

27 WINONA DRIVE

WHITCHURCH-STOUFFVILLE, ONTARIO

NOISE IMPACT STUDY

RWDI #2406483

December 15, 2025

SUBMITTED TO

Darul Khair Center Stouffville

86 Ringwood Drive, Unit 36
Whitchurch-Stouffville, ON
info@darulkhair.ca

Worship-Mosque

27 Winona Drive
Whitchurch-Stouffville,
ON L4A 2S9

SUBMITTED BY

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VERSION HISTORY

Index	Date	Description	Prepared by	Reviewed by
1	November 20, 2025	Submitted for ZBA	Caelan Weber-Martin	Jacque Kelton
2	December 15, 2025	Updated for new site plan drawings	Caelan Weber-Martin	Lorenzo Carboni



EXECUTIVE SUMMARY

RWDI was retained to prepare a Noise Impact Study for the proposed mosque, located at 27 Winona Drive in Whitchurch-Stouffville, Ontario. This assessment was completed to support the Zoning Bylaw Amendment (ZBA) submission as required by the Town of Whitchurch-Stouffville.

A screening level assessment of stationary sources associated with the mosque was conducted for existing and proposed surrounding buildings.

The land immediately to the east of the proposed mosque, 5964 Main Street & 28 Fairview Avenue, has an active development application. However, the development has not yet been approved. Since the land is currently zoned as Commercial Residential Mixed, allowing noise-sensitive uses for buildings with a maximum height of 20m, the proposed 5964 Main Street & 28 Fairview Avenue development was conservatively included in this assessment to represent a potential future noise-sensitive building. Sound levels at a future noise-sensitive building on this lot may exceed provincial guidelines. As part of the approval process for the proposed 5964 Main Street & 28 Fairview Avenue development, noise from surrounding stationary sources, including the mosque, should be considered. Various mitigation measures are considered feasible, including at-source mitigation measures such as barrier walls and at-receptor mitigation measures, such as including air conditioning in the building design, which allows residents to keep windows closed and reduce indoor sound levels.

Sound levels attributable to the proposed mosque at all other existing and proposed residential lands are predicted to comply with the provincial environmental noise criteria.

Based on the results of this analysis, the proposed mosque is feasible with respect to noise.



TABLES OF CONTENTS

1 INTRODUCTION1

2 APPLICABLE CRITERIA1

3 STATIONARY SOURCE ASSESSMENT2

3.1.1 Surrounding Noise-Sensitive Receptors..... 2

3.1.2 Stationary Source Modelling 2

3.1.3 Analysis and Results 3

4 CONCLUSIONS4

5 REFERENCES5

STATEMENT OF LIMITATIONS6

LIST OF TABLES

Table 1: NPC-300 Exclusion Limits for Continuous Sources 1

Table 2: Stationary Source Sound Power Levels..... 3

Table 3: Predicted Sound Levels at Worst-case Receptor Locations – Continuous Stationary Sources 3

LIST OF FIGURES

Figure 1: Context Site Plan

Figure 2: Surrounding Noise-Sensitive Receptors

LIST OF APPENDICES

Appendix A: Drawings

Appendix B: Sound Data

Appendix C: Stationary Source Assessment



1 INTRODUCTION

RWDI was retained to prepare a Noise Impact Study for the proposed mosque located at 27 Winona Drive in Whitchurch-Stouffville, Ontario. The context site plan is shown in **Figure 1**.

This assessment was completed in support of the Zoning Bylaw Amendment (ZBA) submission as required by the Town of Whitchurch-Stouffville. This assessment was based on design drawings dated November 20, 2025. A copy of the drawings is included in **Appendix A**.

2 APPLICABLE CRITERIA

Applicable criteria for stationary noise sources are adopted from the Ontario Ministry of the Environment, Conservation and Parks (MECP) NPC-300 Environmental Noise Guideline (MOE, 2013).

Noise from stationary sources requires sound levels to 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 the plane of the window.

The assessment criteria for all PORs are 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 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."

The NPC-300 exclusion limits for continuously operating stationary sources in a Class 1 Area are summarized in **Table 1**.

Table 1: NPC-300 Exclusion Limits for Continuous Sources

Time Period	Class 1 Area	
	Outdoor	Plane of Window
Daytime 07:00-19:00	50 dBA	50 dBA
Evening 19:00-23:00	50 dBA	50 dBA
Nighttime 23:00-07:00	--	45 dBA

3 STATIONARY SOURCE ASSESSMENT

3.1.1 Surrounding Noise-Sensitive Receptors

Lands surrounding the proposed mosque consist of:

- Stouffville Auto Wash Car Wash to the north, with residential dwellings beyond that,
- A property with development applications pending to the east (5964 Main Street & 28 Fairview Avenue),
- A commercial plaza to the immediate south,
- Future residential developments to the south (along the south side of Main Street), and
- A commercial plaza to the west.

Representative worst-case receptors were selected for the dwellings to the north. A façade receptor with a height of 4.5m was used to represent the worst-case façade sound level at the 2nd storey (or 1.5m receptor height for single-storey dwellings). An outdoor receptor with a height of 1.5m was used to assess sound levels in the backyards of the dwellings.

The building shape of the proposed 5964 Main Street & 28 Fairview Avenue development was used to assess noise at the lot to the east, with a building height of 20 meters (maximum building height for the current zoning). A worst-case façade receptor was used to assess sound levels at the potential future building. The ZBA for the proposed 5964 Main Street & 28 Fairview Avenue development has currently not been approved, however, the building was conservatively considered in this assessment to account for the case where the development is approved in the future, or if another noise-sensitive building is built on the lot. However, a future development should consider noise from the mosque in its own Noise Impact Study to ensure that appropriate sound levels are met at the building.

Future residential developments to the south, along the south side of Main Street, were included in this assessment. Sound levels were assessed at worst-case façade locations for future developments.

Representative receptor locations included in this assessment are illustrated in **Figure 2**.

3.1.2 Stationary Source Modelling

Stationary sources associated with the proposed mosque include 3 rooftop HVAC units and one transformer. There will be no call-to-prayer sound system associated with the proposed mosque. Sound power level data were provided for the 3 HVAC units and are included in **Appendix B**. The transformer associated with the mosque is a small 300 kVA transformer and is considered insignificant from a noise perspective relative to the HVAC units. Therefore, this assessment does not include the transformer.

The rooftop HVAC unit locations are shown in **Appendix C** in **Figure C.1**.

Sound power levels for the HVAC units are shown in **Table 2**.

