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- Environmental Restoration

Iron Valley 2

Detailed Noise Control Study

Prepared for: Claridge Homes

IRON VALLEY 2
5331 Fernbank Road

OTTAWA, ONTARIO

Detailed Noise Control Study

Prepared By:

NOVATECH
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario
K2M 1P6

Submitted: June 2, 2021
Revised: November 5, 2021
Revised: November 14, 2025
Revised: March 13, 2026
Revised: June 25, 2026

Novatech File: 121011
Ref: R-2021-074

NOVATECH
Engineers, Planners & Landscape Architects

June 25, 2026

City of Ottawa
Planning and Infrastructure Approvals
110 Laurier Street West, 4th Floor
Ottawa, ON, K1P 1J1

Attention: **Santhosh Kuruvilla**

Reference: **Iron Valley 2**
Detailed Noise Control Study
Our File No.: 121011

Please find enclosed for your review the revised Detailed Noise Control Study to support a Site Plan application for the Iron Valley 2 (formerly Fernbank Zens) at 5331 Fernbank Road. The site is bounded by Cope Drive to the north, the existing SOHO development to the east, Fernbank Road to the south and Terry Fox Drive to the west.

This study evaluates the environmental impact of noise from traffic on the outdoor living areas and inside residential buildings and discusses the mitigation measures to attenuate noise to acceptable levels.

This report is submitted in support of the engineering detailed design for the Claridge Homes Site Plan application.

Trusting this report is adequate for your purposes. Should you have any questions, or require additional information pertaining to the enclosed report, please contact us.

Yours truly,

NOVATECH

Drew Blair, P. Eng.
Senior Project Coordinator, Land Development Engineering

Cc: Shawn Malhotra, Claridge Homes

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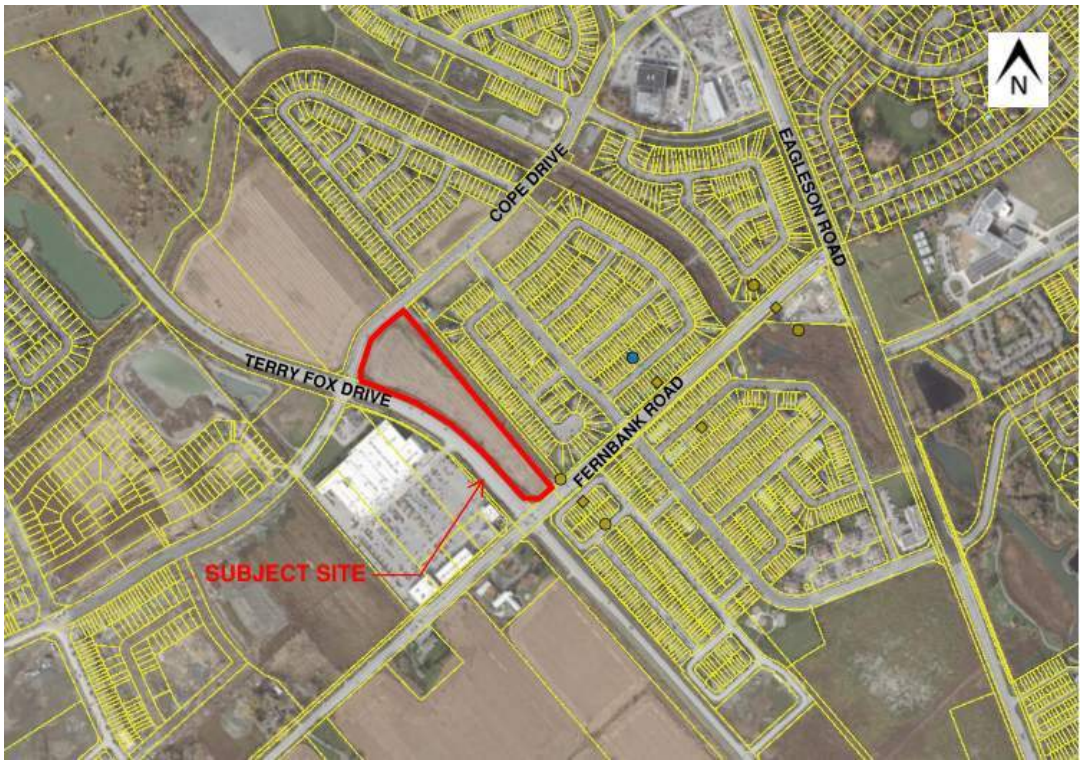
1.0 INTRODUCTION

This Detailed Noise Control Study was prepared as part of the engineering detailed design for the Iron Valley 2 (formerly Fernbank Zens) residential development at 5331 Fernbank Road. This report assesses the environmental impact of noise on the proposed development and outlines recommended mitigation measures, if required.

2.1 The Site

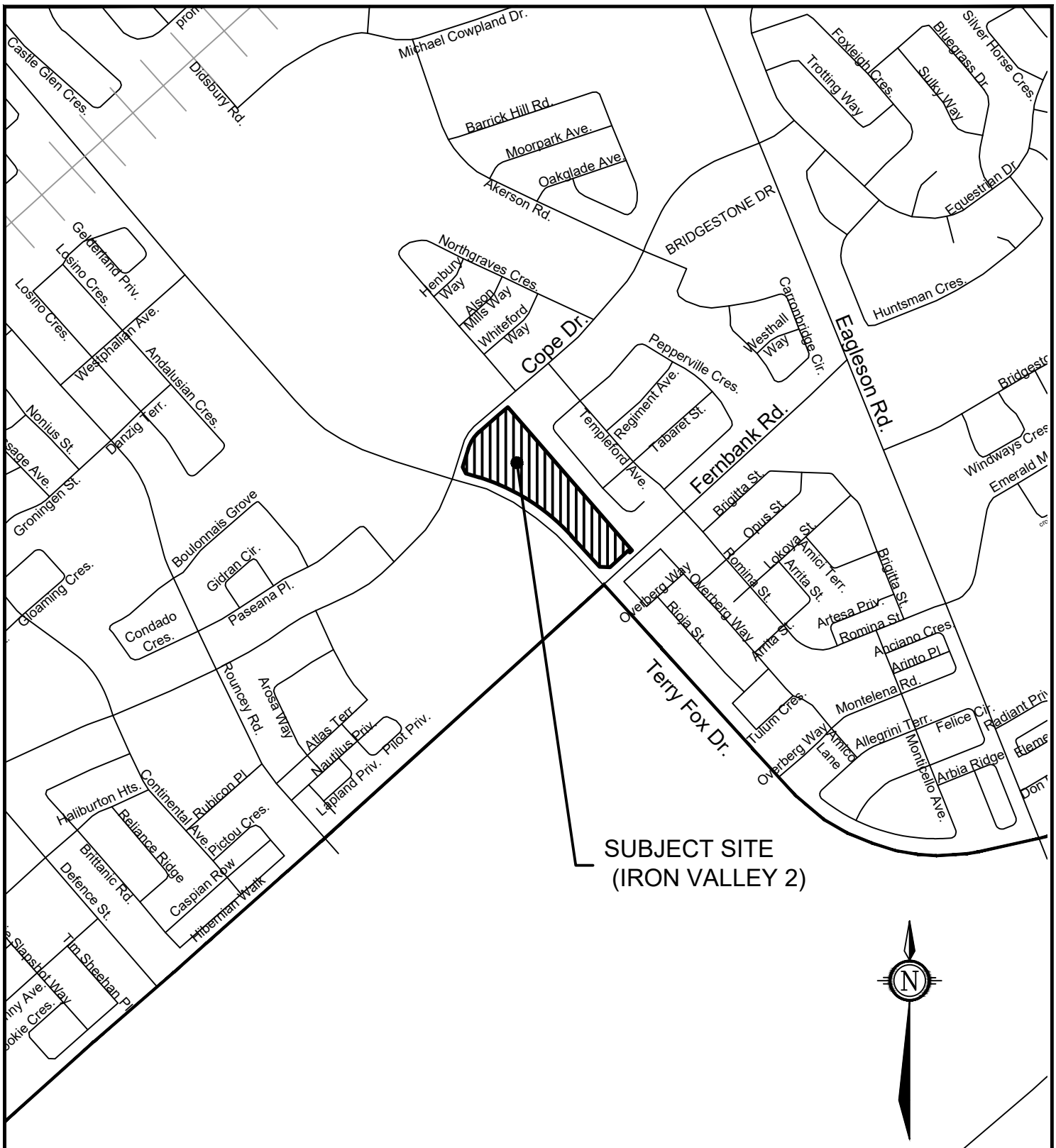
The proposed Iron Valley 2 site (approximately 3.68 ha) is owned by Claridge Homes and located within the City of Ottawa. The site is bounded by Cope Drive to the north, the existing SOHO development to the east, Fernbank Road to the south and Terry Fox Drive to the west as shown on **Figure 1A/1B** – Key Plan.

Figure 1A – Key Plan



The legal description of the property is designated as Part of Lot 30 Concession 10, Goulbourn, Part 1 Plan 4R17373, Except Part 4, Plan 4R20112; Ottawa. Subject to an Easement in Favour of Hydro Ottawa Limited Over Parts 5,6, 7, 8 and 9 Plan 4R20112 as in OC455206. Road Allowance Between Lots 30 and 31 Concession 10, Goulbourn Lying Between Parts 3 and 4 on 4R17373 and Part 2 on Plan 4R20112, as Closed by N599928; Ottawa. Part of Lot 31, Concession 10, Goulbourn, Part 1 on Plan 4R19334 City of Ottawa.

The site is proposed to be developed as a residential site plan which will consist of 180 apartment units within 15 buildings (12 units per building) and on-site parking with access from Cope Drive and Terry Fox Drive as shown on **Figure 2** – Site Plan.



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CITY OF OTTAWA
IRON VALLEY 2

KEY PLAN

N.T.S.

DATE	JOB	FIGURE
MAR 2026	121011	FIGURE 1B

M:\2021\121011\CAD\DESIGN\FIGURES\NOISE\121011-1B.DWG 3/11/2026 9:00 AM - SMCLAUGHLIN

EXISTING RESIDENTIAL LANDS

BLDG-A
BLDG-B
BLDG-C
BLDG-D
BLDG-E
BLDG-F
BLDG-G
BLDG-H
BLDG-I
BLDG-J
BLDG-K
BLDG- L
BLDG-M
BLDG-N
BLDG-O

CLARIDGE IRON VALLEY 2 SITE

FERNBANK ROAD

TERRY FOX DRIVE

COPE DRIVE

EXISTING COMMERCIAL LANDS

600mmØCSP
T/P=96.48
INV=95.96

600mmØCSP
T/P=96.43
INV=95.83

Concrete Sidewalk

M:\2021\121011\CAD\Design\Figures\Design Brief\121011-FIG2.dwg, FIG2, Jun 25, 2026 - 12:02pm, smatthews

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CITY OF OTTAWA
5331 FERNBANK ROAD
IRON VALLEY 2

SITE PLAN

SCALE 1 : 1000 (0 10 20 30 40)

DATE JUN 2026 | JOB 121011 | FIGURE FIG-2

SHT11X17.DWG - 279mmX432mm

2.0 NOISE SOURCES

The City of Ottawa Official Plan stipulates that a noise study shall be prepared when a new development is proposed within 100 metres of an arterial, major collector or collector roadway, or a rapid-transit corridor.

The potential surface road noise sources that were considered for the purposes of this study are Terry Fox Drive, Fernbank Road, and Cope Drive as all other roadways within the zone of influence were not arterial or collector roadways.

Terry Fox Drive is classified as an urban arterial roadway with a 44.5m protected ROW in the City of Ottawa Transportation Master Plan and Official Plan. Terry Fox Drive is currently a 2-lane undivided arterial road with a posted speed of 80km/hr fronting the site. As per Map 10 in the Transportation Master Plan (TMP), Road Network – 2031 Network Concept, there are future plans to widen Terry Fox Drive to 4 lanes. Therefore, for the purposes of this report, a 4-lane divided arterial road with an AADT level of 35,000 veh/day and a posted speed of 80km/hr will be utilized. This report separates Terry Fox into two separate noise sources: Terry Fox northbound lane and Terry Fox southbound lanes. The 35,000 veh/day is divided 50/50 between northbound and southbound lanes. The Terry Fox northbound lane is located approximately 10m closer to the site than the Terry Fox southbound lane. Refer to **Appendix A** for the excerpt from the TMP. A typical cross section for the Terry Fox Drive widening has been provided in **Appendix E.**

Fernbank Road is classified as an urban arterial roadway with a 30.0m protected ROW in the City of Ottawa Transportation Master Plan and Official Plan. Fernbank Road is currently a 2-lane undivided arterial road with a posted speed of 60km/hr fronting the site. Therefore, for the purposes of this report, a 2-lane undivided arterial road with an AADT level of 15,000 veh/day and a posted speed of 60km/hr will be utilized.

Cope Drive is classified as an urban collector roadway with a 24m protected ROW with an AADT level of 8,000 veh/day and a posted speed limit of 50km/hr.

There is no railway ROW within 250m that impacts the site.

There is no airport noise affecting this site.

There are no stationary noise sources that affect this site.

3.0 CITY OF OTTAWA NOISE CONTROL GUIDELINES

3.1 Sound Level Criteria

The City of Ottawa is concerned with noise from aircraft, roads, transitways, and railways, as expressed in Tables 2.2a: Sound Level Limit for Outdoor Living Areas – Road and Rail, Table 2.2b: Sound Level Limit for Indoor Living Areas Road and Rail, and Table 2.2c: Supplementary Sound Level Limits for Indoor Spaces – Road and Rail of the ENCG. The maximum suggested sound levels for outdoor and indoor living areas between 7am and

11pm are 55 dBA and 45 dBA, respectively. The maximum suggested sound level for indoor bedrooms is 40dBA between 11pm and 7am. For reference, Tables 2.2a, 2.2b and 2.2c of the ENCG are included in **Appendix A**.

Outdoor Living Area and Plane of Window receivers are defined as:

- **Outdoor Living Area (OLA):** The outdoor amenity area provided for quiet enjoyment of the outdoor environment during the daytime period (i.e., backyards, terraces and patios). OLA noise levels are considered 3.0m from the building façade (where applicable), 1.5m above grade.

- **Plane of Window (POW):** The indoor living space where the sound levels will affect the living room area during daytime hours and bedrooms during nighttime hours. Typically, POW noise levels are considered inside the building, 1.5m above the ground for the daytime and 4.5m above the ground for nighttime.

3.2 Alternative Methods for Noise Attenuation

When OLA sound levels are predicted to be approximately equal to or less than 55 dBA attenuation measures are not required. If the predicted noise levels are found to exceed 55 dBA, physical forms of mitigation are suggested and which may also include the provision of warning clauses to inform purchasers of the expected noise levels and specific mitigation measures.

These attenuation measures may include any or all of the following:

- Distance setback with soft ground;
- Insertion of noise insensitive land uses between the source and sensitive receptor;
- Orientation of building to provide sheltered zones;
- Construction of sound or acoustic barriers;
- Installation of air conditioning and ventilation; and
- Enhanced construction techniques and improved construction quality.

3.3 Noise Attenuation Requirements

When the noise attenuation measures listed above do not reduce noise levels below 55 dBA in the Outdoor Living Area, control measures (barriers) are required to reduce the Leq below or as close to 55 dBA as technically, economically and administratively feasible.

The noise barriers are to be compliant with the City standard for noise barriers and have the following characteristics:

- Minimum height of 2.2m; Maximum height of 2.5m, unless approved by the City;
- Situated 0.30m inside the private property line;
- A surface mass density not less than 20kg/sq.m; and
- No holes or gaps.

3.4 Ventilation Requirements

A forced air heating system with provision for a central air conditioning system is required if the plane of window daytime noise levels are between 55 dBA and 65 dBA and/or the nighttime noise levels are between 50 dBA and 60 dBA.

The installation of a central air conditioning system is required when the daytime noise level exceeds 65 dBA and/or the nighttime noise level exceeds 60 dBA.

3.5 Building Component Assessment

When plane of window noise levels exceeds 65 dBA (daytime) or 60 dBA (nighttime) the exterior cladding system of the building envelope must be acoustically assessed to ensure indoor sound criteria are achieved. This includes analysis of the exterior wall, door, and/or glazing system specifications as appropriate.

The NRC research *Acoustic Insulation Factor: A Rating for the Insulation of Buildings against Noise* (June 1980, JD Quirt) is used to assess the building components and the required acoustic insulation factor (AIF). This method is recognized by the City of Ottawa.

The required AIF is based on the Outside L_{eq}, Indoor L_{eq} required, and the number of exterior façade components.

Minimum Required AIF = Outside L_{eq} – Indoor L_{eq} + 10 $\log_{10}$ (Number of Components) + 2dB

Where, N = Number of components (walls, windows and roof);

L = Sound Level expressed on a common decibel scale.

3.6 Warning Clauses

When predicted noise levels exceed the specified criteria, the City of Ottawa and the MOE recommend warning clauses be registered as a notice on title and incorporated into the lease/rental/sale agreements to warn potential purchaser/buyers/tenants of the possible elevated noise levels.

Typical warning clauses should be registered as shown below. Warning clauses are extracted from Part 4, Appendix A the City of Ottawa ENCG and excerpts have been provided in **Appendix A** of this report**.** As stated in the City of Ottawa ENCG, due to the variation of noise impacts for any given site, it may be necessary to amend the example warning clauses to recognize the site conditions in each development.

It is recommended that the following noise clauses be registered on title and incorporated into the agreement of purchase and sales as required. Results can be found in **Table 5** from Section 4.3 of this report:

Type A

"Purchasers/tenants are advised that sound levels due to increasing road traffic may occasionally interfere with some outdoor activities as the sound levels may exceed the sound level limits of the City and Ministry of the Environment."

"To help address the need for sound attenuation this development has been designed so as to provide an outdoor amenity area and indoor environment that is within provincial guidelines. Measures for sound attenuation include:

- An acoustic barrier"

"To ensure that provincial sound level limits are not exceeded it is important to maintain sound attenuation features."

"The acoustic barrier shall be maintained and kept in good repair by the property owner. Any maintenance, repair or replacement is the responsibility of the owner and shall be with the same material or to the same standards, having the same colour, appearance and function of the original."

Additionally, if a tolerance of 5 dBA is being considered in some areas, it is recommended an additional noise clause be registered on title and incorporated into the agreement of purchase and sales:

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/rail/Light Rail/transitway traffic may, on occasion, interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the City and the Ministry of the Environment by up to 5 dBA."

"To help address the need for sound attenuation this development has been designed so as to provide an outdoor amenity area and indoor environment that is within provincial guidelines. Measures for sound attenuation include:

- An acoustic barrier"

"To ensure that provincial sound level limits are not exceeded it is important to maintain sound attenuation features."

"The acoustic barrier shall be maintained and kept in good repair by the property owner. Any maintenance, repair or replacement is the responsibility of the owner and shall be with the same material or to the same standards, having the same colour, appearance and function of the original."

Type C

"Purchasers/tenants are advised that sound levels due to increasing road traffic may occasionally interfere with some outdoor activities as the sound levels may exceed the sound level limits of the City and Ministry of the Environment."

"To help address the need for sound attenuation this development has been designed so as to provide an outdoor amenity area and indoor environment that is within provincial guidelines. Measures for sound attenuation may include:

- Multi-pane glass
- Double brick veneer"

"To ensure that provincial sound level limits are not exceeded it is important to maintain sound attenuation features."

"This dwelling unit has also been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the City and the Ministry of the Environment"

Type D

"Purchasers/tenants are advised that sound levels due to increasing road traffic may occasionally interfere with some outdoor activities as the sound levels may exceed the sound level limits of the City and Ministry of the Environment."

"To help address the need for sound attenuation this development has been designed so as to provide an outdoor amenity area and indoor environment that is within provincial guidelines. Measures for sound attenuation may include:

- Multi-pane glass
- Double brick veneer
- High sound transmission class walls"

"To ensure that provincial sound level limits are not exceeded it is important to maintain sound attenuation features."

"This dwelling unit has also been supplied with a central air conditioning system and other measures 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 City and the Ministry of the Environment"

For units with multiple types of warning clauses, similar/identical wording can be combined as to not duplicate wording/information.

3.7 Summary of Noise Attenuation Requirements

Table 1 summarizes the required noise attenuation measures and warning clauses should sound criteria be exceeded. Excerpts from the MOE NPC-300 and City of Ottawa ENCG documents are included in **Appendix A** for reference.

Table 1: Noise Attenuation Measure Requirements

Assessment Location	L_{eq} (dBA)	Outdoor Control Measures	Indoor Control Measures		Warning Clause
			Ventilation Requirements	Building Components	
Outdoor Living Area (OLA)	Less than 55	None required	N/A	N/A	None required
	Between 55 and 60	Control measures (barriers) may not be required but should be considered	N/A	N/A	Required if resultant L_{eq} exceeds 55 dBA Type A* or Type B**
	More than 60	Barriers required	N/A	N/A	Required if resultant L_{eq} exceeds 55 dBA Type A* or Type B*
Plane of Living Room Window (POW)	Less than 55	N/A	None Required	None Required	None Required
	Between 55 and 65	N/A	Forced air heating with provision for central air conditioning	None Required	Required Type C
	More Than 65	N/A	Central Air Conditioning	Acoustical performance of the windows and walls should be specified	Required Type D
Plane of Bedroom Window (POW)	Less than 50	N/A	None Required	None Required	None Required
	Between 50 and 60	N/A	Forced air heating with provision for central air conditioning	None Required	Required Type C
	More than 60	N/A	Central Air Conditioning	Acoustical performance of the windows and walls should be specified	Required Type D

*Type A warning clause refers to units requiring a noise barrier that mitigates noise below 55dBA.
**Type B warning clause refers to units requiring a noise barrier, but is technically or economically not feasible to reduce levels below 55dBA and a tolerance of up to 5dBA can be granted by the City.

4.0 PREDICTION OF OUTDOOR NOISE LEVELS

4.1 Roadway Traffic

Noise levels from Terry Fox Drive, Fernbank Road, and Cope Drive were assessed using the ultimate road (as per the 2031 Network Concept Plan in the TMP) and traffic parameters below from “Appendix B of the City of Ottawa’s Environmental Noise Control Guidelines, 2016”. The posted speed for Terry Fox Drive, Fernbank Road and Cope Drive are consistent with the current conditions. The traffic and roadway parameters used for sound level predictions are shown in Table 2.

