

Environmental Noise Control Study

Proposed Residential Development

319 Huntmar Drive
Ottawa, Ontario

Prepared for Ironclad Developments

Report PG7897-1 dated March 20, 2026

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Appendix 2

STAMSON Results

1.0 Introduction

Paterson Group (Paterson) was commissioned by Ironclad Developments to conduct an environmental noise control study for the proposed residential development to be located at 319 Huntmar Drive in the City of Ottawa.

The objectives of the current study are to:

- ☐ Determine the primary noise sources impacting the site and compare the projected sound levels to guidelines set out by the Ministry of Environment and Conservation and Parks (MOECP) and the City of Ottawa.
- ☐ Review the projected noise levels and offer recommendations regarding warning classes, construction materials or alternative sound barriers.

The following report has been prepared specifically and solely for the aforementioned project, which is described herein. It contains our findings and includes acoustical recommendations pertaining to the design and construction of the subject residential development as they are understood at the time of writing this report.

This study has been conducted according to the City of Ottawa document - Engineering Noise Control Guidelines (ENCG), dated January 2016, and the Ontario Ministry of the Environment Guideline NPC-300.

2.0 Proposed Development

It is understood that the proposed residential development will consist of six 6-storey residential buildings (denoted as Building A and Buildings B1 through B5). Associated at-grade roadways, and parking areas are also anticipated as a part of the proposed residential development.

3.0 Methodology and Noise Assessment Criteria

The City of Ottawa outlines 3 sources of environmental noise that must be analyzed separately:

- ☐ Surface Transportation Noise
- ☐ Stationary Noise
 - New noise-sensitive development applications (noise receptors) in proximity to existing or approved stationary sources of noise and
 - New stationary sources of noise (noise-generating) in proximity to existing or approved noise-sensitive developments.
- ☐ Aircraft noise

Surface Transportation Noise

The City of Ottawa's Official Plan, in addition to the ENCG, dictate that the influence area must contain any of the following conditions to classify as a surface transportation noise source for a subject site:

- ☐ Within 100 m of the right-of-way of an existing or proposed arterial, collector or major collector road; a light rail transit corridor; bus rapid transit, or transit priority corridor.
- ☐ Within 250 m of the right-of-way for an existing or proposed highway or secondary rail line.
- ☐ Within 300 m from the right of way of a proposed or existing rail corridor or a secondary main railway line.
- ☐ Within 500 m of an existing 400 series provincial highway, freeway or principal main railway line.

The NPC-300 outlines the limitations of the stationary and environmental noise levels in relation to the location of the receptors. These can be found below in the following tables:

Table 1 - Sound Level Limits for Outdoor Living Areas	
Time Period	Required $L_{eq(16)}$ (dBA)
16 hours, 7:00-23:00	55
I. Standards taken from Table 2.2a; Sound Level Limit for Outdoor Living Areas - Road and Rail	

Table 2 - Sound Level Limits for Indoor Living Areas			
Type of Space	Time Period	Required L_{eq} (dBA)	
		Road	Rail
Living/Dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc	7:00-23:00	45	40
Theatres, places of worship, libraries, individual or semi-private offices, conference rooms, reading rooms	23:00-7:00	45	40
Sleeping quarters	7:00-23:00	45	40
	23:00-7:00	40	35
I. Standards taken from Table 2.2b; Sound Level Limit for Indoor Living Areas - Road and Rail			

It is noted in the ENCG that the limits outlined in Table 2 are for the sound levels on the interior of the glass pane. The ENCG further goes on to state that the limit for the exterior of the pane of glass will be 55 dBA.

If the sound level limits are exceeded at the window panes for the indoor living areas, the following Warning Clauses may be referenced:

Table 3 - Warning Clauses for Sound Level Exceedances

Warning Clause	Description
Warning Clause Type A	"Purchasers/tenants are advised that sound levels due to increasing road traffic (rail traffic) (air traffic) may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment."
Warning Clause Type B	"Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic (rail traffic) (air traffic) may, on occasions, interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment."
Warning Clause Type C	"This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium-density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."
Warning Clause Type D	"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."
I. Clauses taken from section C8 Warning Clauses; Environmental Noise Guidelines - NPC-300	

Stationary Noise

Stationary noise sources include sources or facilities that are fixed or mobile and can cause a combination of sound and vibration levels emitted beyond the property line. These sources may include commercial air conditioner units, generators and fans. Facilities that may contribute to stationary noise may include car washes, snow disposal sites, transit stations and manufacturing facilities.

The proposed residential development is not in proximity to any existing or approved stationary sources of noise. Therefore, a stationary noise analysis will not be required with respect to off-site stationary noise sources impacting the proposed residential development.

Aircraft / Airport Noise

The subject site is not located within the Airport Vicinity Development Zone. Therefore this project will not require an aircraft/airport noise analysis. No warning clauses regarding aircraft or airport noise will be required.

4.0 Noise and Vibration Assessment Criteria

Due to the location of a proposed future Ottawa Light Rail Transit Line (OLRT), ground vibration and ground-borne noise reviews were also performed for this residential development.

Effects of the OLRT on the Proposed Residential Development

The human body can be affected by exposure to vibration, in particular ground-borne vibrations occurring at low frequencies. These can be caused by the surrounding vibration sources previously identified, such as wheels on a road or rail system. These ground-borne vibrations can cause the building to shake (ground-borne vibration) and/or cause rumbling sounds (ground-borne noise).

The methods of defining and measuring vibrations have their own challenges, based on the oscillatory motion identified as a vibration. Due to the nature of the oscillatory motion of the vibration, there is no net movement of the vibration element, and therefore motion descriptors are zero.

There are 2 main methods of defining the magnitude of the overall vibration. The industry standard approach utilized in construction activities is the peak particle velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration signal and is often used when monitoring blasting vibrations and is ideal for evaluating the potential for building damage.

However, human responses require a different method of analysis as the human body requires time to respond to vibration signals. The average vibration amplitude would be an applicable method of reporting the ground-borne vibrations that humans would respond to, however, with the vibration being represented as a sine wave, the average vibration amplitude would be zero. Therefore, the root mean square (RMS) amplitude, typically calculated over a 1-second interval, is utilized for the analysis. The RMS value is always less than the PPV.

General factors that could affect the magnitude of the created vibrations include but are not limited to: whether the rail is above grade or below grade, speed, vehicle suspension, wheel and track condition, track support system, depth of system and soil conditions. It should be noted that vibrations that travel through the bedrock surface should be minimal but can travel a further distance.

The Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual: FTA Report No. 0123 dated September 2018 outlines the vibration standards caused by rail sources. Upon review of this document, the following standards were obtained that apply to this analysis.

Screening distances are based on land-use categories and the type of project vehicles. The proposed future OLRT is currently not active, with no infrastructure related to the rail line constructed. The proposed residential buildings would be classified as a "Vibration Category 2 – Residential". Therefore, the screening distance is 61 metres (200 ft). Vibration assessment is required only when the proposed residential buildings are located within the screening distance from the proposed railway.

The criteria for the environmental impact from vibrations are based on the RMS vibration levels for repeated events. The proposed residential buildings would be classified as a "Vibration Category 2 – Residential". The following table outlines the limits for ground-borne vibrations.

Table 4 - Ground-Borne Vibration (GBV) for General Assessment			
Land Use Category	GBV Impact Levels (VdB re 1 micro-inch/sec)		
	Frequent Events	Occasional Events	Infrequent Events
Category 2	72 VdB	75 VdB	80 VdB
Notes: ➤ Standards taken from Table 6.3; Indoor Ground-Borne Vibration and Ground-Borne Noise Impact Criteria for General Vibration Assessment. ➤ Frequent events are defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category. ➤ Occasional events are defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations. ➤ Infrequent events are defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.			

Ground-borne vibration can also result in ground-borne noise. This is separate from the noise caused by the trains directly and instead focuses on the vibration of objects to emit noise. Similar to ground-borne vibration, the noise impacts are based on criteria for human annoyance and activity interference. For residential buildings, the criteria for acceptability is given in the table on the following page:

Table 5 - Ground-Borne Noise (GBN) for General Assessment

Land Use Category	GBN Impact Levels (dBA re 20 micro Pascals)		
	Frequent Events	Occasional Events	Infrequent Events
Category 2	35 dBA	38 dBA	43 dBA
Notes: ➤ Standards taken from Table 6.3; Indoor Ground-Borne Vibration and Ground-Borne Noise Impact Criteria for General Vibration Assessment. ➤ Frequent events are defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category. ➤ Occasional events are defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations. ➤ Infrequent events are defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.			

5.0 Analysis

Surface Transportation Noise

The subject site is currently vacant, with commercial developments to the north, Huntmar Drive to the east, and the Queensway Highway 417 east and westbound to the west and south. Huntmar Drive and the proposed future OLRT were identified within the 100 m radius, and the Queensway Highway 417 east and westbound were identified within the 500 m radius of the proposed residential development.

Based on the new City of Ottawa Official Plan, Schedule F, the Queensway east and westbound are considered a Queensway, and Huntmar Drive is considered a 2 lane urban arterial road. Other roads within the 100 m and 500 m radius of the proposed residential development are not classified as either arterial, collector, or major collector roads, Highway or Queensway and, therefore, are not included in this study.

From the City of Ottawa Schedule C2 – Transit Network, a proposed future OLRT line is identified within 100 m of the proposed residential development. It is understood that the OLRT will be used for as a passenger vehicle rail line. As the rail line is currently not constructed, the volume of trains used for the current analysis are based on the current traffic schedule of existing OLRT lines. All noise sources are presented in Drawing PG7897-1-Site Geometry, located in Appendix 1.

The City of Ottawa provides noise levels from road traffic, taking into consideration the right-of-way width and the implied roadway class. These values represent the maximum allowable capacity of the proposed roadways. The parameters to be used for sound-level predictions can be found below.

Table 6 - Traffic and Road Parameters						
Road	Implied Roadway	AADT (Veh/day)	Posted Speed (km/h)	Day/Night Split %	Medium Truck %	Heavy Truck %
HWY417 Eastbound	Queensway	54999	100	92/8	7	5
HWY417 Westbound	Queensway	54999	100	92/8	7	5
Huntmar Drive	2-UAU	15000	50	92/8	7	5
Data obtained from the City of Ottawa document ENCG or City of Ottawa Officials						

Table 7 - Rail Parameters				
Rail Line	Engine Type	Maximum Speed (km/hr)	Number of Trips/day	Length of Train
OLRT	Electric	80	180	2

Two (2) levels of reception points were selected for this analysis. The following elevations were selected from the heights provided on the survey plan for the subject buildings.

Table 8 - Elevation of Reception Points			
Floor Number	Elevation at the Centre of Window / Ground Surface (m)	Floor Use	Daytime/Nighttime Analysis
Ground Floor	1.5	Living Area/Bedroom	Daytime/nighttime
6 th Floor	16.5	Living Area/Bedroom	Daytime/nighttime

For this analysis, a reception point was taken at the centre of each floor, on the ground floor and the sixth floor. Reception points are detailed in Drawing PG7897-2 Receptor Location Plans presented in Appendix 1.

All horizontal distances have been measured from the reception point to the edge of the right-of-way. The roadways were analyzed where they intersected the 100 m and 500 m buffer zone, and the rail lines were analyzed where they intersected the 100 m buffer zone which is reflected in the local angles described in Paterson Drawings PG7897-3A to 8D-Site Geometry in Appendix 1.

Table 12 - Summary of Reception Points and Geometry, located in Appendix 1, provides a summary of the points of reception and their geometry concerning the noise sources. The analysis is completed so that no effects of sound reflection off the building facade are considered, as stipulated by the ENCG. It should be noted that one receptor is assigned to the side of the building affected by noise. There are four noise sources: Huntmar Drive, Highway 417 eastbound, Highway 417 westbound and a proposed future OLRT. The anticipated noise at each receptor represents the worst-case scenario for each building.

The analysis was completed using STAMSON version 5.04, a computer program which uses the road and rail traffic noise prediction methods using ORNAMENT (Ontario Road Noise Analysis Method for Environment and Transportation) and STEAM (Sound from Trains Environment Analysis Method), publications from the Ontario Ministry of Environment and Energy.

The subject site is relatively level and at grade with the neighbouring roads within a 100 to 500 m radius.

Ground-borne vibration assessment is required for proposed future OLRT. However, it is noted that the distance between the OLRT and the proposed residential buildings are greater than 75 m. This distance is greater than the screening distances specified in the City of Ottawa Noise Control Study Guidelines and the Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual. Therefore, a ground-borne vibration assessment is not required.

6.0 Results

Surface Transportation

The primary descriptors are the 16-hour daytime and the 8-hour nighttime equivalent sound levels, $L_{eq(16)}$ and the $L_{eq(8)}$ for City roads.

The proposed traffic noise levels were analyzed at all reception points. The results of the STAMSON software are located in Appendix 2, and the summary of the results is noted in Table 9 below.

Table 9 – Proposed Noise Levels				
Reception Point	Description	OLA (dBA)	Daytime at Facade $L_{eq(16)}$ (dBA)	Nighttime at Facade $L_{eq(8)}$ (dBA)
REC 1-1	Western Elevation - Building B4 - 1st Floor		62.06	54.46
REC 1-6	Western Elevation - Building B4 - 6th Floor		66.82	59.23
REC 2-1	Southern Elevation - Building B4 - 1st Floor		62.91	55.32
REC 2-6	Southern Elevation - Building B4 - 6th Floor		67.96	60.37
REC 3-1	Eastern Elevation - Building B4 - 1st Floor		67.28	59.68
REC 3-6	Eastern Elevation - Building B4 - 6th Floor		71.79	64.19
REC4-1	Western Elevation - Building B5 - 1st Floor		68.69	61.1
REC4-6	Western Elevation - Building B5 - 6th Floor		69.71	62.12
REC 5-1	Eastern Elevation - Building B5 - 1st Floor		70.89	63.27
REC 5-6	Eastern Elevation - Building B5 - 6th Floor		74.79	66.9
REC 6-1	Southern Elevation - Building B5 - 1st Floor		67.79	60.17
REC 6-6	Southern Elevation - Building B5 - 6th Floor		71.47	63.87
REC 7-1	Western Elevation - Building B3 - 1st Floor		61.98	54.38
REC 7-6	Western Elevation - Building B3 - 6th Floor		66.75	59.16
REC 8-1	Eastern Elevation - Building B3 - 1st Floor		63.24	55.64
REC 8-6	Eastern Elevation - Building B3 - 6th Floor		68.13	60.54
REC 9-1	Southern Elevation - Building B3 - 1st Floor		66.25	58.66
REC 9-6	Southern Elevation - Building B3 – 6th Floor		71.01	63.42
REC 10-1	Western Elevation - Building A - 1st Floor		67.28	59.68
REC 10-6	Western Elevation - Building A - 6th Floor		71.04	63.45

Table 9 – Proposed Noise Levels Cont.

Reception Point	Description	OLA (dBA)	Daytime at Facade L_{eq(16)} (dBA)	Nighttime at Facade L_{eq(8)} (dBA)
REC 11-1	Eastern Elevation - Building A - 1st Floor		71.34	63.74
REC 11-6	Eastern Elevation - Building A - 6th Floor		74.83	67.23
REC 12-1	Southern Elevation - Building A - 1st Floor		67.29	59.7
REC 12-6	Southern Elevation - Building A - 6th Floor		70.95	63.36
REC 13-1	Western Elevation - Building B2 - 1st Floor		62.93	55.33
REC 13-6	Western Elevation - Building B2 - 6th Floor		67.49	59.89
REC 14-1	Northern Elevation - Building B2 - 1st Floor		48.35	40.23
REC 14-6	Northern Elevation - Building B2 - 6th Floor		52.3	44.16
REC 15-1	Eastern Elevation - Building B2 - 1st Floor		64.7	57.08
REC 15-6	Eastern Elevation - Building B2 - 6th Floor		69.33	61.71
REC 16-1	Southern Elevation - Building B2 - 1st Floor		67.58	59.98
REC 16-6	Southern Elevation - Building B2 - 6th Floor		72.03	64.44
REC 17-1	Western Elevation - Building B1 - 1st Floor		67.33	59.74
REC 17-6	Western Elevation - Building B1 - 6th Floor		71.09	63.49
REC 18-1	Northern Elevation - Building B1 - 1st Floor		48.9	40.63
REC 18-6	Northern Elevation - Building B1 - 6th Floor		52.64	44.35
REC 19-1	Eastern Elevation - Building B1 - 1st Floor		67.65	60.01
REC 19-6	Eastern Elevation - Building B1 - 6th Floor		71.29	63.65
REC 20-1	Southern Elevation - Building B1 - 1st Floor		71.97	64.37
REC 20-6	Southern Elevation - Building B1 - 6th Floor		75.27	67.66

7.0 Discussion and Recommendations

7.1 Outdoor Living Areas

No outdoor living areas were identified within the proposed residential development.

7.2 Indoor Living Areas and Ventilation

The results of the STAMSON modelling indicate that the $L_{eq(16)}$ ranges between 48.90 dBA and 75.27 dBA. Some of the values calculated exceed the limit of 55 and 65 dBA as specified by the ENCG, and therefore, warning clauses will be required to be stated on any deeds of sale. The applicable warning clauses are summarized in Table 10 below.

Table 10 - Summary of Warning Clauses – Indoor Living Areas			
Building	Elevation	Applicable Warning Clause	Additional Considerations
A	Southern, Eastern, Western	Warning Clause Type D	"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."
B1	Southern, Eastern, Western	Warning Clause Type D	"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."
B2	Southern, Eastern, Western	Warning Clause Type D	"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."
B3	Southern, Eastern, Western	Warning Clause Type D	"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."

Table 10 - Summary of Warning Clauses – Indoor Living Areas - Cont			
Building	Elevation	Applicable Warning Clause	Additional Considerations
B4	Southern, Eastern, Western	Warning Clause Type D	"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."
B5	Southern, Eastern, Western	Warning Clause Type D	"This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."

Various receptors exceed the 65 dBA threshold; therefore, an analysis of the building materials will be required. However, at this time, the building materials and exterior wall construction details have not been finalized. Therefore, a review of the proposed building materials will need to be completed, once they have been determined.

Proposed Construction Specifications

It is understood that typical window and wall details are proposed for the residential buildings. The effectiveness of the noise insulation can be expressed as the Acoustical Insulation Factor (AIF), calculated as follows:

$$AIF = L_{eq(16)(Exterior)} - L_{eq(16)(Interior)} + 10\log_{10}(N) + 2dBA$$

Where:

$L_{eq(16)(Exterior)}$: Calculated value at the windowpane

$L_{eq(16)(Interior)}$: Equals 45 dBA

N : Number of components in the room

No floor plans or detailed design drawings were provided at the time of preparing the current study. A conservative approach was used, assuming two components per room.

A conversion from AIF to a Standard Transmission Class (STC) rating will require knowledge of room dimensions in addition to the wall and window dimensions. However, as this information was not available, a conservative approach was used, which included increasing the AIF factor by 3. A summary of the required STC Ratings for the proposed residential buildings is presented in Table 11 below.

Table 11 - Summary of STC Ratings		
Building	AIF	Minimum STC Rating
A	35	38
B1	36	39
B2	32	35
B3	31	34
B4	32	38
B5	35	38

Therefore, provided the building materials of either the windows and/or exterior walls have an STC rating as per Table 11, would be considered a sufficient noise attenuation device.

8.0 Summary of Findings

The subject site is located at 319 Huntmar Drive. It is understood that the proposed residential development will consist of six 6-storey residential buildings. The associated analysis identified four surface transportation noise sources: Queensway HWY 417 east and westbound, Huntmar Drive, and a proposed future OLRT.

Several reception points were selected for the analysis, consisting of panes of glass reception points on both the first level and sixth level of the proposed residential buildings.

The sound levels for southern, eastern and western elevations for the proposed buildings exceeded the 65 dBA threshold as specified by ENCG, and will require Warning Clause Type D. Further analysis was performed as various receptors exceeded the 65 dBA threshold to determine applicable STC ratings for the proposed residential buildings.

All warning clauses are reiterated below and are to be included on all applicable units Offers of Purchase and Sale. It should be noted that all units should receive the Aircraft Noise Warning Clause.

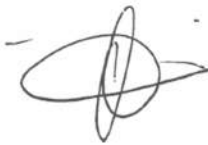
Warning Clause Type D: "This dwelling unit has been supplied with a central air conditioning system which will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment."

9.0 Statement of Limitations

The recommendations made in this report are in accordance with our present understanding of the project. Our recommendations should be reviewed when the project drawings and specifications are complete.

The present report applies only to the project described in this document. Use of this report for purposes other than those described herein or by person(s) other than Ironclad Developments or their agent(s) is not authorized without review by this firm for the applicability of our recommendations to the altered use of the report.

Paterson Group Inc.



Otilia McLaughlin, B.Eng.



Scott S. Dennis, P.Eng.