Table 2: Stationary Source Sound Power Levels

Source Description	Source ID (As shown in Figure C.1)	Sound Power Level (dBA)	Duty Cycle	
			Daytime and Evening (07:00 – 23:00)	Nighttime (23:00h – 07:00)
12.5 Ton HVAC Unit	JAIN_12_5_T	89	Continuous	30 minutes/hour
15 Ton HVAC Unit	JAIN_15_T	87	Continuous	30 minutes/hour
7.5 Ton HVAC Unit	JAIN_7_5_T	86	Continuous	30 minutes/hour

The HVAC units were assumed to operate continuously during the daytime and evening, and 30 minutes per hour during nighttime.

3.1.3 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 the Class 1 Area limits. A sample calculation is included in **Appendix C** for the worst-case façade receptor associated with the proposed 28 Fairview Avenue building (R04).

Table 3: Predicted Sound Levels at Worst-case Receptor Locations – Continuous Stationary Sources

Receptor	Receptor Description	Predicted Sound Level Daytime-Evening / Nighttime L _{EQ-1hr} (dBA)	Criteria	Meets Class 1 Criteria?
			Class 1 Daytime-Evening / Nighttime L _{EQ-1hr} (dBA)	
R01_f	Façade Receptor – 1-Storey House at 50 Winona Drive	43 / 40	50 / 45	Yes / Yes
R01_o	Outdoor Receptor – 1-Storey House at 50 Winona Drive	44 / -- ^[1]	50 / -- ^[1]	Yes / -- ^[1]
R02_f	Façade Receptor – 1-Storey House at 336 Rupert Avenue	44 / 41	50 / 45	Yes / Yes
R02_o	Outdoor Receptor – 1-Storey House at 336 Rupert Avenue	46 / -- ^[1]	50 / -- ^[1]	Yes / -- ^[1]
R03_f	Façade Receptor – 1-Storey House at 34 Fairview Avenue	38 / 35	50 / 45	Yes / Yes
R03_o	Outdoor Receptor – 1-Storey House at 34 Fairview Avenue	36 / -- ^[1]	50 / -- ^[1] dBA	Yes / -- ^[1]

Receptor	Receptor Description	Predicted Sound Level Daytime-Evening / Nighttime L _{EQ} -1hr (dBA)	Criteria	Meets Class 1 Criteria?
			Class 1 Daytime-Evening / Nighttime L _{EQ} -1hr (dBA)	
R04	Façade Receptor – Future Potential 5964 Main Street & 28 Fairview Avenue Development	52 / 49	50 / 45 dBA	No / No
R05	Façade Receptor – Future 5991 Main Street Development	44 / 41	50 / 45 dBA	Yes / Yes
R06	Façade Receptor – Future 5945-5947 Main Street Development	42 / 39	50 / 45 dBA	Yes / Yes

Note(s):

1. Outdoor areas are not assessed during the nighttime period.
2. No outdoor points of reception were identified for R04, R05, or R06.

As shown in **Table 3**, based on the modelling assumptions, the continuous sound levels at the façade due to stationary sources are predicted to meet the applicable Class 1 sound level criteria for all surrounding noise-sensitive receptors except for the future potential 5964 Main Street & 28 Fairview Avenue development.

Currently, the proposed development at 5964 Main Street & 28 Fairview Avenue has not been approved for ZBA. If a future development is proposed at 5964 Main Street & 28 Fairview Avenue after the approval of the proposed 27 Winona Drive mosque, the development should consider noise from the mosque in its Noise Impact Study. Various mitigation measures are considered feasible, including at-source mitigation measures such as barrier walls, and at-receptor mitigation measures, such as including air conditioning in the building design, which allows residents to keep windows closed and reduces indoor sound levels.

4 CONCLUSIONS

RWDI was retained to prepare a Noise Impact Study for the proposed mosque located in Whitchurch-Stouffville, Ontario.

A screening-level assessment of stationary sources associated with the mosque was conducted for existing and proposed surrounding buildings. The land immediately to the east of the proposed mosque, 5964 Main Street & 28 Fairview Avenue, has an active development application. However, the development has not yet been approved. Since the land is currently zoned as Commercial Residential Mixed, allowing noise-sensitive uses for buildings with a maximum height of 20m, the proposed 5964 Main Street & 28 Fairview Avenue development was conservatively included in this assessment to represent a potential future noise-sensitive building. Sound levels at a future noise-sensitive building on this lot may exceed provincial guidelines. As part of the approval process for the proposed 5964 Main Street & 28 Fairview Avenue development, noise from surrounding stationary sources, including the mosque, should be considered.

Various mitigation measures are considered feasible, including at-source mitigation measures such as barrier walls and at-receptor mitigation measures, such as including air conditioning in the building design, which allows residents to keep windows closed and reduces indoor sound levels.

Sound levels attributable to the proposed mosque at all other existing and proposed residential lands are predicted to comply with the provincial environmental noise criteria.

Based on the results of the analysis, the proposed mosque is feasible with respect to noise.

5 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. 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).
3. 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).