Table 2: Traffic and Roadway Parameters

Description	Terry Fox Drive	Fernbank Road	Cope Drive
Roadway Classification	4-Lane Urban Arterial Divided	2-Lane Urban Arterial Undivided	2-Lane Urban Collector
Annual Average Daily Traffic (AADT)	35,000 vehicles/day	15,000 vehicles/day	8,000 vehicles/day
Day/Night Split (%)	92/8	92/8	92/8
Medium Trucks (%)	7	7	7
Heavy Trucks (%)	5	5	5
Posted Speed	80 km/hr	60 km/hr	50 km/hr

For reference, excerpts from the ENCG confirming the Terry Fox Drive, Fernbank Road and Cope Drive AADT are included in **Appendix A.**

4.2 Noise Level Analysis

The noise levels were analyzed using Version 5.03 of the STAMSON computer program issued by the MOE. Proposed grades were required for the software and were obtained from elevations on the Grading Plans (121011-GR1-2), which have been included in **Appendix E** of this report.

For the purposes of this report, the buildings within the development were used as a barrier in the noise calculations have an assumed height of 9.1m. Refer to **Appendix D** for architectural elevations and drawings.

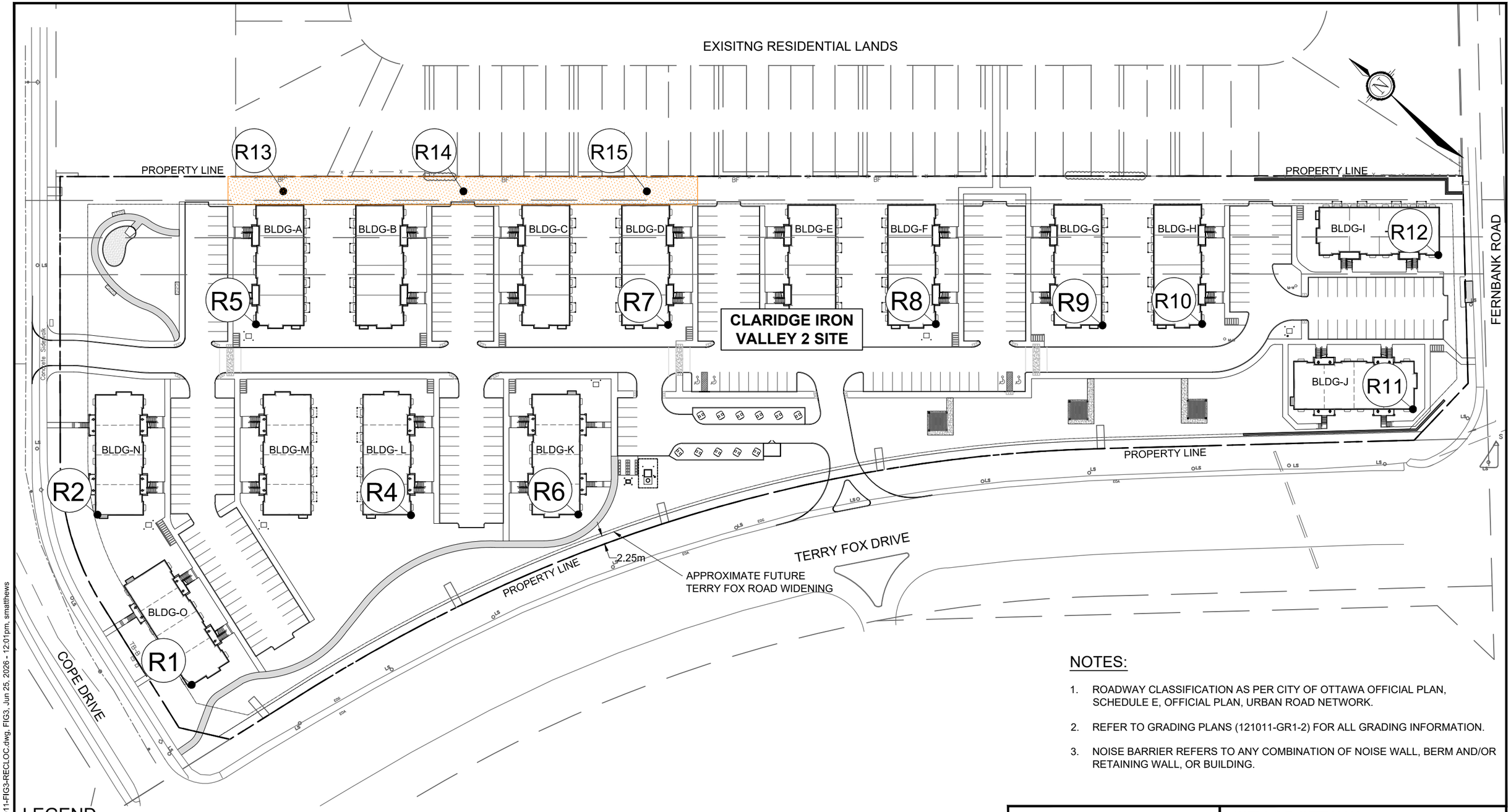
For the purposes of this report the Plane of Window calculations for the apartment units have been taken at 1.5m and 4.5m above the finished floor elevation of the first-floor. The 1.5m height represents the first floor. The 4.5m height represents the second floor. Below ground level units were best case scenario in comparison to the other levels as they are partially below grade and were not analyzed as part of this report. It was also determined through several receiver points that the top floor was the worst-case scenario for each unit

Receiver locations used in the noise simulations are shown on **Figure 3** – Receiver Location Plan.

Table 3 confirms the units represented by each receiver's node.

Table 3: Nodes and the Units They Represent

Node	Unit	Node	Unit	Node	Unit
R1	O	R6	K	R10	H
R2	N	R7	C, D	R11	J
R4	L, M	R8	E, F	R12	I
R5	A, B	R9	G		



NOTES:

1. ROADWAY CLASSIFICATION AS PER CITY OF OTTAWA OFFICIAL PLAN, SCHEDULE E, OFFICIAL PLAN, URBAN ROAD NETWORK.
2. REFER TO GRADING PLANS (121011-GR1-2) FOR ALL GRADING INFORMATION.
3. NOISE BARRIER REFERS TO ANY COMBINATION OF NOISE WALL, BERM AND/OR RETAINING WALL, OR BUILDING.

LEGEND

PROPERTY LINE

R1 — RECEIVER LOCATION

AMENITY SPACE

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Website www.novatech-eng.com

CITY OF OTTAWA
5331 FERNBANK ROAD
IRON VALLEY 2

RECEIVER LOCATION PLAN

1 : 1000 (0, 10, 20, 30, 40)

JUN 2026 | 121011 | FIGURE 3

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4.3 Noise Level Results

Simulated noise levels confirm Node 5 is within the permitted noise levels, Nodes 2 and 7 exceed the minimum permitted noise levels but remain within the maximum permitted noise levels, and Nodes 1, 4, 6, and 8-12 exceed the maximum permitted noise levels. No action is required for units represented by Node 5: A and B. Forced Air with provisions for air condition and warning clause “C” is required for units represented by Nodes 2 and 7: C, D, and N. Air conditioning, building component analysis, and warning clause “D” is required for all remaining units: E, F, G, H, I, J, K, L, M, and O.

Outdoor amenity space is identified as the open space area behind units A-D. This area fulfills the communal outdoor amenity area requirement. R13 represents the west side of the amenity space. R14 represents the middle of the amenity space. R15 represents the east side of the amenity space.

The predicted outdoor noise levels at the selected receiver locations within the development are illustrated in **Table 4.**

Table 4: Simulation Results – Outdoor Living Areas

Receiver Location*	File	Un-attenuated Calculated Noise Level (dBA) 7:00-23:00	Outdoor Mitigation Method
R13	1r13	54.73	N/A
R14	1r14	50.34	N/A
R15	1r15	45.08	N/A

*Locations correspond to receivers found on Figure 3 – Receiver Location Plan

Figures in **Appendix B** show angles used in the detailed modeling calculations. The noise levels for all receiver locations generated from STAMSON are listed in **Table 3** with detailed modeling results in **Appendix B.**

The predicted daytime and nighttime noise levels and required mitigation for the Plane of Window are shown in **Table 5.**

Table 5: Simulation Results – Plane of Window

Receiver Location	File	Unit	Un-attenuated Calculated Noise Level (dBA)		Mitigation Method
			7:00-23:00	23:00-7:00	
R1	1-R1	O	68.97	61.37	• Installation of Air Condition • Warning clause Type D • Building Façade Analysis
	2-R1		69.39	61.79	
R2	1-R2	N	63.35	55.76	• Forced Air with provisions for AC • Warning clause Type C
	2-R2		63.93	56.34	

R4	1-R4	L, M	66.08	58.49	• Installation of Air Condition • Warning clause Type D • Building Façade Analysis
	2-R4		66.62	59.02	
R5	1-R5	A, B	53.59	45.99	• No Action Required
	2-R5		54.38	46.79	
R6	1-R6	K	69.92	62.33	• Installation of Air Condition • Warning clause Type D • Building Façade Analysis
	2-R6		70.27	62.68	
R7	1-R7	C, D	62.49	54.89	• Forced Air with provisions for AC • Warning clause Type C
	2-R7		63.22	55.62	
R8	1-R8	E, F	64.67	57.07	• Installation of Air Condition • Warning clause Type D • Building Façade Analysis
	2-R8		65.27	57.67	
R9	1-R9	G	65.11	57.52	• Installation of Air Condition • Warning clause Type D • Building Façade Analysis
	2-R9		65.74	58.14	
R10	1-R10	H	65.69	58.10	• Installation of Air Condition • Warning clause Type D • Building Façade Analysis
	2-R10		66.21	58.62	
R11	1-R11	J	71.26	63.67	• Installation of Air Condition • Warning clause Type D • Building Façade Analysis
	2-R11		71.60	64.00	
R12	1-R12	I	66.74	58.14	• Installation of Air Condition • Warning clause Type D • Building Façade Analysis
	2-R12		67.19	59.59	

Figures in **Appendix B** show angles used in the detailed modeling calculations. The noise levels for all receiver locations generated from STAMSON are listed in **Table 4 and 5** with detailed modeling results in **Appendix B.**

4.4 Implementation

The City of Ottawa ENCG requires that noise clauses be applied when noise levels are above minimum requirements outlined in **Table 1**; and, wall & window construction be reviewed when noise levels exceed the maximum requirements outlined in **Table 1.** The acoustical insulation factor (AIF) method recognized by the City of Ottawa is used to assess the wall and window requirements.

The Acoustic Insulation Factor (AIF) is used as a measure of the reduction of outdoor noise provided by the elements of the outer surface of a building. The difference between the indoor noise criterion and the outdoor noise level establishes the acoustical insulation requirement for the exterior shell. The exterior shell is comprised of primarily two components; windows and walls (patio doors are treated as windows). Canada Mortgage

and Housing (CMHC) Standards [1] require that no component should transmit more than 1/N of the total sound power that would give the maximum acceptable noise level inside the room. Therefore, in a room with two exterior components, neither should transmit more than one-half of the total allowable sound power.

Mathematically, this Acoustical Insulation Factor can be expressed as:

Required AIF = L_{eq} (Outside) – L_{eq} (Inside) + 10 $\log_{10}$ (N) +2dBA

Where, N = Number of components;
L = Sound Level expressed on a common decibel scale.

Since noise levels and unit types vary over the site, acoustical insulation factors have been separated depending on exposure to different noise sources.

The largest acoustical insulation factors for the unit in closest proximity to Fernbank Road and Terry Fox Drive (R11) are calculated as follows:

- $AIF_{Residential(day)}$ = 72 dBA – 45 dBA + 10log(2) dBA + 2dBA = 32 dBA
- $AIF_{Residential(night)}$ = 64 dBA – 40 dBA + 10log(2) dBA + 2dBA = 29 dBA

Other AIF values calculated using the same method above are presented in **Table 6**:

Table 6: AIF Results

Receiver	AIF (dBa)	
	7:00-23:00	23:00-7:00
R1	29	27
R2	24	21
R4	27	24
R5	14	11
R6	30	28
R7	23	21
R8	25	23
R9	26	23
R10	26	34
R11	32	29
R12	27	25

Refer to **Table 3** to confirm the units represented by the receivers.

Tables from the document entitled “Acoustic Insulation Factor: A Rating for the Insulation of Buildings Against Outdoor Noise”, produced by the Division of Building Research, National Research Council of Canada, June 1980 (J.D. Quirt) were used to assess the exterior facade against the required AIF. This reference material is included in **Appendix C**.

In order to assess the façade against the required AIF respective Leq values, the number of components in a wall, the calculated required AIF, percentage of window to room areas and

[1] Road and Rail Noise: Effects on Housing, CMHC, Ottawa. Publication NHA #185 1/78, 1978

exterior wall to room areas are required. Exterior facade analysis data is presented in **Table 7.**

Table 7: Exterior Façade Analysis Data

Description				Percentage	
Floor	**Unit**	**Room**	**No. of Components**	**Window to Floor Area**	**Percentage of Ext. Wall to Floor**
1	1	Primary Bedroom	2	38	133
		Bedroom 2	2	16	172*
		Living Room	2	45	30
1	2/3	Primary Bedroom	2	37*	36*
		Bedroom 2	2	17	86
		Living Room	2	46	29
1	4	Primary Bedroom	2	42	124
		Bedroom 2	2	17	178
		Living Room	2	46	29
2	1	Primary Bedroom	2	37	132
		Bedroom 2	2	15	169
		Living Room	2	45	30
2	2/3	Primary Bedroom	2	36	38
		Bedroom 2	2	15	77
		Living Room	2	46	29
2	4	Primary Bedroom	2	43	123
		Bedroom 2	2	16	171
		Living Room	2	44	31

*Denotes an average
Components (2) include windows and exterior walls
Unit location Left side to right side 1, 2, 3, 4

Architect unit floor plans were reviewed to calculate the window and wall to floor ratios (as seen above). The architect plans are included in **Appendix D.**

Using the percentage of window area to room area, and the required acoustical insulation factor (AIF), **Table 5** in **Appendix C** was used to identify the various window assemblies that would satisfy the calculated AIF. The builder confirmed their minimum window STC rating is 31. All units requiring a widow STC of 31 or below are grouped together. Units L and M were isolated because of their enhanced noise mitigation requirement.

Similarly, **Table 6.3** in **Appendix C** was used to select the typical wall assembly that would satisfy the required AIF. The worst case was used to complete the façade analysis for the whole unit. The only exception is Unit L. Unit L has an enhanced wall (EW3) compared to all other units (EW2).

The minimum required noise mitigation measures are listed in **Table 8.**

Table 8: Window and Wall Assemblies Required for Attenuation

Unit	Min. Required Window Rating		Min. Required Wall Rating		Recommended Wall Rating
	AIF	STC	AIF	STC	
A and B	14	16	14	23	EW2
C and D	23	25	23	32	EW2
E and F	25	27	25	34	EW2
G	26	28	26	35	EW2
H	26	28	26	35	EW2
I	27	29	27	36	EW2
J	32	34	32	41	EW3
K	30	32	30	39	EW2
L and M	27	29	27	36	EW2
N	24	26	24	33	EW2
O	29	31	29	38	EW2

* Tables 11 and 12 in **Appendix C** were used to convert the AIF values to Sound Transmission Class or STC values.

Table 4 in **Appendix C** was considered to redistribute AIF requirements between the walls and windows for Units L and M. Unfortunately due to the window and wall to floor ratios of the units, redistribution it is not possible. All other unit's window and wall assembly STC requirements were low enough that redistribution is not needed. Redistribution is not considered in this report.

The attenuation measures required to satisfy the City of Ottawa noise criteria and the noise clauses that are to be included on title and in the Agreement of Purchase and Sale for the various dwelling units are summarized in **Table 9**.

Table 9 – Required Attenuation Measures and Associated Warning Clauses

Unit	Attenuation Measure	Notice on Title
A and B	• N/A	• N/A
C, D, and N	• Forced air with provisions for AC	• Type C
E, F, G, H, I, J, K, L, M, and O	• Installation of air conditioning • Building Façade Analysis	• Type D

Refer to **Figure 4** – Noise Attenuation Measures Plan for building unit identification, node locations, and details of mitigation measures.

EXISITNG RESIDENTIAL LANDS

R13 R14 R15

BLDG-A BLDG-B BLDG-C BLDG-D BLDG-E BLDG-F BLDG-G BLDG-H BLDG-I R12

R5 R7 R8 R9 R10

CLARIDGE IRON
VALLEY 2 SITE

BLDG-J R11

BLDG-N BLDG-M BLDG- L BLDG-K

R2 R4 R6

BLDG-O

R1

FERNBANK ROAD

TERRY FOX DRIVE

COPE DRIVE

2.25m

APPROXIMATE FUTURE
TERRY FOX ROAD WIDENING

Concrete Sidewalk

LEGEND

PROPERTY LINE

R1 RECEIVER LOCATION

AMENITY SPACE

MITIGATION METHODS INCLUDE:
- PROVIDE FORCED AIR VENTILATION WITH THE PROVISION OF CENTRAL AIR CONDITIONING
- WARNING CLAUSE TYPE C BE REGISTERED ON TITLE AND INCORPORATED INTO THE AGREEMENT OF PURCHASE AND SALES

MITIGATION METHODS INCLUDE:
- INSTALLATION OF CENTRAL AIR CONDITIONING
- WARNING CLAUSE TYPE D BE REGISTERED ON TITLE AND INCORPORATED INTO THE AGREEMENT OF PURCHASE AND SALES
- ACOUSTICALLY SELECTED WALLS AND WINDOWS FOR ALL ROOMS. SEE NOISE REPORT FOR DETAILS.

NOTES:

1. ROADWAY CLASSIFICATION AS PER CITY OF OTTAWA OFFICIAL PLAN, SCHEDULE E, OFFICIAL PLAN, URBAN ROAD NETWORK.
2. REFER TO GRADING PLANS (121011-GR1-2) FOR ALL GRADING INFORMATION.

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CITY OF OTTAWA
5331 FERNBANK ROAD
IRON VALLEY 2

NOISE ATTENUATION
MEASURES PLAN

1 : 1000 (0 10 20 30 40)

JUN 2026 | 121011 | FIGURE 4

M:\2021\121011\CAD\Design\Figures\Noise\121011-FIG4-Noise Attenuation.dwg, FIG4, Jun 25, 2026 - 12:00pm, smatthews

SHT11X17.DWG - 279mmX432mm

5.0 CONCLUSIONS

An analysis of the roadway traffic along Terry Fox Drive, Fernbank Road, and Cope Drive indicates indoor noise attenuation measures is necessary for the Iron Valley 2 development. However, no outdoor noise attenuation is required.

The following is a summary of the attenuation measures and notice requirements to be placed on title**.** Refer to **Figure 2** for unit locations.

Units A and B

- No action required.

Units C, D, and N

- Forced air ventilation with provisions for central air conditioning,
- Type C Warning Clause (refer to Section 3.6),
- Provide window assembly to meet a sound transmission class, STC of 26, and
- Provide EW2 wall assembly (minimum).

Units E, F, G, H, I, L, M, and O

- Provide central air conditioning,
- Type D Warning Clause (refer to Section 3.6),
- Provide window assembly to meet a sound transmission class, STC of 31, and
- Provide EW2 wall assembly (minimum).

Units J

- Provide central air conditioning,
- Type D Warning Clause (refer to Section 3.6),
- Provide window assembly to meet a sound transmission class, STC of 34, and
- Provide EW3 wall assembly (minimum).

Units K

- Provide central air conditioning,
- Type D Warning Clause (refer to Section 3.6),
- Provide window assembly to meet a sound transmission class, STC of 32, and
- Provide EW2 wall assembly (minimum).

In closing, Novatech respectfully requests the City of Ottawa accept the findings of this Detailed Noise Control Study for the Iron Valley 2 residential development at 5331 Fernbank Road as part of the Site Plan application.

NOVATECH

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APPENDIX A

EXCERPTS FROM THE CITY OF OTTAWA ENVIRONMENTAL NOISE CONTROL GUIDELINES, THE MOE'S NPC-300, THE CITY OF OTTAWA'S TRANSPORTATION MASTER PLAN AND OFFICIAL PLAN

PLANNING AND GROWTH MANAGEMENT
URBANISME ET GESTION DE LA CROISSANCE

ENVIRONMENTAL NOISE CONTROL GUIDELINES: Introduction and Glossary

January 2016

Table 2.2a: Sound Level Limit for Outdoor Living Areas - Road and Rail

(from NPC-300, 2013 Table C-1)

Time Period	Required L_{eq} (16) (dBA)
16-hour, 07:00 – 23:00	55

Table 2.2b: Sound Level Limit for Indoor Living Areas Road and Rail

(from NPC-300, 2013 Table C-2)

		Required L_{eq} (dBA)	
Type of Space	**Time Period**	**Road**	**Rail**
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	07:00 – 23:00	45	40
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	23:00 – 07:00	45	40
Sleeping quarters	07:00 – 23:00	45	40
	23:00 – 07:00	40	35

The Province also provides for supplementary indoor sound level limits for land uses not generally considered noise sensitive (see Table 2.2c below). These good practice design objectives should be addressed in any noise study prepared for the City. These supplementary sound level limits are based on the windows and doors to an indoor space being closed.

