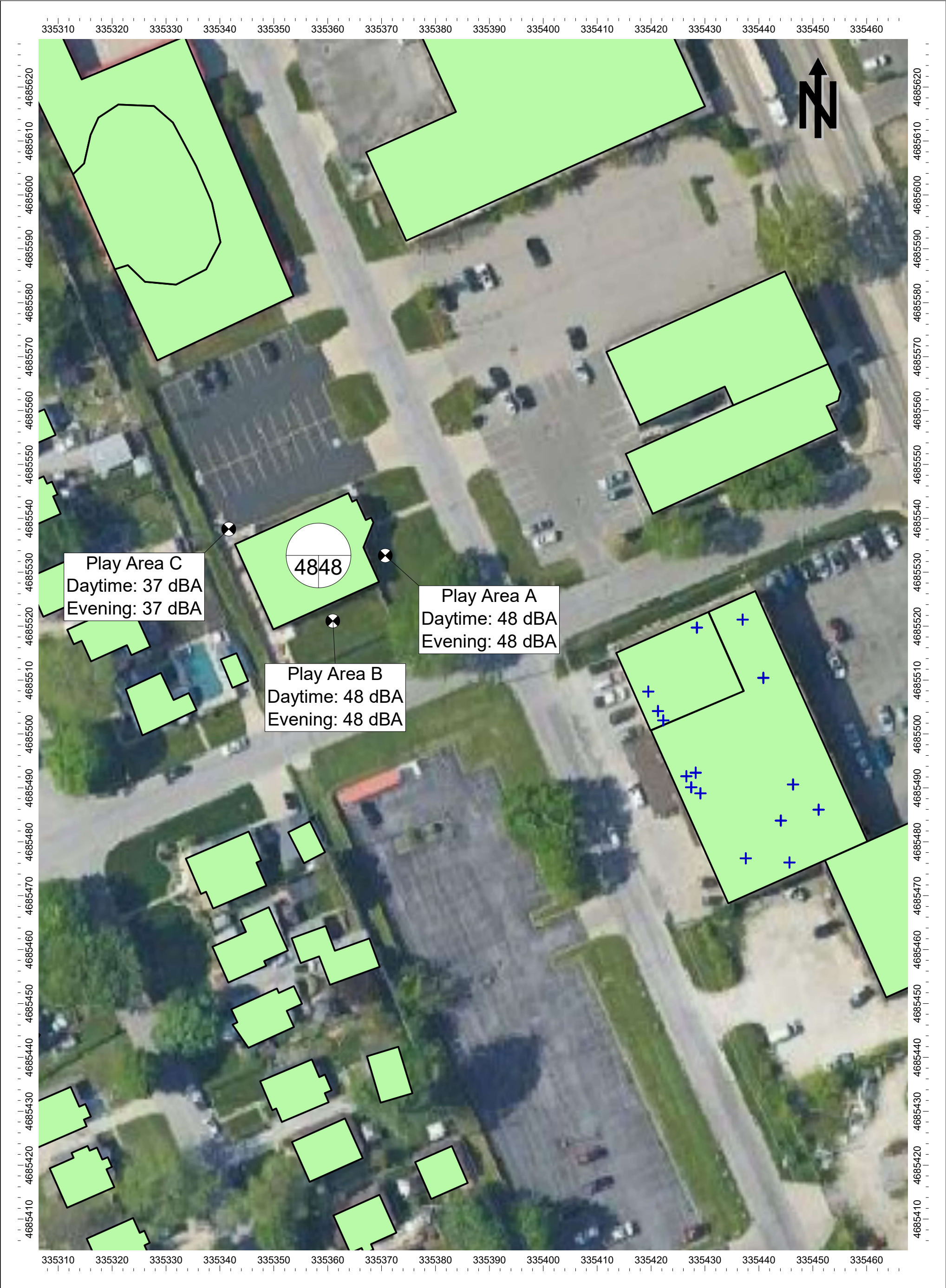


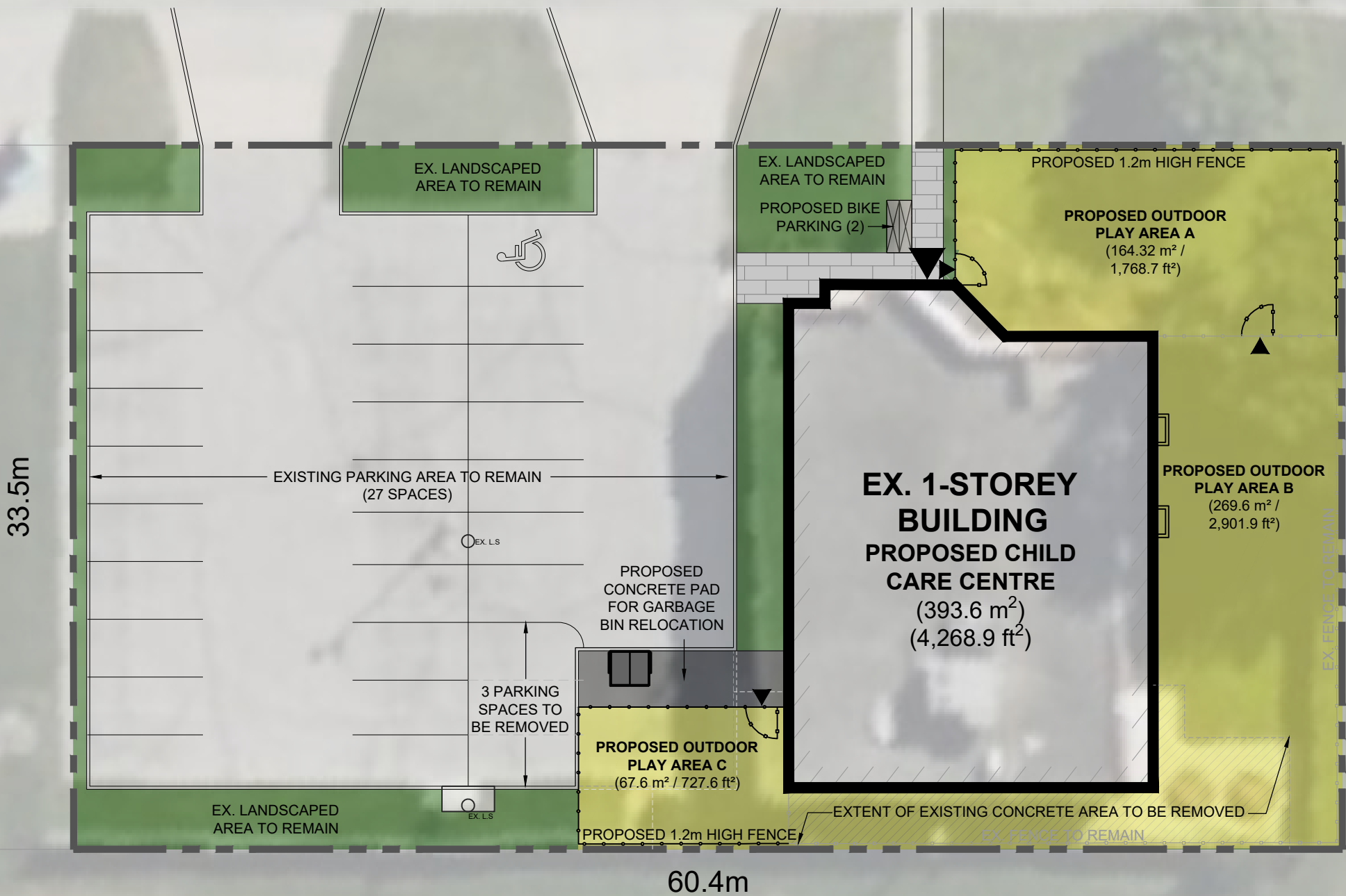
Figure 7	Long & McQuade Predicted Stationary Noise Impacts 1785 Turner Road, Windsor, Ontario		
			Project # 25-2569
			Apr 2026