Report Distribution:

- ☐ Ironclad Developments
- ☐ Paterson Group

APPENDIX 1

TABLE 12 – SUMMARY OF RECEPTION POINTS AND GEOMETRY

DRAWING PG7897-1-SITE PLAN

DRAWING PG7897-2-RECEPTOR LOCATION PLAN

DRAWING PG7897-3-SITE GEOMETRY

DRAWING PG7897-3A-SITE GEOMETRY (REC 1-1 & REC 1-6)

DRAWING PG7897-3B-SITE GEOMETRY (REC 2-1 & REC 2-6)

DRAWING PG7897-3C-SITE GEOMETRY (REC 3-1 & REC 3-6)

DRAWING PG7897-4-SITE GEOMETRY

DRAWING PG7897-4A-SITE GEOMETRY (REC 4-1 & REC 4-6)

DRAWING PG7897-4B-SITE GEOMETRY (REC 5-1 & REC 5-6)

DRAWING PG7897-4C-SITE GEOMETRY (REC 6-1 & REC 6-6)

DRAWING PG7897-5-SITE GEOMETRY

DRAWING PG7897-5A-SITE GEOMETRY (REC 7-1 & REC 7-6)

DRAWING PG7897-5B-SITE GEOMETRY (REC 8-1 & REC 8-6)

DRAWING PG7897-5C-SITE GEOMETRY (REC 9-1 & REC 9-6)

DRAWING PG7897-6-SITE GEOMETRY

DRAWING PG7897-6A-SITE GEOMETRY (REC 10-1 & REC 10-6)

DRAWING PG7897-6B-SITE GEOMETRY (REC 11-1 & REC 11-6)

DRAWING PG7897-6C-SITE GEOMETRY (REC 12-1 & REC 12-6)

DRAWING PG7897-7-SITE GEOMETRY

DRAWING PG7897-7A-SITE GEOMETRY (REC 13-1 & REC 13-6)

DRAWING PG7897-7B-SITE GEOMETRY (REC 14-1 & REC 14-6)

DRAWING PG7897-7C-SITE GEOMETRY (REC 15-1 & REC 15-6)

DRAWING PG7897-7D-SITE GEOMETRY (REC 16-1 & REC 16-6)

DRAWING PG7897-8-SITE GEOMETRY

DRAWING PG7897-8A-SITE GEOMETRY (REC 17-1 & REC 17-6)

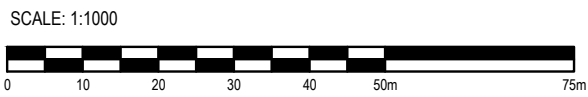
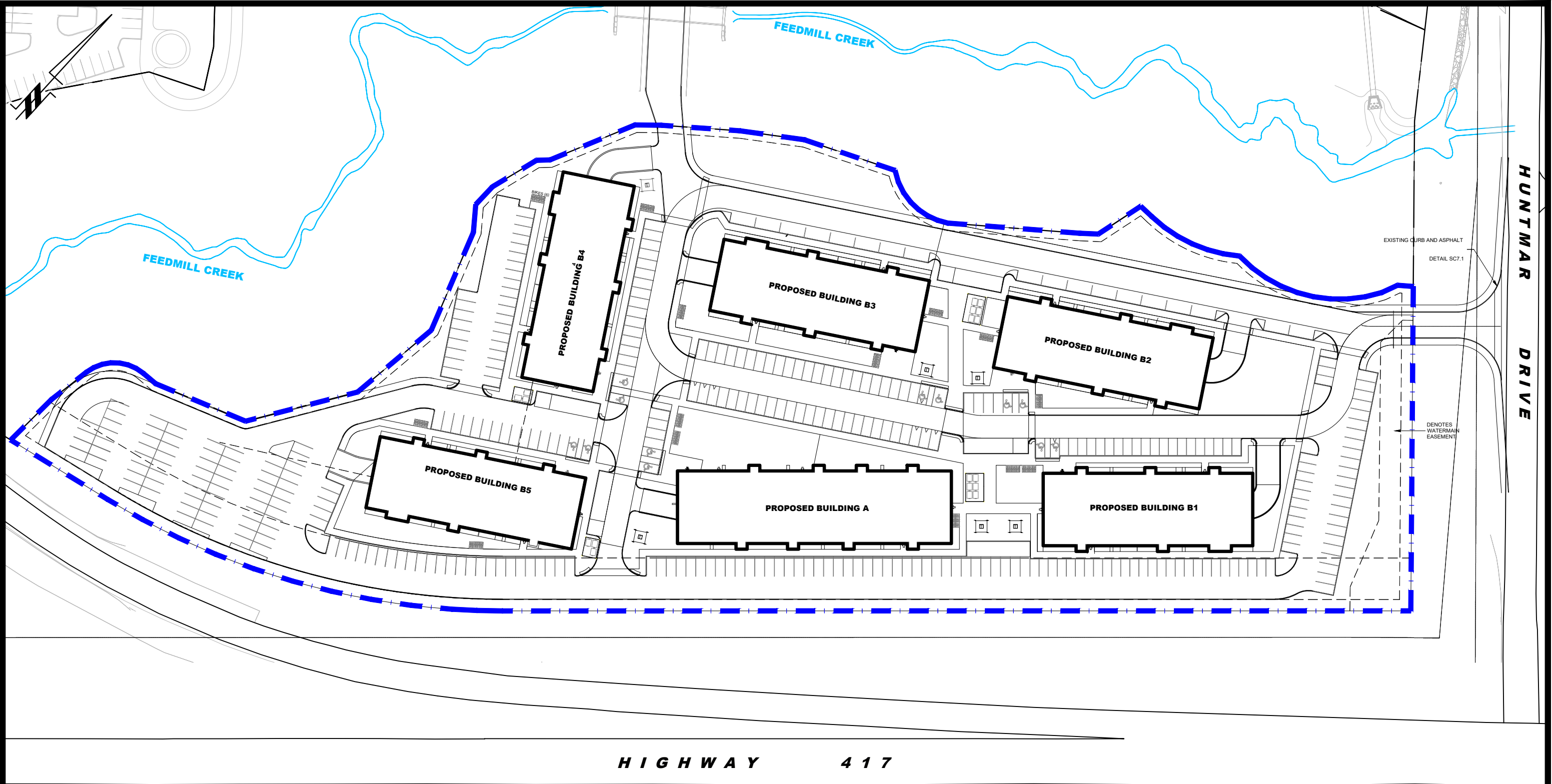
DRAWING PG7897-8B-SITE GEOMETRY (REC 18-1 & REC 18-6)

DRAWING PG7897-8C-SITE GEOMETRY (REC 19-1 & REC 19-6)

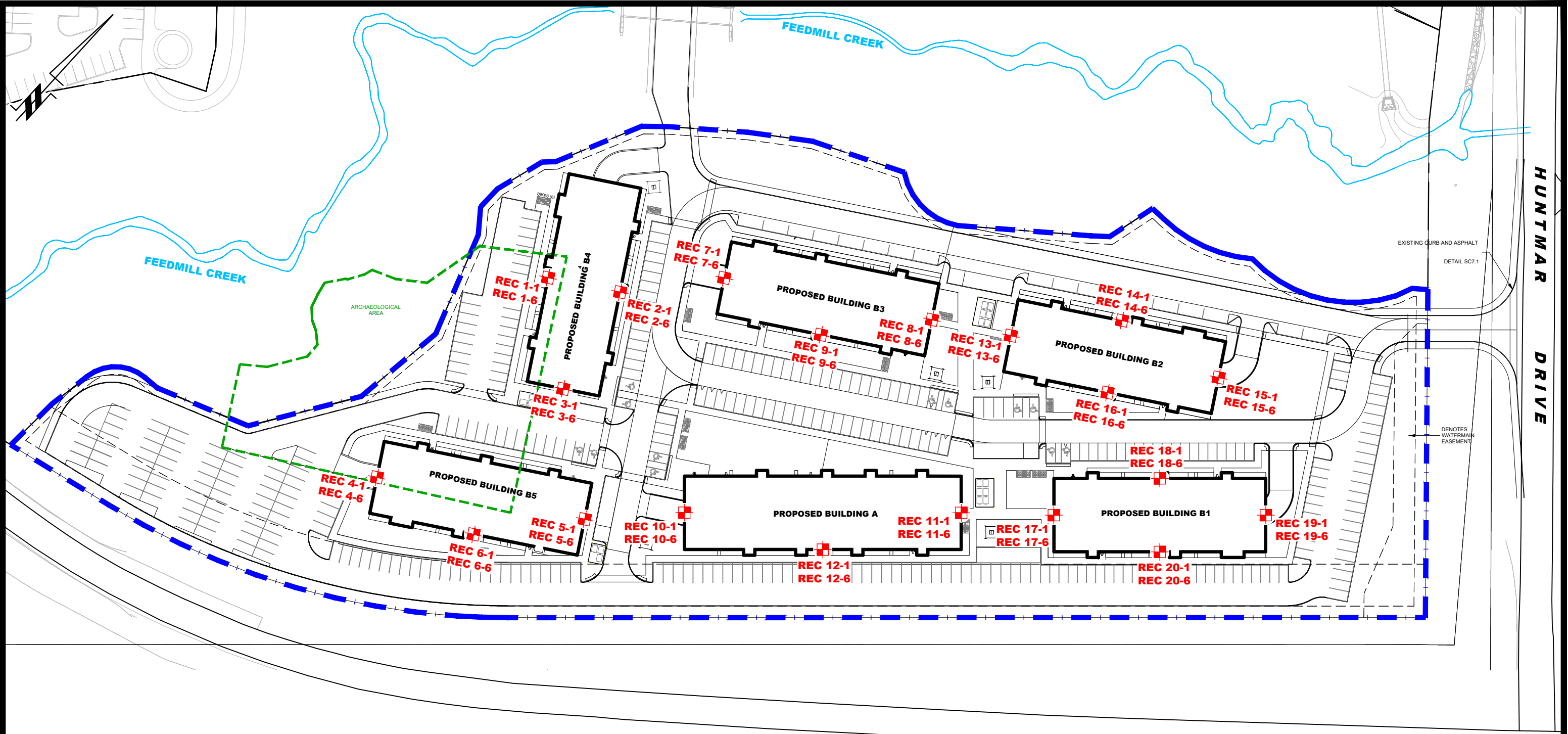
DRAWING PG7897-8D-SITE GEOMETRY (REC 20-1 & REC 20-6)

Table 12 - Summary of Reception Points and Geometry																			
Proposed Residential Development																			
Point of Reception	Location	Total Leq Day (dBA)	Total Leq Night (dBA)	HWY 417 East				HWY 417 West				Huntmar Drive				Future OLRT			
				Horizontal	Vertical	Total	Local Angle	Horizontal	Vertical	Total	Local Angle	Horizontal	Vertical	Total	Local Angle	Horizontal	Vertical	Total	Local Angle
				(m)	(m)	(m)	(degree)	(m)	(m)	(m)	(degree)	(m)	(m)	(m)	(degree)	(m)	(m)	(m)	(degree)
REC 1-1	Western Elevation - Building B4 - 1st Floor	62.06	54.46	168.9	1.5	168.91	0, 60	123.9	1.5	123.91	0, 65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 1-6	Western Elevation - Building B4 - 6th Floor	66.82	59.23	168.9	16.5	169.7	0, 60	123.9	16.5	124.99	0, 65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 2-1	Southern Elevation - Building B4 - 1st Floor	62.91	55.32	164.1	1.5	164.11	-80, 0	120.22	1.5	120.23	-85, 0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 2-6	Southern Elevation - Building B4 - 6th Floor	67.96	60.37	164.1	16.5	164.93	-80, 0	120.22	16.5	121.35	-85, 0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 3-1	Eastern Elevation - Building B4 - 1st Floor	67.28	59.68	138.57	1.5	138.58	-84, 63	94.11	1.5	94.12	-84, 63	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 3-6	Eastern Elevation - Building B4 - 6th Floor	71.79	64.19	138.57	16.5	139.55	-84, 63	94.11	16.5	95.55	-84, 68	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC4-1	Western Elevation - Building B5 - 1st Floor	68.69	61.1	114.34	1.5	114.35	0, 66	71.65	1.5	71.67	0, 70	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC4-6	Western Elevation - Building B5 - 6th Floor	69.71	62.12	114.34	16.5	115.52	0, 66	71.65	16.5	73.53	0, 70	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 5-1	Eastern Elevation - Building B5 - 1st Floor	70.89	63.27	99.53	1.5	99.54	-89, 68	55.46	1.5	55.48	-82, 87	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 5-6	Eastern Elevation - Building B5 - 6th Floor	74.79	66.9	99.53	16.5	100.89	-89, 68	55.46	16.5	57.86	-82, 87	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 6-1	Southern Elevation - Building B5 - 1st Floor	67.79	60.17	104.11	1.5	104.12	-88, 0	59.91	1.5	59.93	-81, 8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 6-6	Southern Elevation - Building B5 - 6th Floor	71.47	63.87	104.11	16.5	105.41	-88, 0	59.91	16.5	62.14	-81, 8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 7-1	Western Elevation - Building B3 - 1st Floor	61.98	54.38	169.02	1.5	169.03	0, 59	125.39	1.5	125.4	0, 65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 7-6	Western Elevation - Building B3 - 6th Floor	66.75	59.16	169.02	16.5	169.82	0, 59	125.39	16.5	126.47	0, 65	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 8-1	Eastern Elevation - Building B3 - 1st Floor	63.24	55.64	158.38	1.5	158.39	-77, 0	113.23	1.5	113.24	-83, 0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 8-6	Eastern Elevation - Building B3 - 6th Floor	68.13	60.54	158.38	16.5	159.24	-77, 0	113.23	16.5	114.43	-83, 0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 9-1	Southern Elevation - Building B3 - 1st Floor	66.25	58.66	154.64	1.5	154.65	-82, 62	109.71	1.5	109.72	-87, 67	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 9-6	Southern Elevation - Building B3 - 6th Floor	71.01	63.42	154.64	16.5	155.52	-82, 62	109.71	16.5	110.94	-87, 67	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Table 12 - Summary of Reception Points and Geometry																			
Proposed Residential Development																			
Point of Reception	Location	Total Leq Day (dBA)	Total Leq Night (dBA)	HWY 417 East				HWY 417 West				Huntmar Drive				Future OLRT			
				Horizontal	Vertical	Total	Local Angle	Horizontal	Vertical	Total	Local Angle	Horizontal	Vertical	Total	Local Angle	Horizontal	Vertical	Total	Local Angle
				(m)	(m)	(m)	(degree)	(m)	(m)	(m)	(degree)	(m)	(m)	(m)	(degree)	(m)	(m)	(m)	(degree)
REC 10-1	Western Elevation - Building A - 1st Floor	67.28	59.68	104.5	1.5	104.51	0, 78	60.79	1.5	60.81	0, 83	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 10-6	Western Elevation - Building A - 6th Floor	71.04	63.45	104.5	16.5	105.79	0, 78	60.79	16.5	62.99	0, 83	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 11-1	Eastern Elevation - Building A - 1st Floor	71.34	63.74	95.52	1.5	95.53	-77, 80	51.77	1.5	51.79	-84, 85	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 11-6	Eastern Elevation - Building A - 6th Floor	74.83	67.23	95.52	16.5	96.93	-77, 80	51.77	16.5	54.34	-84, 85	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 12-1	Southern Elevation - Building A - 1st Floor	67.29	59.7	104.36	1.5	104.37	-75, 0	59.76	1.5	59.78	-79, 0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 12-6	Southern Elevation - Building A - 6th Floor	70.95	63.36	104.36	16.5	105.66	-75, 0	59.76	16.5	62	-79, 0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 13-1	Western Elevation - Building B2 - 1st Floor	62.93	55.33	154.37	1.5	154.38	0, 61	109.83	1.5	109.84	0, 67	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 13-6	Western Elevation - Building B2 - 6th Floor	67.49	59.89	154.37	16.5	155.25	0, 61	109.83	16.5	111.06	0, 67	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 14-1	Northern Elevation - Building B2 - 1st Floor	48.35	40.23	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	103.52	1.5	103.53	-40, 0	125.23	1.5	125.24	-18, 0
REC 14-6	Northern Elevation - Building B2 - 6th Floor	52.3	44.16	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	103.52	16.5	104.83	-40, 0	125.23	16.5	126.31	-18, 0
REC 15-1	Eastern Elevation - Building B2 - 1st Floor	64.7	57.08	142.48	1.5	142.49	-81, 0	97.77	1.5	97.78	-85, 0	81.83	1.5	81.84	-53, 30	99.47	1.5	99.48	-29, 6
REC 15-6	Eastern Elevation - Building B2 - 6th Floor	69.33	61.71	142.48	16.5	143.43	-81, 0	97.77	16.5	99.15	-85, 0	81.83	16.5	83.48	-53, 30	99.47	16.5	100.83	-29, 6
REC 16-1	Southern Elevation - Building B2 - 1st Floor	67.58	59.98	138	1.5	138.01	-82, 63	91.61	1.5	91.62	-87, 68	110.12	1.5	110.13	0, 20	127.67	1.5	127.68	0, 2
REC 16-6	Southern Elevation - Building B2 - 6th Floor	72.03	64.44	138	16.5	138.98	-82, 63	91.61	16.5	93.08	-87, 68	110.12	16.5	111.35	0, 20	127.67	16.5	128.73	0, 2
REC 17-1	Western Elevation - Building B1 - 1st Floor	67.33	59.74	104.24	1.5	104.25	0, 78	60.17	1.5	60.19	0, 83	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 17-6	Western Elevation - Building B1 - 6th Floor	71.09	63.49	104.24	16.5	105.54	0, 78	60.17	16.5	62.39	0, 83	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
REC 18-1	Northern Elevation - Building B1 - 1st Floor	48.9	40.63	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	93.98	1.5	93.99	-37, 0	114.32	1.5	114.33	-22, 0
REC 18-6	Northern Elevation - Building B1 - 6th Floor	52.64	44.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	93.98	16.5	95.42	-37, 0	114.32	16.5	115.5	-22, 0
REC 19-1	Eastern Elevation - Building B1 - 1st Floor	67.65	60.01	105.11	1.5	105.12	-73, 0	59.58	1.5	59.6	-78, 0	66.85	1.5	66.87	-51, 51	85.23	1.5	85.24	-35, 38
REC 19-6	Eastern Elevation - Building B1 - 6th Floor	71.29	63.65	105.11	16.5	106.4	-73, 0	59.58	16.5	61.82	-78, 0	66.85	16.5	68.86	-51, 51	85.23	16.5	86.81	-35, 38
REC 20-1	Southern Elevation - Building B1 - 1st Floor	71.97	64.37	95.31	1.5	95.32	-75, 80	46.73	1.5	46.75	-79, 84	94.47	1.5	94.48	0, 38	111.27	1.5	111.28	0, 26
REC 20-6	Southern Elevation - Building B1 - 6th Floor	75.27	67.66	95.31	16.5	96.73	-75, 80	46.73	16.5	49.56	-79, 84	94.47	16.5	95.9	0, 38	111.27	16.5	112.49	0, 26

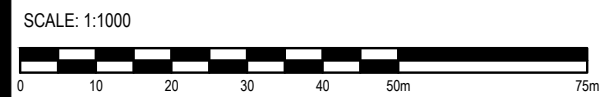


 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE	Scale: 1:1000 Drawn by: YA Checked by: OM Approved by: SB	Date: 02/2026 Report No.: PG7897-1 Dwg. No.: PG7897-1 Revision No.:
	NO.	REVISIONS	DATE	INITIAL	OTTAWA, Title: SITE PLAN	ONTARIO	



LEGEND:

RECEPTOR LOCATION





PATERSON GROUP
9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

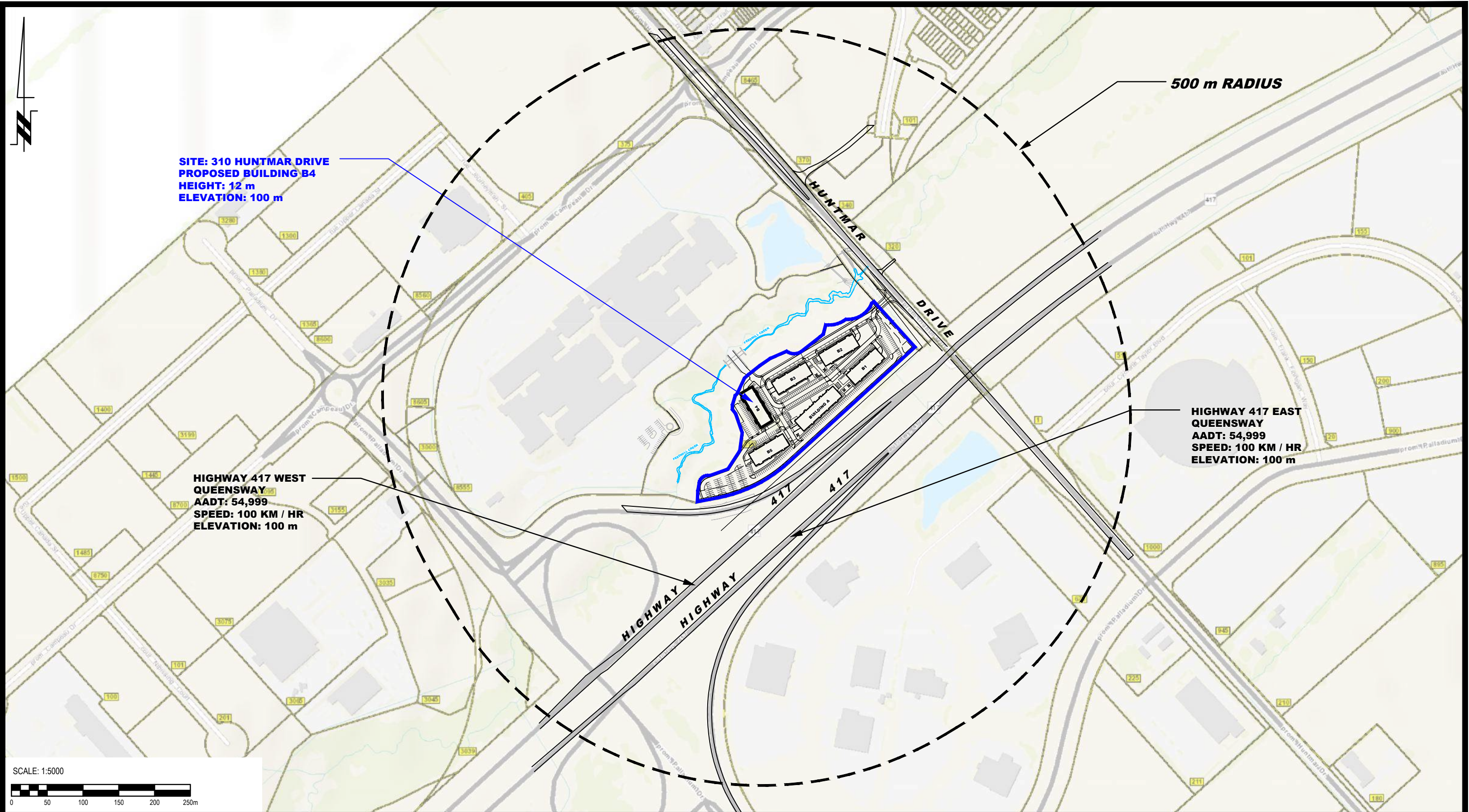
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NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE

OTTAWA,
Title:

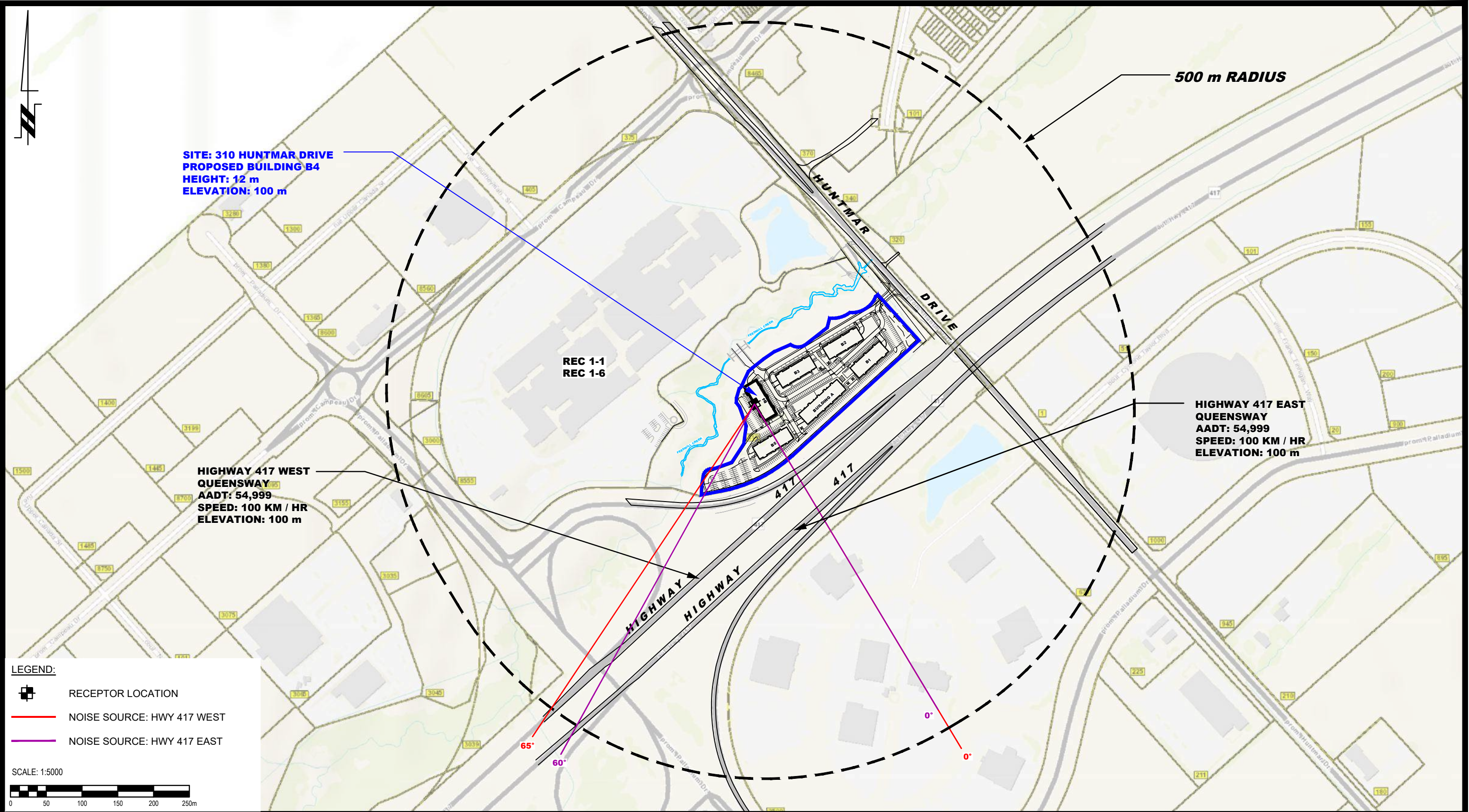
ONTARIO

RECEPTOR LOCATION PLAN

Scale:	1:1000	Date:	02/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-2
Approved by:	SB	Revision No.:	



 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					OTTAWA, Title:	IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE ONTARIO	Scale:	1:5000	Date:	03/2026		
							Drawn by:	YA	Report No.:	PG7897-1		
							Checked by:	OM	Dwg. No.:	PG7897-3		
							Approved by:	SB	Revision No.:			
	NO.	REVISIONS	DATE	INITIAL			SITE GEOMETRY - BUILDING B4					





9 AURIGA DRIVE
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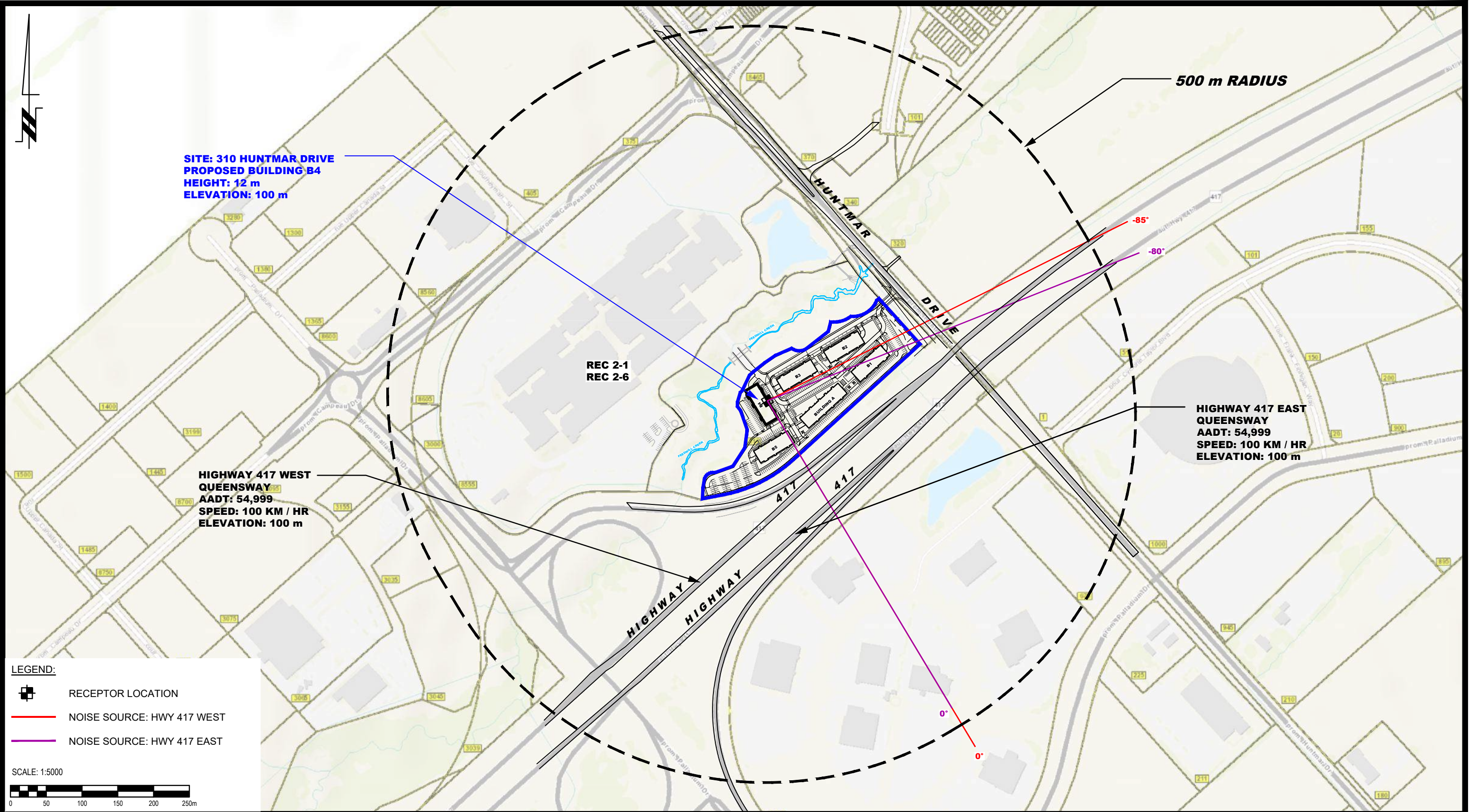
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OTTAWA,
Title:

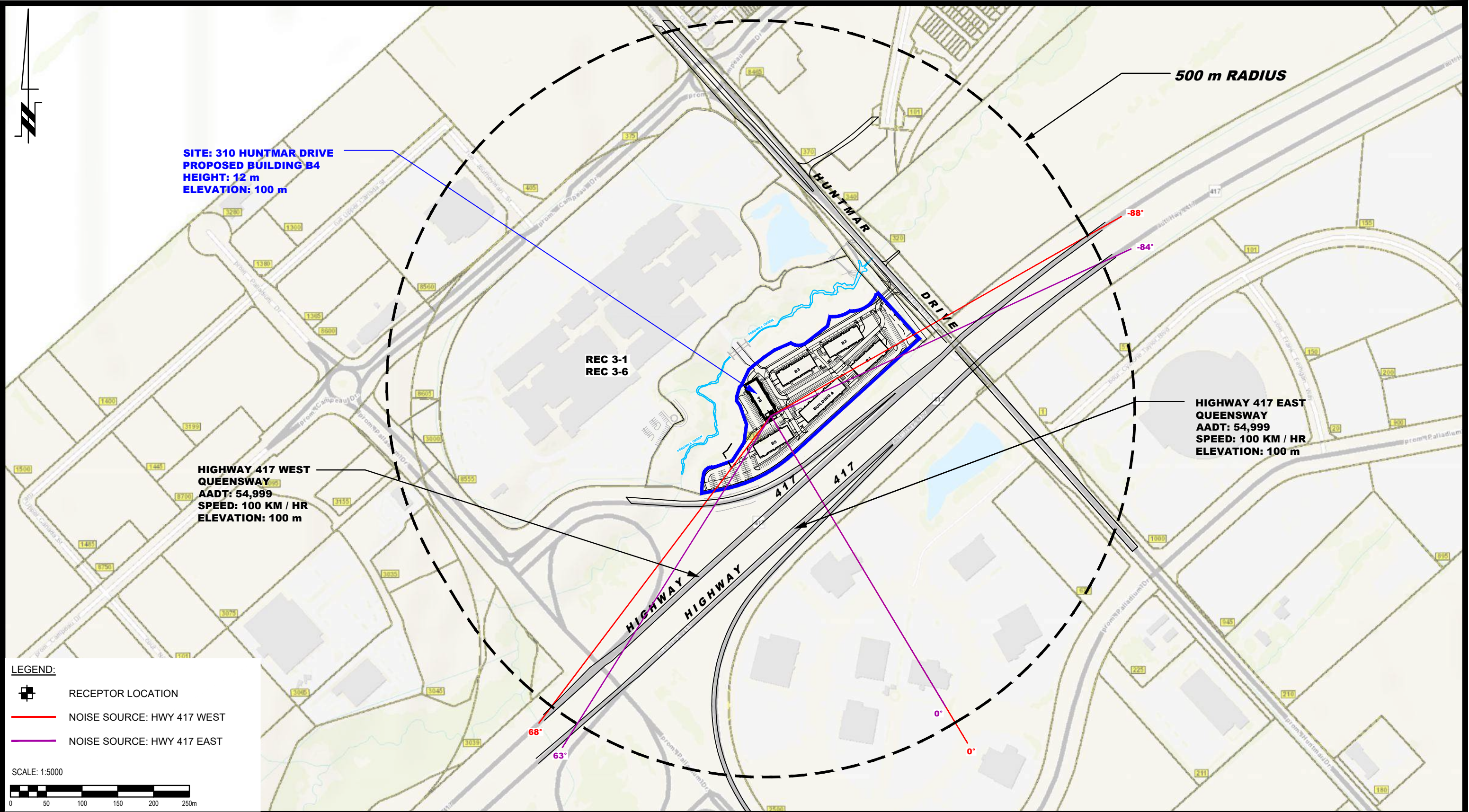
IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE
ONTARIO

SITE GEOMETRY - REC 1-1 AND REC 1-6

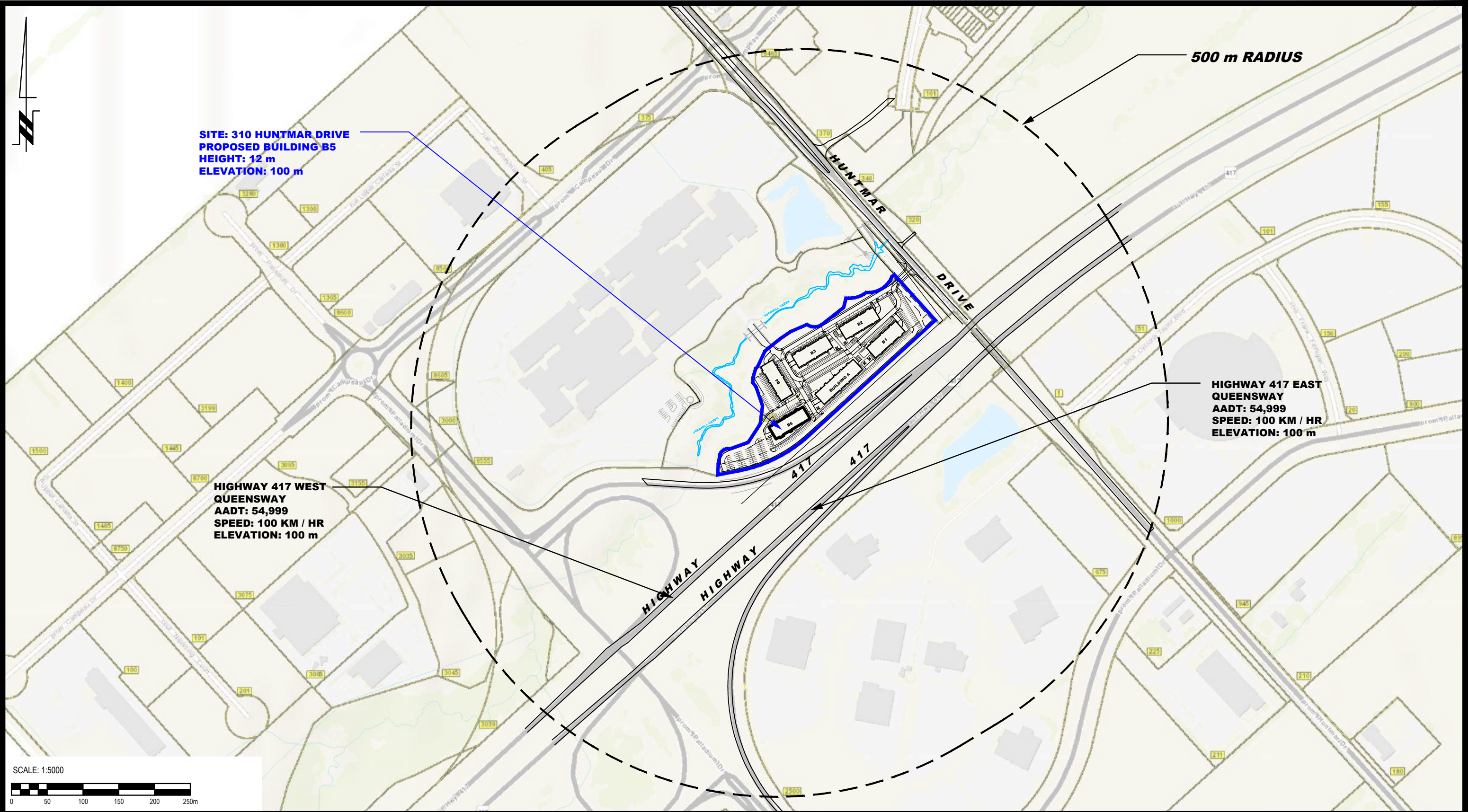
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Checked by:	OM	Dwg. No.:	PG7897-3A
Approved by:	SB	Revision No.:	



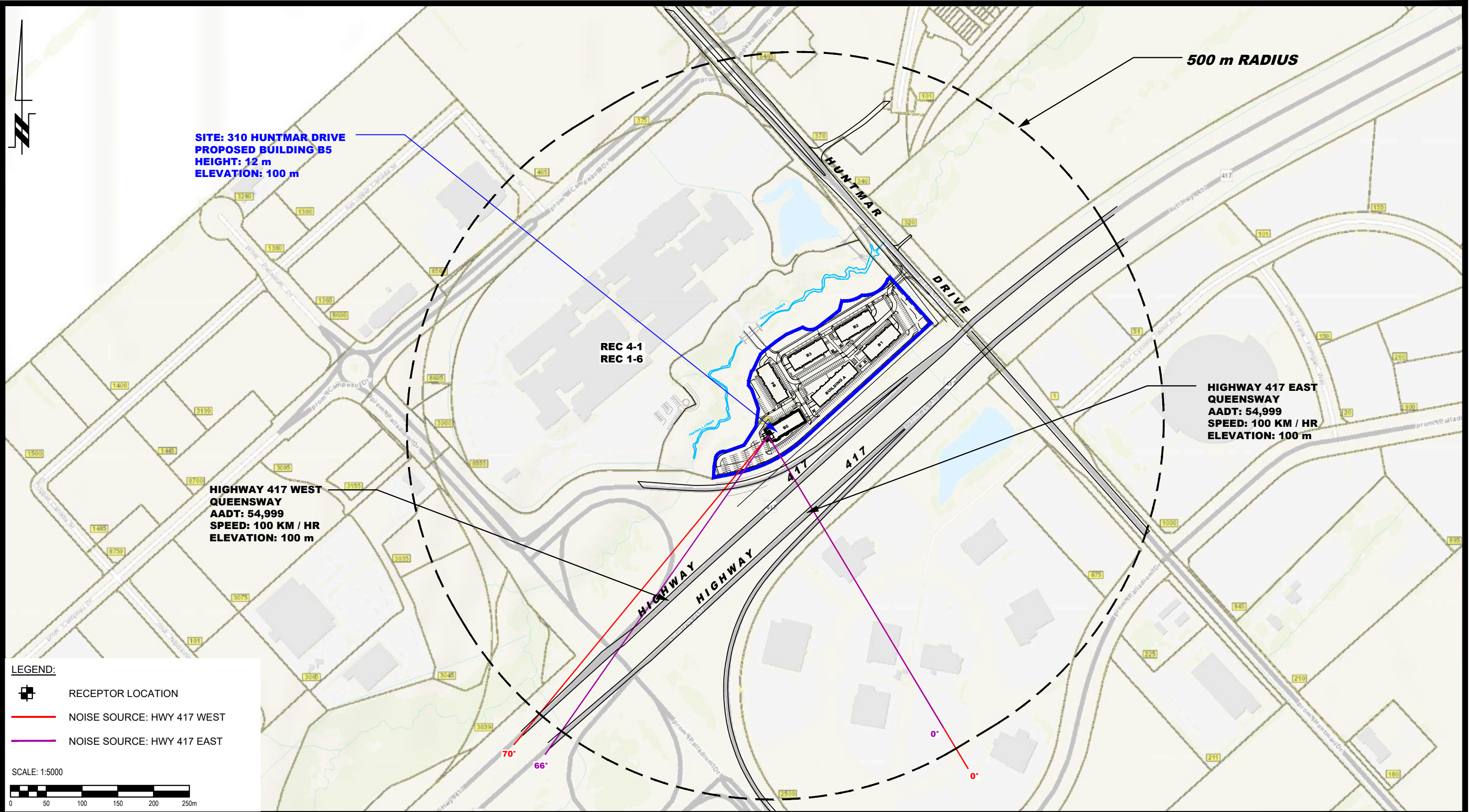
 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					OTTAWA, Title:	IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE ONTARIO	Scale:	1:5000	Date:	03/2026
							Drawn by:	YA	Report No.:	PG7897-1
							Checked by:	OM	Dwg. No.: PG7897-3B	
							Approved by:	SB		Revision No.:
	NO.	REVISIONS	DATE	INITIAL						



 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE OTTAWA, ONTARIO	Scale: 1:5000	Date: 03/2026		
						Drawn by: YA	Report No.: PG7897-1		
						Checked by: OM	Dwg. No.: PG7897-3C		
						Approved by: SB		Revision No.:	



 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE	Scale: 1:5000 Drawn by: YA Checked by: OM Approved by: SB	Date: 03/2026 Report No.: PG7897-1 Dwg. No.: PG7897-4 Revision No.:
					OTTAWA, Title:	ONTARIO	
					SITE GEOMETRY - BUILDING B5		
NO.	REVISIONS	DATE	INITIAL				



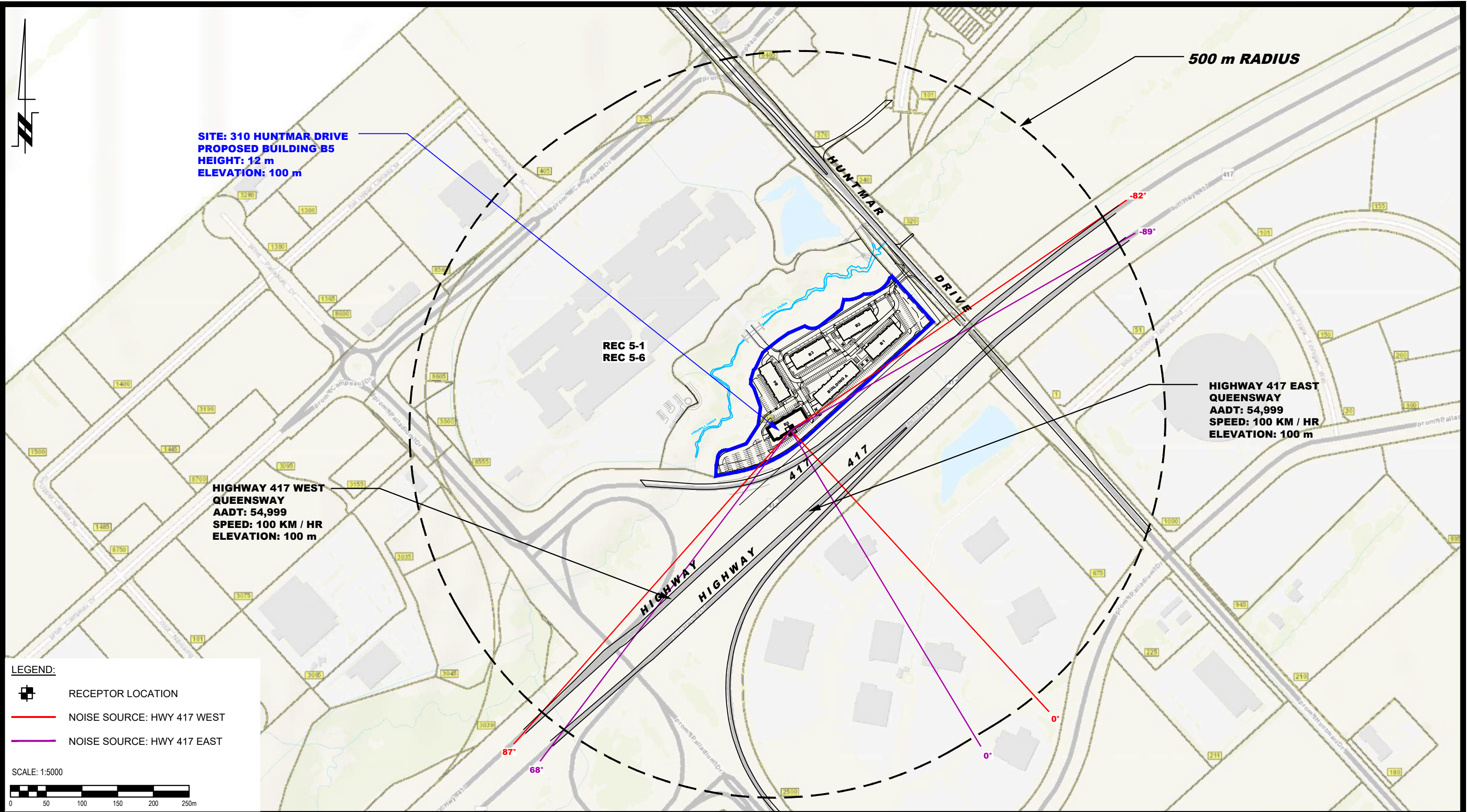
LEGEND:

- RECEPTOR LOCATION
- NOISE SOURCE: HWY 417 WEST
- NOISE SOURCE: HWY 417 EAST

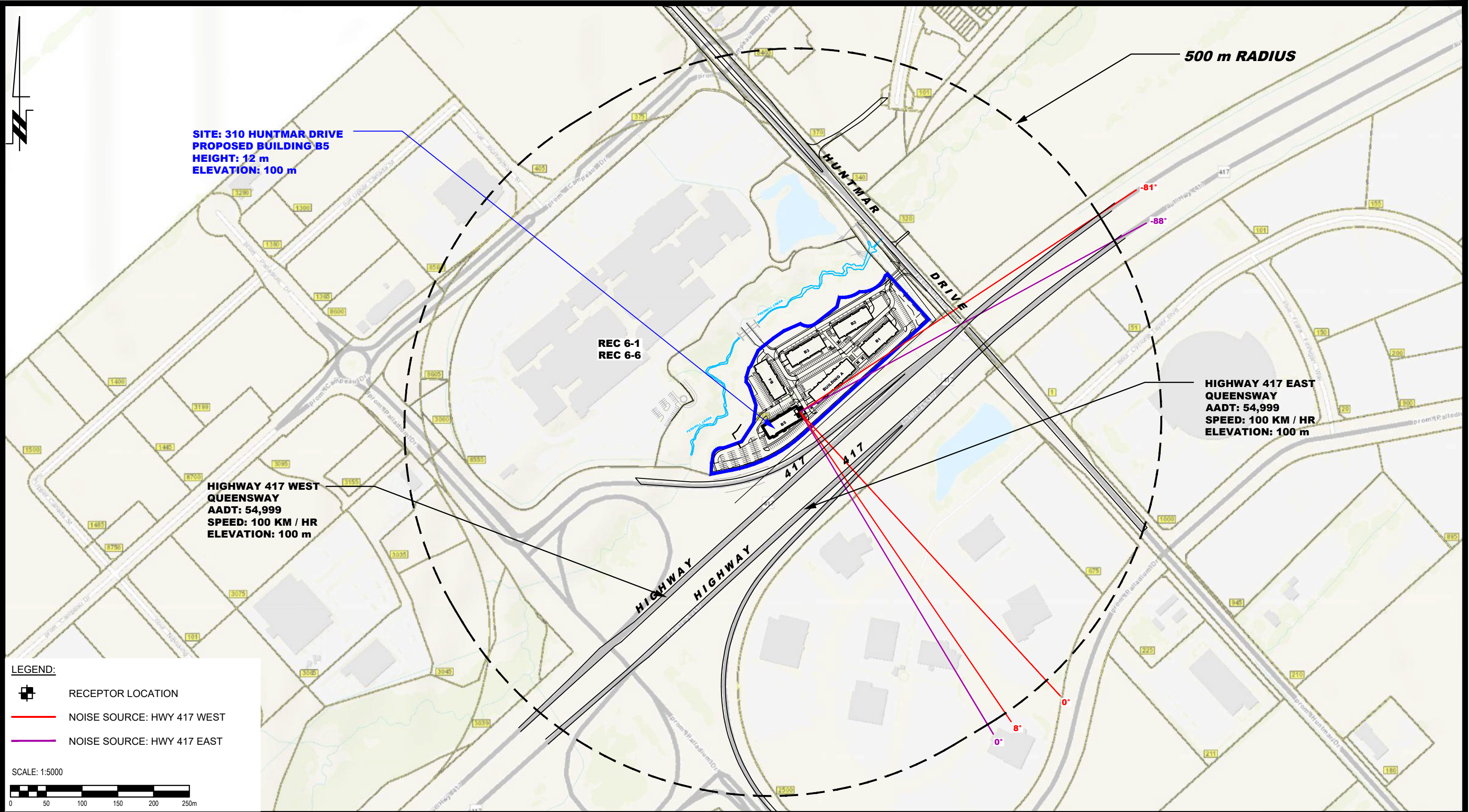
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 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE	Scale: 1:5000	Date: 03/2026	
					OTTAWA, Title: SITE GEOMETRY - REC 4-1 AND REC 4-6	ONTARIO	Drawn by: YA	Report No.: PG7897-1
							Checked by: OM	Dwg. No.: PG7897-4A
							Approved by: SB	



 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE	Scale: 1:5000	Date: 03/2026
					OTTAWA, Title:	ONTARIO	Drawn by: YA
				SITE GEOMETRY - REC 5-1 AND REC 5-6		Checked by: OM	Dwg. No.: PG7897-4B
						Approved by: SB	Revision No.:
	NO.	REVISIONS	DATE	INITIAL			





9 AURIGA DRIVE
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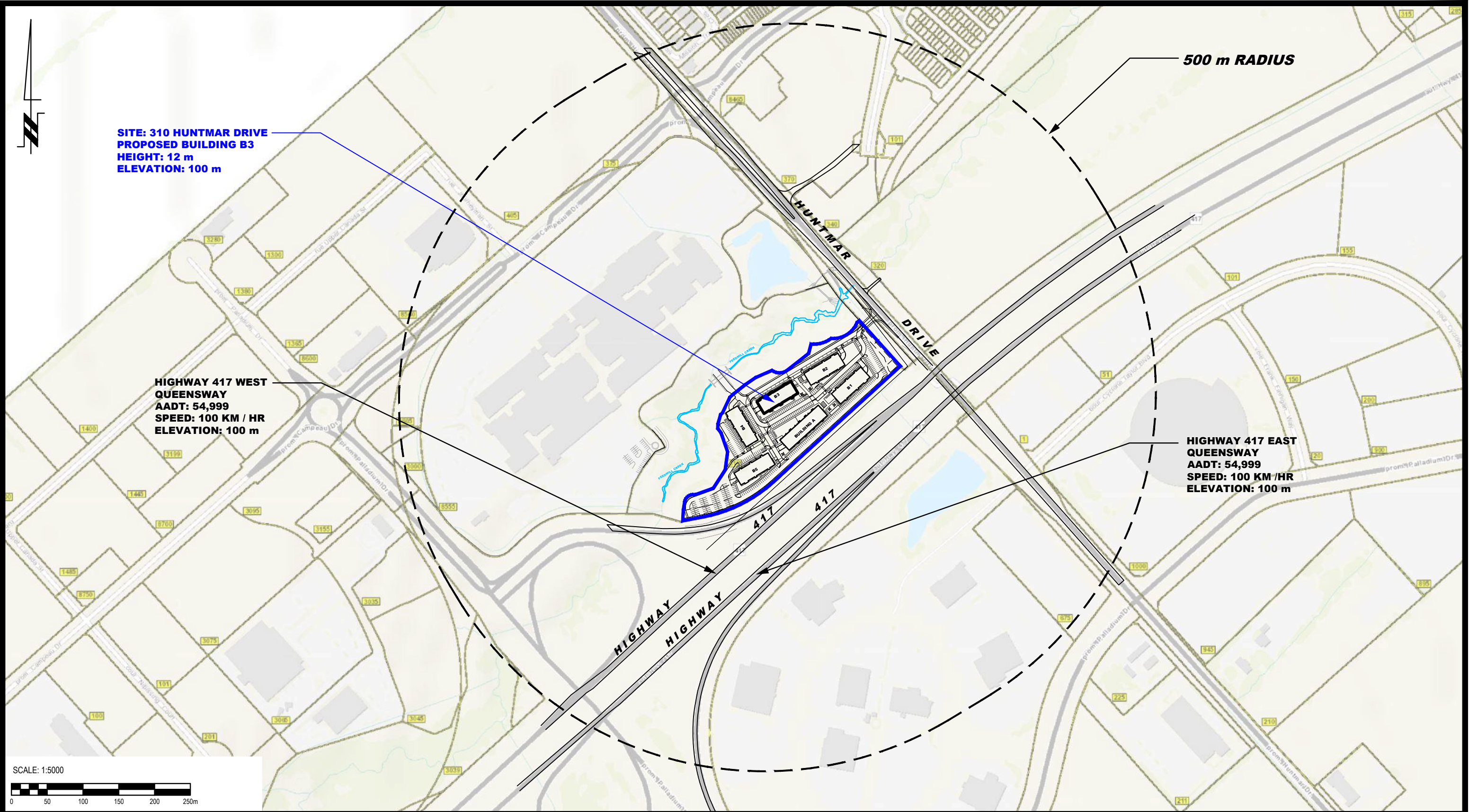
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IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE

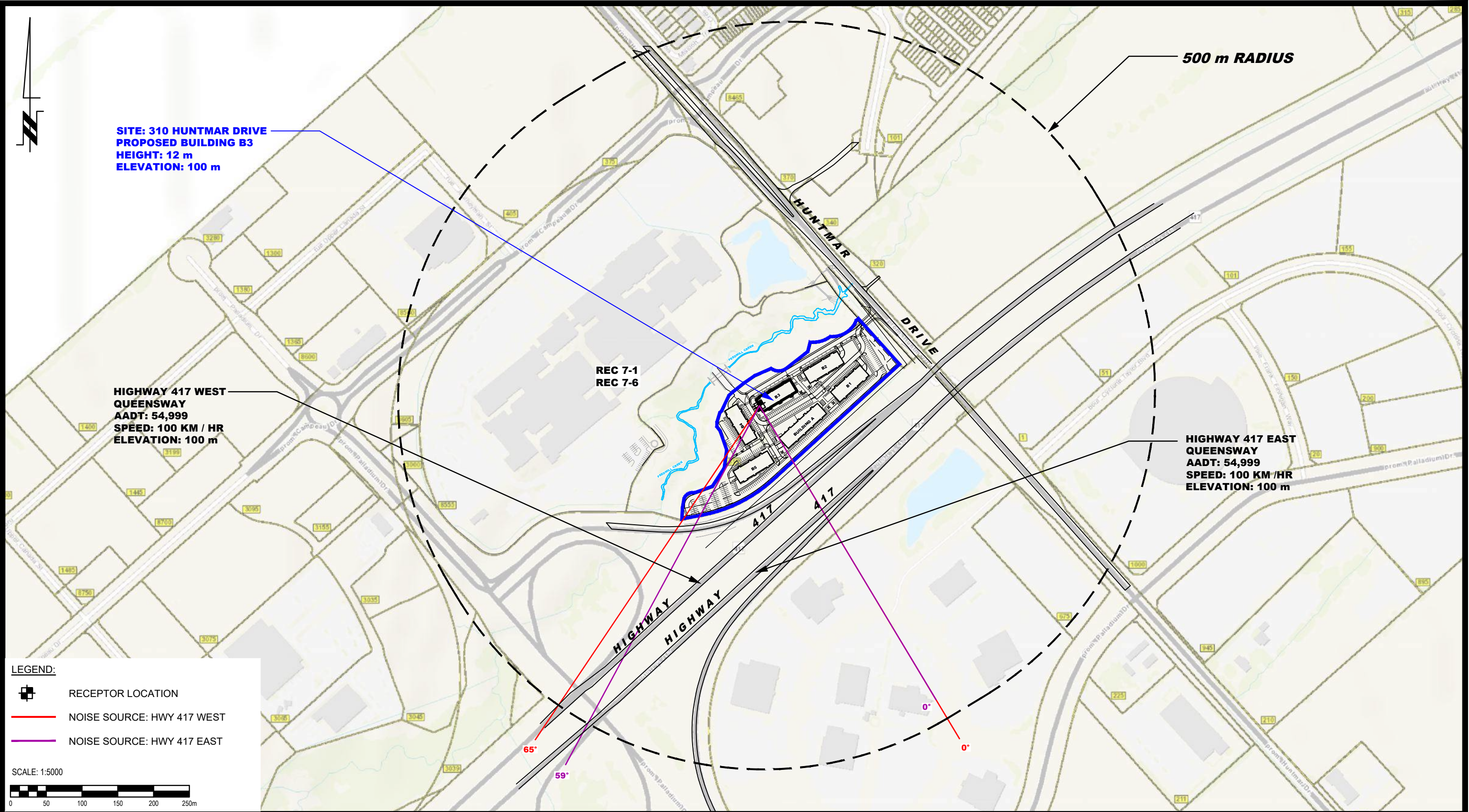
OTTAWA,
Title: SITE GEOMETRY - REC 6-1 AND REC 6-6

ONTARIO

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-4C
Approved by:	SB	Revision No.:	



 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE	Scale: 1:5000 Drawn by: YA Checked by: OM Approved by: SB	Date: 03/2026	
							OTTAWA, Title: SITE GEOMETRY - BUILDING B3	Report No.: PG7897-1
								Dwg. No.: PG7897-5
								Revision No.:
	NO.	REVISIONS	DATE	INITIAL				





9 AURIGA DRIVE
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K2E 7T9
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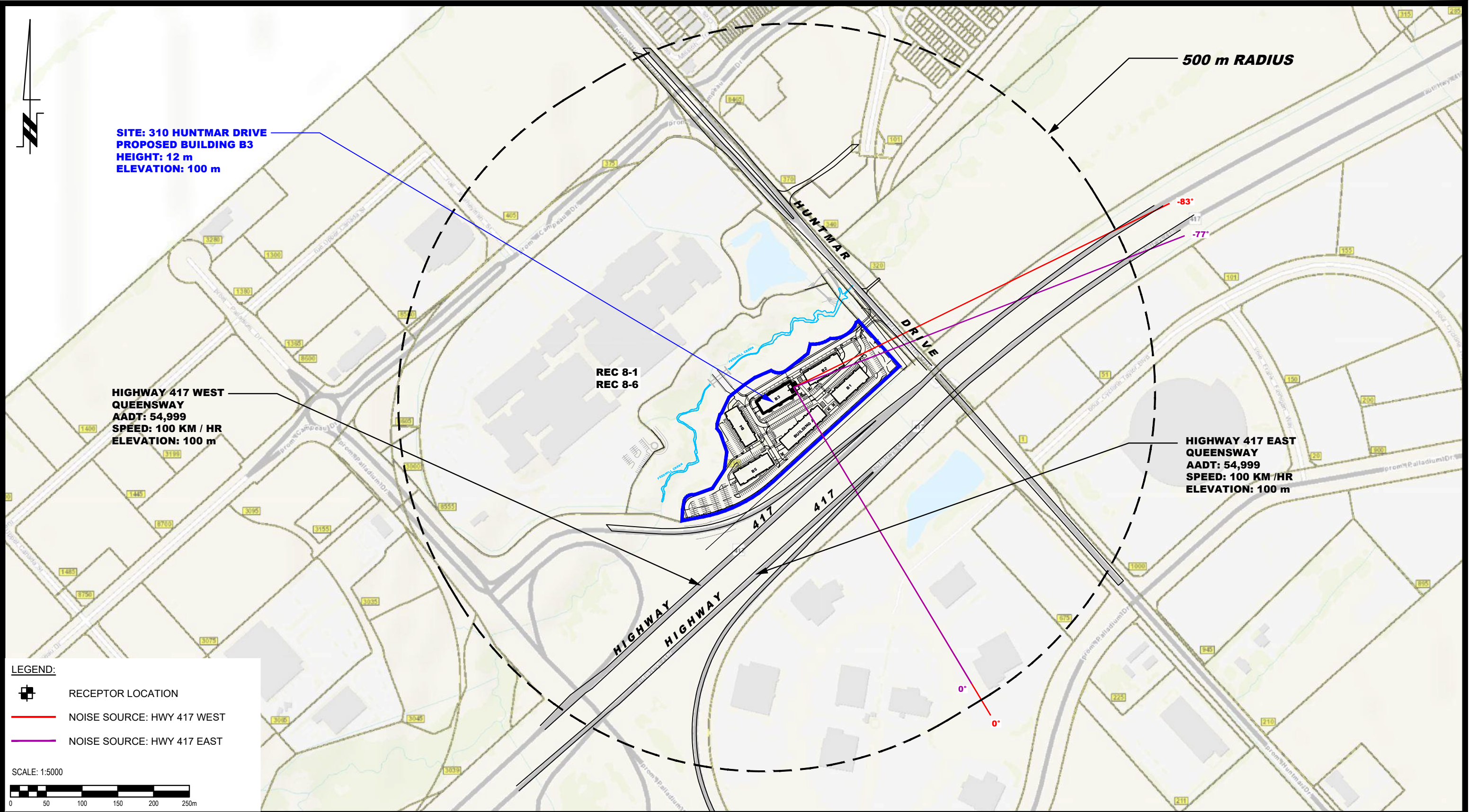
NO.	REVISIONS	DATE	INITIAL

OTTAWA,
Title:

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE
ONTARIO

SITE GEOMETRY - REC 7-1 AND REC 7-6

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-5A
Approved by:	SB	Revision No.:	





9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

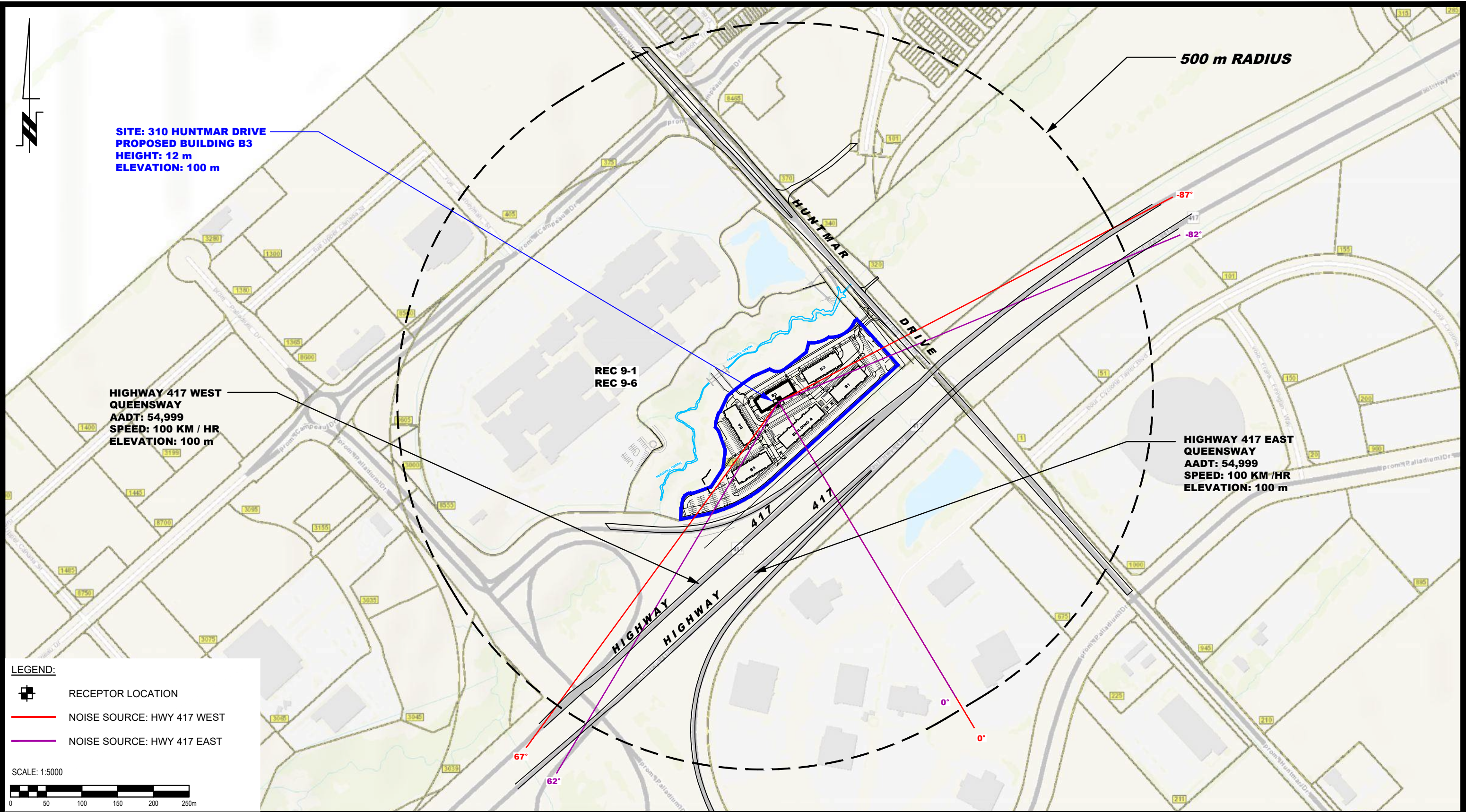
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OTTAWA,
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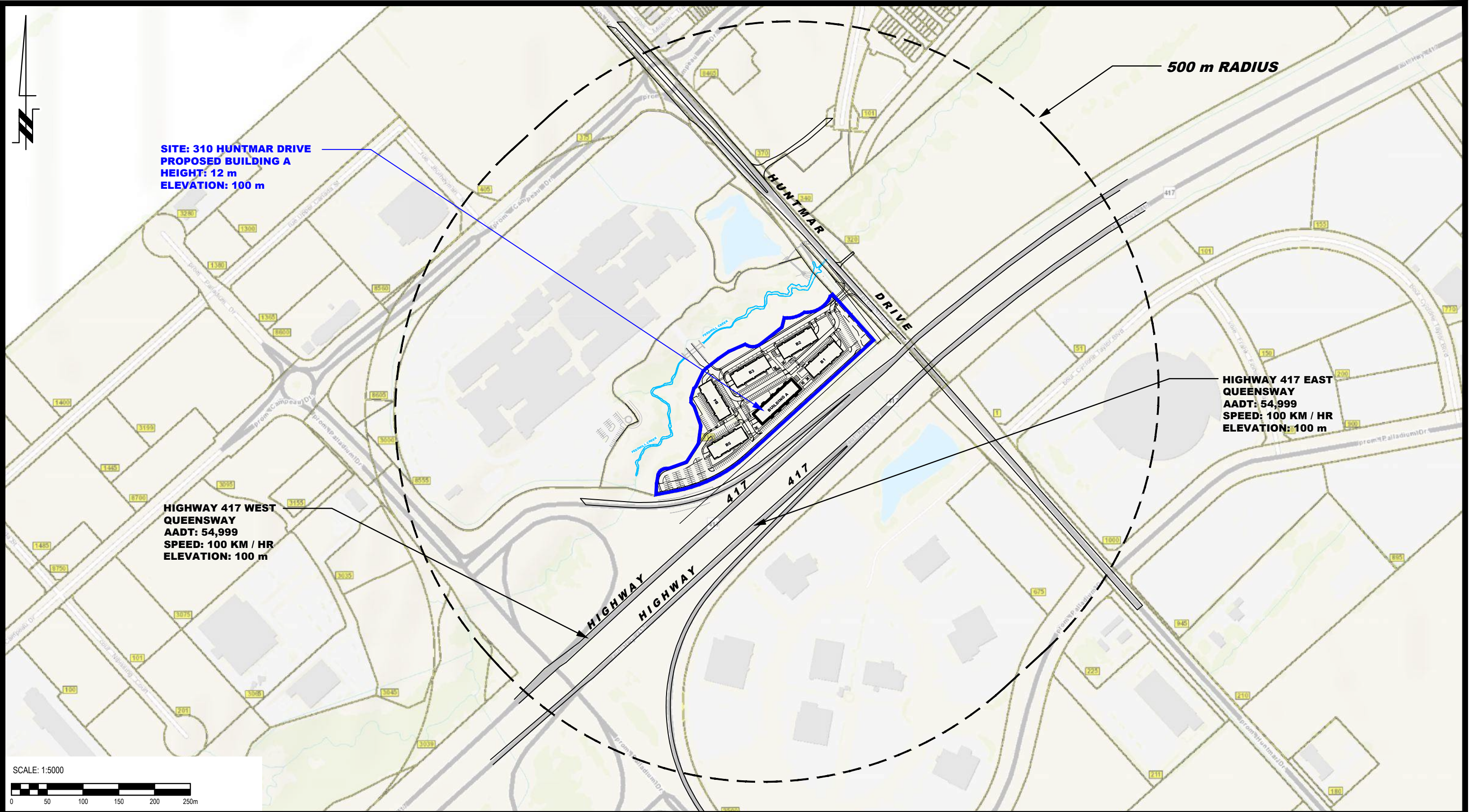
IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE
ONTARIO