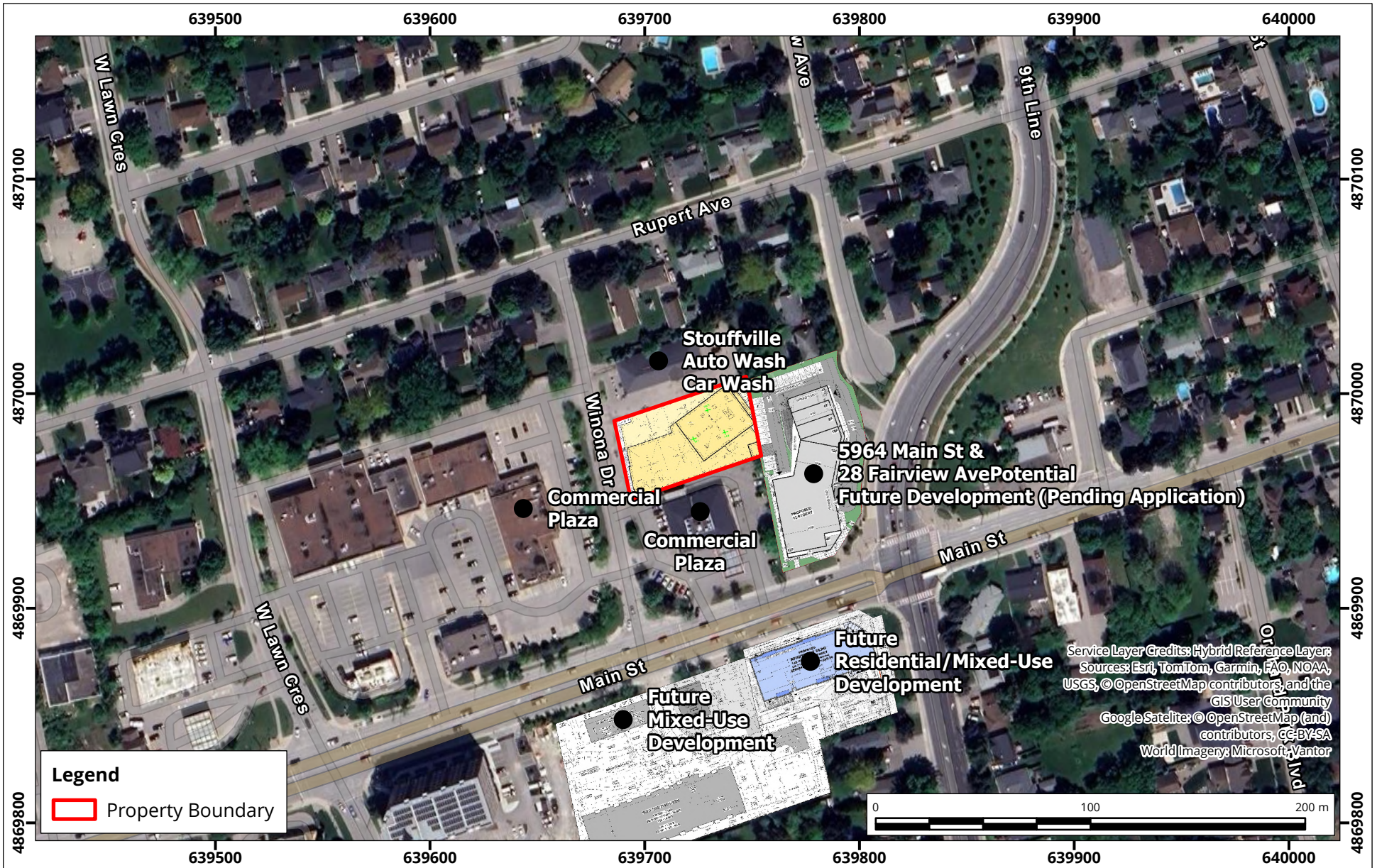
STATEMENT OF LIMITATIONS

This report, entitled 27 Winona Drive, was prepared by Rowan Williams Davies & Irwin Inc. ("RWDI") for Darul Khair Center Stouffville ("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 the 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



Site Context Plan

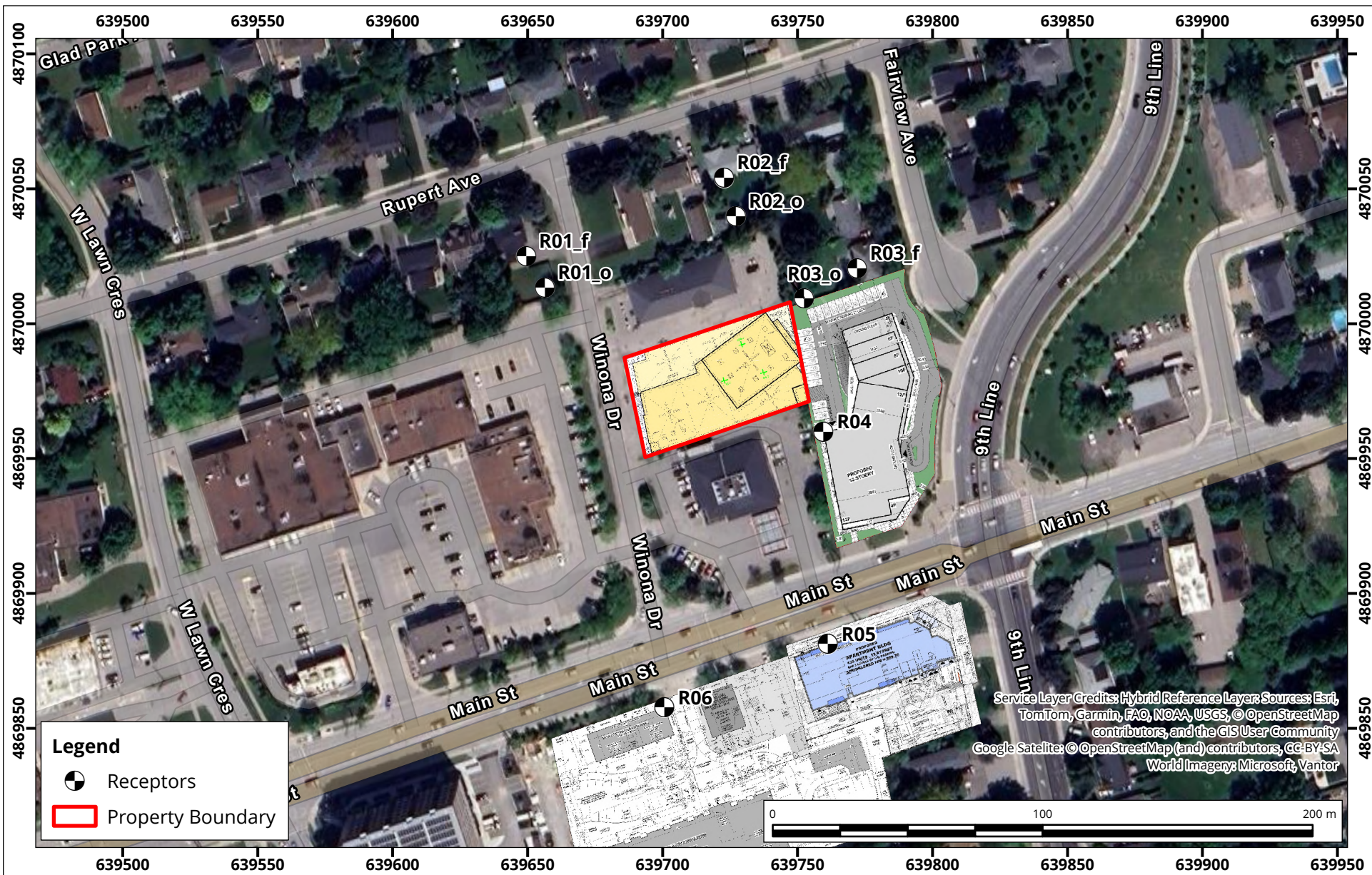
Map Projection: NAD 1983 UTM Zone 17N
 27 Winona Drive - Witchurch-Stouffville, Ontario