Appendix A

Development Site Plan

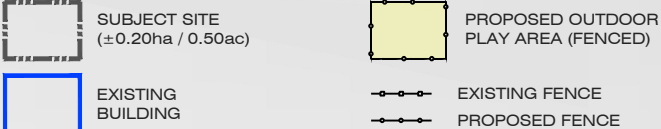
TURNER ROAD

MOHAWK STREET



DELTA CHI EARLY CHILDHOOD CENTRES
1785 TURNER ROAD

CONCEPT PLAN
FIGURE 1.0



OUTDOOR PLAY AREA
ESTIMATED CHILDREN - 88
REQUIRED OUTDOOR PLAY AREA - 492.8 sq.m
(@5.6 sq.m / child)
PROVIDED OUTDOOR PLAY AREA - 501.5 sq.m

File Location:
c:\pw working directory\projects 2025\dillon_31r\dms79672\25-2569 - base site
plan.dwg
January, 21, 2026 12:43 PM

SOURCE: THE COUNTY OF ESSEX INTERACTIVE MAPPING (2025)

MAP/DRAWING INFORMATION
THIS DRAWING IS FOR INFORMATION PURPOSES ONLY.
ALL DIMENSIONS AND BOUNDARY INFORMATION SHOULD
BE VERIFIED BY AN O.L.S PRIOR TO CONSTRUCTION.

CREATED BY: RR
CHECKED BY: AMF
DESIGNED BY: RR

SCALE: 1:250 (11x17)

COUNTERPOINT
LAND DEVELOPMENT BY

DILLON
CONSULTING

PROJECT: 25-2569
STATUS: DRAFT
DATE: 01/21/2026

Appendix B

Road Traffic Data

A B C D E F G H I J K L M N O P Q R S

1

2

3

4

5

6

7

8

9

10

11

1

2

3

4

5

6

7

8

9

10

11



DOWNTOWN AREA

2020 AADT MAP

CITY OF WINDSOR

A B C D E F G H I J K L M N O P Q R S

Appendix C

STAMSON

Filename: 1785turn.te Time Period: 1 hours
Description:

Road data, segment # 1: Walker

Car traffic volume : 1588 veh/TimePeriod
Medium truck volume : 91 veh/TimePeriod
Heavy truck volume : 146 veh/TimePeriod
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Walker

Angle1 Angle2 : 0.00 deg 70.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 105.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: Tecumseh

Car traffic volume : 1672 veh/TimePeriod
Medium truck volume : 96 veh/TimePeriod
Heavy truck volume : 154 veh/TimePeriod
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: Tecumseh

Angle1 Angle2 : 0.00 deg 30.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 310.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Results segment # 1: Walker

Source height = 1.68 m

ROAD (0.00 + 54.05 + 0.00) = 54.05 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	70	0.65	72.91	0.00	-13.98	-4.88	0.00	0.00	0.00	54.05

Segment Leq : 54.05 dBA

↑
Results segment # 2: Tecumseh

Source height = 1.68 m

ROAD (0.00 + 43.47 + 0.00) = 43.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	30	0.65	73.15	0.00	-21.76	-7.91	0.00	0.00	0.00	43.47