SITE GEOMETRY - REC 8-1 AND REC 8-6

Scale:	1:4000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-5B
Approved by:	SB	Revision No.:	

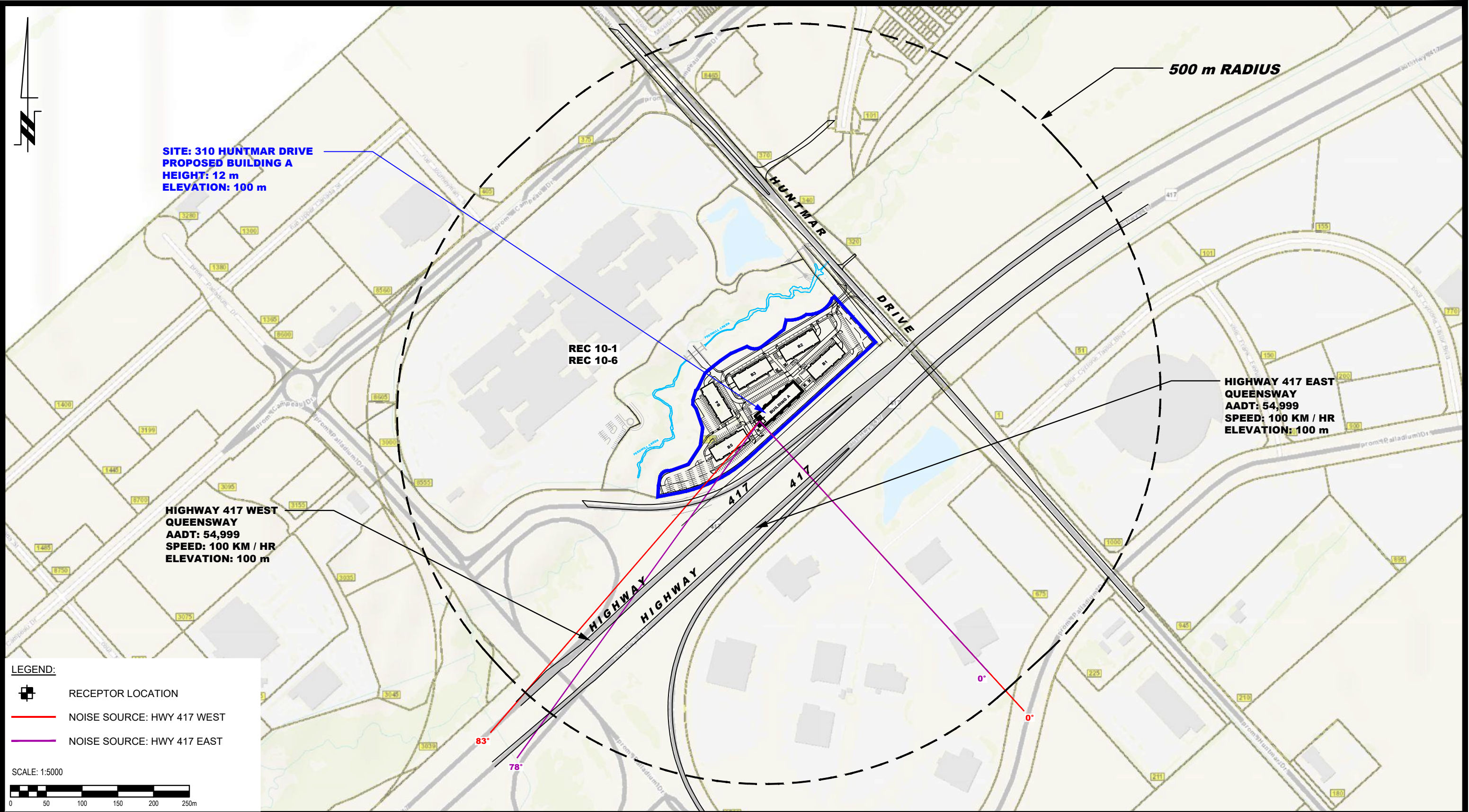


 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE	Scale: 1:5000	Date: 03/2026
					OTTAWA, Title:	ONTARIO	Drawn by: YA
				SITE GEOMETRY - REC 9-1 AND REC 9-6		Checked by: OM	Dwg. No.: PG7897-5C
						Approved by: SB	Revision No.:
NO.	REVISIONS	DATE	INITIAL				



 PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE	Scale: 1:5000 Drawn by: YA Checked by: OM Approved by: SB	Date: 03/2026 Report No.: PG7897-1 Dwg. No.: PG7897-6 Revision No.:
	NO.	REVISIONS	DATE	INITIAL			

OTTAWA, Title:	SITE GEOMETRY - BUILDING A
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9 AURIGA DRIVE
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TEL: (613) 226-7381

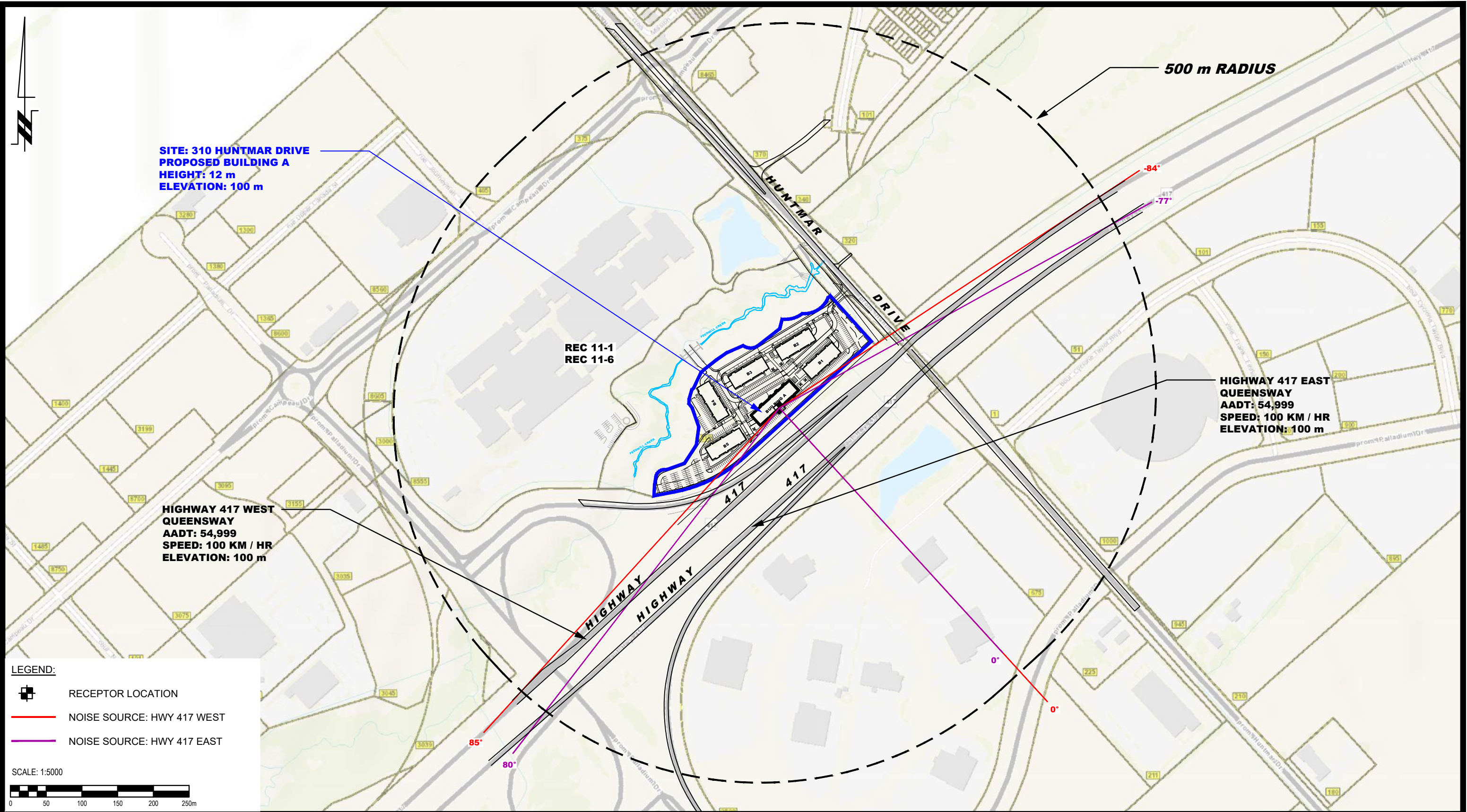
NO.	REVISIONS	DATE	INITIAL

OTTAWA,
Title:

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE
ONTARIO

SITE GEOMETRY - REC 10-1 AND REC 10-6

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-6A
Approved by:	SB	Revision No.:	





9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

OTTAWA,
Title:

SITE GEOMETRY - REC 11-1 AND REC 11-6

ONTARIO

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE

Scale: 1:5000

Drawn by: YA

Checked by: OM

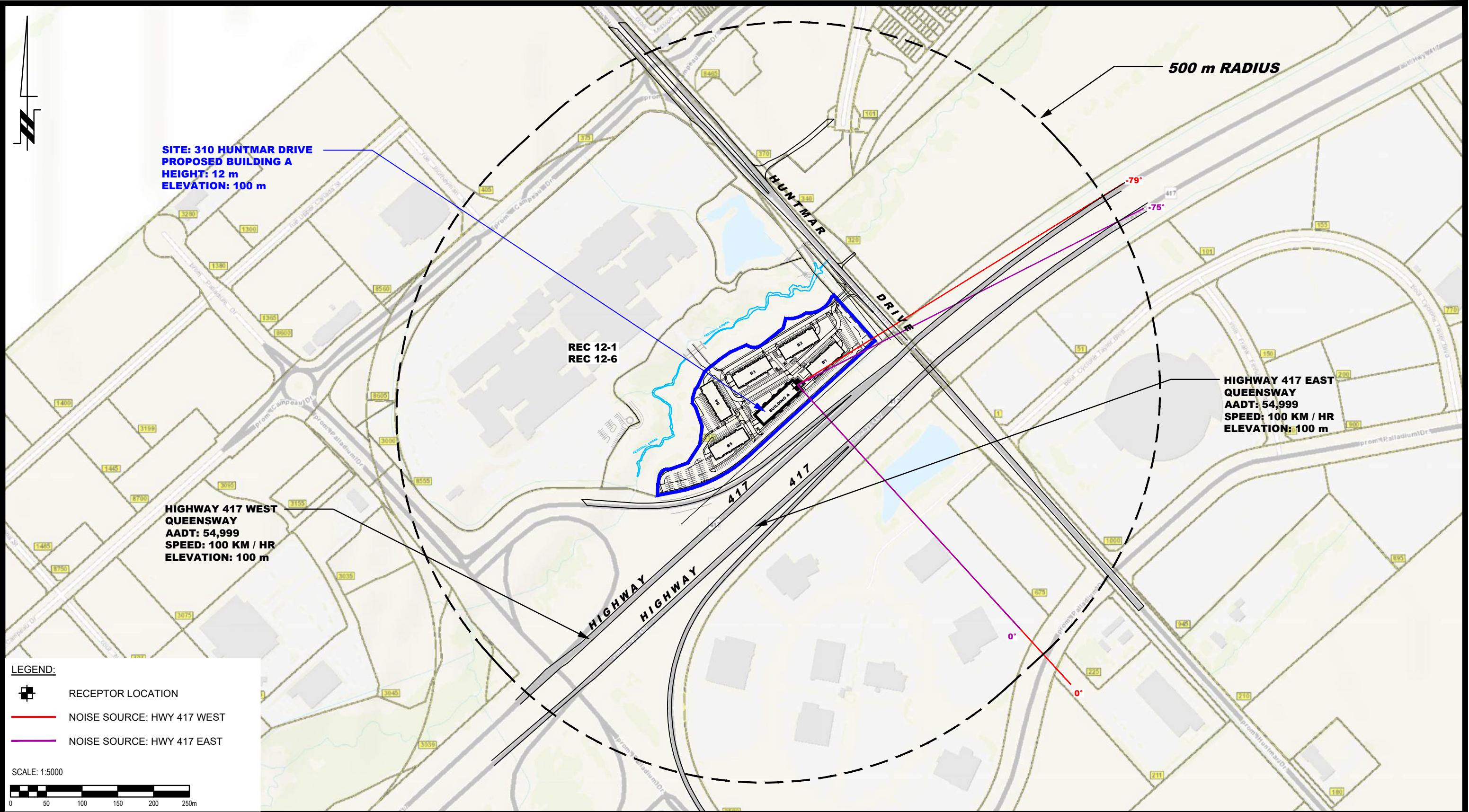
Approved by: SB

Date: 03/2026

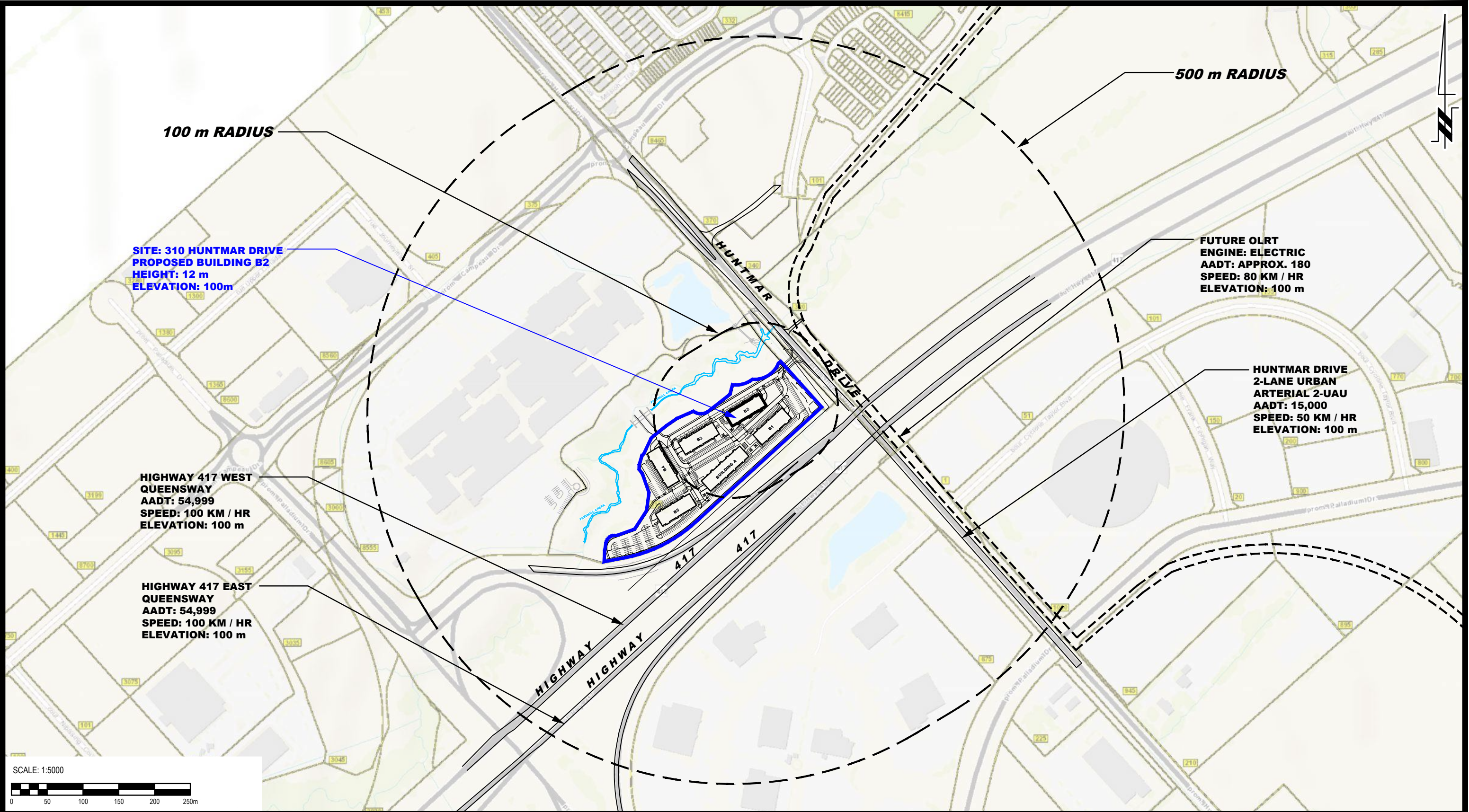
Report No.: PG7897-1

Dwg. No.: **PG7897-6B**

Revision No.:



PATERSON GROUP 9 AURIGA DRIVE OTTAWA, ON K2E 7T9 TEL: (613) 226-7381					IRONCLAD DEVELOPMENTS INC. NOISE ATTENUATION STUDY PROPOSED RESIDENTIAL DEVELOPMENT 319 HUNTMAR DRIVE	Scale: 1:5000	Date: 03/2026
					OTTAWA, ONTARIO	Drawn by: YA	Report No.: PG7897-1
				Title: SITE GEOMETRY - REC 12-1 AND REC 12-6	Checked by: OM	Dwg. No.: PG7897-6C	
					Approved by: SB	Revision No.:	
	NO.	REVISIONS	DATE	INITIAL			





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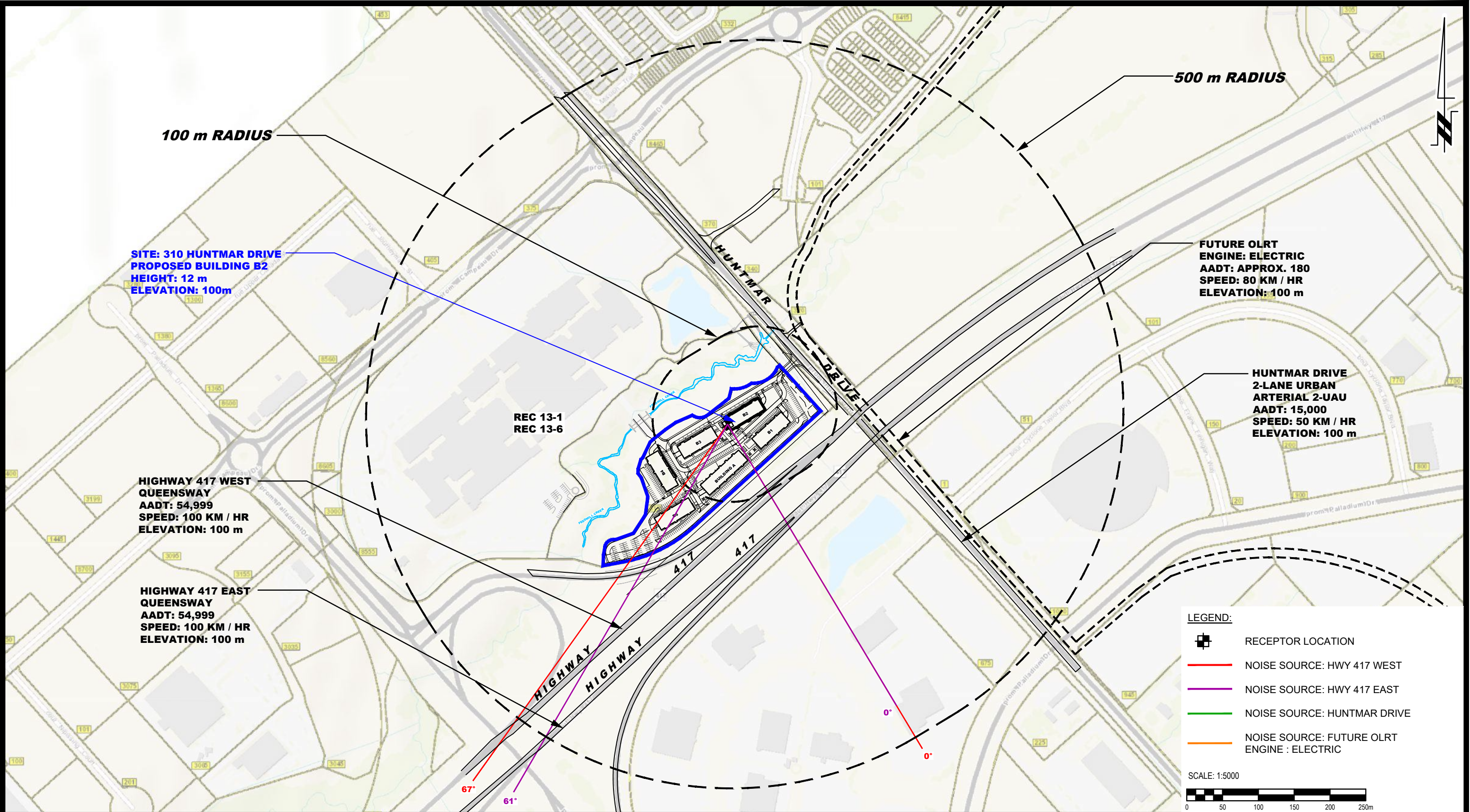
NO.	REVISIONS	DATE	INITIAL