Table 2.2c: Supplementary Sound Level Limits for Indoor Spaces - Road and Rail (adapted from NPC-300 Table C-9)

		Required L_{eq} (dBA)	
Type of Space	**Time Period**	**Road**	**Rail**
General offices, reception areas, retail stores, etc.	16 hours between 07:00 – 23:00	50	45
Theatres, places of worship, libraries, individual or semi- private offices, conference rooms, reading rooms, etc.	16 hours between 07:00 – 23:00	45	40
Sleeping quarters of hotels/motels	8 hours between 23:00 – 07:00	45	40
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	8 hours between 23:00 – 07:00	40	35

Appendix B: Table of Traffic and Road Parameters To Be Used For Sound Level Predictions

Table B1 Traffic And Road Parameters To Be Used For Sound Level Predictions

Row Width (m)	Implied Roadway Class	AADT Vehicles/Day	Posted Speed Km/Hr	Day/Night Split %	Medium Trucks %	Heavy Trucks % [1]
NA [2]	Freeway, Queensway, Highway	18,333 per lane	100	92/8	7	5
37.5-44.5	6-Lane Urban Arterial-Divided (6 UAD)	50,000	50-80	92/8	7	5
34-37.5	4-Lane Urban Arterial-Divided (4-UAD)	35,000	50-80	92/8	7	5
23-34	4-Lane Urban Arterial-Undivided (4-UAU)	30,000	50-80	92/8	7	5
23-34	4-Lane Major Collector (4-UMCU)	24,000	40-60	92/8	7	5
30-35.5	2-Lane Rural Arterial (2-RAU)	15,000	50-80	92/8	7	5
20-30	2-Lane Urban Arterial (2-UAU)	15,000	50-80	92/8	7	5
20-30	2-Lane Major Collector (2-UMCU)	12,000	40-60	92/8	7	5
30-35.5	2-Lane Outer Rural Arterial (near the extremities of the City) (2-RAU)	10,000	50-80	92/8	7	5
20-30	2-Lane Urban Collector (2-UCU)	8,000	40-50	92/8	7	5

[1] The MOE Vehicle Classification definitions should be used to estimate automobiles, medium trucks and heavy trucks.

[2] The number of lanes is determined by the future mature state of the roadway.

Environmental Noise Guideline

Stationary and Transportation Sources – Approval and Planning

Publication NPC-300

Ontario

Table C-10
Supplementary Indoor Aircraft Noise Limits
(Applicable over 24-hour period)

Type of Space	Indoor NEF/NEP*
General offices, reception areas, retail stores, etc.	15
Individual or semi-private offices, conference rooms, etc.	10
Living/dining areas of residences, sleeping quarters of hotels/motels, theatres, libraries, schools, daycare centres, places of worship, etc.	5
Sleeping quarters of residences, hospitals, nursing/retirement homes, etc.	0

* The indoor NEF/NEP values listed in Table C-10 are not obtained from NEF/NEP contour maps. The values are representative of the indoor sound levels and are used as assessment criteria for the evaluation of acoustical insulation requirements.

C7 Noise Control Measures

The following sections provide MOE guidance for appropriate noise control measures. These sections constitute requirements that are applied to MOE approvals for stationary sources. This information is also provided as guidance which land use planning authorities may consider adopting.

The definition in Part A describes the various types and application of noise control measures. All the noise control measures described in the definition are appropriate to address the impact of noise of transportation sources (road, rail and aircraft) on planned sensitive land uses. Only some of the noise control measures described in the definition are appropriate to address the noise impact of stationary sources on planned sensitive land uses.

C7.1 Road Noise Control Measures

C7.1.1 Outdoor Living Areas

If the 16-Hour Equivalent Sound Level, L_{eq} (16) in the OLA is greater than 55 dBA and less than or equal to 60 dBA, noise control measures may be applied to reduce the sound level to 55 dBA. If measures are not provided, prospective purchasers or tenants should be informed of potential noise problems by a warning clause Type A.

If the 16-Hour Equivalent Sound Level, L_{eq} (16) in the OLA is greater than 60 dBA, noise control measures should be implemented to reduce the level to 55 dBA. Only in cases where the required noise control measures are not feasible for technical, economic or administrative reasons would an excess above the limit (55 dBA) be acceptable with a warning clause Type B. In the above situations, any excess above the limit will not be acceptable if it exceeds 5 dBA.

C7.1.2 Plane of a Window – Ventilation Requirements

C7.1.2.1 Daytime Period, 07:00 – 23:00 Hours

Noise control measures may not be required if the L_{eq} (16) daytime sound level in the plane of a bedroom or living/dining room window is less than or equal to 55 dBA. If the sound level in the plane of a bedroom or living/dining room window is greater than 55 dBA and less than or equal to 65 dBA, the dwelling should be designed with a provision for the installation of central air conditioning in the future, at the occupant's discretion. Warning clause Type C is also recommended.

If the daytime sound level in the plane of a bedroom or living/dining room window is greater than 65 dBA, installation of central air conditioning should be implemented with a warning clause Type D. In addition, building components including windows, walls and doors, where applicable, should be designed so that the indoor sound levels comply with the sound level limits in Table C-2. The location and installation of the outdoor air conditioning device should comply with sound level limits of Publication NPC-216, Reference [32], and guidelines contained in Environmental Noise Guidelines for Installation of Residential Air Conditioning Devices, Reference [6], or should comply with other criteria specified by the municipality.

C7.1.2.2 Nighttime Period, 23:00 – 07:00 Hours

Noise control measures may not be required if the L_{eq} (8) nighttime sound level in the plane of a bedroom or living/dining room window is less than or equal to 50 dBA. If the sound level in the plane of a bedroom or living/dining room window is greater than 50 dBA and less than or equal to 60 dBA, the dwelling should be designed with a provision for the installation of central air conditioning in the future, at the occupant's discretion. Warning clause Type C is also recommended.

If the nighttime sound level in the plane of a bedroom or living/dining room window is greater than 60 dBA, installation of central air conditioning should be implemented, with a warning clause Type D. In addition, building components including windows, walls and doors, where applicable, should be designed so that the indoor sound levels comply with the sound level limits in Table C-2. The location and installation of the outdoor air conditioning device should comply with sound level limits of Publication NPC-216, Reference [32], and guidelines contained in Environmental Noise Guidelines for Installation of Residential Air Conditioning Devices, Reference [6], or should comply with other criteria specified by the municipality.

C7.1.3 Indoor Living Areas – Building Components

If the nighttime sound level outside the bedroom or living/dining room windows exceeds 60 dBA or the daytime sound level outside the bedroom or living/dining area windows exceeds 65 dBA, building components including windows, walls and doors, where applicable, should be designed so that the indoor sound levels comply with the

sound level limits in Table C-2. The acoustical performance of the building components (windows, doors and walls) should be specified.

C7.2 Rail Noise Control Measures

C7.2.1 Outdoor Living Areas

Whistle noise is not included in the determination of the outdoor daytime sound level due to railway trains. All the provisions of Section C7.1.1 apply also to noise control requirements for rail noise.

C7.2.2 Plane of a Window – Ventilation Requirements

Whistle noise is not included in the determination of the sound level in the plane of a window. All the provisions of Section C7.1.2 apply also to noise control requirements for rail noise.

C7.2.3 Indoor Living Areas – Building Components

The sound level, L_{eq}, during the daytime (16-hour) and nighttime (8-hour) periods is determined using the prediction method STEAM, Reference [34], immediately outside the dwelling envelope. Whistle noise is included in the determination of the sound level.

If the nighttime sound level outside the bedroom or living/dining room windows exceeds 55 dBA or the daytime sound level outside the bedroom or living/dining area windows exceeds 60 dBA, building components including windows, walls and doors, where applicable, need to be designed so that the indoor sound levels comply with the sound level limits in Table C-2. The acoustical performance of the building components (windows, doors and walls) needs to be specified.

In addition, the exterior walls of the first row of dwellings next to railway tracks are to be built to a minimum of brick veneer or masonry equivalent construction, from the foundation to the rafters when the rail traffic L_{eq} (24-hour), estimated at a location of a nighttime receptor, is greater than 60 dBA, and when the first row of dwellings is within 100 metres of the tracks.

C7.3 Combination of Road and Rail Noise

The noise impact in the OLA and in the plane of a window, and the requirements for outdoor measures, ventilation measures and warning clauses, should be determined by combining road and rail traffic sound levels.

The assessment of the indoor sound levels and the resultant requirement for the acoustical descriptors of the building components should be done separately for road

In Class 4 areas, where windows for noise sensitive spaces are assumed to be closed, the use of central air conditioning may be acceptable if it forms an essential part of the overall building designs.

C7.9 Verification of Noise Control Measures

It is recommended that the implementation of noise control measures be verified by qualified individuals with experience in environmental acoustics.

C8 Warning Clauses

The use of warning clauses or easements in respect of noise are recommended when circumstances warrant. Noise warning clauses may be used to warn of potential annoyance due to an existing source of noise and/or to warn of excesses above the sound level limits. Direction on the use of warning clauses should be included in agreements that are registered on title to the lands in question. The warning clauses would be included in agreements of Offers of Purchase and Sale, lease/rental agreements and condominium declarations. Alternatively, the use of easements in respect of noise may be appropriate in some circumstances. Additional guidance on the use of noise warning clauses is provided in Section C7.1.1, Section C7.1.2.1, Section C7.1.2.2, Section C7.3 and Section C7.4.

C8.1 Transportation Sources

The following warning clauses may be used individually or in combination:

TYPE A: (see Section C7.1.1)

> "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."

TYPE B: (see Section C7.1.1 and Section C7.4)

> "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."

TYPE C: (see Section C7.1.2.1, Section C7.1.2.2 and Section C7.4)

> "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."

TYPE D: (see Section C7.1.2.1, Section C7.1.2.2 and Section C7.4)

"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."

C8.2 Stationary Sources

It is not acceptable to use warning clauses in place of physical noise control measures to identify an excess over the MOE sound level limits. Warning clause (Type E) for stationary sources may identify a potential concern due to the proximity of the facility but it is not acceptable to justify exceeding the sound level limits.

TYPE E: (see Section C7.6)

"Purchasers/tenants are advised that due to the proximity of the adjacent industry (facility) (utility), noise from the industry (facility) (utility) may at times be audible."

C8.3 Class 4 Area Notification

TYPE F: (see Section B9.2 and Section C4.4.2)

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

Appendix A: Warning Clauses

Under the Official Plan and this guideline warning clauses may be required to be incorporated into development through development agreements, registration on title and inclusion in Agreements of Purchase and Sale. This requirement may be included in any development, regardless of whether it is considered a noise sensitive land use.

A warning clause provides recognition for the City, Province landowner or tenants that noise may be a concern, that noise may be audible at times or even quite loud, and, depending on the type of development, provincial guidelines for noise may be exceeded. Warning clauses also recognize that environmental noise is a potential health hazard that does impact people and neighbourhoods. It is for this reason that, unless a non-noise sensitive land use is established, a warning clause should also include noise mitigation.

A warning clause is not considered a form of noise mitigation. It is not acceptable therefore to use warning clauses in place of physical noise control measures to identify an excess over the MOE or City noise limits. The reason for a warning clause on all development is twofold. Firstly, it is important to note that a land use that although the development may not be considered noise sensitive it may include employees or tenants that are personally sensitive to noise. A warning clause provides protection against complaints to the ministry of Environment should provincial guidelines be exceeded. Secondly, a warning clause on title could obviate the need for a new noise study in the future. In a redevelopment scenario the warning clause would provide recognition of the extent noise conditions.

Given the variation in potential intensity and impact of noise it will often be necessary to amend warning clauses to recognize the site specific conditions in each development. Final wording of any warning clause is to be approved by the City.

The following subsections provide example text to be adapted into warning clauses.

Surface Transportation Warning Clauses

Table A1 Surface Transportation Warning Clauses

Type	Example	Notes
Generic	*Purchasers/tenants are advised that sound levels due to increasing road/rail/Light Rail/transitway traffic may occasionally interfere with some outdoor activities as the sound levels may exceed the sound level limits of the City and the Ministry of the Environment.* *To help address the need for sound attenuation this development has been designed so as to provide an outdoor amenity area that is within provincial guidelines. Measures for sound attenuation include:* • *A setback of buildings from the noise source and* • *An acoustic barrier.* *To ensure that provincial sound level limits are not exceeded it is important to maintain sound attenuation features.* *The acoustic barrier shall be maintained and kept in good repair by the property owner. Any maintenance, repair or replacement is the responsibility of the owner and shall be with the same material or to the same standards, having the same colour, appearance and function of the original.* *Additionally this development includes trees and shrubs to screen the source of noise from occupants.*	The generic warning clause outlines that MOE sound levels may be exceeded but the indoor environment and outdoor amenity areas are within guidelines. Mitigation measures are described including urban design features. Mention is also made of landscaping to screen the development visually from the source of noise.
Extensive mitigation of indoor and	*"Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units,*	The warning clause makes reference to MOE sound levels

Table A1 Surface Transportation Warning Clauses

Type	Example	Notes
outdoor amenity area	*sound levels due to increasing road/rail/Light Rail/transitway traffic may, on occasion, interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the City and the Ministry of the Environment.* *To help address the need for sound attenuation this development includes:* • *multi-pane glass;* • *double brick veneer;* • *an earth berm; and* • *an acoustic barrier.* *To ensure that provincial sound level limits are not exceeded it is important to maintain these sound attenuation features.* *The acoustic barrier shall be maintained and kept in good repair by the property owner. Any maintenance, repair or replacement is the responsibility of the owner and shall be with the same material or to the same standards, having the same colour, appearance and function of the original.* *This dwelling unit has also been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the City and the Ministry of the Environment.*	being exceeded from time to time and that there are sound attenuation features and landscaping within the development that should be maintained. An option for air conditioning is noted as well as landscaping to screen the source of noise.

Table A1 Surface Transportation Warning Clauses

Type	Example	Notes
	Additionally this development includes trees and shrubs to screen the source of noise from occupants.	
No outdoor amenity area	*Purchasers/tenants are advised that sound levels due to increasing road/rail/Light Rail/transitway traffic will interfere with outdoor activities as the sound levels exceed the sound level limits of the City and the Ministry of the Environment.* *To help address the need for sound attenuation this development includes:* • *multi-pane glass;* • *double brick veneer;* • *high sound transmission class walls.* *To ensure that provincial sound level limits are not exceeded it is important to maintain these sound attenuation features.* *This dwelling unit has been supplied with a central air conditioning system and other measures 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 City and the Ministry of the Environment*	This warning clause notes that only an indoor environment is being provided for.

Stationary Source Warning Clauses

The Province notes that it is not acceptable to use warning clauses in place of physical noise control measures to identify an excess over the MOE sound level limits for stationary sources. The generic warning clause for stationary sources (called Type E in NPC-300) may identify a potential concern due to the proximity of the facility but it is not possible to justify exceeding the sound level limits.
The wording of the generic stationary noise warning clause may also be used as the basis for new development adjacent to areas licensed for mineral aggregate extraction.

Note:
1) This schedule forms part of the Official Plan of the City of Ottawa and must be read in conjunction with the text.
2) This schedule is intended as a framework for planning and design; consequently alignments of proposed roads are approximate and subject to detailed study.
3) An unidentified new facility from Highway 416 to Highway 417 East is not shown.

Note:
1) La présente annexe fait partie du Plan officiel de la Ville d'Ottawa et doit être consultée en se reportant au texte même du Plan officiel.
2) La présente annexe doit servir de guide en matière de planification et de conception;il s'ensuit que le tracé des routes proposées n'est qu'approximatif et donnera lieu à une étude plus approfondie.
3) Une nouvelle installation non identifiée et située entre l'autoroute 416 et l'autoroute 417E n'apparaît pas.

SEE MAP 6
VOIR CARTE 6

Official Plan for the City of Ottawa
Consolidation and Amendments

Plan officiel de la Ville d'Ottawa
Amendement au plan directeur approuvé

150 (07/2019) # 192 (08/2017)
173 (01/2017) # 213 (07/2018)

OFFICIAL PLAN - Schedule E
URBAN ROAD NETWORK

PLAN OFFICIEL - Annexe E
RÉSEAU ROUTIER - URBAIN

Provincial Highway	Chemins de propriété fédéral
Federally Owned Road	Route provinciale
City Freeway	Autoroute de ville
Arterial - Existing	Artère - Établie
Arterial - Proposed (alignment defined)	Artère - Proposé (alignement déterminée)
Arterial - Conceptual (alignment undefined)	Artère - Conceptuelle (alignement à déterminée)
Major Collector - Existing	Grande collectrice - Établie
Major Collector - Proposed	Grande collectrice - Proposé
Collector - Existing	Collectrice - Établie
Collector - Proposed	Collectrice - Proposé
New Interchange	Nouvel échangeur

Ottawa
1 0.5 0 1 2 3 km

Planning, Infrastructure and Economic Development Department, GIS and Data Management

Services de la planification, de l'infrastructure et du développement économique, SIG et Gestion des données

Note:
1) This map forms part of the Transportation Master Plan of the City of Ottawa and must be read in conjunction with the text.
2) This map is intended as a framework for planning and design: consequently alignments of proposed roads are approximate and subject to detailed study.

Note:
1) La présente carte fait partie du Plan directeur des transports de la Ville d'Ottawa et doit être consultée en se reportant au texte même du Plan officiel.
2) La présente carte doit servir de guide en matière de planification et de conception;il s'ensuit que le tracé des routes proposées n'est qu'approximatif et donnera lieu à une étude plus approfondie.

10

City of / Ville de GATINEAU

Rivière des Outaouais / Ottawa River

CARP
HUNTMAR
MARCH
CARLING
CAMPEAU
PALADIUM
HAZELDEAN
TERRY FOX
EAGLESON
TIMM
ROBERTSON
STITTSVILLE MAIN
FERNBANK
HOPESIDE
OLD RICHMOND
BASELINE
MEADOWLANDS
WEST HUNT CLUB
CEDARVIEW
GREENBANK
WOODROFFE
FALLOWFIELD
BAGLESON
MOODIE
PERTH
BROPHY
BANKFIELD
MERIVALE
FISHER
SCOTT
KNOXDALE
HOLLAND
BRONSON
BANK
MAIN
RIVERSIDE
CAMBRIAN
JOCKVALE
PRINCE OF WALES
RIVER
HUNT CLUB
AIRPORT
HEMLOCK
MONTREAL
McARTHUR
ST LAURENT
INDUSTRIAL
SMYTH
HERON
WALKLEY
OGILVIE
BLAIR
CONROY
HAWTHORNE
ALBION
LEITRIM
EARL ARMSTRONG
ANDERSON
RAMSAYVILLE
INNES
BLACKBURN BYPASS
ST JOSEPH
JEANNE D'ARC
ORLEANS
MER BLEUE
TENTH LINE
TRIM
NAVAN
RUSSELL
MILTON
FRANK KENNY
MITCH OWENS

Ottawa

1 0.5 0 1 2 3 km

Prepared by: Planning and Growth Management Department, Mapping & Graphics Unit, 2015 Revision
Préparé par: Service de l'urbanisme et de la gestion de la croissance, Unité de la cartographie et des graphiques, Révision 2015

New Arterials — Nouvelles artères
Widened Arterial — Artères élargies
Conceptual Arterial — Conception d'artères
New or Widened Collector — Artères élargies ou nouvelles
New Interchange — Nouvel échangeur

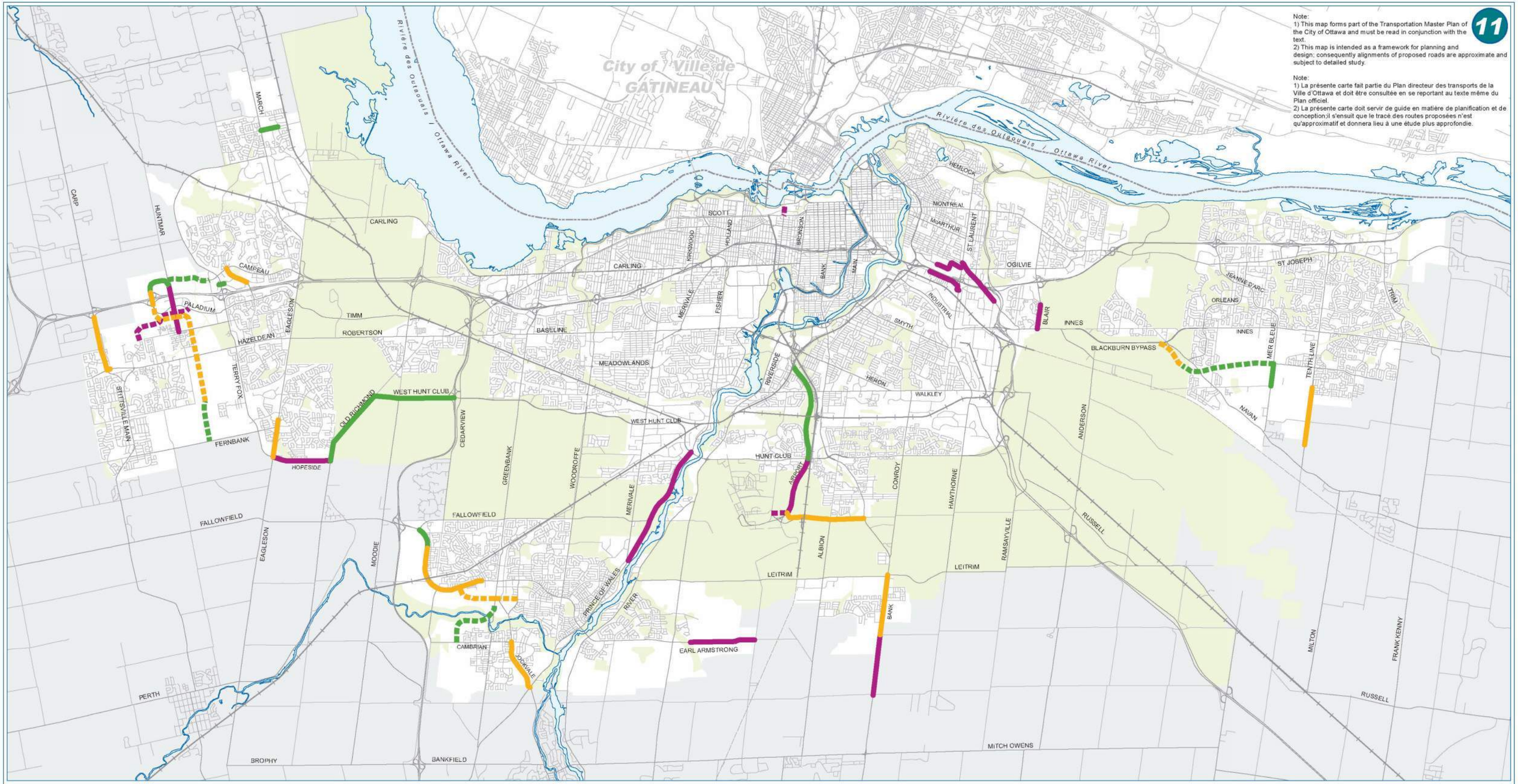
TRANSPORTATION MASTER PLAN - Map 10
ROAD NETWORK – 2031 NETWORK CONCEPT

PLAN DIRECTEUR DES TRANSPORTS - Carte 10
RÉSEAU ROUTIER - CONCEPT DU RÉSEAU 2031

Note:
1) This map forms part of the Transportation Master Plan of the City of Ottawa and must be read in conjunction with the text.
2) This map is intended as a framework for planning and design; consequently alignments of proposed roads are approximate and subject to detailed study.