Drawn by: CWM	Figure: 1
Approx. Scale: 1:2,500	
Date Revised: Dec 12, 2025	



Project #: 2406483



Sensitive Receptor Locations

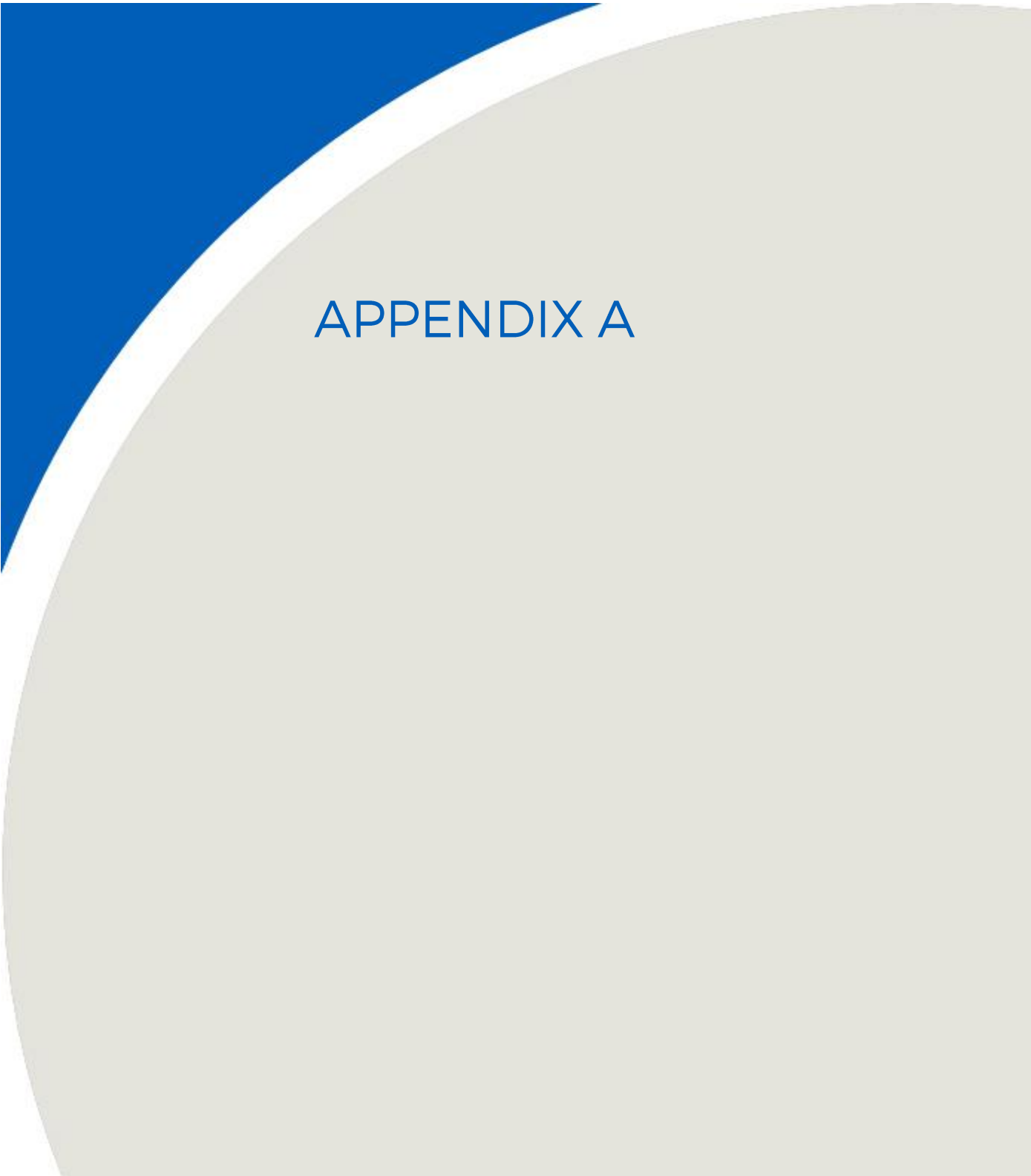
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27 Winona Drive - Witchurch-Stouffville, Ontario



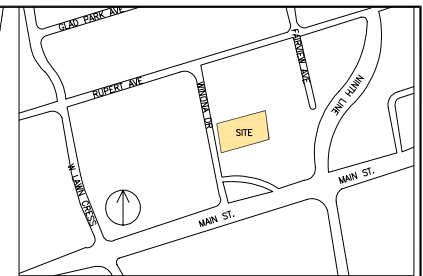
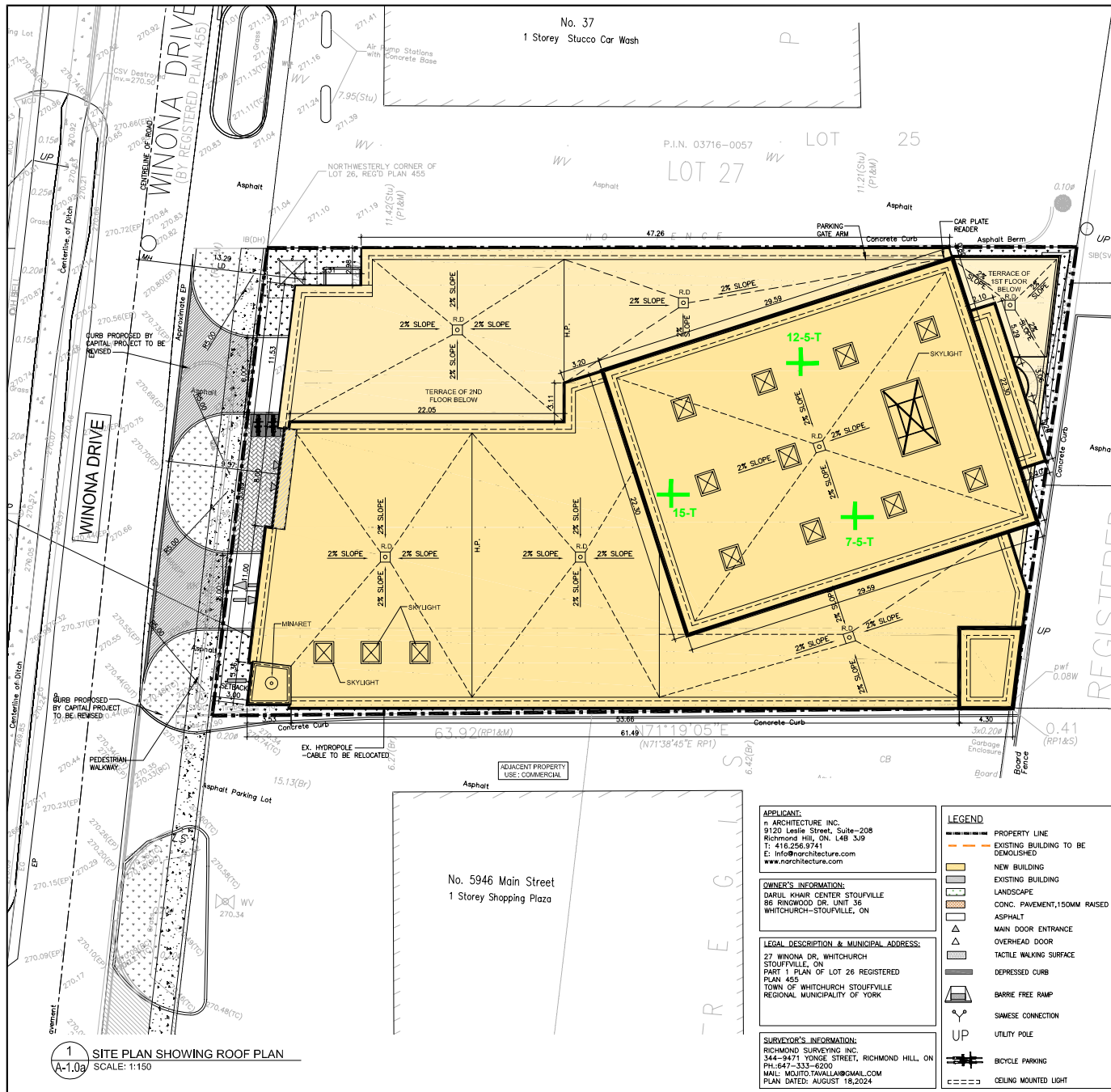
Drawn by: CWM	Figure: 2
Approx. Scale: 1:2,000	
Date Revised: Dec 12, 2025	