OTTAWA,
Title:

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE
SITE GEOMETRY - BUILDING B2

ONTARIO

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-7
Approved by:	SB	Revision No.:	





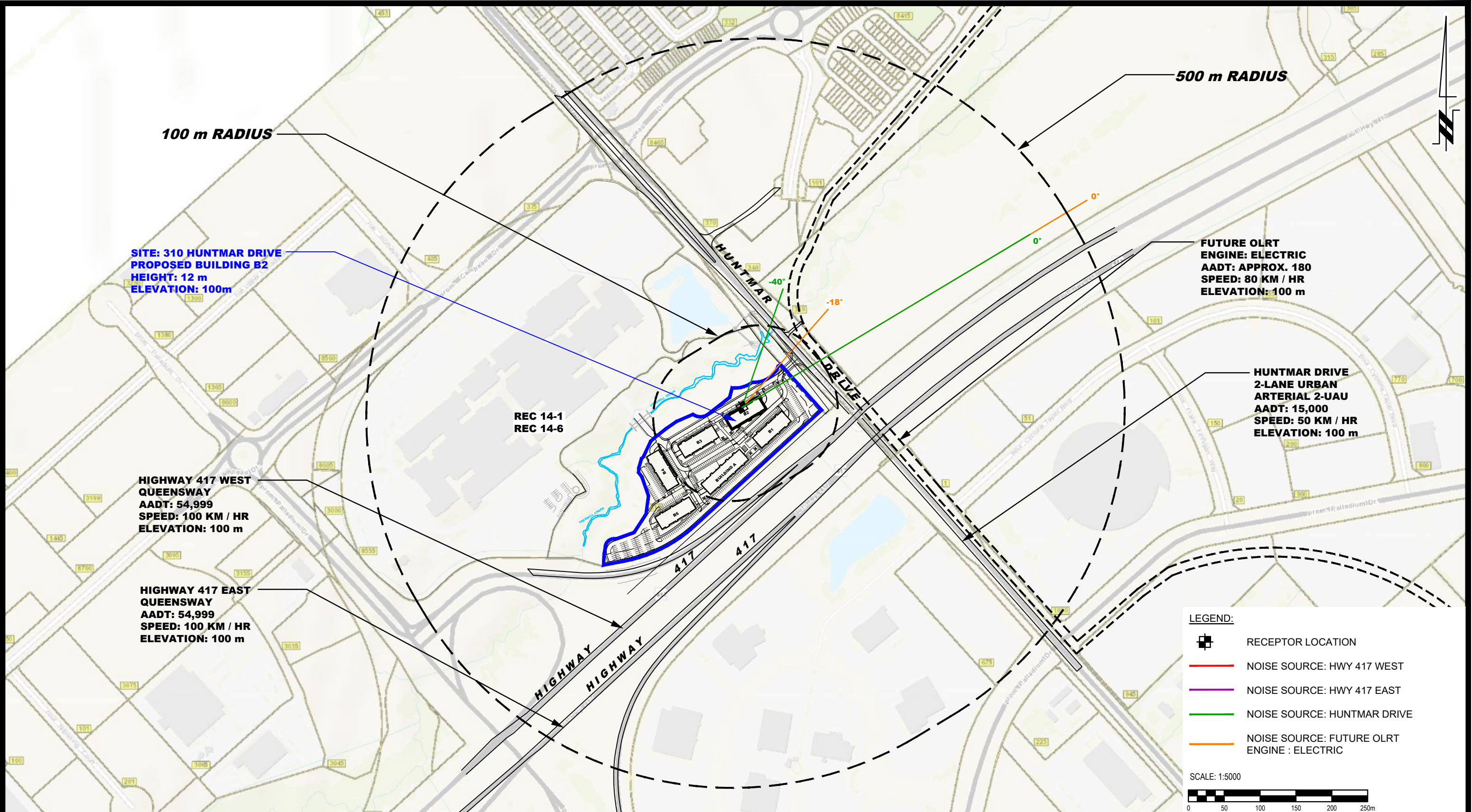
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K2E 7T9
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NO.	REVISIONS	DATE	INITIAL

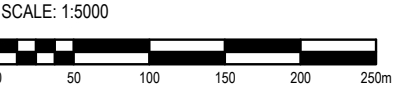
IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE

OTTAWA,
Title: **SITE GEOMETRY - REC 13-1 AND REC 13-6** ONTARIO

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-7A
Approved by:	SB	Revision No.:	



- LEGEND:
- RECEPTOR LOCATION
 - NOISE SOURCE: HWY 417 WEST
 - NOISE SOURCE: HWY 417 EAST
 - NOISE SOURCE: HUNTMAR DRIVE
 - NOISE SOURCE: FUTURE OLRT ENGINE : ELECTRIC





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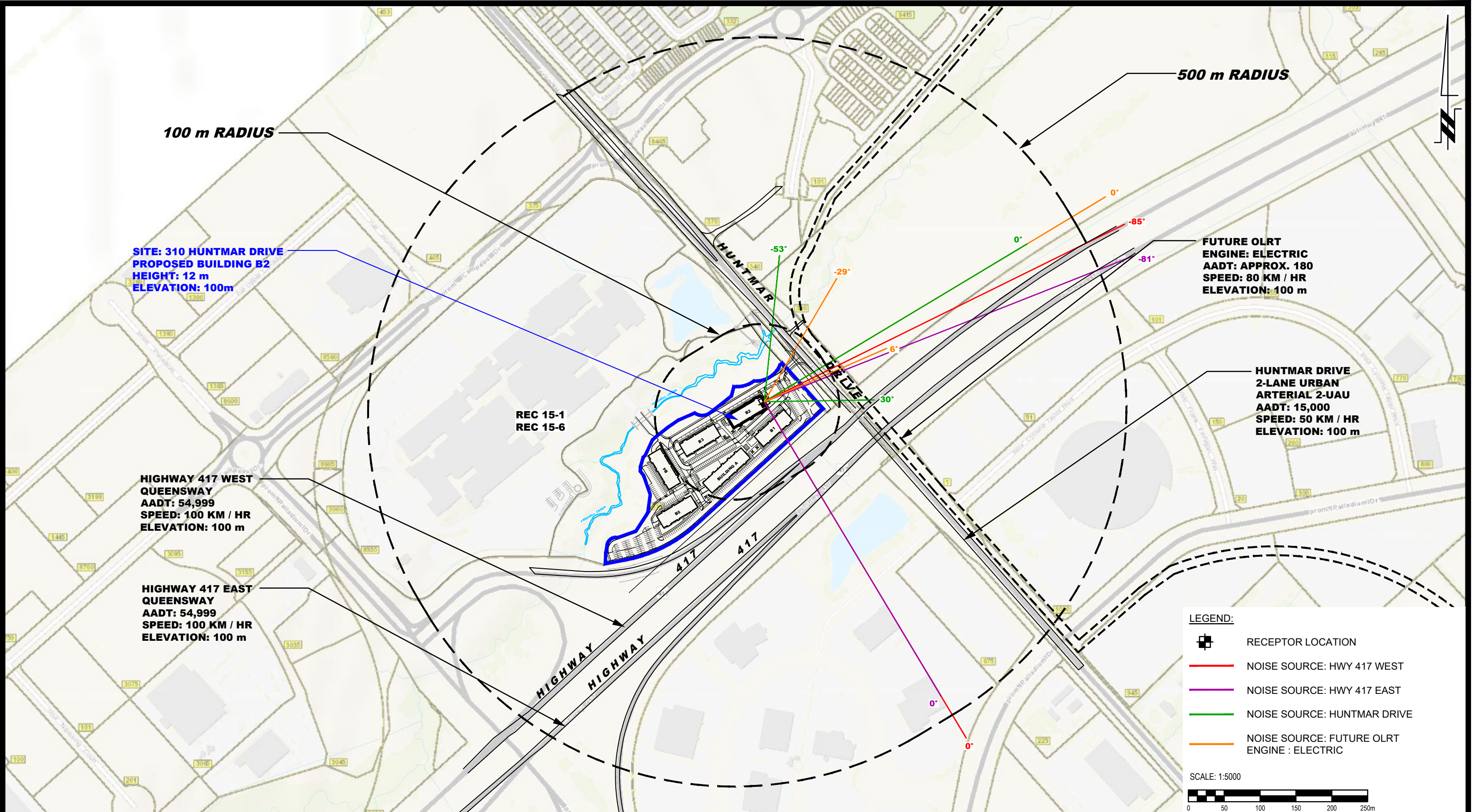
NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE

OTTAWA,
Title: **SITE GEOMETRY - REC 14-1 AND REC 14-6**

ONTARIO

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-7B
Approved by:	SB	Revision No.:	





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NO.	REVISIONS	DATE	INITIAL

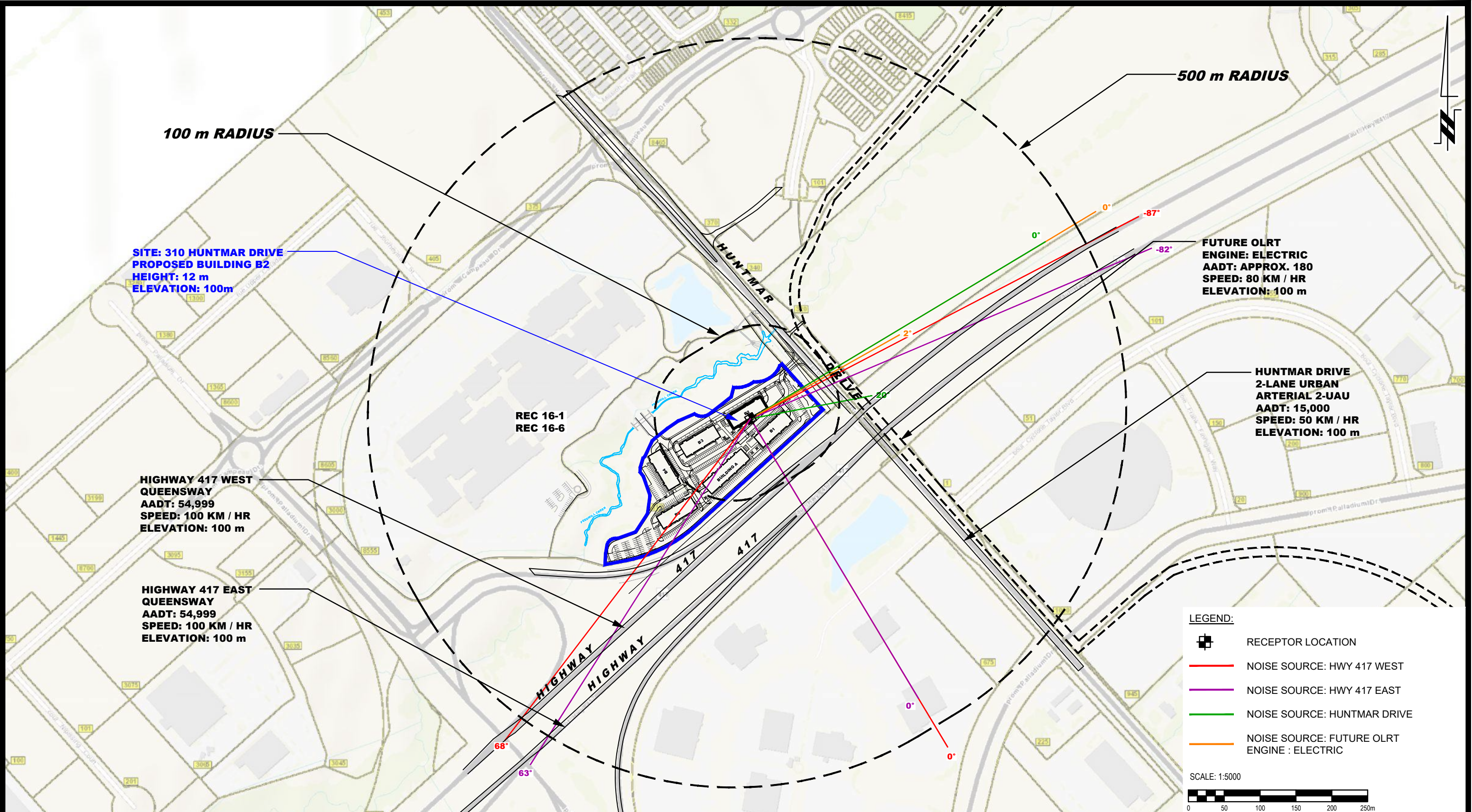
IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE

OTTAWA,
Title:

ONTARIO

SITE GEOMETRY - REC 15-1 AND REC 15-6

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-7C
Approved by:	SB	Revision No.:	





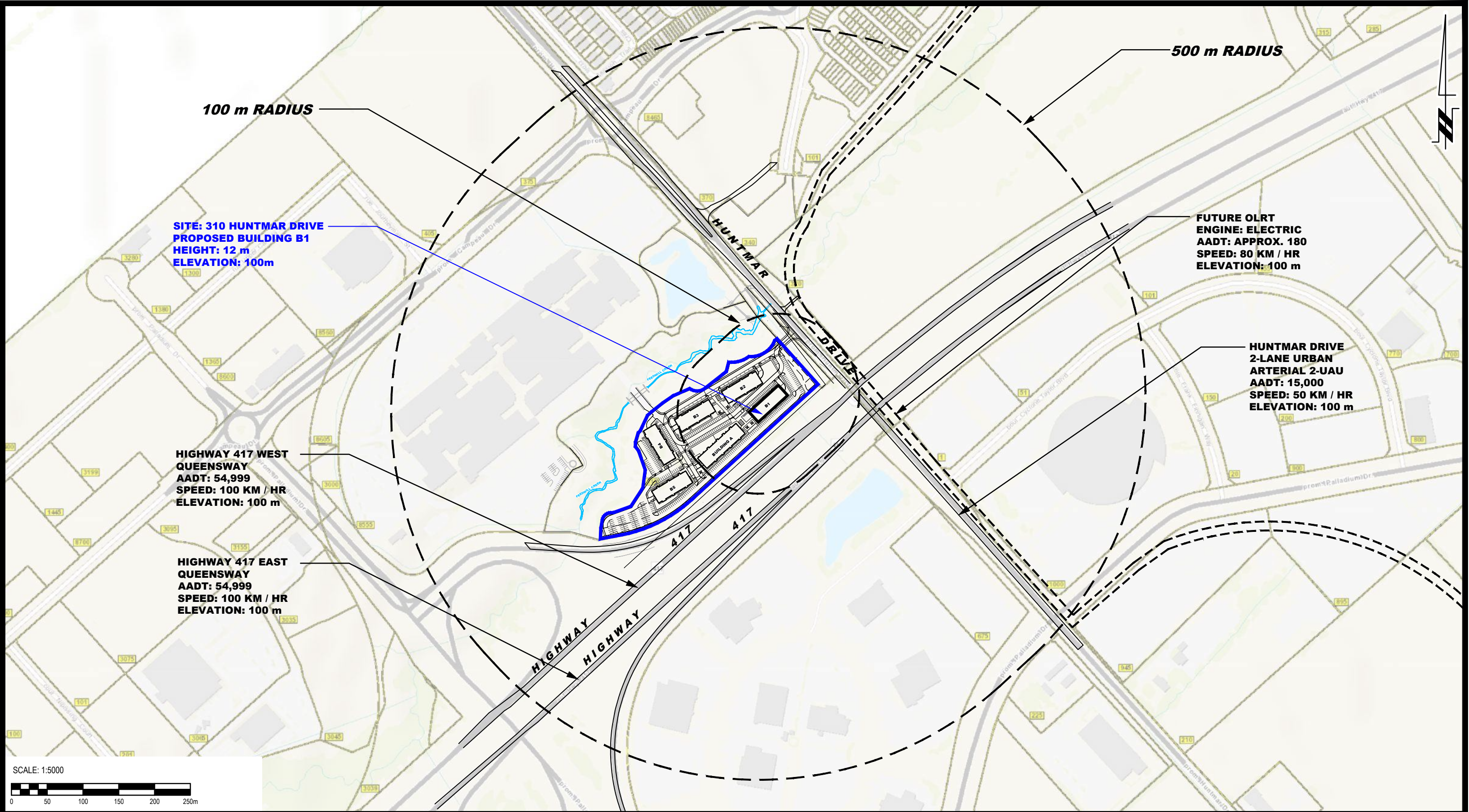
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K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE
OTTAWA, ONTARIO

OTAWA,
Title:
SITE GEOMETRY - REC 16-1 AND REC 16-6

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-7D
Approved by:	SB	Revision No.:	





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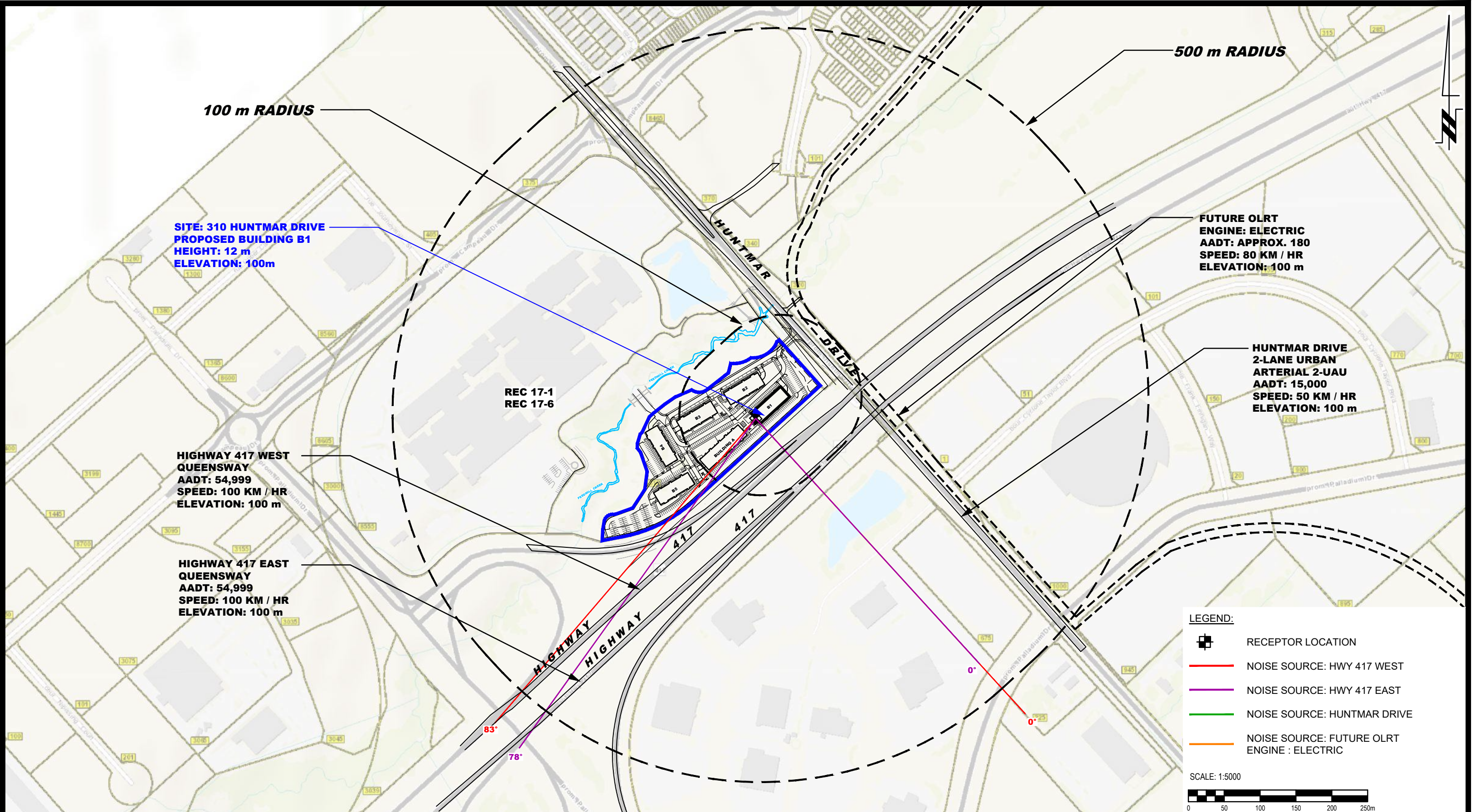
NO.	REVISIONS	DATE	INITIAL

OTTAWA,
Title:

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE
ONTARIO

SITE GEOMETRY - BUILDING B1

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-8
Approved by:	SB	Revision No.:	