Note:
1) La présente carte fait partie du Plan directeur des transports de la Ville d'Ottawa et doit être consultée en se reportant au texte même du Plan officiel.
2) La présente carte doit servir de guide en matière de planification et de conception;il s'ensuit que le tracé des routes proposées n'est qu'approximatif et donnera lieu à une étude plus approfondie.

11



Phase 1 (2014 - 2019) Widening
Phase 1 (2014 - 2019) New Road
Phase 1 (2014 - 2019) Élargissement
Phase 1 (2014 - 2019) Nouvelle route

Phase 2 (2020 - 2025) Widening
Phase 2 (2020 - 2025) New Road
Phase 2 (2020 - 2025) Élargissement
Phase 2 (2020 - 2025) Nouvelle route

Phase 3 (2026 - 2031) Widening
Phase 3 (2026 - 2031) New Road
Phase 3 (2026 - 2031) Élargissement
Phase 3 (2026 - 2031) Nouvelle route

Ottawa

1 0.5 0 1 2 3 km

Prepared by: Planning and Growth Management Department, Mapping & Graphics Unit, 2015 Revision
Préparé par: Service de l'urbanisme et de la gestion de la croissance, Unité de la cartographie et des graphiques, Révision 2015

TRANSPORTATION MASTER PLAN - Map 11

ROAD NETWORK – 2031 AFFORDABLE NETWORK

PLAN DIRECTEUR DES TRANSPORTS - Carte 11

RÉSEAU ROUTIER - RÉSEAU ABORDABLE 2031

Table A3 Road Projects

Project	General Description	Rationale	EA Status
Rideau River Crossing (Network Concept)	New four lane bridge and approaches between Prince of Wales Drive and Limebank Road	Provides for increased capacity across Rideau River screenline.	Not started
Riverside Drive (Network Concept)	Widen from four to six lanes between River Road and Hunt Club Road	Provides capacity for growth in Riverside South	Complete
Strandherd Drive (Affordable Network and Network Concept)	**Affordable:** Widen from two to four lanes between Fallowfield Road and Jockvale Road	Addresses capacity deficiencies at the Rideau River South and Manotick screenlines, in conjunction with a Strandherd-Earl Armstrong Rideau River Bridge and Earl Armstrong Road widening	Complete
	Concept: Widen from four to six lanes between Jockvale Road and Woodroffe Avenue		
Stittsville Main Street Extension (Affordable Network and Network Concept)	New two-lane road between Palladium Drive and Maple Grove Road	Provides capacity for development in Stittsville	Not started
Stittsville North-South Arterial (Affordable Network and Network Concept)	New two-lane road between Palladium Drive and Fernbank Road	Provides capacity for development in Stittsville and provides a bypass for Stittsville Main Street congestion	Complete
Tenth Line Road (Affordable Network and Network Concept)	Widen from two to four lanes between Harvest Valley Drive and the urban boundary	Services growth south of Innes Road	Complete
Terry Fox Drive (Network Concept)	Widen from two to four lanes between Winchester Drive and Eagleson Road	Provides access to adjacent developments	Complete
	Widen from four to six lanes between Campeau Drive and Palladium Drive	Accommodates Kanata West Development	Not started
Tremblay Road (Affordable Network and Network Concept)	Widen from two to four lanes between Pickering Place and St. Laurent Boulevard	Addresses the needs identified by the St. Laurent Station Transit-Oriented Development study and accommodates new employment land at St. Laurent Blvd at Tremblay Road	Not started
West Hunt Club Road (Network Concept)	Widen from four to six lanes between Highway 416 and Prince of Wales Drive	Services on-going development/ redevelopment along corridor and makes full use of Rideau River Bridge	Not started

APPENDIX B

SOUND LEVEL CALCULATIONS

- Part 1 - Modelling Results
- Part 2 - Stamson Modelling Figures

PART 1 (APPENDIX B)

Stamson Modelling Results

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 11:30:56
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r1.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -50.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 21.80 / 21.80 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX N (day/night)
-----------------------------------------------
Angle1   Angle2           : -75.00 deg   75.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  31.40 / 31.40  m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

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```
Road data, segment # 3: TERRY FOX S (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX S (day/night)
-----------------------------------------------
Angle1   Angle2           : -75.00 deg   75.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  41.60 / 41.60  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.COPE	1.50	60.92	60.92
2.TERRY FOX N	1.50	66.11	66.11
3.TERRY FOX S	1.50	64.09	64.09
Total			68.97 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	53.33	53.33
2.TERRY FOX N	1.50	58.52	58.52
3.TERRY FOX S	1.50	56.49	56.49
Total			61.37 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.97
(NIGHT): 61.37

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 11:31:44
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2r1.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -50.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 21.80 / 21.80 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX N (day/night)
-----------------------------------------------
Angle1   Angle2           : -75.00 deg   75.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  31.40 / 31.40  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 3: TERRY FOX S (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX S (day/night)
-----------------------------------------------
Angle1   Angle2           : -75.00 deg   75.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  41.60 / 41.60  m
Receiver height           :   4.50 / 4.50   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.COPE	1.50	61.18	61.18
2.TERRY FOX N	1.50	66.52	66.52
3.TERRY FOX S	1.50	64.60	64.60
Total			69.39 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	53.59	53.59
2.TERRY FOX N	1.50	58.92	58.92
3.TERRY FOX S	1.50	57.00	57.00
Total			61.79 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 69.39
(NIGHT): 61.79

STAMSON 5.0 SUMMARY REPORT Date: 28-10-2025 09:31:42
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r2.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 23.20 / 23.20 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX N (day/night)
-----------------------------------------------
Angle1   Angle2           : -65.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  83.20 / 83.20  m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -25.00 deg   Angle2 : 15.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  20.50 / 20.50  m
Source elevation          :  97.10 m
Receiver elevation        :  99.30 m
Barrier elevation         :  97.60 m
Reference angle           :   0.00

🠉
Road data, segment # 3: TERRY FOX S (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX S (day/night)
-----------------------------------------------
Angle1   Angle2           : -65.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  93.40 / 93.40  m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
```

Barrier angle1 : -25.00 deg Angle2 : 15.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 20.50 / 20.50 m
Source elevation : 98.30 m
Receiver elevation : 99.30 m
Barrier elevation : 97.60 m
Reference angle : 0.00

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	61.15	61.15
2.TERRY FOX N	1.50	56.73	56.73
3.TERRY FOX S	1.50	55.92	55.92
Total			63.35 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	53.56	53.56
2.TERRY FOX N	1.50	49.13	49.13
3.TERRY FOX S	1.50	48.32	48.32
Total			55.76 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.35
(NIGHT): 55.76

STAMSON 5.0 SUMMARY REPORT Date: 28-10-2025 09:34:22
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2r2.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 23.20 / 23.20 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX N (day/night)
-----------------------------------------------
Angle1   Angle2           : -65.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  83.20 / 83.20  m
Receiver height           :   4.50 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -25.00 deg   Angle2 : 15.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  20.50 / 20.50  m
Source elevation          :  97.10 m
Receiver elevation        :  99.30 m
Barrier elevation         :  97.60 m
Reference angle           :   0.00

↟
Road data, segment # 3: TERRY FOX S (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX S (day/night)
-----------------------------------------------
Angle1   Angle2           : -65.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  93.40 / 93.40  m
Receiver height           :   4.50 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
```

Barrier angle1 : -25.00 deg Angle2 : 15.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 20.50 / 20.50 m
Source elevation : 98.30 m
Receiver elevation : 99.30 m
Barrier elevation : 97.60 m
Reference angle : 0.00

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	61.47	61.47
2.TERRY FOX N	1.50	57.62	57.62
3.TERRY FOX S	1.50	56.90	56.90
Total			63.93 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	53.88	53.88
2.TERRY FOX N	1.50	50.03	50.03
3.TERRY FOX S	1.50	49.30	49.30
Total			56.34 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.93
(NIGHT): 56.34

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 11:37:15
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r4.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -25.00 deg 30.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 97.10 / 97.10 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -5.00 deg Angle2 : 20.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 63.70 / 63.70 m
Source elevation : 97.08 m
Receiver elevation : 99.36 m
Barrier elevation : 97.70 m
Reference angle : 0.00

Road data, segment # 2: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 2: TERRY FOX N (day/night)
---------------------------------------------
Angle1   Angle2           : -65.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  42.00 / 42.00  m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

🠉
Road data, segment # 3: TERRY FOX S (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -65.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  52.10 / 52.10  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.COPE	1.50	44.48	44.48
2.TERRY FOX N	1.50	63.75	63.75
3.TERRY FOX S	1.50	62.20	62.20
Total			66.08 dBA

↟

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	36.88	36.88
2.TERRY FOX N	1.50	56.16	56.16
3.TERRY FOX S	1.50	54.60	54.60
Total			58.49 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 66.08
(NIGHT): 58.49

↟
↟

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 11:40:02
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2r4.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -25.00 deg 30.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 97.10 / 97.10 m
Receiver height : 4.50 / 4.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -5.00 deg Angle2 : 20.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 63.70 / 63.70 m
Source elevation : 97.08 m
Receiver elevation : 99.36 m
Barrier elevation : 97.70 m
Reference angle : 0.00

Road data, segment # 2: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 2: TERRY FOX N (day/night)
---------------------------------------------
Angle1   Angle2           : -65.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  42.00 / 42.00  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

↟
Road data, segment # 3: TERRY FOX S (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -65.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  52.10 / 52.10  m
Receiver height           :   4.50 / 4.50   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.COPE	1.50	45.28	45.28
2.TERRY FOX N	1.50	64.25	64.25
3.TERRY FOX S	1.50	62.78	62.78
Total			66.62 dBA

↟

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	37.69	37.69
2.TERRY FOX N	1.50	56.65	56.65
3.TERRY FOX S	1.50	55.18	55.18
Total			59.02 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 66.62
(NIGHT): 59.02

↟
↟

STAMSON 5.0 SUMMARY REPORT Date: 15-06-2026 12:56:47
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r5.te Time Period: Day/Night 16/8 hours
Description: R5 - First Floor

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -80.00 deg 40.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 67.10 / 67.10 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -80.00 deg Angle2 : -24.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 3.00 / 3.00 m
Source elevation : 97.20 m
Receiver elevation : 99.26 m
Barrier elevation : 97.40 m
Reference angle : 0.00

Road data, segment # 2: COPE (day/night)

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):   8000
    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 # 2: COPE (day/night)
--------------------------------------
Angle1   Angle2           :  40.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     90 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  67.10 / 67.10  m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

♠
Road data, segment # 3: TERRY FOX N (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX N (day/night)
---------------------------------------------
Angle1   Angle2           : -55.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     95 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 106.40 / 106.40 m
```

```
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 4: TERRY FOX S (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 4: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -55.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     95 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 116.30 / 116.30 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.COPE             !     1.50 !    50.37 !    50.37
 2.COPE             !     1.50 !    37.68 !    37.68
 3.TERRY FOX N      !     1.50 !    47.79 !    47.79
 4.TERRY FOX S      !     1.50 !    47.28 !    47.28
--------------------+----------+----------+----------
                      Total                   53.59 dBA
```

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	42.78	42.78
2.COPE	1.50	30.08	30.08
3.TERRY FOX N	1.50	40.19	40.19
4.TERRY FOX S	1.50	39.68	39.68
Total			45.99 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 53.59
(NIGHT): 45.99

STAMSON 5.0 SUMMARY REPORT Date: 15-06-2026 13:02:34
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2r5.te Time Period: Day/Night 16/8 hours
Description: R5 - Second Floor

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -80.00 deg 40.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 67.10 / 67.10 m
Receiver height : 4.50 / 4.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -80.00 deg Angle2 : -24.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 3.00 / 3.00 m
Source elevation : 97.20 m
Receiver elevation : 99.26 m
Barrier elevation : 97.40 m
Reference angle : 0.00

Road data, segment # 2: COPE (day/night)

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):   8000
    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 # 2: COPE (day/night)
--------------------------------------
Angle1   Angle2           :  40.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     90 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  67.10 / 67.10  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

♠
Road data, segment # 3: TERRY FOX N (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX N (day/night)
---------------------------------------------
Angle1   Angle2           : -55.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     95 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 106.40 / 106.40 m
```

```
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

↟

```
Road data, segment # 4: TERRY FOX S (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 4: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -55.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     95 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 116.30 / 116.30 m
Receiver height           :   4.50 / 4.50   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.COPE             !     1.50 !    51.11 !    51.11
 2.COPE             !     1.50 !    38.48 !    38.48
 3.TERRY FOX N      !     1.50 !    48.62 !    48.62
 4.TERRY FOX S      !     1.50 !    48.15 !    48.15
--------------------+----------+----------+----------
                      Total                   54.38 dBA
```

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	43.52	43.52
2.COPE	1.50	30.89	30.89
3.TERRY FOX N	1.50	41.02	41.02
4.TERRY FOX S	1.50	40.55	40.55
Total			46.79 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 54.38
(NIGHT): 46.79

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 13:16:48
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r6.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -75.00 deg 75.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 24.30 / 24.30 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -75.00 deg   75.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  34.10 / 34.10  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.TERRY FOX N      !     1.50 !    67.96 !    67.96
 2.TERRY FOX S      !     1.50 !    65.52 !    65.52
--------------------+----------+----------+----------
                      Total                   69.92 dBA
```

↟

```
Result summary (night)
----------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.TERRY FOX N      !     1.50 !    60.37 !    60.37
 2.TERRY FOX S      !     1.50 !    57.92 !    57.92
--------------------+----------+----------+----------
                      Total                   62.33 dBA
```

↟

```
TOTAL Leq FROM ALL SOURCES (DAY): 69.92
                           (NIGHT): 62.33
```

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STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 13:18:56
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2R6.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -75.00 deg 75.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 24.30 / 24.30 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX S (day/night)
------------------------------------------------
Angle1   Angle2           : -75.00 deg   75.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  34.10 / 34.10  m
Receiver height           :   4.50 / 4.50   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.TERRY FOX N	1.50	68.26	68.26
2.TERRY FOX S	1.50	65.95	65.95
Total			70.27 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	60.67	60.67
2.TERRY FOX S	1.50	58.36	58.36
Total			62.68 dBA

```
TOTAL Leq FROM ALL SOURCES (DAY): 70.27
                           (NIGHT): 62.68
```

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 13:23:11
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r7.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -65.00 deg 65.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 65.20 / 65.20 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 45.00 deg Angle2 : 65.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 11.80 / 11.80 m
Source elevation : 98.30 m
Receiver elevation : 99.49 m
Barrier elevation : 97.60 m
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT)	17500
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 # 2: TERRY FOX S (day/night)

Angle1 Angle2	: -65.00 deg	65.00 deg
Wood depth	: 0	(No woods.)
No of house rows	: 0 / 0	
Surface	: 1	(Absorptive ground surface)
Receiver source distance	: 74.70 / 74.70	m
Receiver height	: 1.50 / 1.50	m
Topography	: 2	(Flat/gentle slope; with barrier)
Barrier angle1	: 45.00 deg	Angle2 : 65.00 deg
Barrier height	: 9.10 m	
Barrier receiver distance	: 11.80 / 11.80	m
Source elevation	: 98.30 m	
Receiver elevation	: 99.49 m	
Barrier elevation	: 97.60 m	
Reference angle	: 0.00	

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	59.94	59.94
2.TERRY FOX S	1.50	58.96	58.96
Total			62.49 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	52.34	52.34

2.TERRY FOX S	1.50	51.37	51.37
Total			54.89 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 62.49
(NIGHT): 54.89

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 13:24:44
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2r7.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -65.00 deg 65.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 65.20 / 65.20 m
Receiver height : 4.50 / 4.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 45.00 deg Angle2 : 65.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 11.80 / 11.80 m
Source elevation : 98.30 m
Receiver elevation : 99.49 m
Barrier elevation : 97.60 m
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT)	17500
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 # 2: TERRY FOX S (day/night)

Angle1 Angle2	: -65.00 deg	65.00 deg
Wood depth	: 0	(No woods.)
No of house rows	: 0 / 0	
Surface	: 1	(Absorptive ground surface)
Receiver source distance	: 74.70 / 74.70	m
Receiver height	: 4.50 / 4.50	m
Topography	: 2	(Flat/gentle slope; with barrier)
Barrier angle1	: 45.00 deg	Angle2 : 65.00 deg
Barrier height	: 9.10 m	
Barrier receiver distance	: 11.80 / 11.80	m
Source elevation	: 98.30 m	
Receiver elevation	: 99.49 m	
Barrier elevation	: 97.60 m	
Reference angle	: 0.00	

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	60.64	60.64
2.TERRY FOX S	1.50	59.73	59.73
Total			63.22 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	53.04	53.04

2.TERRY FOX S	1.50	52.13	52.13
Total			55.62 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.22
(NIGHT): 55.62

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 13:32:32
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r8.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -70.00 deg 65.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 51.40 / 51.40 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -70.00 deg   65.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  62.40 / 62.40  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.TERRY FOX N      !     1.50 !    62.30 !    62.30
 2.TERRY FOX S      !     1.50 !    60.90 !    60.90
--------------------+----------+----------+----------
                      Total                   64.67 dBA
```

```
Result summary (night)
----------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.TERRY FOX N      !     1.50 !    54.70 !    54.70
 2.TERRY FOX S      !     1.50 !    53.30 !    53.30
--------------------+----------+----------+----------
                      Total                   57.07 dBA
```

```
TOTAL Leq FROM ALL SOURCES (DAY): 64.67
                           (NIGHT): 57.07
```

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 13:33:15
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2r8.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -70.00 deg 65.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 51.40 / 51.40 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -70.00 deg   65.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  62.40 / 62.40  m
Receiver height           :   4.50 / 4.50   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.TERRY FOX N	1.50	62.87	62.87
2.TERRY FOX S	1.50	61.55	61.55
Total			65.27 dBA

↟

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	55.27	55.27
2.TERRY FOX S	1.50	53.95	53.95
Total			57.67 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 65.27
(NIGHT): 57.67

↟
↟

STAMSON 5.0 SUMMARY REPORT Date: 12-11-2025 08:59:58
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r9.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -75.00 deg 70.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 47.90 / 47.90 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -75.00 deg Angle2 : -60.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 14.80 / 14.80 m
Source elevation : 97.75 m
Receiver elevation : 99.81 m
Barrier elevation : 98.04 m
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -75.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  57.80 / 57.80  m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -75.00 deg   Angle2 : -60.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  14.80 / 14.80  m
Source elevation          :  97.75 m
Receiver elevation        :  99.81 m
Barrier elevation         :  98.04 m
Reference angle           :   0.00

♠
Road data, segment # 3: FERNBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 3: FERNBANK (day/night)
------------------------------------------
Angle1   Angle2           : -60.00 deg   25.00 deg
```

```
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     50 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 116.30 / 116.30 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -60.00 deg   Angle2 : 25.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  14.20 / 14.20  m
Source elevation          :  97.40 m
Receiver elevation        :  99.81 m
Barrier elevation         :  97.94 m
Reference angle           :   0.00
```

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	62.71	62.71
2.TERRY FOX S	1.50	61.36	61.36
3.FERNBANK	1.50	38.38	38.38
Total			65.11 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	55.12	55.12
2.TERRY FOX S	1.50	53.77	53.77
3.FERNBANK	1.50	30.79	30.79
Total			57.52 dBA

```
TOTAL Leq FROM ALL SOURCES (DAY): 65.11
                           (NIGHT): 57.52
```

STAMSON 5.0 SUMMARY REPORT Date: 12-11-2025 09:01:21
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2r9.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -75.00 deg 70.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 47.90 / 47.90 m
Receiver height : 4.50 / 4.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -75.00 deg Angle2 : -60.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 14.80 / 14.80 m
Source elevation : 97.75 m
Receiver elevation : 99.81 m
Barrier elevation : 98.04 m
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -75.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  57.80 / 57.80  m
Receiver height           :   4.50 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -75.00 deg   Angle2 : -60.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  14.80 / 14.80  m
Source elevation          :  97.75 m
Receiver elevation        :  99.81 m
Barrier elevation         :  98.04 m
Reference angle           :   0.00

♠
Road data, segment # 3: FERNBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 3: FERNBANK (day/night)
------------------------------------------
Angle1   Angle2           : -60.00 deg   25.00 deg
```

```
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     50 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 116.30 / 116.30 m
Receiver height           :   4.50 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -60.00 deg   Angle2 : 25.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  14.20 / 14.20  m
Source elevation          :  97.40 m
Receiver elevation        :  99.81 m
Barrier elevation         :  97.94 m
Reference angle           :   0.00
```

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	63.28	63.28
2.TERRY FOX S	1.50	62.02	62.02
3.FERNBANK	1.50	44.03	44.03
Total			65.74 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	55.68	55.68
2.TERRY FOX S	1.50	54.42	54.42
3.FERNBANK	1.50	36.43	36.43
Total			58.14 dBA

```
TOTAL Leq FROM ALL SOURCES (DAY): 65.74
                           (NIGHT): 58.14
```

STAMSON 5.0 SUMMARY REPORT Date: 28-10-2025 09:43:46
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r10.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -70.00 deg 75.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 46.40 / 46.40 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -70.00 deg Angle2 : -45.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 14.80 / 14.80 m
Source elevation : 97.70 m
Receiver elevation : 99.86 m
Barrier elevation : 98.04 m
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -70.00 deg   75.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  56.40 / 56.40  m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -70.00 deg   Angle2 : -45.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  14.80 / 14.80  m
Source elevation          :  97.70 m
Receiver elevation        :  99.86 m
Barrier elevation         :  98.04 m
Reference angle           :   0.00

↟
Road data, segment # 3: FERNBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 3: FERNBANK (day/night)
------------------------------------------
Angle1   Angle2           : -70.00 deg   15.00 deg
```

```
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  88.90 / 88.90  m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -40.00 deg   Angle2 : -15.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  33.80 / 33.80  m
Source elevation          :  97.40 m
Receiver elevation        :  99.86 m
Barrier elevation         :  97.99 m
Reference angle           :   0.00
```



```
Road data, segment # 4: FERBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 4: FERBANK (day/night)
-----------------------------------------
Angle1   Angle2           :  15.00 deg   30.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  88.90 / 88.90  m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            :  15.00 deg   Angle2 : 30.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  25.60 / 25.60  m
Source elevation          :  97.40 m
Receiver elevation        :  99.86 m
Barrier elevation         :  98.04 m
Reference angle           :   0.00
```