Project #: 2406483

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APPENDIX A



PROJECT STATISTICS		
ADDRESS: 27 . WINONA DR, WHITCHURCH, STOUFFVILLE, ON		
ZONING : COMMERCIAL RESIDENTIAL MIXED -WESTERN APPROACH(CM2) (BYLAW 2010-001-70 TOWN OF WHITCHURCH STOUFFVILLE,2010)		
	REQUIRED	PROPOSED
	CM-2	CM-2 (PLACE OF WORSHIP USE PERMITTED)
LOT AREA (SQ.M)	0 SQ.M. (MIN)	2408.74 SQ.M. (0.59 ACRES)
LOT FRONTAGE	0 M	37.80 M
BUILDING COVERAGE	N/A	2146.45 SQM (89.11%)
GFA (SQ.M)		2115.24 SQ.M 1922.20 SQ.M
GFA (SQ.M)-EXCLUDING MECHANICAL ROOM, STAIR WELLS, ELEVATOR SHAFTS, REFUSE, STORAGE ROOM		217.84 SQ.M(9.04%)
PAVED AREA		2044.58 SQ.M. (84.88%)
MAX. BUILDING HEIGHT	20M	-12.95 M -20.00M (HEIGHT OF MINARET)

BUILDING SETBACKS		
FRONT YARD (WEST)	REQUIRED (MIN)3 M (MAX)3 M	PROPOSED 3 M
REAR YARD (EAST)	(MIN)0 M	0.63 M
INTERIOR SIDE YARD (NORTH)	(MIN)0 M	0.61 M
INTERIOR SIDE YARD (SOUTH)	(MIN)0 M	0.61 M

LOADING CALCULATION:		
OVER 950M ² UP TO 2115.24M ² OF GFA 4 LARGE LOADING SPACES REQUIRED (9M X 3.5M)	04	00
LONG TERM BICYCLE PARKING		
1 PER 1250 SQ.M OF GFA 2115.24/1250=1.69	02	03
SHORT TERM BICYCLE PARKING		
THE GREATER OF 1 SPACE PER 1000 SQ.M OF GFA OR 3 SPACES	03	03
BICYCLE PARKING SIZE:1.8MX0.6M_1.2M VERTICAL CLEARANCE		

PARKING CALCULATION		
MEN'S PRAYER HALL (10 SPACES/100SQ.M.)-AREA=535.82 SQ.M.	53.5	55
WOMEN'S PRAYER HALL (10 SPACES/100SQ.M.)-AREA=135.3 SQ.M.	13.5	14
LOUNGE AREA (10 SPACES/100SQ.M.)-AREA=62.1 SQ.M.	6.2	07
OFFICE (4 SPACES/100 SQ.M.)-AREA=41.7 SQ.M.	1.6	02
TOTAL PARKINGS SPACES	74.8	76
ACCESSIBLE PARKING:4% OF TOTAL PARKING SPACES	03	03
PARKING SIZE:(2.75X5.5M), ACCESSIBLE PARKING SIZE: TYPE A (3.4X5.5M)_TYPE B(2.4X5.5M)		

n Architecture Inc
PRINCIPAL: NITIN MALHOTRA, ARCHITECT.
9120 Leslie Street, Suite-208
Richmond Hill, Ontario, L4B 3J9
T : 4 1 6 . 2 5 6 . 9 7 4 1
E: info@narchitecture.com
www.narchitecture.com

PROJECT NO: 27

20TH NOVEMBER 2025
ISSUED FOR ZBA#2
NOT FOR CONSTRUCTION

5.	20 NOV. 2025	ISSUED FOR ZBA#2 (DA#3)	MG
4.	18 MAR. 2025	ISSUED FOR ZBA#1 (DA#2)	ZP
3.	05 NOV. 2024	ISSUED FOR PRE-CON #3 (DA#1)	ZP
2.	24 APR. 2024	ISSUED FOR PRE-CON #2	JB
1.	13 JUN. 2023	ISSUED FOR PRE-CON	JB
No.	Date	Version	Dwn.

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Contractor must verify all job dimensions,
drawings, details and specifications and report
any discrepancies to the architect before
proceeding with work.