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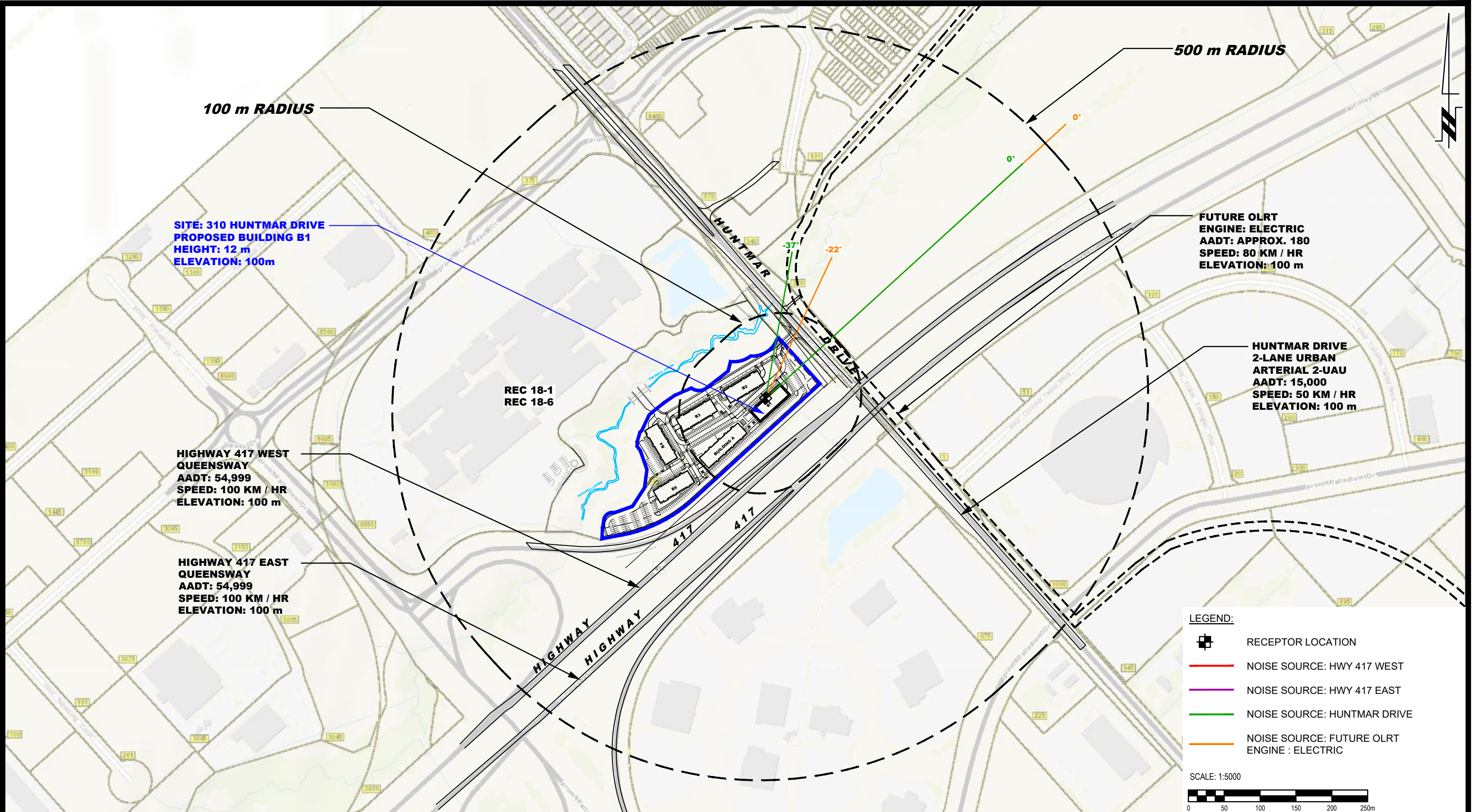
9 AURIGA DRIVE
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TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE

OTTAWA,
Title: **SITE GEOMETRY - REC 17-1 AND REC 17-6**ONTARIO

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-8A
Approved by:	SB	Revision No.:	



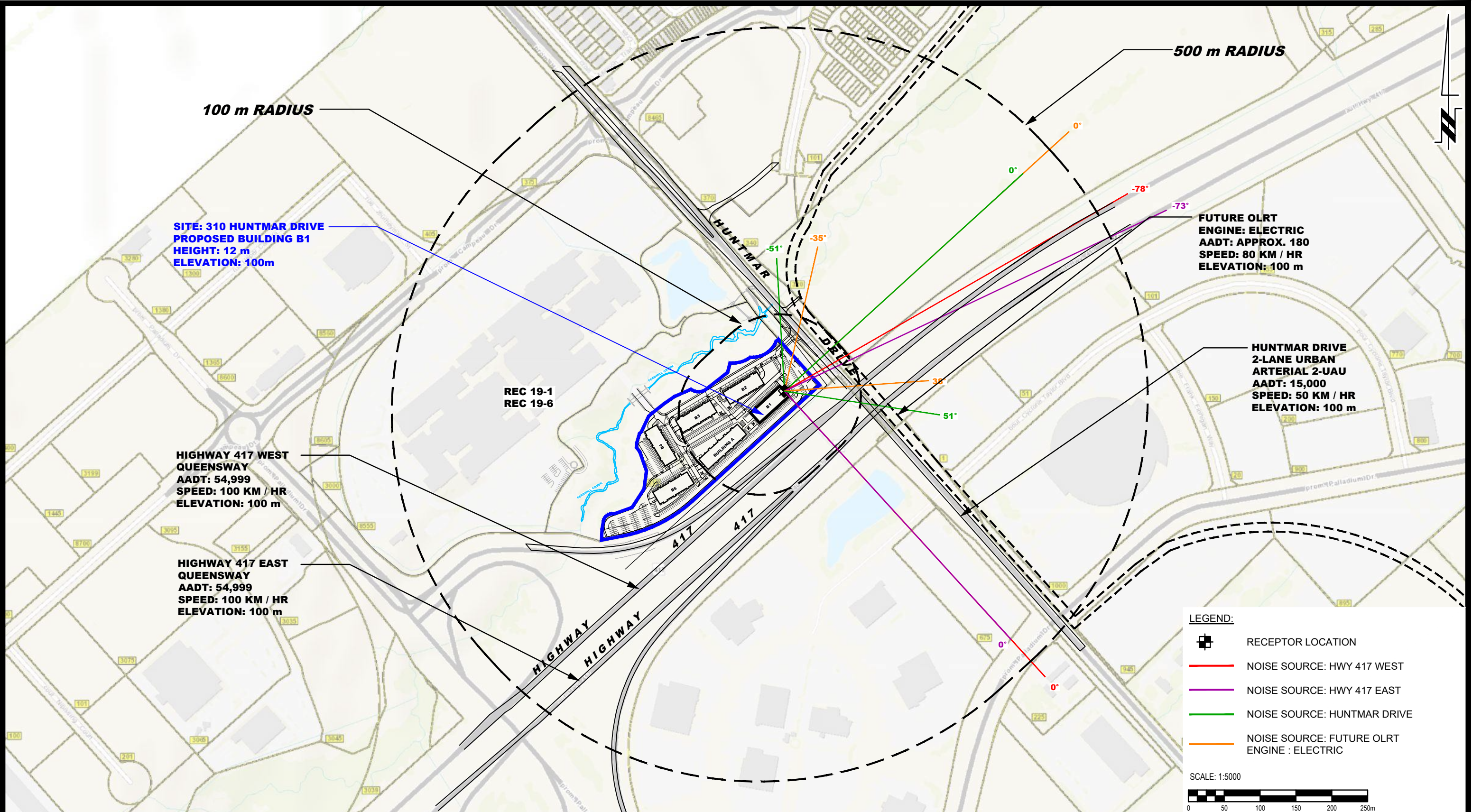
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K2E 7T9
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NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE
OTTAWA, ONTARIO

OTAWA,
Title:
SITE GEOMETRY - REC 18-1 AND REC 18-6

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-8B
Approved by:	SB	Revision No.:	





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NO.	REVISIONS	DATE	INITIAL

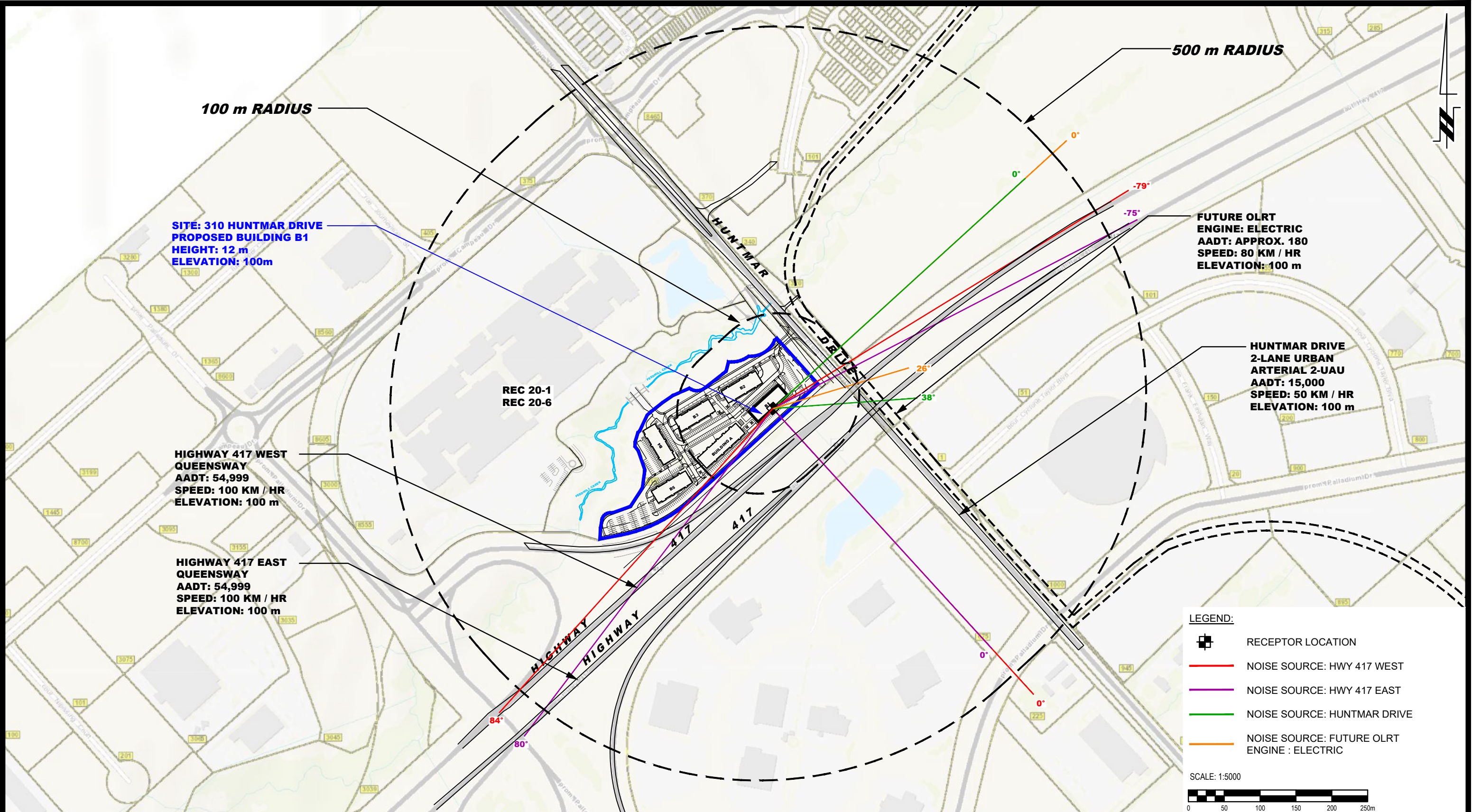
IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE

OTTAWA,
Title:

ONTARIO

SITE GEOMETRY - REC 19-1 AND REC 19-6

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-8C
Approved by:	SB	Revision No.:	





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OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

IRONCLAD DEVELOPMENTS INC.
NOISE ATTENUATION STUDY
PROPOSED RESIDENTIAL DEVELOPMENT
319 HUNTMAR DRIVE

OTTAWA,
Title:

ONTARIO

SITE GEOMETRY - REC 20-1 AND REC 20-6

Scale:	1:5000	Date:	03/2026
Drawn by:	YA	Report No.:	PG7897-1
Checked by:	OM	Dwg. No.:	PG7897-8D
Approved by:	SB	Revision No.:	

APPENDIX 2

STAMSON RESULTS

Filename: REC11.te Time Period: Day/Night 16/8 hours
Description: REC 1-1 - Building B4

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 60.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 168.90 / 168.90 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 65.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 123.90 / 123.90 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	57.36 !	57.36
2.HWY 417 W	! 1.63 !	60.26 !	60.26
Total			62.06 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	49.76 !	49.76
2.HWY 417 W	! 1.63 !	52.67 !	52.67
Total			54.46 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 62.06
 (NIGHT): 54.46

↑

↑

Filename: REC16.te Time Period: Day/Night 16/8 hours
Description: REC 1-6 - Building B4

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 60.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 168.90 / 168.90 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 65.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 123.90 / 123.90 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	62.46	!	62.46
2.HWY 417 W	!	1.63	!	64.83	!	64.83
	+		+		+	
		Total				66.82 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	54.87	!	54.87
2.HWY 417 W	!	1.63	!	57.24	!	57.24
	+		+		+	
		Total				59.23 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 66.82
 (NIGHT): 59.23

↑

↑

Filename: REC21.te Time Period: Day/Night 16/8 hours
Description: REC 2-1 - Building B4

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -80.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 164.10 / 164.10 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -85.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 120.22 / 120.22 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	58.30 !	58.30
2.HWY 417 W	! 1.63 !	61.07 !	61.07
Total			62.91 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	50.71 !	50.71
2.HWY 417 W	! 1.63 !	53.47 !	53.47
Total			55.32 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 62.91
 (NIGHT): 55.32

↑

↑

Filename: REC26.te Time Period: Day/Night 16/8 hours
Description: REC 2-6 - Building B4

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -80.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 164.10 / 164.10 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -85.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 120.22 / 120.22 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	63.67	!	63.67
2.HWY 417 W	!	1.63	!	65.93	!	65.93
	+		+		+	
		Total				67.96 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	56.08	!	56.08
2.HWY 417 W	!	1.63	!	58.34	!	58.34
	+		+		+	
		Total				60.37 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 67.96
 (NIGHT): 60.37

↑

↑

Filename: REC31.te Time Period: Day/Night 16/8 hours
Description: REC 3-1 - Building B4

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -84.00 deg 63.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 138.57 / 138.57 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -88.00 deg 68.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 94.11 / 94.11 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	62.29	!	62.29
2.HWY 417 W	!	1.63	!	65.63	!	65.63
	+		+		+	
		Total				67.28 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	54.69	!	54.69
2.HWY 417 W	!	1.63	!	58.03	!	58.03
	+		+		+	
		Total				59.68 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 67.28
 (NIGHT): 59.68

↑

↑

Filename: REC36.te Time Period: Day/Night 16/8 hours
Description: REC 3-6 - Building B4

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -84.00 deg 63.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 138.57 / 138.57 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -88.00 deg 68.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 94.11 / 94.11 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	67.25	!	67.25
2.HWY 417 W	!	1.63	!	69.91	!	69.91
	+		+		+	
		Total				71.79 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	59.65	!	59.65
2.HWY 417 W	!	1.63	!	62.31	!	62.31
	+		+		+	
		Total				64.19 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 71.79
 (NIGHT): 64.19

↑

↑

Filename: rec41.te Time Period: Day/Night 16/8 hours
Description: REC 4-1 - Building B5

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 66.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 114.34 / 114.34 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 70.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 71.65 / 71.65 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	60.46 !	60.46
2.HWY 417 W	! 1.63 !	67.98 !	67.98
Total			68.69 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	52.86 !	52.86
2.HWY 417 W	! 1.63 !	60.39 !	60.39
Total			61.10 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 68.69
 (NIGHT): 61.10

↑

↑

Filename: REC46.te Time Period: Day/Night 16/8 hours
Description: REC 4-6 - Building B5

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 66.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 114.34 / 114.34 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 70.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 71.65 / 71.65 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	64.88	!	64.88
2.HWY 417 W	!	1.63	!	67.98	!	67.98
	+		+		+	
		Total				69.71 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	57.29	!	57.29
2.HWY 417 W	!	1.63	!	60.39	!	60.39
	+		+		+	
		Total				62.12 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 69.71
 (NIGHT): 62.12

↑

↑

Filename: rec51.te Time Period: Day/Night 16/8 hours
Description: REC 5-1 - Building B5

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -89.00 deg 68.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 99.53 / 99.53 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -82.00 deg 87.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 55.46 / 55.46 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	64.80	!	64.80
2.HWY 417 W	!	1.63	!	69.63	!	69.63
	+		+		+	
		Total				70.86 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	57.21	!	57.21
2.HWY 417 W	!	1.63	!	62.03	!	62.03
	+		+		+	
		Total				63.27 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 70.86
 (NIGHT): 63.27

↑

↑

Filename: rec56.te Time Period: Day/Night 16/8 hours
Description: REC 5-6 - Building B5

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -89.00 deg 68.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 99.53 / 99.53 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -82.00 deg 87.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 55.46 / 55.46 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	69.20	!	69.20
2.HWY 417 W	!	1.63	!	72.97	!	72.97
	+		+		+	
		Total				74.49 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	61.60	!	61.60
2.HWY 417 W	!	1.63	!	65.38	!	65.38
	+		+		+	
		Total				66.90 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 74.49
 (NIGHT): 66.90

↑

↑

Filename: rec61.te Time Period: Day/Night 16/8 hours
Description: REC 6-1 - Building B5

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -88.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 104.11 / 104.11 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -81.00 deg 8.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 59.91 / 59.91 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	61.70	!	61.70
2.HWY 417 W	!	1.63	!	66.53	!	66.53
	+		+		+	
		Total				67.76 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	54.11	!	54.11
2.HWY 417 W	!	1.63	!	58.93	!	58.93
	+		+		+	
		Total				60.17 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 67.76
 (NIGHT): 60.17

↑

↑

Filename: rec66.te Time Period: Day/Night 16/8 hours
Description: REC 6-6 - Building B5

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -88.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 104.11 / 104.11 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -81.00 deg 8.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 59.91 / 59.91 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	66.35 !	66.35
2.HWY 417 W	! 1.63 !	69.88 !	69.88
Total			71.47 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	58.75 !	58.75
2.HWY 417 W	! 1.63 !	62.28 !	62.28
Total			63.87 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 71.47
 (NIGHT): 63.87

↑

↑

Filename: rec71.te Time Period: Day/Night 16/8 hours
Description: REC 7-1 - Building B3

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 59.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 169.02 / 169.02 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 65.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 125.39 / 125.39 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	57.30	!	57.30
2.HWY 417 W	!	1.63	!	60.18	!	60.18
	+		+		+	
		Total				61.98 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	49.70	!	49.70
2.HWY 417 W	!	1.63	!	52.58	!	52.58
	+		+		+	
		Total				54.38 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 61.98
 (NIGHT): 54.38

↑

↑

Filename: rec76.te Time Period: Day/Night 16/8 hours
Description: REC 7-6 - Building B3

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 59.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 169.02 / 169.02 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 65.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 125.39 / 125.39 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	62.39 !	62.39
2.HWY 417 W	! 1.63 !	64.77 !	64.77
Total			66.75 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	54.80 !	54.80
2.HWY 417 W	! 1.63 !	57.18 !	57.18
Total			59.16 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 66.75
 (NIGHT): 59.16

↑

↑

Filename: rec81.te Time Period: Day/Night 16/8 hours
Description: REC 8-1 - Building B3

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -77.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 158.38 / 158.38 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -83.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 113.23 / 113.23 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	58.49 !	58.49
2.HWY 417 W	! 1.63 !	61.47 !	61.47
Total			63.24 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	50.89 !	50.89
2.HWY 417 W	! 1.63 !	53.87 !	53.87
Total			55.64 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 63.24
 (NIGHT): 55.64

↑

↑

Filename: rec86.te Time Period: Day/Night 16/8 hours
Description: REC 8-6 - Building B3

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -77.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 158.38 / 158.38 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -83.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 113.23 / 113.23 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	63.73	!	63.73
2.HWY 417 W	!	1.63	!	66.17	!	66.17
	+		+		+	
		Total				68.13 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	56.13	!	56.13
2.HWY 417 W	!	1.63	!	58.58	!	58.58
	+		+		+	
		Total				60.54 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 68.13
 (NIGHT): 60.54

↑

↑

Filename: rec91.te Time Period: Day/Night 16/8 hours
Description: REC 9-1 - Building B3

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -82.00 deg 62.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 154.64 / 154.64 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -87.00 deg 67.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 109.71 / 109.71 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	61.46 !	61.46
2.HWY 417 W	! 1.63 !	64.50 !	64.50
Total			66.25 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	53.86 !	53.86
2.HWY 417 W	! 1.63 !	56.91 !	56.91
Total			58.66 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 66.25
 (NIGHT): 58.66

↑

↑

Filename: rec96.te Time Period: Day/Night 16/8 hours
Description: REC 9-6 - Building B3

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -82.00 deg 62.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 154.64 / 154.64 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -87.00 deg 67.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 109.71 / 109.71 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	66.60	!	66.60
2.HWY 417 W	!	1.63	!	69.06	!	69.06
	+		+		+	
		Total				71.01 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	59.00	!	59.00
2.HWY 417 W	!	1.63	!	61.47	!	61.47
	+		+		+	
		Total				63.42 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 71.01
 (NIGHT): 63.42

↑

↑

Filename: rec101.te Time Period: Day/Night 16/8 hours
Description: REC 10-1 - Building A

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 78.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 104.50 / 104.50 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 83.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 60.79 / 60.79 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	61.51	!	61.51
2.HWY 417 W	!	1.63	!	65.94	!	65.94
	+		+		+	
		Total				67.28 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	53.91	!	53.91
2.HWY 417 W	!	1.63	!	58.34	!	58.34
	+		+		+	
		Total				59.68 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 67.28
 (NIGHT): 59.68

↑

↑

Filename: rec106.te Time Period: Day/Night 16/8 hours
Description: REC 10-6 - Building A

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 78.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 104.50 / 104.50 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 83.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 60.79 / 60.79 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	65.96	!	65.96
2.HWY 417 W	!	1.63	!	69.43	!	69.43
	+		+		+	
		Total				71.04 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	58.36	!	58.36
2.HWY 417 W	!	1.63	!	61.84	!	61.84
	+		+		+	
		Total				63.45 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 71.04
 (NIGHT): 63.45

↑

↑

Filename: rec111.te Time Period: Day/Night 16/8 hours
Description: REC 11-1 - Building A

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -77.00 deg 80.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 95.52 / 95.52 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -84.00 deg 85.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 51.77 / 51.77 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	65.18 !	65.18
2.HWY 417 W	! 1.63 !	70.13 !	70.13
Total			71.34 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	57.58 !	57.58
2.HWY 417 W	! 1.63 !	62.53 !	62.53
Total			63.74 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 71.34
 (NIGHT): 63.74

↑

↑

Filename: rec116.te Time Period: Day/Night 16/8 hours
Description: REC 11-6 - Building A

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -77.00 deg 80.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 95.52 / 95.52 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -84.00 deg 85.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 51.77 / 51.77 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	69.46 !	69.46
2.HWY 417 W	! 1.63 !	73.34 !	73.34
Total			74.83 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	61.87 !	61.87
2.HWY 417 W	! 1.63 !	65.74 !	65.74
Total			67.23 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 74.83
 (NIGHT): 67.23

↑

↑

Filename: rec121.te Time Period: Day/Night 16/8 hours
Description: REC 12-1 - Building A

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -75.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 104.36 / 104.36 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -79.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 59.76 / 59.76 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	61.44 !	61.44
2.HWY 417 W	! 1.63 !	65.98 !	65.98
Total			67.29 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	53.84 !	53.84
2.HWY 417 W	! 1.63 !	58.39 !	58.39
Total			59.70 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 67.29
 (NIGHT): 59.70

↑

↑

Filename: rec126.te Time Period: Day/Night 16/8 hours
Description: REC 12-6 - Building A

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : -75.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 104.36 / 104.36 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : -79.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 59.76 / 59.76 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	65.83 !	65.83
2.HWY 417 W	! 1.63 !	69.36 !	69.36
Total			70.95 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	58.24 !	58.24
2.HWY 417 W	! 1.63 !	61.77 !	61.77
Total			63.36 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 70.95
 (NIGHT): 63.36

↑

↑

STAMSON 5.0 NORMAL REPORT Date: 18-03-2026 14:18:35
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rec131.te Time Period: Day/Night 16/8 hours
Description: REC 13-1 - Building A

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 61.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 154.37 / 154.37 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 67.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 109.83 / 109.83 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Results segment # 1: HWY 417 E (day)

 Source height = 1.50 m

ROAD (0.00 + 58.06 + 0.00) = 58.06 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	61	0.66	80.15	0.00	-16.81	-5.28	0.00	0.00	0.00	58.06

Segment Leq : 58.06 dBA

↑

Results segment # 2: HWY 417 W (day)

 Source height = 1.63 m

ROAD (0.00 + 61.22 + 0.00) = 61.22 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	67	0.66	80.54	0.00	-14.32	-5.00	0.00	0.00	0.00	61.22

Segment Leq : 61.22 dBA

Total Leq All Segments: 62.93 dBA

↑

Results segment # 1: HWY 417 E (night)

Source height = 1.50 m

ROAD (0.00 + 50.46 + 0.00) = 50.46 dBA

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

0	61	0.66	72.55	0.00	-16.81	-5.28	0.00	0.00	0.00	50.46
---	----	------	-------	------	--------	-------	------	------	------	-------

Segment Leq : 50.46 dBA

↑

Results segment # 2: HWY 417 W (night)

Source height = 1.63 m

ROAD (0.00 + 53.62 + 0.00) = 53.62 dBA

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

0	67	0.66	72.94	0.00	-14.32	-5.00	0.00	0.00	0.00	53.62
---	----	------	-------	------	--------	-------	------	------	------	-------

Segment Leq : 53.62 dBA

Total Leq All Segments: 55.33 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 62.93

(NIGHT): 55.33

↑

↑

Filename: rec136.te Time Period: Day/Night 16/8 hours
Description: REC 13-6 - Building A

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 61.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 154.37 / 154.37 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 67.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 109.83 / 109.83 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	63.00	!	63.00
2.HWY 417 W	!	1.63	!	65.58	!	65.58
	+		+		+	
		Total				67.49 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
1.HWY 417 E	!	1.50	!	55.41	!	55.41
2.HWY 417 W	!	1.63	!	57.98	!	57.98
	+		+		+	
		Total				59.89 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 67.49
 (NIGHT): 59.89

↑

↑

Filename: rec141.te Time Period: Day/Night 16/8 hours
 Description: REC 14-1 - Building B2

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : -18.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 125.23 / 125.23 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 35.64	! 36.72	! --	! --	! 39.22 *
Total					39.22 dBA

* Bright Zone !