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	62.60	62.60
2.TERRY FOX S	1.50	61.20	61.20
3.FERNBANK	1.50	57.53	57.53
4.FERBANK	1.50	33.62	33.62
Total			65.69 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	55.01	55.01
2.TERRY FOX S	1.50	53.61	53.61
3.FERNBANK	1.50	49.93	49.93
4.FERBANK	1.50	26.02	26.02
Total			58.10 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 65.69
(NIGHT): 58.10

STAMSON 5.0 SUMMARY REPORT Date: 27-10-2025 15:28:37
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2R10.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -70.00 deg 75.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 46.40 / 46.40 m
Receiver height : 4.50 / 4.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -70.00 deg Angle2 : -45.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 14.80 / 14.80 m
Source elevation : 97.70 m
Receiver elevation : 99.86 m
Barrier elevation : 98.04 m
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -70.00 deg   75.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  56.40 / 56.40  m
Receiver height           :   4.50 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -70.00 deg   Angle2 : -45.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  14.80 / 14.80  m
Source elevation          :  97.70 m
Receiver elevation        :  99.86 m
Barrier elevation         :  98.04 m
Reference angle           :   0.00

♠
Road data, segment # 3: FERNBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 3: FERNBANK (day/night)
------------------------------------------
Angle1   Angle2           : -70.00 deg   15.00 deg
```

```
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  88.90 / 88.90  m
Receiver height           :   4.50 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -40.00 deg   Angle2 : -15.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  33.80 / 33.80  m
Source elevation          :  97.40 m
Receiver elevation        :  99.86 m
Barrier elevation         :  97.99 m
Reference angle           :   0.00
```



```
Road data, segment # 4: FERBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 4: FERBANK (day/night)
-----------------------------------------
Angle1   Angle2           :  15.00 deg   30.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  88.90 / 88.90  m
Receiver height           :   4.50 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            :  15.00 deg   Angle2 : 30.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  25.60 / 25.60  m
Source elevation          :  97.40 m
Receiver elevation        :  99.86 m
Barrier elevation         :  98.04 m
Reference angle           :   0.00
```

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	63.16	63.16
2.TERRY FOX S	1.50	61.86	61.86
3.FERNBANK	1.50	57.56	57.56
4.FERBANK	1.50	37.02	37.02
Total			66.21 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	55.57	55.57
2.TERRY FOX S	1.50	54.26	54.26
3.FERNBANK	1.50	49.96	49.96
4.FERBANK	1.50	29.43	29.43
Total			58.62 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 66.21
(NIGHT): 58.62

STAMSON 5.0 SUMMARY REPORT Date: 10-11-2025 11:24:59
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r11.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -80.00 deg 80.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 21.70 / 21.70 m
Receiver height : 1.50 / 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -80.00 deg   80.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  31.70 / 31.70  m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Road data, segment # 3: FERNBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 3: FERNBANK (day/night)
------------------------------------------
Angle1   Angle2           : -90.00 deg   40.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  33.40 / 33.40  m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -90.00 deg   Angle2 : -75.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   1.00 / 1.00   m
Source elevation          :  97.50 m
Receiver elevation        :  99.63 m
Barrier elevation         :  97.99 m
```

Reference angle : 0.00

↟

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	68.91	68.91
2.TERRY FOX S	1.50	66.17	66.17
3.FERNBANK	1.50	61.64	61.64
Total			71.26 dBA

↟

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	61.31	61.31
2.TERRY FOX S	1.50	58.58	58.58
3.FERNBANK	1.50	54.04	54.04
Total			63.67 dBA

↟

TOTAL Leq FROM ALL SOURCES (DAY): 71.26
(NIGHT): 63.67

↟
↟

STAMSON 5.0 SUMMARY REPORT Date: 10-11-2025 11:27:11
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2r11.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -80.00 deg 80.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 21.70 / 21.70 m
Receiver height : 4.50 / 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -80.00 deg   80.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  31.70 / 31.70  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

```
Road data, segment # 3: FERNBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 3: FERNBANK (day/night)
------------------------------------------
Angle1   Angle2           : -90.00 deg   40.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  33.40 / 33.40  m
Receiver height           :   4.50 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -90.00 deg   Angle2 : -75.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   1.00 / 1.00   m
Source elevation          :  97.50 m
Receiver elevation        :  99.63 m
Barrier elevation         :  97.99 m
```

Reference angle : 0.00

Result summary (day)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	69.18	69.18
2.TERRY FOX S	1.50	66.59	66.59
3.FERNBANK	1.50	62.07	62.07
Total			71.60 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	61.58	61.58
2.TERRY FOX S	1.50	59.00	59.00
3.FERNBANK	1.50	54.47	54.47
Total			64.00 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 71.60
(NIGHT): 64.00

STAMSON 5.0 SUMMARY REPORT Date: 12-11-2025 09:59:28
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r12.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -70.00 deg 70.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 63.30 / 63.30 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 10.00 deg Angle2 : 55.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 29.30 / 29.30 m
Source elevation : 97.60 m
Receiver elevation : 99.58 m
Barrier elevation : 98.04 m
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -70.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  74.30 / 74.30  m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            :  10.00 deg   Angle2 : 55.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  29.30 / 29.30  m
Source elevation          :  97.60 m
Receiver elevation        :  99.58 m
Barrier elevation         :  98.04 m
Reference angle           :   0.00

↟
Road data, segment # 3: FERNBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 3: FERNBANK (day/night)
------------------------------------------
Angle1   Angle2           : -90.00 deg   70.00 deg
```

```
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  23.40 / 23.40  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.TERRY FOX N	1.50	59.18	59.18
2.TERRY FOX S	1.50	58.05	58.05
3.FERNBANK	1.50	65.13	65.13
Total			66.74 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	51.58	51.58
2.TERRY FOX S	1.50	50.45	50.45
3.FERNBANK	1.50	57.53	57.53
Total			59.14 dBA

```
TOTAL Leq FROM ALL SOURCES (DAY): 66.74
                           (NIGHT): 59.14
```

STAMSON 5.0 SUMMARY REPORT Date: 12-11-2025 10:00:17
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 2r12.te Time Period: Day/Night 16/8 hours
Description:

Road data, segment # 1: TERRY FOX N (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 17500
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: TERRY FOX N (day/night)

Angle1 Angle2 : -70.00 deg 70.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 63.30 / 63.30 m
Receiver height : 4.50 / 4.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : 10.00 deg Angle2 : 55.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 29.30 / 29.30 m
Source elevation : 97.60 m
Receiver elevation : 99.58 m
Barrier elevation : 98.04 m
Reference angle : 0.00

↟
Road data, segment # 2: TERRY FOX S (day/night)

Car traffic volume : 14168/1232 veh/TimePeriod *
Medium truck volume : 1127/98 veh/TimePeriod *
Heavy truck volume : 805/70 veh/TimePeriod *
Posted speed limit : 80 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 2: TERRY FOX S (day/night)
---------------------------------------------
Angle1   Angle2           : -70.00 deg   70.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  74.30 / 74.30  m
Receiver height           :   4.50 / 4.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            :  10.00 deg   Angle2 : 55.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  29.30 / 29.30  m
Source elevation          :  97.60 m
Receiver elevation        :  99.58 m
Barrier elevation         :  98.04 m
Reference angle           :   0.00

↟
Road data, segment # 3: FERNBANK (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  :    60 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  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 # 3: FERNBANK (day/night)
------------------------------------------
Angle1   Angle2           : -90.00 deg   70.00 deg
```

```
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  23.40 / 23.40  m
Receiver height           :   4.50 / 4.50   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.TERRY FOX N	1.50	59.90	59.90
2.TERRY FOX S	1.50	58.86	58.86
3.FERNBANK	1.50	65.43	65.43
Total			67.19 dBA

↟

Result summary (night)

---

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.TERRY FOX N	1.50	52.31	52.31
2.TERRY FOX S	1.50	51.26	51.26
3.FERNBANK	1.50	57.83	57.83
Total			59.59 dBA

↟

```
TOTAL Leq FROM ALL SOURCES (DAY): 67.19
                           (NIGHT): 59.59
```

↟

↟

STAMSON 5.0 SUMMARY REPORT Date: 15-06-2026 10:19:41
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r13.te Time Period: Day/Night 16/8 hours
Description: R13 - Outdoor Amenity Area

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -85.00 deg 10.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 71.00 / 71.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -85.00 deg Angle2 : -50.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 3.00 / 3.00 m
Source elevation : 97.20 m
Receiver elevation : 97.10 m
Barrier elevation : 97.40 m
Reference angle : 0.00

Road data, segment # 2: COPE (day/night)

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %

```
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):   8000
    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 # 2: COPE (day/night)
--------------------------------------
Angle1   Angle2           :  10.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     95 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  71.00 / 71.00  m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

♠
Road data, segment # 3: TERRY FOX (day/night)
---------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX (day/night)
-------------------------------------------
Angle1   Angle2           : -50.00 deg   -25.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     75 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 138.00 / 138.00 m
```

```
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -50.00 deg   Angle2 : -25.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.50 m
Receiver elevation        :  97.10 m
Barrier elevation         :  97.45 m
Reference angle           :   0.00
```



```
Road data, segment # 4: TERRY FOX (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 4: TERRY FOX (day/night)
-----------------------------------------------
Angle1   Angle2           : -50.00 deg   -25.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     75 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 148.00 / 148.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -50.00 deg   Angle2 : -25.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.50 m
Receiver elevation        :  97.10 m
Barrier elevation         :  97.45 m
Reference angle           :   0.00
```



```
Road data, segment # 5: TERRY FOX (day/night)
-----------------------------------------------
```

```
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 5: TERRY FOX (day/night)
-------------------------------------------
Angle1   Angle2           : -25.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     90 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 138.00 / 138.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -25.00 deg   Angle2 : 60.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.50 m
Receiver elevation        :  97.10 m
Barrier elevation         :  97.55 m
Reference angle           :   0.00

♠
Road data, segment # 6: TERRY FOX (day/night)
---------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 6: TERRY FOX (day/night)
------------------------------------------
Angle1   Angle2           : -25.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     90 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 148.00 / 148.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -25.00 deg   Angle2 : 60.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.50 m
Receiver elevation        :  97.10 m
Barrier elevation         :  97.55 m
Reference angle           :   0.00
```

↟

```
Result summary (day)
--------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.COPE             !     1.50 !    54.26 !    54.26
 2.COPE             !     1.50 !    40.09 !    40.09
 3.TERRY FOX        !     1.50 !    33.72 !    33.72
 4.TERRY FOX        !     1.50 !    33.39 !    33.39
 5.TERRY FOX        !     1.50 !    39.08 !    39.08
 6.TERRY FOX        !     1.50 !    38.74 !    38.74
--------------------+----------+----------+----------
                      Total                   54.73 dBA
```

↟

```
Barrier table for segment # 1: COPE (day)
-----------------------------------------

Barrier ! Elev of !  Road   ! Tot Leq !
Height  ! Barr Top!  dBA    !   dBA   !
--------+---------+---------+---------+
  10.60 !  108.00 !   54.26 !   54.26 !
  11.10 !  108.50 !   54.25 !   54.25 !
  11.60 !  109.00 !   54.25 !   54.25 !
  12.10 !  109.50 !   54.25 !   54.25 !
  12.60 !  110.00 !   54.25 !   54.25 !
```

13.10	110.50	54.25	54.25
13.60	111.00	54.25	54.25
14.10	111.50	54.25	54.25
14.60	112.00	54.25	54.25
15.10	112.50	54.25	54.25

Barrier table for segment # 3: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.05	34.69	34.69
11.10	108.55	34.95	34.95
11.60	109.05	34.95	34.95
12.10	109.55	34.95	34.95
12.60	110.05	34.95	34.95
13.10	110.55	34.95	34.95
13.60	111.05	34.95	34.95
14.10	111.55	34.95	34.95
14.60	112.05	34.95	34.95
15.10	112.55	34.95	34.95

Barrier table for segment # 4: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.05	34.38	34.38
11.10	108.55	34.64	34.64
11.60	109.05	34.64	34.64
12.10	109.55	34.64	34.64
12.60	110.05	34.64	34.64
13.10	110.55	34.64	34.64
13.60	111.05	34.64	34.64
14.10	111.55	34.64	34.64
14.60	112.05	34.64	34.64
15.10	112.55	34.64	34.64

Barrier table for segment # 5: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.15	40.01	40.01
11.10	108.65	40.26	40.26
11.60	109.15	40.26	40.26
12.10	109.65	40.26	40.26

```
  12.60 !  110.15 !   40.26 !   40.26 !
  13.10 !  110.65 !   40.26 !   40.26 !
  13.60 !  111.15 !   40.26 !   40.26 !
  14.10 !  111.65 !   40.26 !   40.26 !
  14.60 !  112.15 !   40.26 !   40.26 !
  15.10 !  112.65 !   40.26 !   40.26 !

Barrier table for segment # 6: TERRY FOX (day)
----------------------------------------------

Barrier ! Elev of !  Road   ! Tot Leq !
Height  ! Barr Top!  dBA    !   dBA   !
--------+---------+---------+---------+
  10.60 !  108.15 !   39.70 !   39.70 !
  11.10 !  108.65 !   39.96 !   39.96 !
  11.60 !  109.15 !   39.96 !   39.96 !
  12.10 !  109.65 !   39.96 !   39.96 !
  12.60 !  110.15 !   39.96 !   39.96 !
  13.10 !  110.65 !   39.96 !   39.96 !
  13.60 !  111.15 !   39.96 !   39.96 !
  14.10 !  111.65 !   39.96 !   39.96 !
  14.60 !  112.15 !   39.96 !   39.96 !
  15.10 !  112.65 !   39.96 !   39.96 !

Result summary (night)
----------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.COPE             !     1.50 !    46.67 !    46.67
 2.COPE             !     1.50 !    32.50 !    32.50
 3.TERRY FOX        !     1.50 !    26.13 !    26.13
 4.TERRY FOX        !     1.50 !    25.79 !    25.79
 5.TERRY FOX        !     1.50 !    31.49 !    31.49
 6.TERRY FOX        !     1.50 !    31.15 !    31.15
--------------------+----------+----------+----------
                      Total                   47.14 dBA


TOTAL Leq FROM ALL SOURCES (DAY): 54.73
                           (NIGHT): 47.14
```

STAMSON 5.0 SUMMARY REPORT Date: 05-03-2026 15:49:51
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: 1r14.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -70.00 deg 10.00 deg
Wood depth : 0 (No woods.)
No of house rows : 2 / 2
House density : 75 %
Surface : 1 (Absorptive ground surface)
Receiver source distance : 123.00 / 123.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -70.00 deg Angle2 : -5.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 14.00 / 14.00 m
Source elevation : 97.20 m
Receiver elevation : 97.00 m
Barrier elevation : 97.40 m
Reference angle : 0.00

Road data, segment # 2: COPE (day/night)

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h

```
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):   8000
    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 # 2: COPE (day/night)
--------------------------------------
Angle1   Angle2           :  10.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     95 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 123.00 / 123.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 3: TERRY FOX (day/night)
---------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX (day/night)
-------------------------------------------
Angle1   Angle2           : -50.00 deg   5.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     75 %
Surface                   :      1       (Absorptive ground surface)
```

```
Receiver source distance  : 116.00 / 116.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -50.00 deg   Angle2 : 5.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  15.00 / 15.00  m
Source elevation          :  98.45 m
Receiver elevation        :  97.00 m
Barrier elevation         :  97.50 m
Reference angle           :   0.00
```



```
Road data, segment # 4: TERRY FOX (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 4: TERRY FOX (day/night)
-----------------------------------------------
Angle1   Angle2           : -50.00 deg   5.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     75 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 126.00 / 126.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -50.00 deg   Angle2 : 5.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :  15.00 / 15.00  m
Source elevation          :  98.45 m
Receiver elevation        :  97.00 m
Barrier elevation         :  97.50 m
Reference angle           :   0.00
```



```
Road data, segment # 5: TERRY FOX (day/night)
```

```
-------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 5: TERRY FOX (day/night)
-------------------------------------------
Angle1   Angle2           :   5.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     66 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 116.00 / 116.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            :  35.00 deg   Angle2 : 60.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.45 m
Receiver elevation        :  97.00 m
Barrier elevation         :  97.50 m
Reference angle           :   0.00

↟
Road data, segment # 6: TERRY FOX (day/night)
-------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 6: TERRY FOX (day/night)
-------------------------------------------
Angle1   Angle2           :   5.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     66 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 126.00 / 126.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            :  35.00 deg   Angle2 : 60.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.45 m
Receiver elevation        :  97.00 m
Barrier elevation         :  97.50 m
Reference angle           :   0.00
```

↟

```
Result summary (day)
--------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.COPE             !     1.50 !    35.54 !    35.54
 2.COPE             !     1.50 !    36.80 !    36.80
 3.TERRY FOX        !     1.50 !    38.11 !    38.11
 4.TERRY FOX        !     1.50 !    37.72 !    37.72
 5.TERRY FOX        !     1.50 !    46.68 !    46.68
 6.TERRY FOX        !     1.50 !    46.11 !    46.11
--------------------+----------+----------+----------
                      Total                   50.34 dBA
```

↟

```
Barrier table for segment # 1: COPE (day)
-----------------------------------------

Barrier ! Elev of !  Road   ! Tot Leq !
Height  ! Barr Top!  dBA    !   dBA   !
--------+---------+---------+---------+
  10.60 !  108.00 !   35.74 !   35.74 !
  11.10 !  108.50 !   35.82 !   35.82 !
  11.60 !  109.00 !   35.80 !   35.80 !
  12.10 !  109.50 !   35.79 !   35.79 !
```

12.60	110.00	35.78	35.78
13.10	110.50	35.78	35.78
13.60	111.00	35.78	35.78
14.10	111.50	35.78	35.78
14.60	112.00	35.78	35.78
15.10	112.50	35.78	35.78

Barrier table for segment # 3: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.10	38.90	38.90
11.10	108.60	39.12	39.12
11.60	109.10	39.12	39.12
12.10	109.60	39.12	39.12
12.60	110.10	39.12	39.12
13.10	110.60	39.12	39.12
13.60	111.10	39.12	39.12
14.10	111.60	39.12	39.12
14.60	112.10	39.12	39.12
15.10	112.60	39.12	39.12

Barrier table for segment # 4: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.10	38.53	38.53
11.10	108.60	38.76	38.76
11.60	109.10	38.76	38.76
12.10	109.60	38.76	38.76
12.60	110.10	38.76	38.76
13.10	110.60	38.76	38.76
13.60	111.10	38.76	38.76
14.10	111.60	38.76	38.76
14.60	112.10	38.76	38.76
15.10	112.60	38.76	38.76

Barrier table for segment # 5: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.10	46.74	46.74
11.10	108.60	46.76	46.76
11.60	109.10	46.76	46.76

12.10	109.60	46.76	46.76
12.60	110.10	46.76	46.76
13.10	110.60	46.76	46.76
13.60	111.10	46.76	46.76
14.10	111.60	46.76	46.76
14.60	112.10	46.76	46.76
15.10	112.60	46.76	46.76

Barrier table for segment # 6: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.10	46.18	46.18
11.10	108.60	46.20	46.20
11.60	109.10	46.20	46.20
12.10	109.60	46.20	46.20
12.60	110.10	46.20	46.20
13.10	110.60	46.20	46.20
13.60	111.10	46.20	46.20
14.10	111.60	46.20	46.20
14.60	112.10	46.20	46.20
15.10	112.60	46.20	46.20

🠝

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.COPE	1.50	27.95	27.95
2.COPE	1.50	29.21	29.21
3.TERRY FOX	1.50	30.52	30.52
4.TERRY FOX	1.50	30.13	30.13
5.TERRY FOX	1.50	39.08	39.08
6.TERRY FOX	1.50	38.51	38.51
Total			42.74 dBA

🠝

Barrier table for segment # 1: COPE (night)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.00	28.15	28.15

11.10	108.50	28.23	28.23
11.60	109.00	28.21	28.21
12.10	109.50	28.20	28.20
12.60	110.00	28.19	28.19
13.10	110.50	28.19	28.19
13.60	111.00	28.19	28.19
14.10	111.50	28.19	28.19
14.60	112.00	28.19	28.19
15.10	112.50	28.19	28.19

Barrier table for segment # 3: TERRY FOX (night)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.10	31.30	31.30
11.10	108.60	31.53	31.53
11.60	109.10	31.53	31.53
12.10	109.60	31.53	31.53
12.60	110.10	31.53	31.53
13.10	110.60	31.53	31.53
13.60	111.10	31.53	31.53
14.10	111.60	31.53	31.53
14.60	112.10	31.53	31.53
15.10	112.60	31.53	31.53

Barrier table for segment # 4: TERRY FOX (night)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.10	30.93	30.93
11.10	108.60	31.17	31.17
11.60	109.10	31.17	31.17
12.10	109.60	31.17	31.17
12.60	110.10	31.17	31.17
13.10	110.60	31.17	31.17
13.60	111.10	31.17	31.17
14.10	111.60	31.17	31.17
14.60	112.10	31.17	31.17
15.10	112.60	31.17	31.17

Barrier table for segment # 5: TERRY FOX (night)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA

10.60	108.10	39.15	39.15
11.10	108.60	39.16	39.16
11.60	109.10	39.16	39.16
12.10	109.60	39.16	39.16
12.60	110.10	39.16	39.16
13.10	110.60	39.16	39.16
13.60	111.10	39.16	39.16
14.10	111.60	39.16	39.16
14.60	112.10	39.16	39.16
15.10	112.60	39.16	39.16