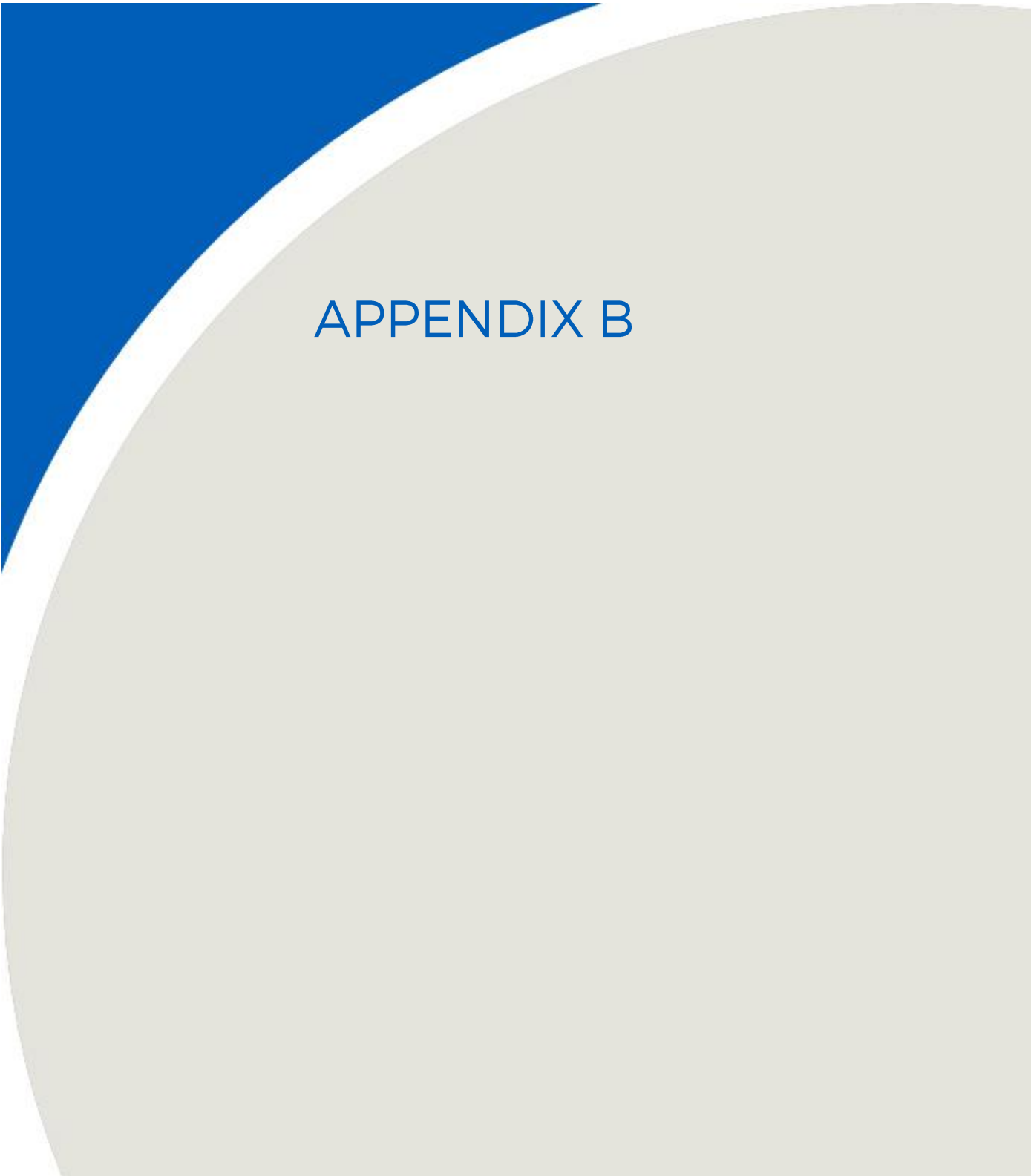
PROJECT:
**27 WINONA DR,
WHITCHURCH
STOUFFVILLE, ON
PLACE OF
WORSHIP-MOSQUE**

DRAWING TITLE:
**SITE PLAN AT
ROOF LEVEL**

DRAWN BY: JB	DATE: 12 DEC 2022
CHECKED BY: NM	SCALE: AS NOTED
PROJECT NO:	DRAWING NO.:

22-71

A-1.0a

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APPENDIX B

**TRANE**

Job Name: Moz Budget Pricing
Prepared For:
Unit Tag: JAIN - 12.5T
Quantity: 1

12.5 Ton Unit

Fan Section

Indoor Fan Data		Indoor Fan Performance	
Airflow Application	Downflow	Airflow	5000 cfm
Design ESP	1.000 in H2O	Supply Motor Horsepower	4.600 hp
Component SP	0.432 in H2O	Indoor Motor Operating Power	2.864 hp
Heat SP	0.000 in H2O	Indoor RPM	1634 rpm
Total SP	1.432 in H2O	Outdoor Fan Data	
Indoor Fan Drive Type	Variable Direct	Outdoor Fan Drive Type	Direct
Indoor Fan Quantity	1.00 Number	Outdoor Fan Quantity	1
Indoor Fan Type	BC Plenum	Outdoor Fan Type	Propeller
		Filters	
		1st Filter Size and Qty	3 - 24 x 18 x 2
		2nd Filter Size and Qty	3 - 18 x 18 x 2

Field Installed Accessories

Roof curb	14" Full Perimeter Knockdown Curb
Economizer Conversion Kit	None
Symbio Adv Controls and BACnet Conv Kit	None

Acoustics

Sound Path	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Ducted Discharge	85 dB	90 dB	82 dB	74 dB	70 dB	67 dB	68 dB	67 dB
Ducted Inlet	82 dB	81 dB	76 dB	67 dB	64 dB	61 dB	61 dB	60 dB
Outdoor Noise	88 dB	91 dB	90 dB	87 dB	84 dB	80 dB	75 dB	67 dB

Note: Ducted Discharge/Ducted Inlet prediction data conform to AHRI 260

Warranty

Labor (first year)	1st Yr Labor Whole Unit
--------------------	-------------------------



TRANE

Job Name: Moz Budget Pricing
Prepared For:
Unit Tag: JAIN - 15T
Quantity: 1

15 Ton Unit

Field Installed Accessories

Roof curb 14" Full Perimeter Knockdown Curb

Economizer Conversion Kit None

Symbio Adv Controls and BACnet Conv Kit None

Acoustics

Sound Path	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Ducted Discharge	79 dB	88 dB	77 dB	68 dB	63 dB	59 dB	59 dB	57 dB
Ducted Inlet	78 dB	84 dB	69 dB	63 dB	59 dB	56 dB	55 dB	53 dB
Outdoor Noise	84 dB	87 dB	88 dB	85 dB	82 dB	77 dB	74 dB	69 dB

Note: Ducted Discharge/Ducted Inlet prediction data conform to AHRI 260

Warranty

Labor (first year) 1st Yr Labor Whole Unit

**TRANE**

Job Name: Moz Budget Pricing
Prepared For:
Unit Tag: JAIN - 7.5T
Quantity: 1

7 1/2 Ton Unit

Fan Section

Indoor Fan Data		Indoor Fan Performance	
Airflow Application	Downflow	Airflow	3000 cfm
Design ESP	1.000 in H2O	Supply Motor Horsepower	3.000 hp
Component SP	0.151 in H2O	Indoor Motor Operating Power	1.281 hp
Heat SP	0.000 in H2O	Indoor RPM	1232 rpm
Total SP	1.151 in H2O	Outdoor Fan Data	
Indoor Fan Drive Type	Variable Direct	Outdoor Fan Drive Type	Direct
Indoor Fan Quantity	1.00 Number	Outdoor Fan Quantity	1
Indoor Fan Type	BC Plenum	Outdoor Fan Type	Propeller
		Filters	
		1st Filter Size and Qty	2 - 18 x 24 x 2
		2nd Filter Size and Qty	3 - 24 x 16 x 2