Result summary (night)

	! Loc ! Leq ! (dBA)	! Wheel ! Leq ! (dBA)	! Whistle ! Left Leq ! (dBA)	! Whistle ! Right Leq ! (dBA)	! Total ! Leq ! (dBA)
1.Future OLRT	! 16.10	! 17.17	! --	! --	! 19.68 *
	Total				19.68 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : -40.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 103.52 / 103.52 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Result summary (day)

	! source ! height ! (m)	! Road ! Leq ! (dBA)	! Total ! Leq ! (dBA)

1.Huntmar	!	1.50	!	47.78	!	47.78
-----+-----+-----+-----						
		Total				47.78 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
-----+-----+-----+-----						
1.Huntmar	!	1.50	!	40.19	!	40.19
-----+-----+-----+-----						
		Total				40.19 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 48.35
(NIGHT): 40.23

↑

↑

Filename: rec146.te Time Period: Day/Night 16/8 hours
 Description: REC 14-6 - Building B2

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : -18.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 125.23 / 125.23 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 39.82	! 40.62	! --	! --	! 43.25 *
Total					43.25 dBA

* Bright Zone !

Result summary (night)

	! Loc ! Leq ! (dBA)	! Wheel ! Leq ! (dBA)	! Whistle ! Left Leq ! (dBA)	! Whistle ! Right Leq ! (dBA)	! Total ! Leq ! (dBA)
1.Future OLRT	! 20.28	! 21.08	! --	! --	! 23.71 *
	Total				23.71 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : -40.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 103.52 / 103.52 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Result summary (day)

	! source ! height ! (m)	! Road ! Leq ! (dBA)	! Total ! Leq ! (dBA)

1.Huntmar	!	1.50	!	51.72	!	51.72
-----+-----+-----+-----						
		Total				51.72 dBA

⬆

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
-----+-----+-----+-----						
1.Huntmar	!	1.50	!	44.12	!	44.12
-----+-----+-----+-----						
		Total				44.12 dBA

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 52.30
(NIGHT): 44.16

⬆

⬆

Filename: rec151.te Time Period: Day/Night 16/8 hours
 Description: REC 15-1 - Building B2

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : -29.00 deg 6.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 99.47 / 99.47 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 40.07	! 41.21	! --	! --	! 43.69 *
Total					43.69 dBA

* Bright Zone !

Result summary (night)

	! Loc !	Wheel !	Whistle !	Whistle !	Total
	! Leq !	Leq !	Left Leq !	Right Leq !	Leq
	! (dBA) !	(dBA) !	(dBA) !	(dBA) !	(dBA)
1.Future OLRT	! 20.52 !	21.67 !	-- !	-- !	24.14 *
Total					24.14 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : -53.00 deg 30.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 81.83 / 81.83 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 E (day/night)

Angle1 Angle2 : -81.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 142.48 / 142.48 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 3: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: HWY 417 W (day/night)

Angle1 Angle2 : -85.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 97.77 / 97.77 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

↑

Result summary (day)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
-----+-----+-----+-----						
1.Huntmar	!	1.50	!	52.57	!	52.57
2.HWY 417 E	!	1.63	!	59.78	!	59.78
3.HWY 417 W	!	1.63	!	62.55	!	62.55
-----+-----+-----+-----						
		Total				64.67 dBA

↑

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
-----+-----+-----+-----						
1.Huntmar	!	1.50	!	44.97	!	44.97
2.HWY 417 E	!	1.63	!	52.18	!	52.18
3.HWY 417 W	!	1.63	!	54.96	!	54.96
-----+-----+-----+-----						
		Total				57.08 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 64.70
(NIGHT): 57.08

↑

↑

Filename: rec156.te Time Period: Day/Night 16/8 hours
 Description: REC 15-6 - Building B2

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : -29.00 deg 6.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 99.47 / 99.47 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 43.83	! 44.73	! --	! --	! 47.31 *
Total					47.31 dBA

* Bright Zone !

Result summary (night)

	! Loc !	Wheel !	Whistle !	Whistle !	Total
	! Leq !	Leq !	Left Leq !	Right Leq !	Leq
	! (dBA) !	(dBA) !	(dBA) !	(dBA) !	(dBA)
1.Future OLRT	! 24.29 !	25.18 !	-- !	-- !	27.77 *
Total					27.77 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : -53.00 deg 30.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 81.83 / 81.83 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 E (day/night)

Angle1 Angle2 : -81.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 142.48 / 142.48 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 3: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: HWY 417 W (day/night)

Angle1 Angle2 : -85.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 97.77 / 97.77 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00



Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	56.10 !	56.10
2.HWY 417 E	! 1.63 !	64.89 !	64.89
3.HWY 417 W	! 1.63 !	67.02 !	67.02
-----+-----+-----+-----			
	Total		69.31 dBA



Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	48.50 !	48.50
2.HWY 417 E	! 1.63 !	57.30 !	57.30
3.HWY 417 W	! 1.63 !	59.42 !	59.42
-----+-----+-----+-----			
	Total		61.71 dBA



TOTAL Leq FROM ALL SOURCES (DAY): 69.33
(NIGHT): 61.71



Filename: rec161.te Time Period: Day/Night 16/8 hours
 Description: REC 16-1 - Building B2

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : 0.00 deg 2.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 127.67 / 127.67 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00



Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 26.01	! 27.08	! --	! --	! 29.59 *
Total					29.59 dBA

* Bright Zone !



Result summary (night)

	! Loc !	Wheel !	Whistle !	Whistle !	Total
	! Leq !	Leq !	Left Leq !	Right Leq !	Leq
	! (dBA) !	(dBA) !	(dBA) !	(dBA) !	(dBA)
1.Future OLRT	! 6.47 !	7.54 !	-- !	-- !	10.05 *
Total					10.05 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : 0.00 deg 20.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 110.12 / 110.12 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 E (day/night)

Angle1 Angle2 : -82.00 deg 63.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 138.00 / 138.00 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 3: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: HWY 417 W (day/night)

Angle1 Angle2 : -87.00 deg 68.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 91.61 / 91.61 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	44.51 !	44.51
2.HWY 417 E	! 1.63 !	62.73 !	62.73
3.HWY 417 W	! 1.63 !	65.82 !	65.82
-----+-----+-----+-----			
	Total		67.58 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	36.91 !	36.91
2.HWY 417 E	! 1.63 !	55.14 !	55.14
3.HWY 417 W	! 1.63 !	58.22 !	58.22
-----+-----+-----+-----			
	Total		59.98 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 67.58
(NIGHT): 59.98

↑

↑

Filename: rec166.te Time Period: Day/Night 16/8 hours
 Description: REC 16-6 - Building B2

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : 0.00 deg 2.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 127.67 / 127.67 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00



Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 30.19	! 30.99	! --	! --	! 33.62 *
Total					33.62 dBA

* Bright Zone !



Result summary (night)

	!	Loc	!	Wheel	!	Whistle	!	Whistle	!	Total
	!	Leq	!	Leq	!	Left Leq	!	Right Leq	!	Leq
	!	(dBA)	!	(dBA)	!	(dBA)	!	(dBA)	!	(dBA)
1.Future OLRT	!	10.65	!	11.45	!	--	!	--	!	14.08 *
		Total								14.08 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : 0.00 deg 20.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 110.12 / 110.12 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 E (day/night)

Angle1 Angle2 : -82.00 deg 63.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 138.00 / 138.00 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 3: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: HWY 417 W (day/night)

Angle1 Angle2 : -87.00 deg 68.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 91.61 / 91.61 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	48.44 !	48.44
2.HWY 417 E	! 1.63 !	67.66 !	67.66
3.HWY 417 W	! 1.63 !	70.03 !	70.03
-----+-----+-----+-----			
	Total		72.03 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	40.85 !	40.85
2.HWY 417 E	! 1.63 !	60.06 !	60.06
3.HWY 417 W	! 1.63 !	62.44 !	62.44
-----+-----+-----+-----			
	Total		64.44 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 72.03
(NIGHT): 64.44

↑

↑

Filename: rec171.te Time Period: Day/Night 16/8 hours
Description: REC 17-1 - Building B1

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 78.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 104.24 / 104.24 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 83.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 60.17 / 60.17 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	61.53 !	61.53
2.HWY 417 W	! 1.63 !	66.01 !	66.01
Total			67.33 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	53.93 !	53.93
2.HWY 417 W	! 1.63 !	58.42 !	58.42
Total			59.74 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 67.33
 (NIGHT): 59.74

↑

↑

Filename: rec176.te Time Period: Day/Night 16/8 hours
Description: REC 17-6 - Building B1

Road data, segment # 1: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 3542/308 veh/TimePeriod *
Heavy truck volume : 2530/220 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 1: HWY 417 E (day/night)

Angle1 Angle2 : 0.00 deg 78.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 104.24 / 104.24 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00

Number of Years of Growth : 0.00
 Medium Truck % of Total Volume : 5.00
 Heavy Truck % of Total Volume : 7.00
 Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 W (day/night)

 Angle1 Angle2 : 0.00 deg 83.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 60.17 / 60.17 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	65.97 !	65.97
2.HWY 417 W	! 1.63 !	69.49 !	69.49
Total			71.09 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
1.HWY 417 E	! 1.50 !	58.38 !	58.38
2.HWY 417 W	! 1.63 !	61.89 !	61.89
Total			63.49 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 71.09
 (NIGHT): 63.49

↑

↑

Filename: rec181.te Time Period: Day/Night 16/8 hours
 Description: REC 18-1 - Building B1

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : -22.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 114.32 / 114.32 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 37.12	! 38.22	! --	! --	! 40.72 *
Total					40.72 dBA

* Bright Zone !

Result summary (night)

	! Loc !	Wheel !	Whistle !	Whistle !	Total
	! Leq !	Leq !	Left Leq !	Right Leq !	Leq
	! (dBA) !	(dBA) !	(dBA) !	(dBA) !	(dBA)
1.Future OLRT	! 17.58 !	18.68 !	-- !	-- !	21.18 *
Total					21.18 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : -37.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 93.98 / 93.98 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Result summary (day)

! source !	Road !	Total
! height !	Leq !	Leq
! (m) !	(dBA) !	(dBA)

1.Huntmar	!	1.50	!	48.18	!	48.18
-----+-----+-----+-----						
		Total				48.18 dBA

↑
 Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
-----+-----+-----+-----						
1.Huntmar	!	1.50	!	40.58	!	40.58
-----+-----+-----+-----						
		Total				40.58 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 48.90
 (NIGHT): 40.63

↑

↑

Filename: rec186.te Time Period: Day/Night 16/8 hours
 Description: REC 18-6 - Building B1

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : -22.00 deg 0.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 114.32 / 114.32 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 41.14	! 41.97	! --	! --	! 44.59 *
Total					44.59 dBA

* Bright Zone !

Result summary (night)

	! Loc ! Leq ! (dBA)	! Wheel ! Leq ! (dBA)	! Whistle ! Left Leq ! (dBA)	! Whistle ! Right Leq ! (dBA)	! Total ! Leq ! (dBA)
1.Future OLRT	21.60	22.43	--	--	25.05 *
	Total				25.05 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : -37.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 93.98 / 93.98 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Result summary (day)

	! source ! height ! (m)	! Road ! Leq ! (dBA)	! Total ! Leq ! (dBA)

1.Huntmar	!	1.50	!	51.90	!	51.90
-----+-----+-----+-----						
		Total				51.90 dBA

⬆

Result summary (night)

	!	source	!	Road	!	Total
	!	height	!	Leq	!	Leq
	!	(m)	!	(dBA)	!	(dBA)
-----+-----+-----+-----						
1.Huntmar	!	1.50	!	44.30	!	44.30
-----+-----+-----+-----						
		Total				44.30 dBA

⬆

TOTAL Leq FROM ALL SOURCES (DAY): 52.64
(NIGHT): 44.35

⬆

⬆

Filename: rec191.te Time Period: Day/Night 16/8 hours
 Description: REC 19-1 - Building B1

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : -35.00 deg 38.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 85.23 / 85.23 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 44.24	! 45.42	! --	! --	! 47.88 *
Total					47.88 dBA

* Bright Zone !

Result summary (night)

	! Loc !	Wheel !	Whistle !	Whistle !	Total !
	! Leq !	Leq !	Left Leq !	Right Leq !	Leq !
	! (dBA) !	(dBA) !	(dBA) !	(dBA) !	(dBA) !
1.Future OLRT	! 24.69 !	25.88 !	-- !	-- !	28.34 *
Total					28.34 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : -51.00 deg 51.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 66.85 / 66.85 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 E (day/night)

Angle1 Angle2 : -73.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 105.11 / 105.11 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 3: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: HWY 417 W (day/night)

Angle1 Angle2 : -78.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 59.58 / 59.58 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00



Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	54.84 !	54.84
2.HWY 417 E	! 1.63 !	61.75 !	61.75
3.HWY 417 W	! 1.63 !	65.98 !	65.98
-----+-----+-----+-----			
	Total		67.61 dBA



Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	47.25 !	47.25
2.HWY 417 E	! 1.63 !	54.16 !	54.16
3.HWY 417 W	! 1.63 !	58.38 !	58.38
-----+-----+-----+-----			
	Total		60.01 dBA



TOTAL Leq FROM ALL SOURCES (DAY): 67.65
(NIGHT): 60.01



Filename: rec196.te Time Period: Day/Night 16/8 hours
 Description: REC 19-6 - Building B1

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : -35.00 deg 38.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 85.23 / 85.23 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 47.77	! 48.71	! --	! --	! 51.28 *
Total					51.28 dBA

* Bright Zone !

Result summary (night)

	!	Loc	!	Wheel	!	Whistle	!	Whistle	!	Total
	!	Leq	!	Leq	!	Left Leq	!	Right Leq	!	Leq
	!	(dBA)	!	(dBA)	!	(dBA)	!	(dBA)	!	(dBA)
1.Future OLRT	!	28.23	!	29.17	!	--	!	--	!	31.74 *
		Total								31.74 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : -51.00 deg 51.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 66.85 / 66.85 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 E (day/night)

Angle1 Angle2 : -73.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 105.11 / 105.11 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 3: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: HWY 417 W (day/night)

Angle1 Angle2 : -78.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 59.58 / 59.58 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00

↑

Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	58.03 !	58.03
2.HWY 417 E	! 1.63 !	66.13 !	66.13
3.HWY 417 W	! 1.63 !	69.34 !	69.34
-----+-----+-----+-----			
	Total		71.25 dBA

↑

Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	50.43 !	50.43
2.HWY 417 E	! 1.63 !	58.53 !	58.53
3.HWY 417 W	! 1.63 !	61.74 !	61.74
-----+-----+-----+-----			
	Total		63.65 dBA

↑

TOTAL Leq FROM ALL SOURCES (DAY): 71.29
(NIGHT): 63.65

↑

↑

Filename: rec201.te Time Period: Day/Night 16/8 hours
 Description: REC 20-1 - Building B1

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : 0.00 deg 26.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 111.27 / 111.27 m
 Receiver height : 1.50 / 1.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 38.01	! 39.11	! --	! --	! 41.61 *
Total					41.61 dBA

* Bright Zone !

Result summary (night)

	! Loc !	Wheel !	Whistle !	Whistle !	Total
	! Leq !	Leq !	Left Leq !	Right Leq !	Leq
	! (dBA) !	(dBA) !	(dBA) !	(dBA) !	(dBA)
1.Future OLRT	! 18.46 !	19.57 !	-- !	-- !	22.06 *
Total					22.06 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : 0.00 deg 38.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 94.47 / 94.47 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 E (day/night)

Angle1 Angle2 : -75.00 deg 80.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 95.31 / 95.31 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 3: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: HWY 417 W (day/night)

Angle1 Angle2 : -79.00 deg 84.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 46.73 / 46.73 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00



Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	48.24 !	48.24
2.HWY 417 E	! 1.63 !	65.59 !	65.59
3.HWY 417 W	! 1.63 !	70.81 !	70.81
-----+-----+-----+-----			
	Total		71.97 dBA



Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	40.65 !	40.65
2.HWY 417 E	! 1.63 !	58.00 !	58.00
3.HWY 417 W	! 1.63 !	63.21 !	63.21
-----+-----+-----+-----			
	Total		64.37 dBA



TOTAL Leq FROM ALL SOURCES (DAY): 71.97
(NIGHT): 64.37



Filename: rec206.te Time Period: Day/Night 16/8 hours
 Description: REC 20-6 - Building B1

Rail data, segment # 1: Future OLRT (day/night)

Train Type	! Trains	! Speed (km/h)	! # loc / Train	! # Cars / Train	! Eng type	! Cont weld
* 1. OLRT	! 180.0/1.0	! 80.0	! 1.0	! 2.0	! Elec	! Yes

* The identified number of trains have been adjusted for future growth using the following parameters:

Train No	! Name	! Unadj. Trains	! Annual % Increase	! Years of Growth
1.	OLRT	! 180.0/1.0	! 0.00	! 0.00

Data for Segment # 1: Future OLRT (day/night)

Angle1 Angle2 : 0.00 deg 26.00 deg
 Wood depth : 0 (No woods.)
 No of house rows : 0 / 0
 Surface : 1 (Absorptive ground surface)
 Receiver source distance : 111.27 / 111.27 m
 Receiver height : 16.50 / 16.50 m
 Topography : 1 (Flat/gentle slope; no barrier)
 No Whistle
 Reference angle : 0.00

Result summary (day)

	! Loc Leq (dBA)	! Wheel Leq (dBA)	! Whistle Left Leq (dBA)	! Whistle Right Leq (dBA)	! Total Leq (dBA)
1.Future OLRT	! 41.99	! 42.83	! --	! --	! 45.44 *
Total					45.44 dBA

* Bright Zone !

Result summary (night)

	! Loc !	Wheel !	Whistle !	Whistle !	Total
	! Leq !	Leq !	Left Leq !	Right Leq !	Leq
	! (dBA) !	(dBA) !	(dBA) !	(dBA) !	(dBA)
1.Future OLRT	! 22.45 !	23.29 !	-- !	-- !	25.90 *
Total					25.90 dBA

* Bright Zone !



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

Car traffic volume : 12144/1056 veh/TimePeriod *
Medium truck volume : 966/84 veh/TimePeriod *
Heavy truck volume : 690/60 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): 15000
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 7.00
Heavy Truck % of Total Volume : 5.00
Day (16 hrs) % of Total Volume : 92.00

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

Angle1 Angle2 : 0.00 deg 38.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 94.47 / 94.47 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00



Road data, segment # 2: HWY 417 E (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 2: HWY 417 E (day/night)

Angle1 Angle2 : -75.00 deg 80.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 95.31 / 95.31 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↑

Road data, segment # 3: HWY 417 W (day/night)

Car traffic volume : 44527/3872 veh/TimePeriod *
Medium truck volume : 2530/220 veh/TimePeriod *
Heavy truck volume : 3542/308 veh/TimePeriod *
Posted speed limit : 100 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): 54999
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 5.00
Heavy Truck % of Total Volume : 7.00
Day (16 hrs) % of Total Volume : 92.00

Data for Segment # 3: HWY 417 W (day/night)

Angle1 Angle2 : -79.00 deg 84.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 46.73 / 46.73 m
Receiver height : 16.50 / 16.50 m
Topography : 1 (Flat/gentle slope; no barrier)

Reference angle : 0.00



Result summary (day)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	51.98 !	51.98
2.HWY 417 E	! 1.63 !	69.86 !	69.86
3.HWY 417 W	! 1.63 !	73.76 !	73.76
-----+-----+-----+-----			
	Total		75.26 dBA



Result summary (night)

	! source !	Road !	Total !
	! height !	Leq !	Leq !
	! (m) !	(dBA) !	(dBA) !
-----+-----+-----+-----			
1.Huntmar	! 1.50 !	44.39 !	44.39
2.HWY 417 E	! 1.63 !	62.26 !	62.26
3.HWY 417 W	! 1.63 !	66.16 !	66.16
-----+-----+-----+-----			
	Total		67.66 dBA



TOTAL Leq FROM ALL SOURCES (DAY): 75.27
(NIGHT): 67.66