Barrier table for segment # 6: TERRY FOX (night)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.10	38.58	38.58
11.10	108.60	38.60	38.60
11.60	109.10	38.60	38.60
12.10	109.60	38.60	38.60
12.60	110.10	38.60	38.60
13.10	110.60	38.60	38.60
13.60	111.10	38.60	38.60
14.10	111.60	38.60	38.60
14.60	112.10	38.60	38.60
15.10	112.60	38.60	38.60

TOTAL Leq FROM ALL SOURCES (DAY): 50.34
(NIGHT): 42.74

STAMSON 5.0 SUMMARY REPORT Date: 06-03-2026 09:03:22
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r15.te Time Period: Day/Night 16/8 hours
Description:

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

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 1 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 8000
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: COPE (day/night)

Angle1 Angle2 : -55.00 deg 5.00 deg
Wood depth : 0 (No woods.)
No of house rows : 4 / 4
House density : 75 %
Surface : 1 (Absorptive ground surface)
Receiver source distance : 172.00 / 172.00 m
Receiver height : 1.50 / 1.50 m
Topography : 2 (Flat/gentle slope; with barrier)
Barrier angle1 : -55.00 deg Angle2 : 5.00 deg
Barrier height : 9.10 m
Barrier receiver distance : 22.00 / 22.00 m
Source elevation : 97.20 m
Receiver elevation : 97.60 m
Barrier elevation : 97.60 m
Reference angle : 0.00

Road data, segment # 2: COPE (day/night)

Car traffic volume : 6477/563 veh/TimePeriod *
Medium truck volume : 515/45 veh/TimePeriod *
Heavy truck volume : 368/32 veh/TimePeriod *
Posted speed limit : 50 km/h

```
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):   8000
    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 # 2: COPE (day/night)
--------------------------------------
Angle1   Angle2           :   5.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     95 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 172.00 / 172.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 3: TERRY FOX (day/night)
---------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 3: TERRY FOX (day/night)
-------------------------------------------
Angle1   Angle2           : -55.00 deg   -25.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     75 %
Surface                   :      1       (Absorptive ground surface)
```

```
Receiver source distance  : 106.00 / 106.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -55.00 deg   Angle2 : -25.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.30 m
Receiver elevation        :  97.60 m
Barrier elevation         :  97.75 m
Reference angle           :   0.00
```



```
Road data, segment # 4: TERRY FOX (day/night)
-----------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 4: TERRY FOX (day/night)
-----------------------------------------------
Angle1   Angle2           : -55.00 deg   -25.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      1 / 1
House density             :     75 %
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 116.00 / 116.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -55.00 deg   Angle2 : -25.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.30 m
Receiver elevation        :  97.60 m
Barrier elevation         :  97.75 m
Reference angle           :   0.00
```



```
Road data, segment # 5: TERRY FOX (day/night)
```

```
-------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 5: TERRY FOX (day/night)
-------------------------------------------
Angle1   Angle2           : -25.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 106.00 / 106.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -25.00 deg   Angle2 : 60.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.30 m
Receiver elevation        :  97.60 m
Barrier elevation         :  97.60 m
Reference angle           :   0.00

♠
Road data, segment # 6: TERRY FOX (day/night)
-------------------------------------------
Car traffic volume  : 14168/1232  veh/TimePeriod  *
Medium truck volume :  1127/98    veh/TimePeriod  *
Heavy truck volume  :   805/70    veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     1 %
Road pavement       :     1 (Typical asphalt or concrete)

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

    24 hr Traffic Volume (AADT or SADT):  17500
    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 # 6: TERRY FOX (day/night)
------------------------------------------
Angle1   Angle2           : -25.00 deg   60.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 116.00 / 116.00 m
Receiver height           :   1.50 / 1.50   m
Topography                :      2       (Flat/gentle slope; with barrier)
Barrier angle1            : -25.00 deg   Angle2 : 60.00 deg
Barrier height            :   9.10 m
Barrier receiver distance :   6.00 / 6.00   m
Source elevation          :  98.30 m
Receiver elevation        :  97.60 m
Barrier elevation         :  97.60 m
Reference angle           :   0.00
```

↟

```
Result summary (day)
--------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.COPE             !     1.50 !    30.48 !    30.48
 2.COPE             !     1.50 !    35.09 !    35.09
 3.TERRY FOX        !     1.50 !    35.77 !    35.77
 4.TERRY FOX        !     1.50 !    35.34 !    35.34
 5.TERRY FOX        !     1.50 !    40.36 !    40.36
 6.TERRY FOX        !     1.50 !    39.92 !    39.92
--------------------+----------+----------+----------
                      Total                   45.08 dBA
```

↟

```
Barrier table for segment # 1: COPE (day)
-----------------------------------------

Barrier ! Elev of !  Road   ! Tot Leq !
Height  ! Barr Top!  dBA    !   dBA   !
--------+---------+---------+---------+
  10.60 !  108.20 !   30.36 !   30.36 !
  11.10 !  108.70 !   30.50 !   30.50 !
  11.60 !  109.20 !   30.42 !   30.42 !
  12.10 !  109.70 !   30.39 !   30.39 !
  12.60 !  110.20 !   30.38 !   30.38 !
  13.10 !  110.70 !   30.38 !   30.38 !
```

13.60	111.20	30.38	30.38
14.10	111.70	30.38	30.38
14.60	112.20	30.38	30.38
15.10	112.70	30.38	30.38

Barrier table for segment # 3: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.35	36.65	36.65
11.10	108.85	36.88	36.88
11.60	109.35	36.88	36.88
12.10	109.85	36.88	36.88
12.60	110.35	36.88	36.88
13.10	110.85	36.88	36.88
13.60	111.35	36.88	36.88
14.10	111.85	36.88	36.88
14.60	112.35	36.88	36.88
15.10	112.85	36.88	36.88

Barrier table for segment # 4: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.35	36.25	36.25
11.10	108.85	36.49	36.49
11.60	109.35	36.49	36.49
12.10	109.85	36.49	36.49
12.60	110.35	36.49	36.49
13.10	110.85	36.49	36.49
13.60	111.35	36.49	36.49
14.10	111.85	36.49	36.49
14.60	112.35	36.49	36.49
15.10	112.85	36.49	36.49

Barrier table for segment # 5: TERRY FOX (day)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.20	41.18	41.18
11.10	108.70	41.41	41.41
11.60	109.20	41.41	41.41
12.10	109.70	41.41	41.41
12.60	110.20	41.41	41.41

```
  13.10 !  110.70 !   41.41 !   41.41 !
  13.60 !  111.20 !   41.41 !   41.41 !
  14.10 !  111.70 !   41.41 !   41.41 !
  14.60 !  112.20 !   41.41 !   41.41 !
  15.10 !  112.70 !   41.41 !   41.41 !

Barrier table for segment # 6: TERRY FOX (day)
----------------------------------------------

Barrier ! Elev of !  Road   ! Tot Leq !
Height  ! Barr Top!  dBA    !   dBA   !
--------+---------+---------+---------+
  10.60 !  108.20 !   40.78 !   40.78 !
  11.10 !  108.70 !   41.01 !   41.01 !
  11.60 !  109.20 !   41.01 !   41.01 !
  12.10 !  109.70 !   41.01 !   41.01 !
  12.60 !  110.20 !   41.01 !   41.01 !
  13.10 !  110.70 !   41.01 !   41.01 !
  13.60 !  111.20 !   41.01 !   41.01 !
  14.10 !  111.70 !   41.01 !   41.01 !
  14.60 !  112.20 !   41.01 !   41.01 !
  15.10 !  112.70 !   41.01 !   41.01 !

🠝
Result summary (night)
----------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.COPE             !     1.50 !    22.89 !    22.89
 2.COPE             !     1.50 !    27.50 !    27.50
 3.TERRY FOX        !     1.50 !    28.18 !    28.18
 4.TERRY FOX        !     1.50 !    27.74 !    27.74
 5.TERRY FOX        !     1.50 !    32.76 !    32.76
 6.TERRY FOX        !     1.50 !    32.33 !    32.33
--------------------+----------+----------+----------
                      Total                  37.49 dBA

🠝
Barrier table for segment # 1: COPE (night)
-------------------------------------------

Barrier ! Elev of !  Road   ! Tot Leq !
Height  ! Barr Top!  dBA    !   dBA   !
--------+---------+---------+---------+
  10.60 !  108.20 !   22.77 !   22.77 !
  11.10 !  108.70 !   22.91 !   22.91 !
  11.60 !  109.20 !   22.83 !   22.83 !
```

12.10	109.70	22.80	22.80
12.60	110.20	22.79	22.79
13.10	110.70	22.79	22.79
13.60	111.20	22.79	22.79
14.10	111.70	22.79	22.79
14.60	112.20	22.79	22.79
15.10	112.70	22.79	22.79

Barrier table for segment # 3: TERRY FOX (night)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.35	29.05	29.05
11.10	108.85	29.29	29.29
11.60	109.35	29.29	29.29
12.10	109.85	29.29	29.29
12.60	110.35	29.29	29.29
13.10	110.85	29.29	29.29
13.60	111.35	29.29	29.29
14.10	111.85	29.29	29.29
14.60	112.35	29.29	29.29
15.10	112.85	29.29	29.29

Barrier table for segment # 4: TERRY FOX (night)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.35	28.65	28.65
11.10	108.85	28.89	28.89
11.60	109.35	28.89	28.89
12.10	109.85	28.89	28.89
12.60	110.35	28.89	28.89
13.10	110.85	28.89	28.89
13.60	111.35	28.89	28.89
14.10	111.85	28.89	28.89
14.60	112.35	28.89	28.89
15.10	112.85	28.89	28.89

Barrier table for segment # 5: TERRY FOX (night)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.20	33.59	33.59
11.10	108.70	33.81	33.81

11.60	109.20	33.81	33.81
12.10	109.70	33.81	33.81
12.60	110.20	33.81	33.81
13.10	110.70	33.81	33.81
13.60	111.20	33.81	33.81
14.10	111.70	33.81	33.81
14.60	112.20	33.81	33.81
15.10	112.70	33.81	33.81

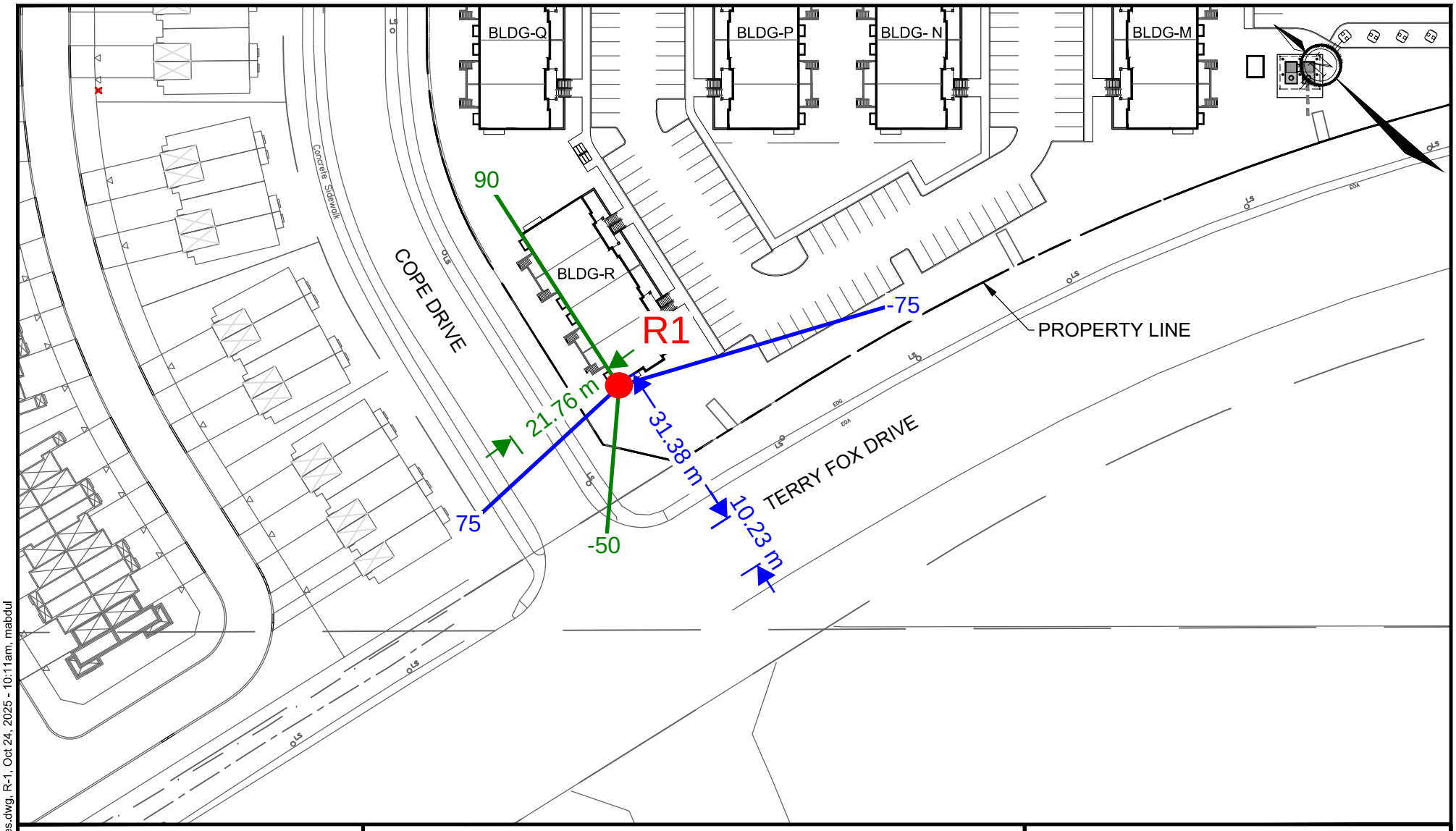
Barrier table for segment # 6: TERRY FOX (night)

Barrier Height	Elev of Barr Top	Road dBA	Tot Leq dBA
10.60	108.20	33.19	33.19
11.10	108.70	33.42	33.42
11.60	109.20	33.42	33.42
12.10	109.70	33.42	33.42
12.60	110.20	33.42	33.42
13.10	110.70	33.42	33.42
13.60	111.20	33.42	33.42
14.10	111.70	33.42	33.42
14.60	112.20	33.42	33.42
15.10	112.70	33.42	33.42

TOTAL Leq FROM ALL SOURCES (DAY): 45.08
(NIGHT): 37.49

PART 2 (APPENDIX B)

Stamson Modelling Figures



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CITY OF OTTAWA
CLARIDGE FERNBANK

RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0, 10, 20, 30, 40)

DATE MAR 2026 | JOB 121011 | FIGURE FIG-R1

SHT8X11.DWG - 216mmx279mm

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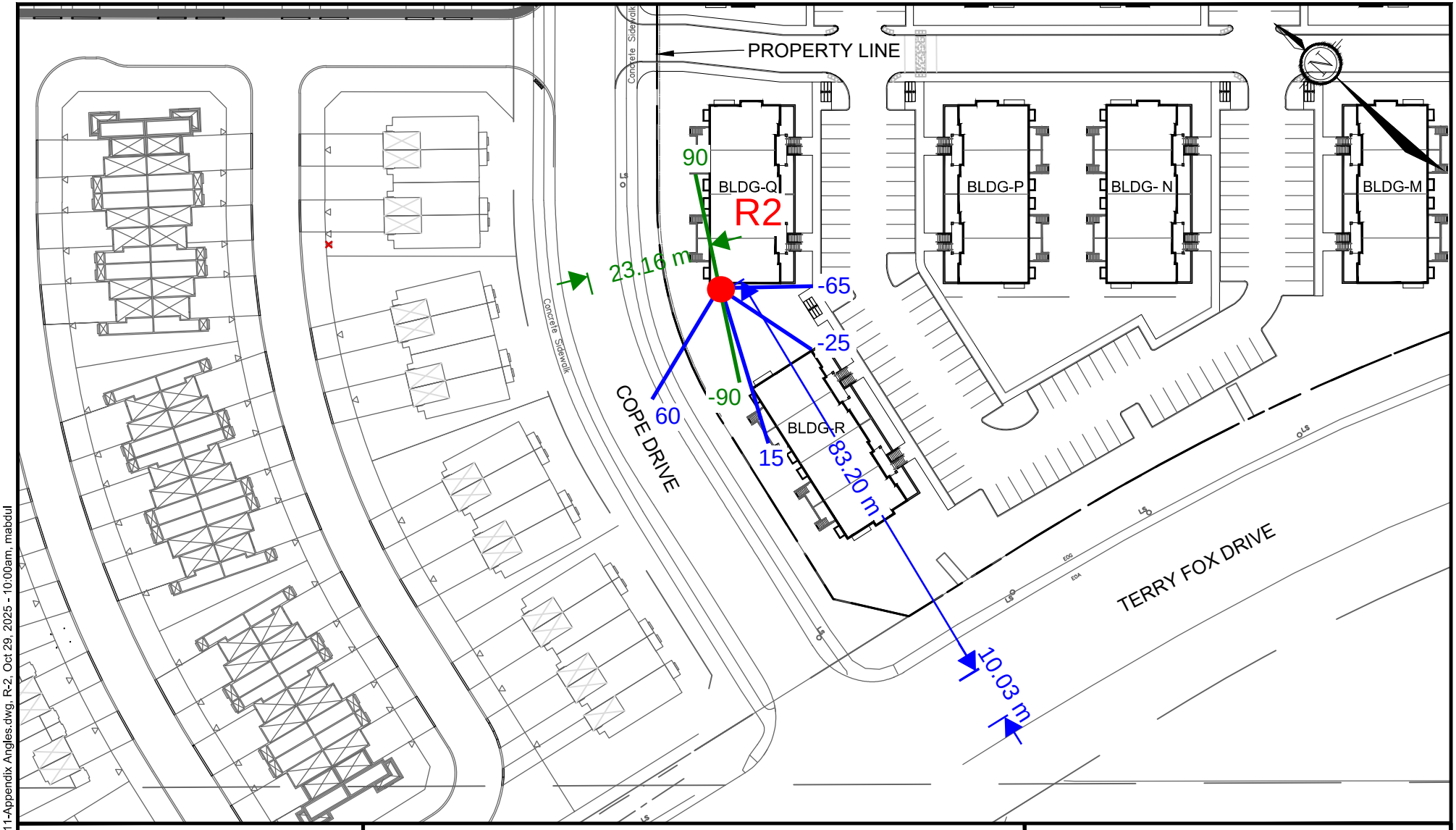

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CITY OF OTTAWA
CLARIDGE FERNBANK

RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0 10 20 30 40)

DATE MAR 2026 | JOB 121011 | FIGURE FIG-R2

SHT8X11.DWG - 216mmx279mm

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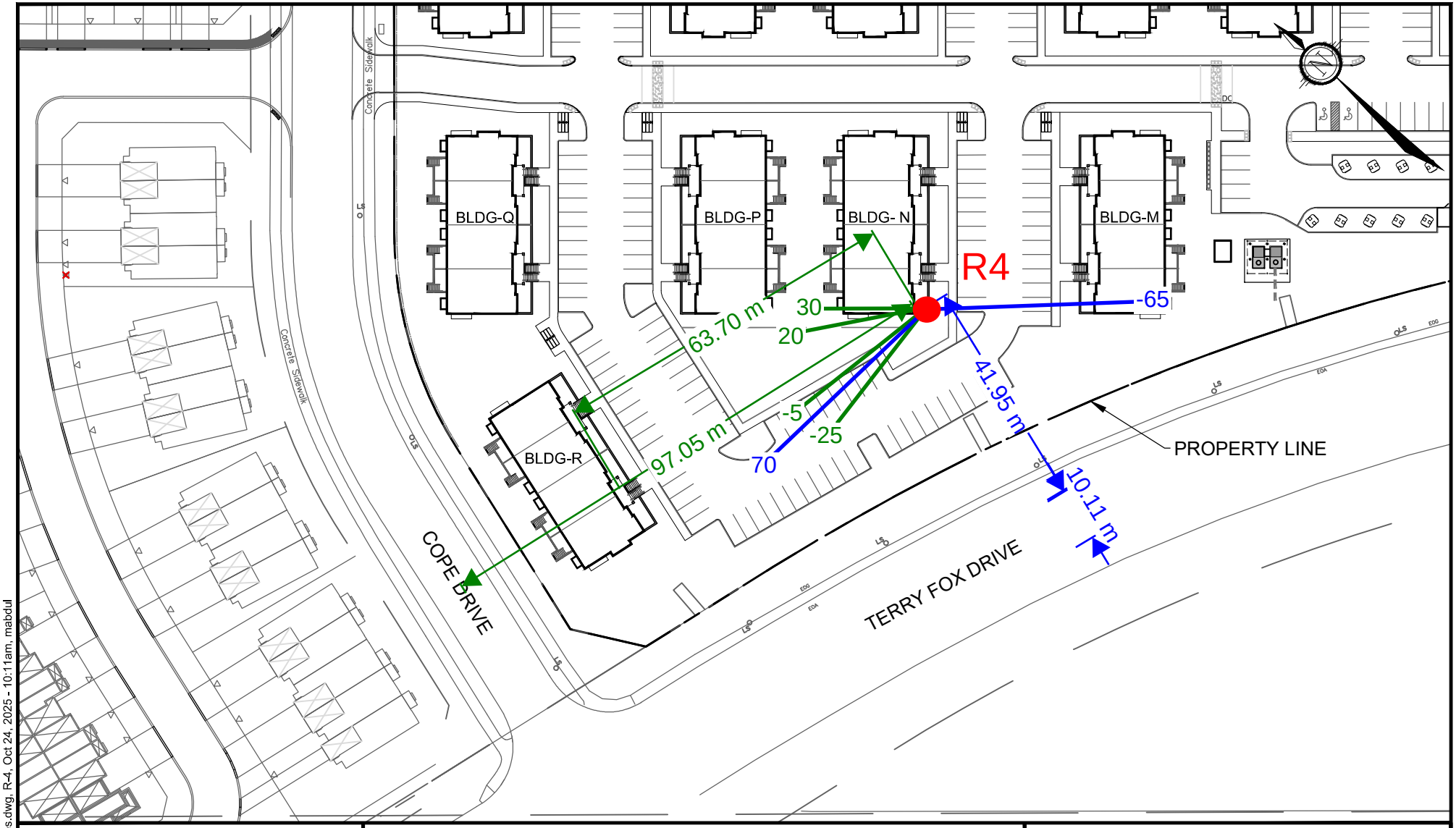