Field Installed Accessories

Roof curb	14" Full Perimeter Knockdown Curb
Economizer Conversion Kit	None
Symbio Adv Controls and BACnet Conv Kit	None

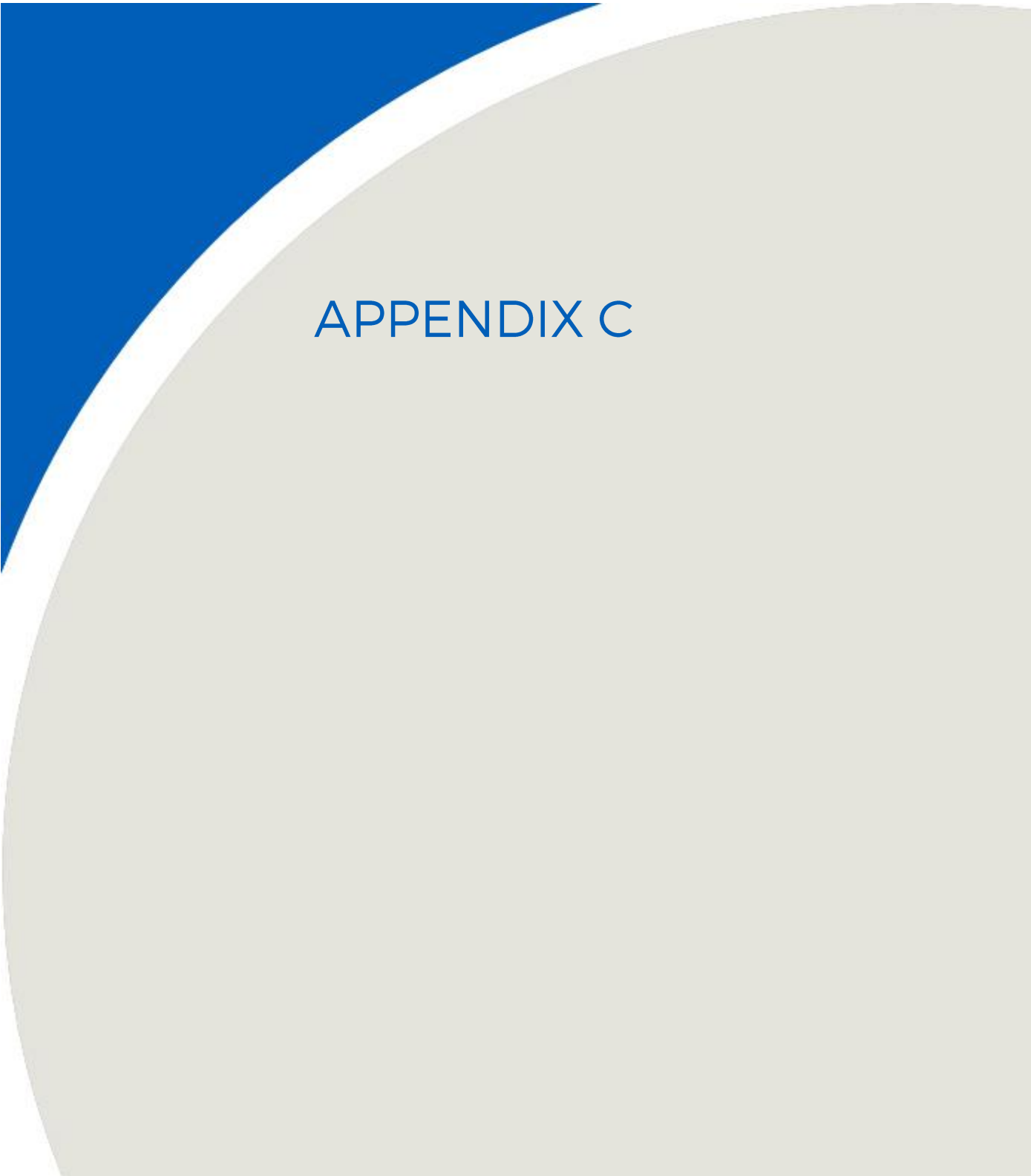
Acoustics

Sound Path	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Ducted Discharge	79 dB	85 dB	77 dB	70 dB	65 dB	62 dB	62 dB	63 dB
Ducted Inlet	75 dB	74 dB	70 dB	58 dB	56 dB	53 dB	54 dB	54 dB
Outdoor Noise	84 dB	85 dB	84 dB	85 dB	82 dB	76 dB	73 dB	67 dB

Note: Ducted Discharge/Ducted Inlet prediction data conform to AHRI 200

Warranty

Labor (first year)	1st Yr Labor Whole Unit
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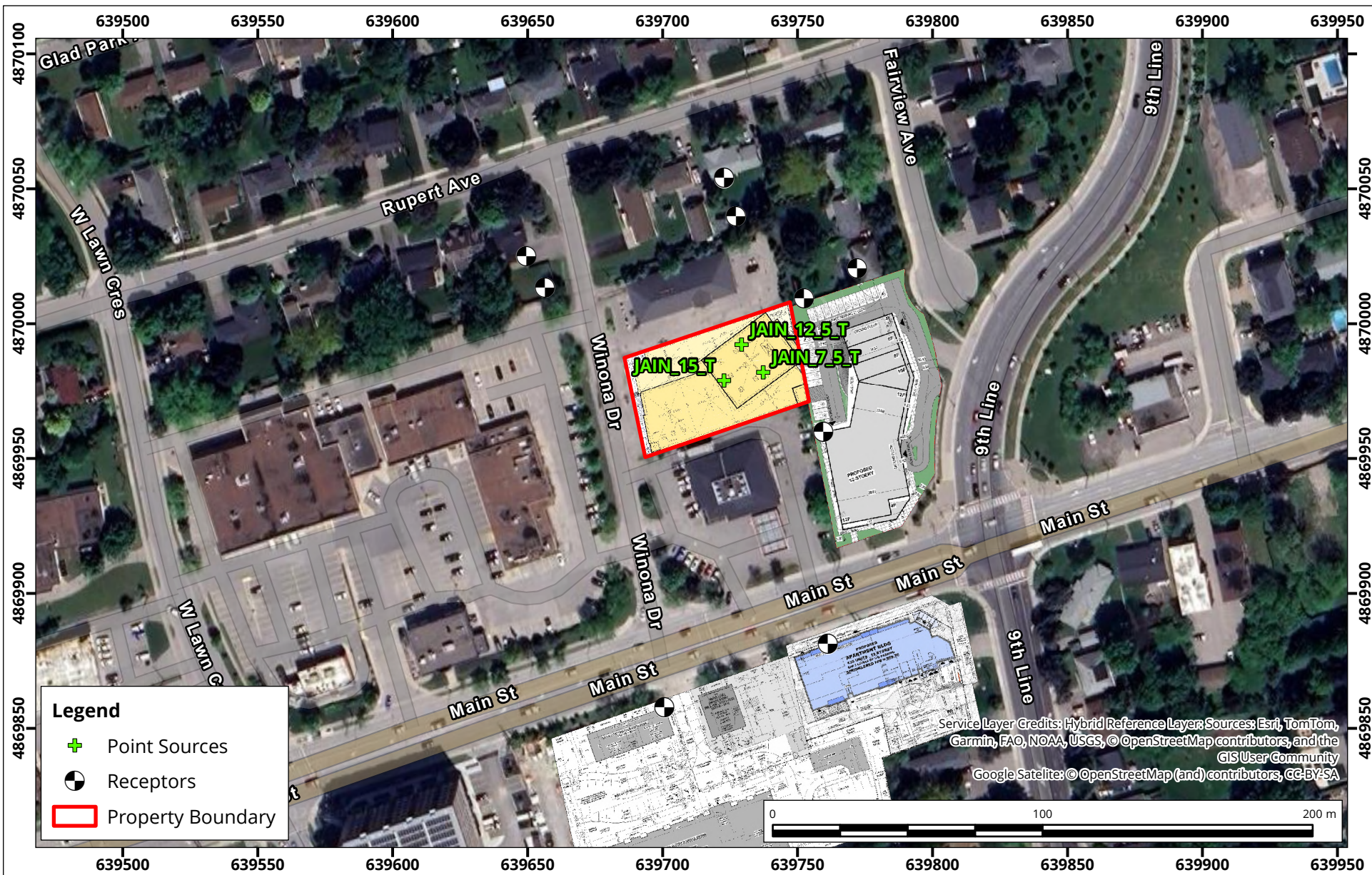
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APPENDIX C