Segment Leq : 43.47 dBA

Total Leq All Segments: 54.41 dBA

↑

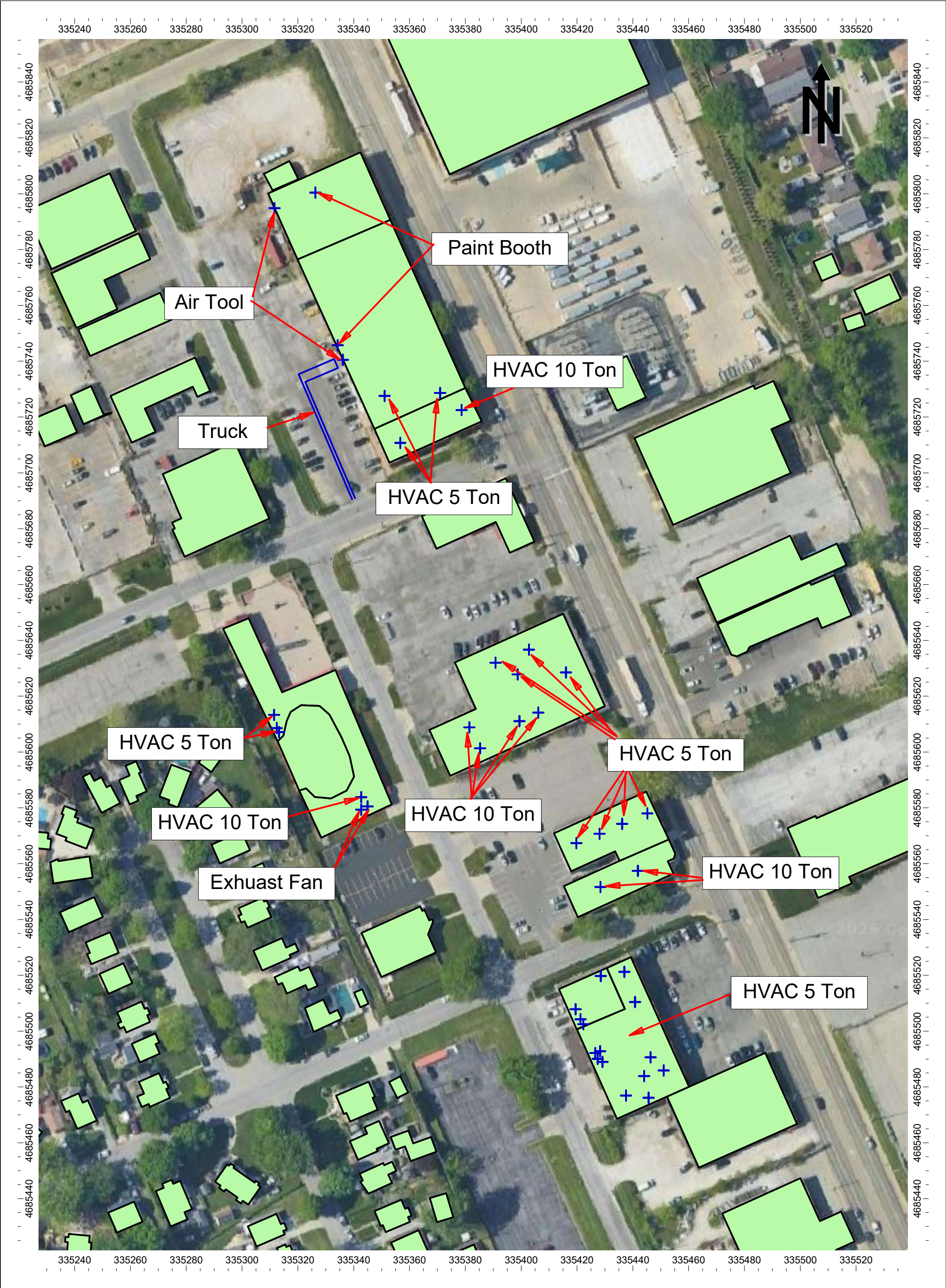
TOTAL Leq FROM ALL SOURCES: 54.41

↑
↑

Appendix D

Noise Source Information

Noise Source Summary Table			
Noise Source	Sound Power Level (dBA)	# of Sources	Sound Characteristics
HVAC 5 Ton	81.4	29	Steady
HVAC 10 Ton	88.3	7	Steady
Exhaust Vent	80	2	Steady
Truck	107.1	1	Steady
Air Tools	112	2	Quasi steady-state
Paint Booth	94.4	2	Steady
Note: Quasi steady-state source has a 10dBA penalty applied			



Appendix D	
Project # 25-2569	
Apr 2026	

Stationary Source Locations

1785 Turner Road, Windsor, Ontario

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