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RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0 10 20 30 40)

DATE MAR 2026 | JOB 121011 | FIGURE FIG-R4

SHT8X11.DWG - 216mmx279mm

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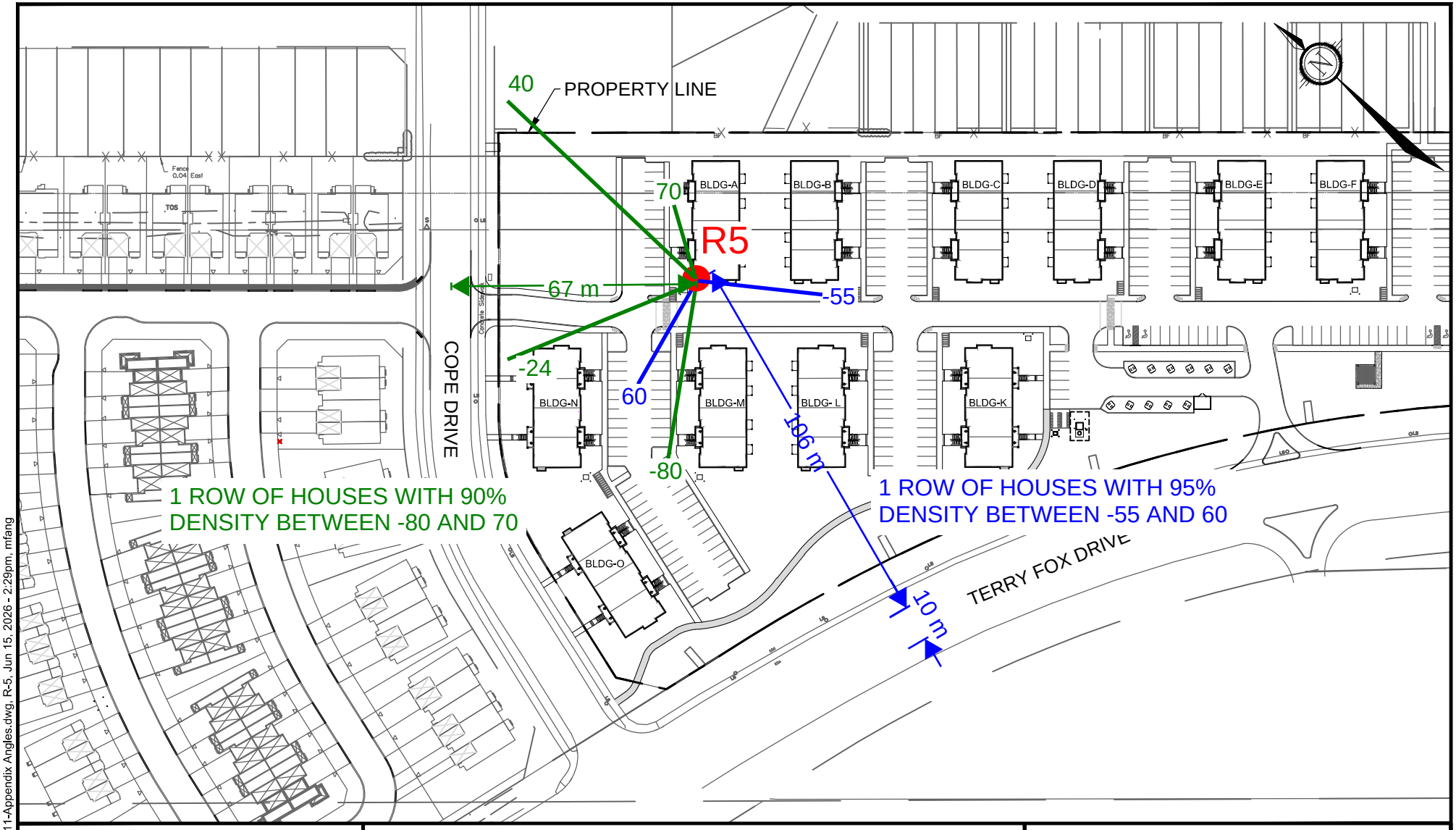

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CITY OF OTTAWA
CLARIDGE FERNBANK

RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1500 (0, 15, 30, 45, 60)

DATE	JOB	FIGURE
JUN 2026	121011	FIG-R5

SHT8X11.DWG - 216mmx279mm

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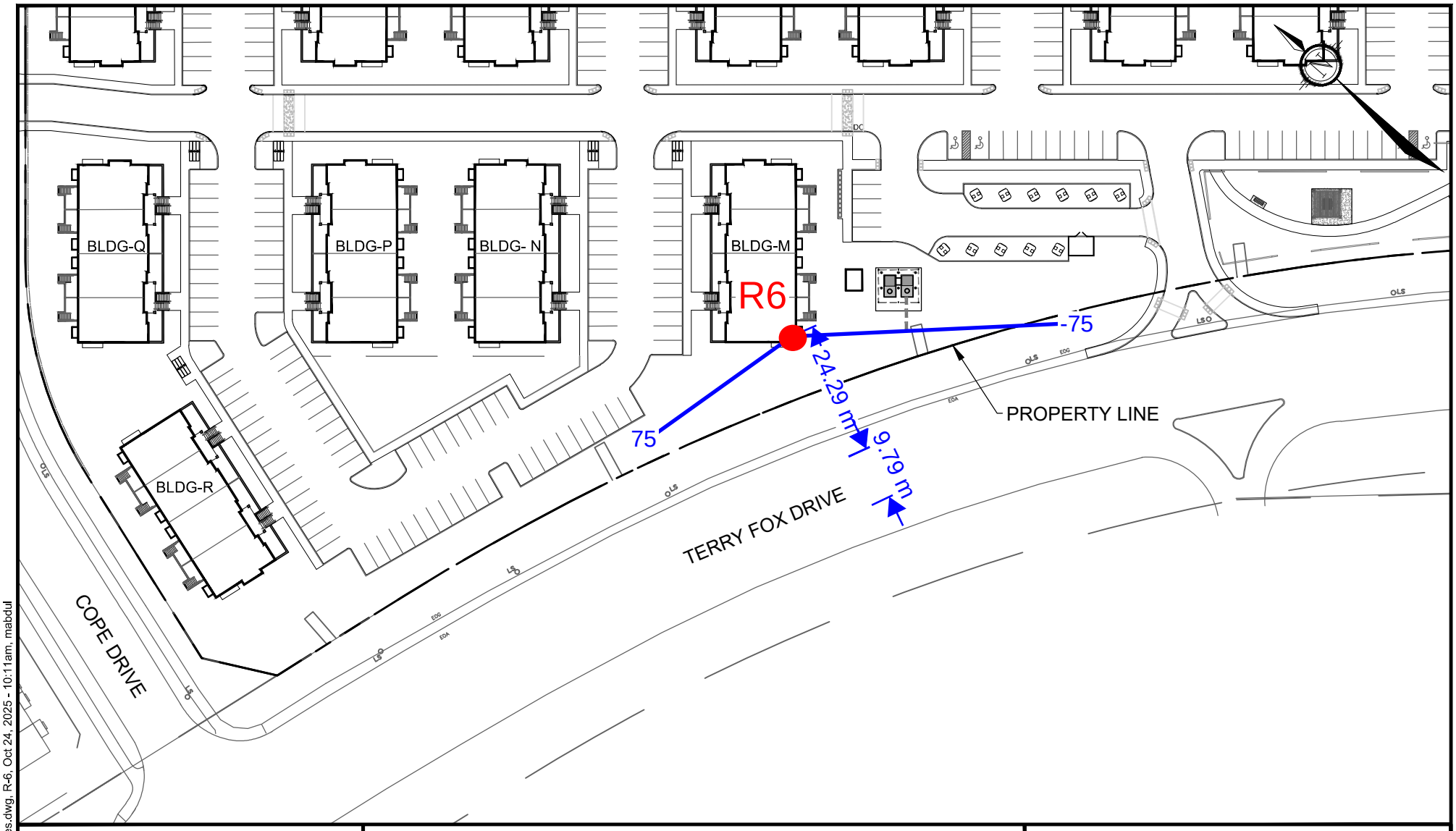

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CITY OF OTTAWA
CLARIDGE FERNBANK

RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0, 10, 20, 30, 40)

DATE	JOB	FIGURE
MAR 2026	121011	FIG-R6

SHT8X11.DWG - 216mmx279mm

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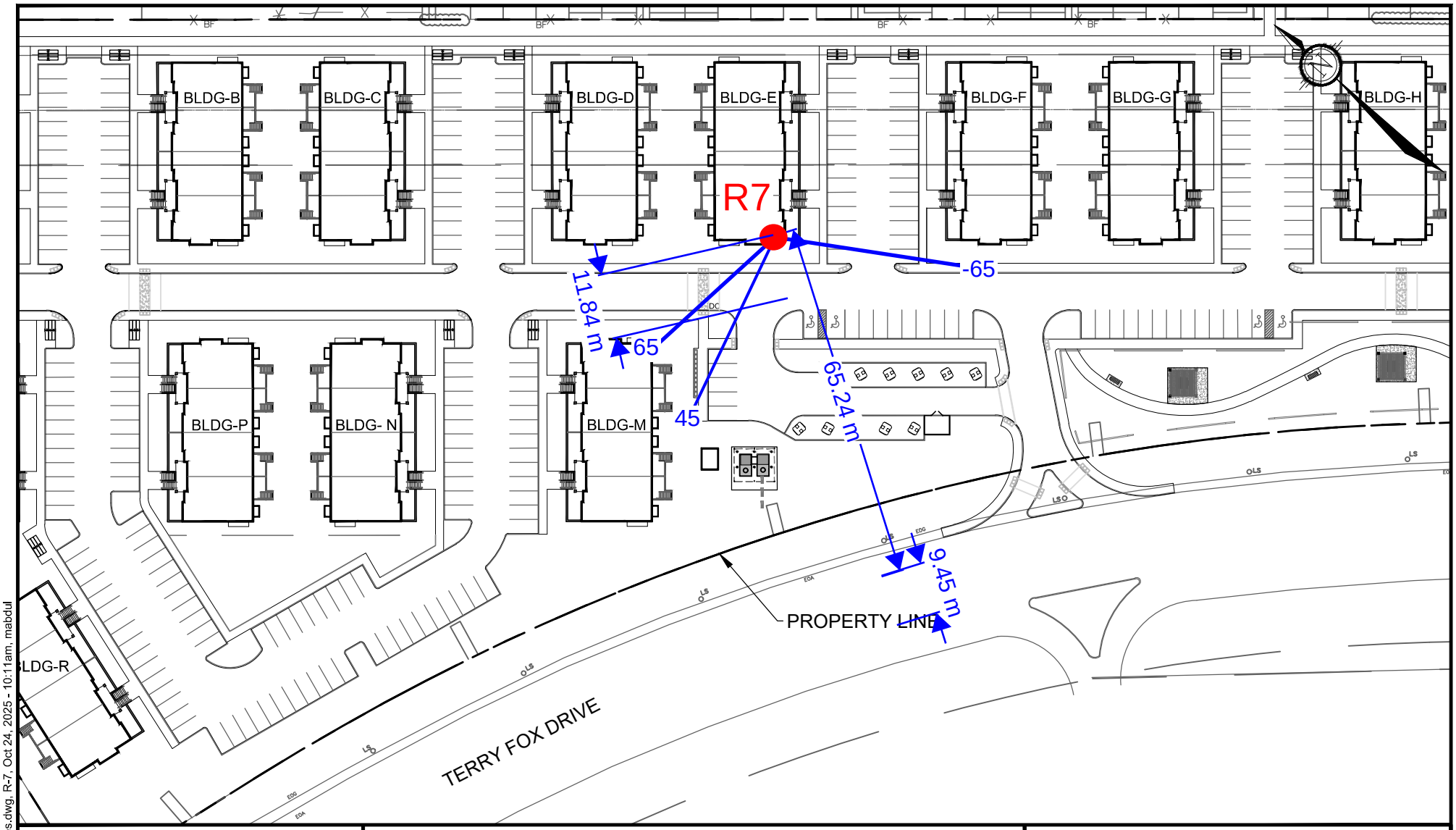

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CITY OF OTTAWA
CLARIDGE FERNBANK

RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0 10 20 30 40)

DATE MAR 2026 | JOB 121011 | FIGURE FIG-R7

SHT8X11.DWG - 216mmx279mm

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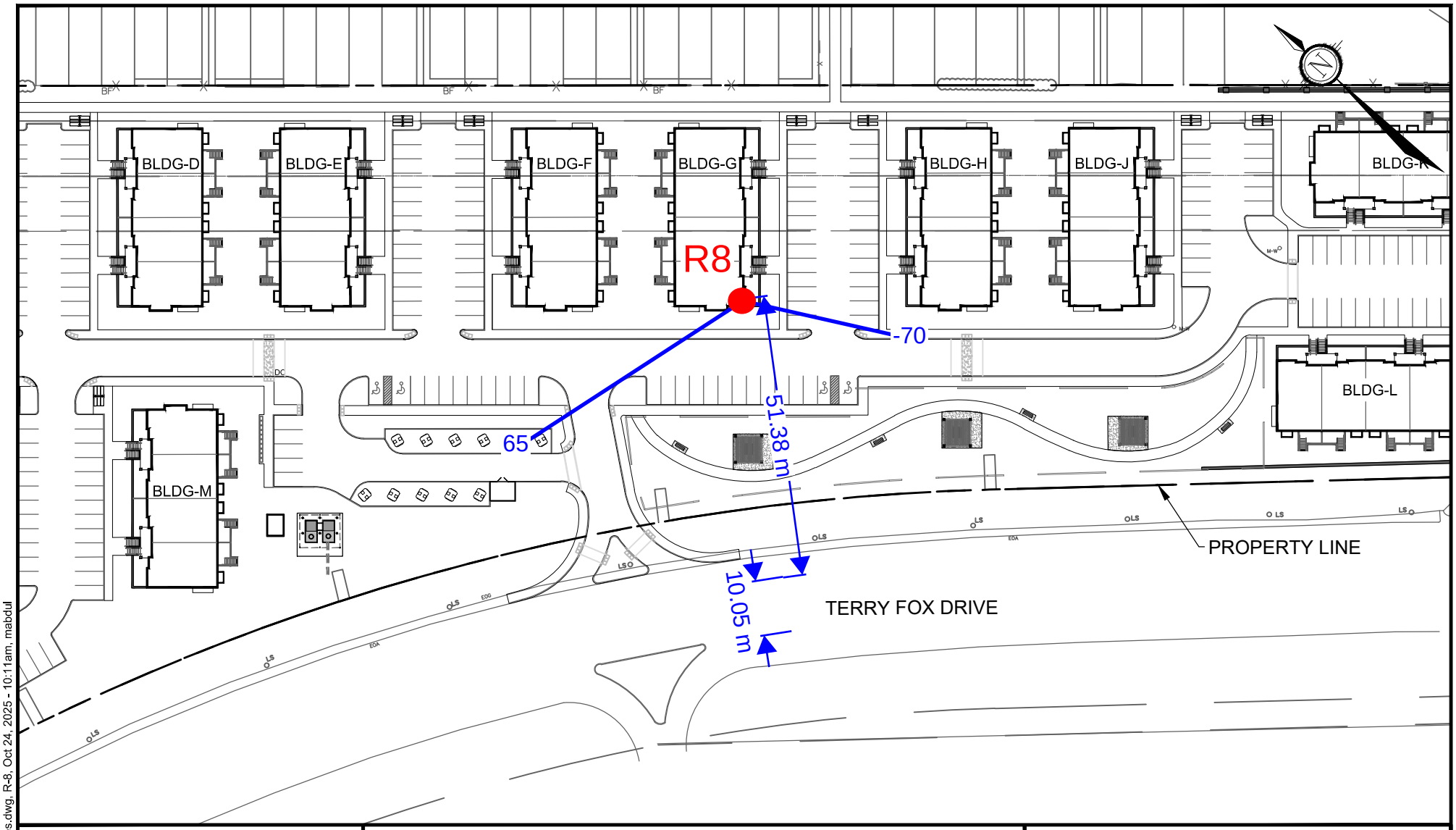

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CITY OF OTTAWA
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RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0 10 20 30 40)

DATE	JOB	FIGURE
MAR 2026	121011	FIG-R8

SHT8X11.DWG - 216mmx279mm

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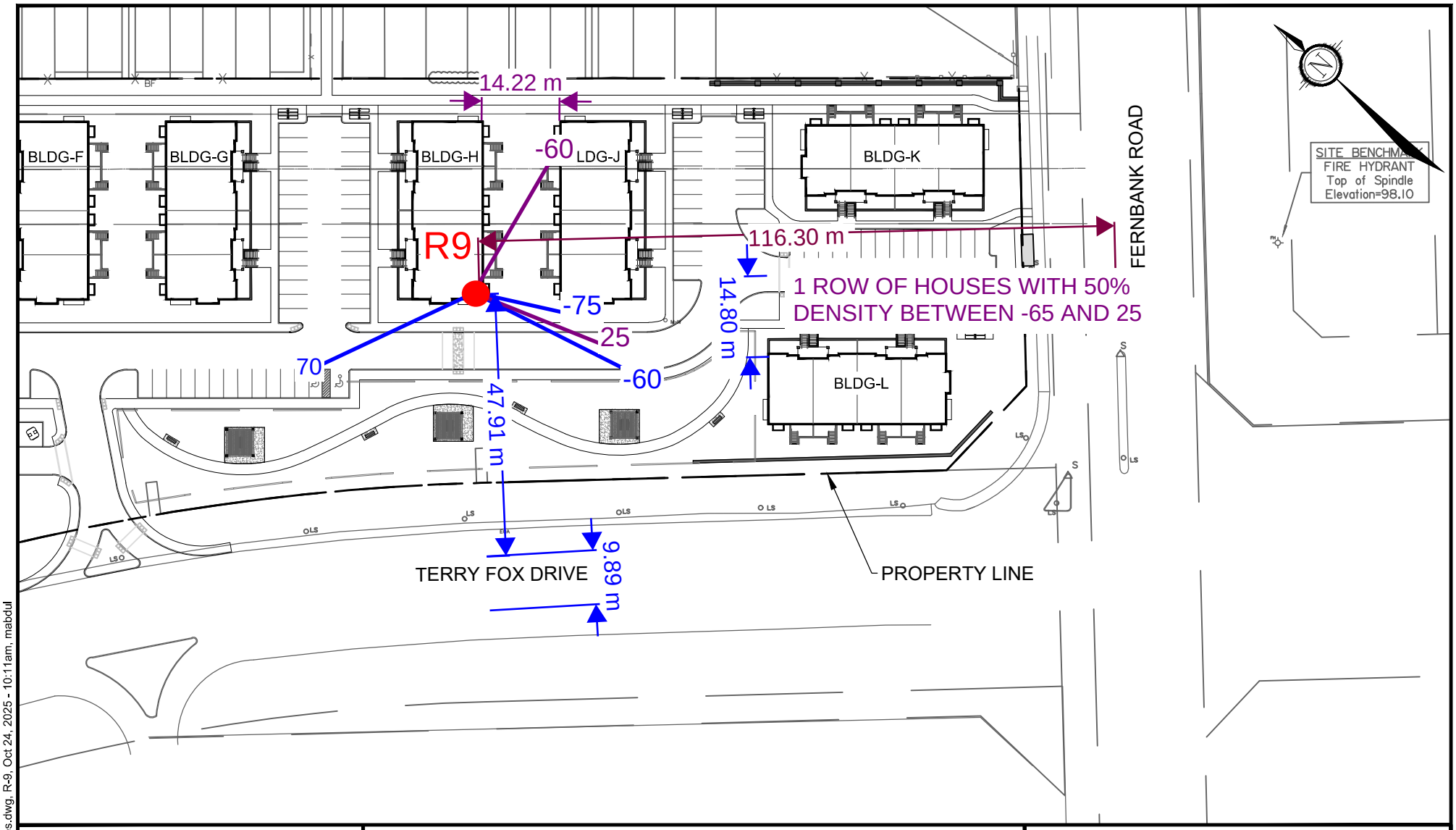

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CITY OF OTTAWA
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RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0 10 20 30 40)

DATE	JOB	FIGURE
MAR 2026	121011	FIG-R9

SHT8X11.DWG - 216mmx279mm

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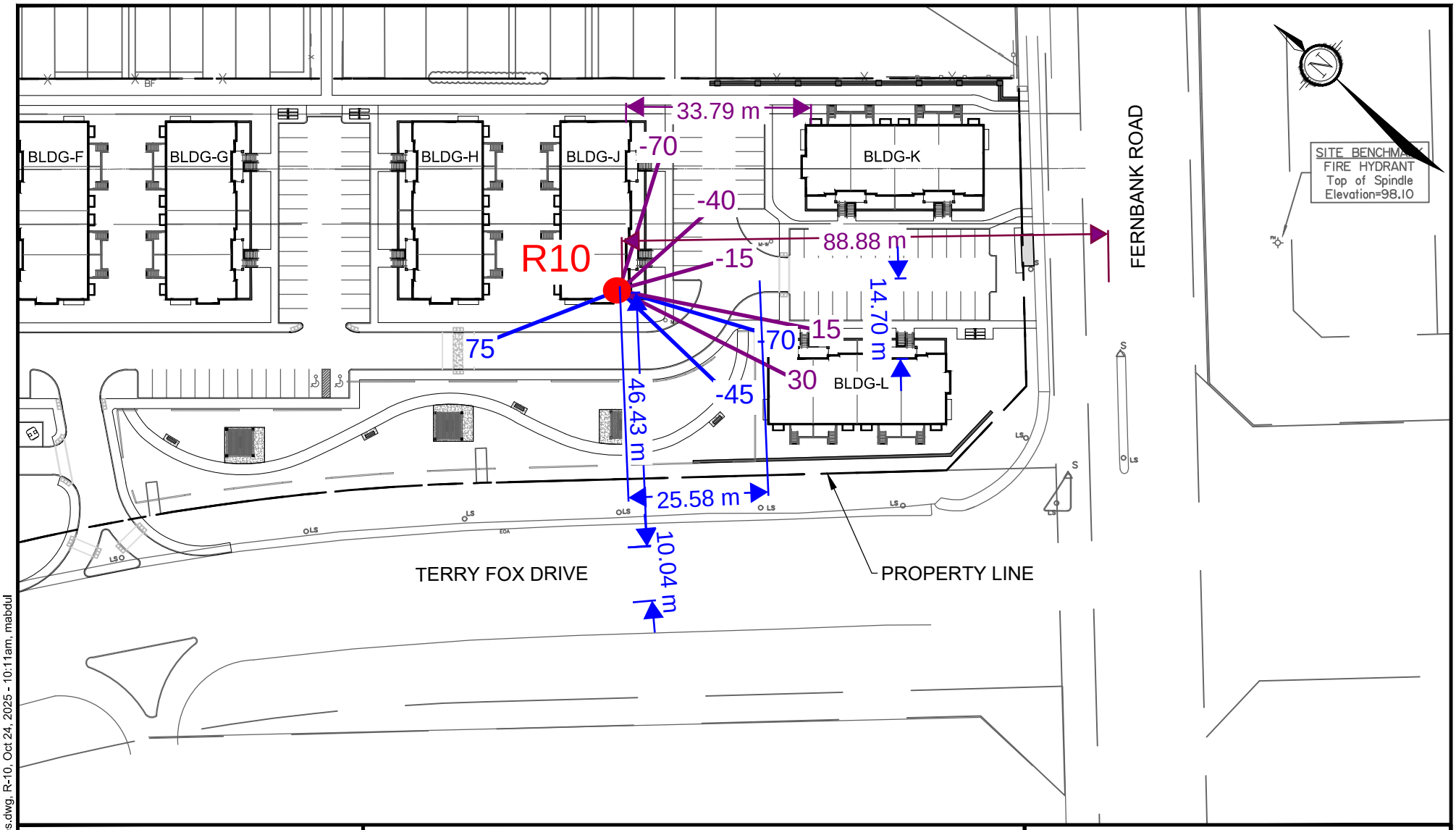