Table C.1: Key Parameters Included in the Cadna/A Noise Modelling

27 Winona Drive

Parameter	Value	Rationale
Ground Absorption	0.2	Accounts for mostly hard ground (e.g., cement, pavement, packed dirt) surfaces between the proposed mosque and receptors of interest
Temperature	10 °C	Ontario standard conditions
Relative Humidity	70%	Ontario standard conditions
Max. Order of Reflection	2	Accounts for reflections from buildings



Stationary Source Locations

Map Projection: NAD 1983 UTM Zone 17N
27 Winona Drive - Witchurch-Stouffville, Ontario



Drawn by: CWM	Figure: C.1
Approx. Scale: 1:2,000	
Date Revised: Dec 12, 2025	



Project #: 2406483

Cadna/A ISO-9613 Calculation Protocol - Definitions

Parameter	Unit	Definition
Nr		Ray Number
X	(m)	X-axis Cartesian Coordinate
Y	(m)	Y-axis Cartesian Coordinate
Z	(m)	Z-axis Cartesian Coordinate
Refl.	order	Order of Reflection
DEN	D/E/N	Time of Day (Day, Evening, or Night)
Freq.	(Hz)	1/1 Octave Band Dominant Frequency or Frequency Type ("A" for A-weighted)
Lw	(dBA)	Overall Sound Power Level
l/a	dB	Line/Area Source Correction
Optime	dB	Operating Time Correction
K0	(dB)	D_omega in ISO 9613-2 (correction for radiation into solid angles less than 4 Pi)
Di	(dB)	Directivity Index
Adiv	(dB)	Attenuation Due to Divergence
Aatm	(dB)	Atmospheric Attenuation
Agr	(dB)	Ground Attenuation
Afol	(dB)	Attenuation Due to Foliage
Ahous	(dB)	Attenuation from Houses
Abar	(dB)	Barrier Attenuation
Cmet	(dB)	Meteorological Correction
RL	(dB)	Reflection Loss
Lr	(dBA)	Resulting Noise Impact at Receptor - Leq (1-Hr)

Receiver

Name: 28 Fairview Avenue Potential Future Development - Worst-case Facade Receptor (10.5m Height)
 ID: R04
 X: 639759.83 m
 Y: 4869960.01 m
 Z: 13.50 m

Point Source, ISO 9613, Name: "7.5 Ton Unit", ID: ""

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
10	639737.25	4869981.94	16.00	0	D	A	86.4	0.0	0.0	0.0	0.0	41.0	0.2	-2.4	0.0	0.0	0.0	0.0	0.0	47.6
32	639737.25	4869981.94	16.00	1	D	A	86.4	0.0	0.0	0.0	0.0	51.7	0.5	-2.4	0.0	0.0	0.0	0.0	17.3	19.2
34	639737.25	4869981.94	16.00	1	D	A	86.4	0.0	0.0	0.0	0.0	56.1	0.8	-2.4	0.0	0.0	24.7	0.0	2.0	5.2
37	639737.25	4869981.94	16.00	2	D	A	86.4	0.0	0.0	0.0	0.0	58.2	1.0	-2.4	0.0	0.0	0.0	0.0	4.0	25.6

Point Source, ISO 9613, Name: "12.5 Ton Unit", ID: ""

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
43	639729.24	4869992.23	16.00	0	D	A	89.2	0.0	0.0	0.0	0.0	44.0	0.2	-2.4	0.0	0.0	0.0	0.0	0.0	47.4
44	639729.24	4869992.23	16.00	1	D	A	89.2	0.0	0.0	0.0	0.0	46.6	0.3	-2.4	0.0	0.0	0.0	0.0	2.0	42.8
46	639729.24	4869992.23	16.00	1	D	A	89.2	0.0	0.0	0.0	0.0	56.7	0.8	-2.4	0.0	0.0	24.4	0.0	2.0	7.7
48	639729.24	4869992.23	16.00	2	D	A	89.2	0.0	0.0	0.0	0.0	58.6	1.0	-2.4	0.0	0.0	0.0	0.0	4.0	28.0

Point Source, ISO 9613, Name: "15 Ton Unit", ID: ""

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
49	639722.74	4869978.92	16.00	0	D	A	87.1	0.0	0.0	0.0	0.0	43.4	0.2	-2.4	0.0	0.0	0.0	0.0	0.0	45.9
51	639722.74	4869978.92	16.00	1	D	A	87.1	0.0	0.0	0.0	0.0	56.2	0.8	-2.4	0.0	0.0	23.6	0.0	2.0	6.8
53	639722.74	4869978.92	16.00	2	D	A	87.1	0.0	0.0	0.0	0.0	58.3	1.0	-2.4	0.0	0.0	0.0	0.0	4.0	26.2