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RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0 10 20 30 40)

DATE MAR 2026 | JOB 121011 | FIGURE FIG-R10

SHT8X11.DWG - 216mmx279mm

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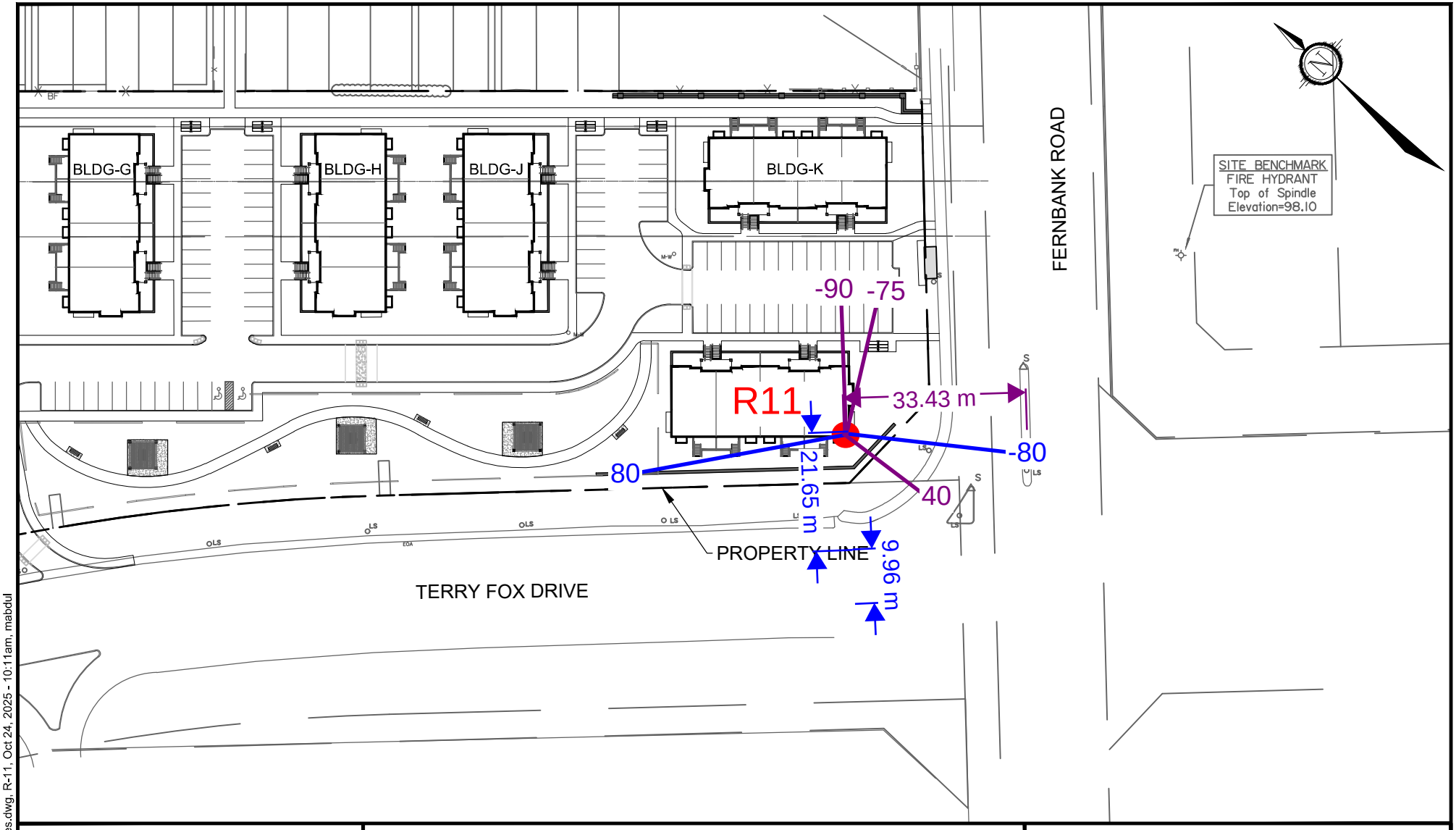

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CITY OF OTTAWA
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RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0 10 20 30 40)

DATE	JOB	FIGURE
MAR 2026	121011	FIG-R11

SHT8X11.DWG - 216mmx279mm

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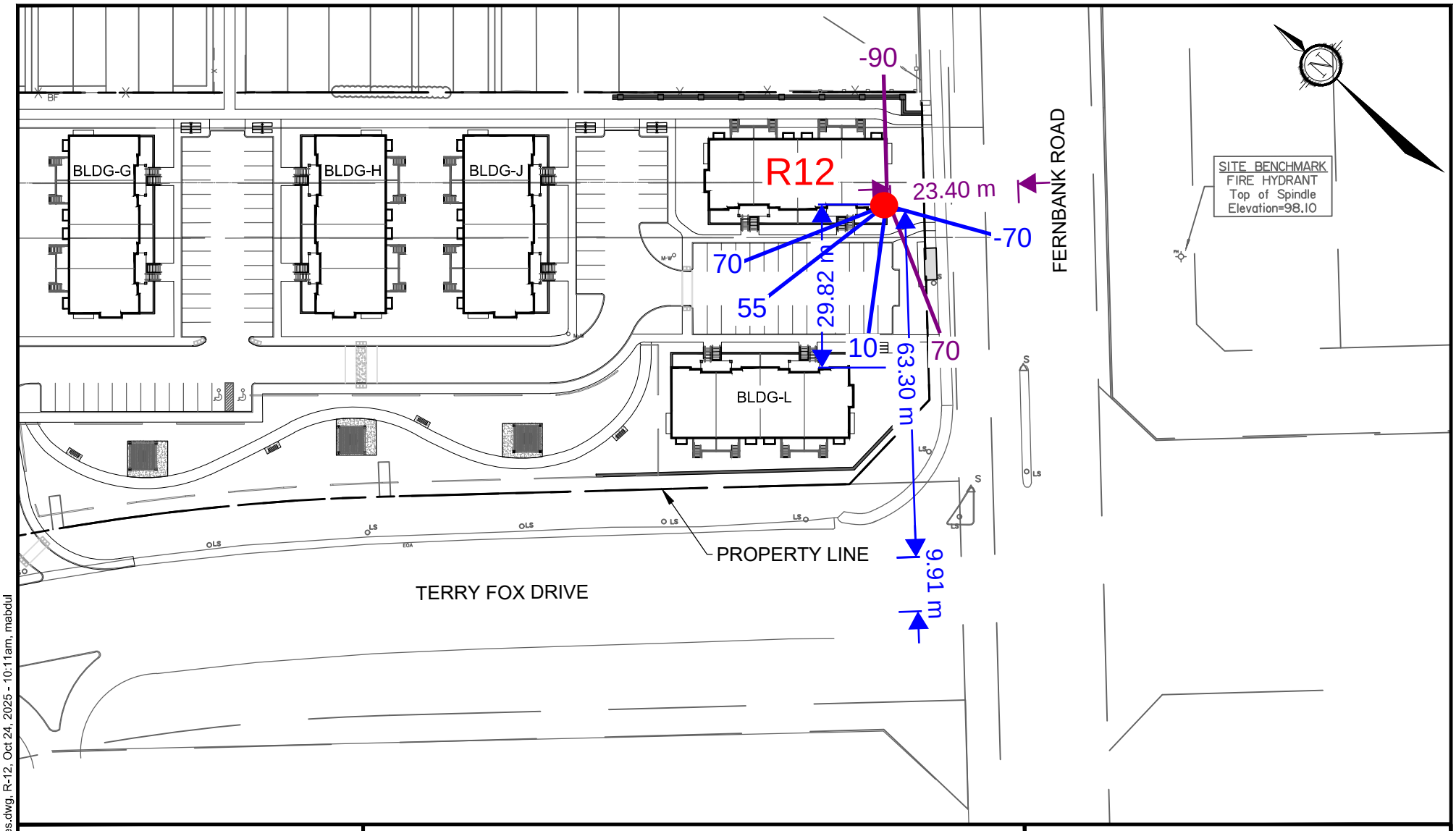

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CITY OF OTTAWA
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RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0 10 20 30 40)

DATE MAR 2026 | JOB 121011 | FIGURE FIG-R12

SHT8X11.DWG - 216mmx279mm

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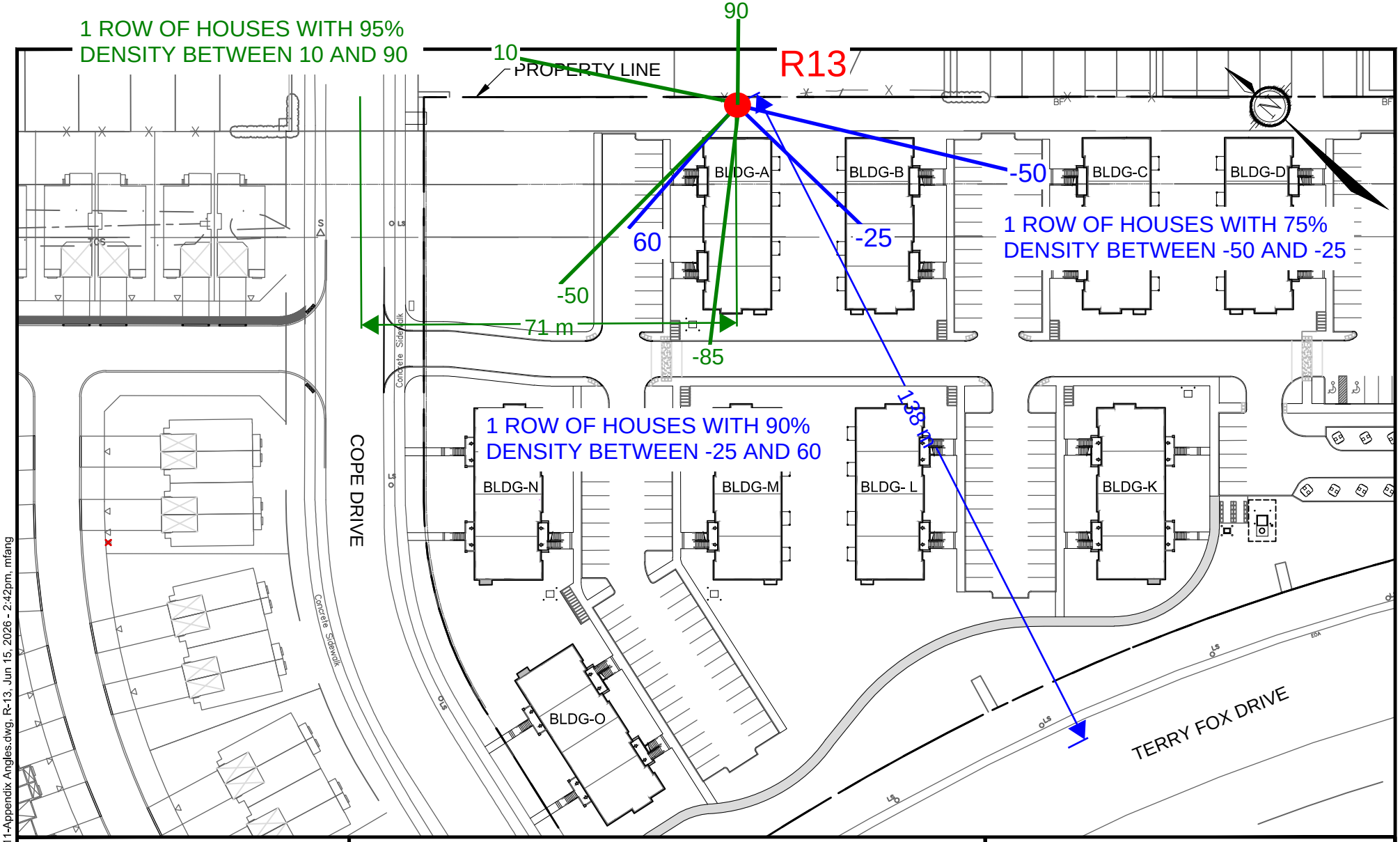

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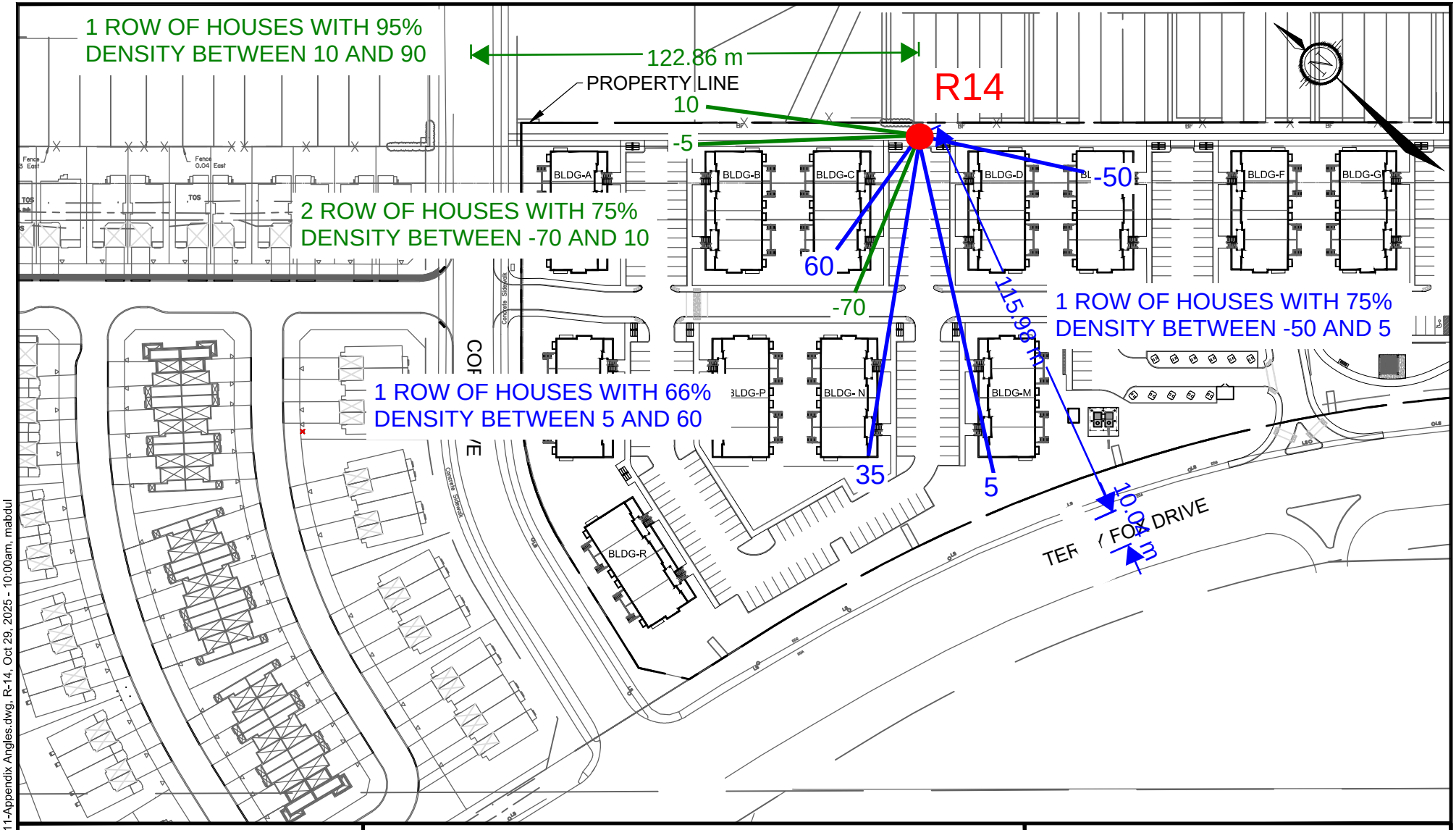
RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1000 (0 10 20 30 40)

DATE	JOB	FIGURE
JUN 2026	121011	FIG-R13

SHT8X11.DWG - 216mmx279mm



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CITY OF OTTAWA
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RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1500 (0, 15, 30, 45, 60)

DATE MAR 2026 | JOB 121011 | FIGURE FIG-R14

SHT8X11.DWG - 216mmx279mm

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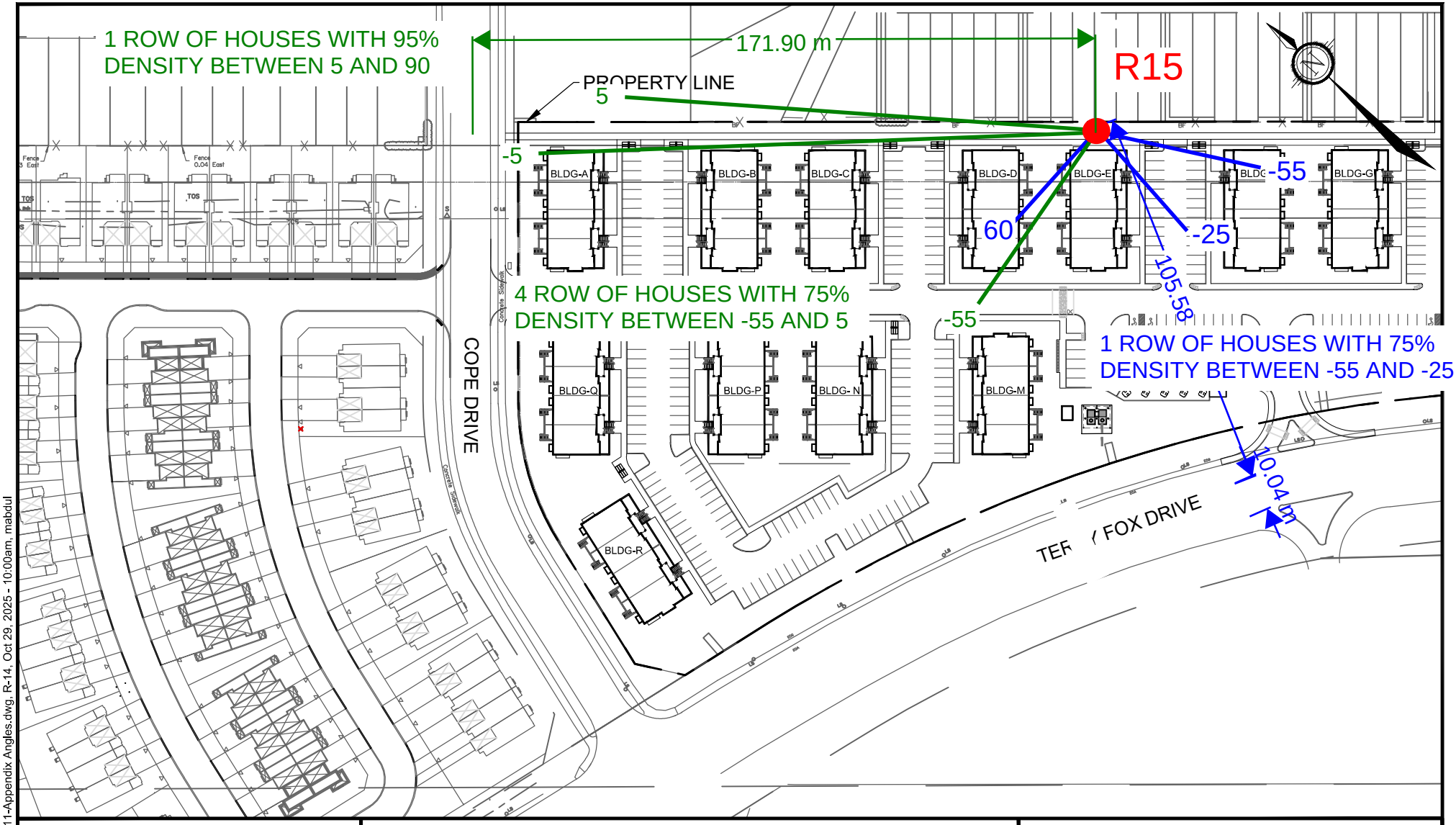

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CITY OF OTTAWA
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RECEIVER DISTANCE AND ANGLES

SCALE 1 : 1500 (0, 15, 30, 45, 60)

DATE MAR 2026 | JOB 121011 | FIGURE FIG-R15

SHT8X11.DWG - 216mmx279mm

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APPENDIX C

Acoustic Insulation Factor Tables

R1 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF 32
(from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	29	-3	50
Window	29	-3	50

Overall increase in total transmitted sound power = N/A
(sum of column above)

R1 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF 27 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	29	2	-18
Window	29	2	-18

Overall increase in total transmitted sound power = -36 (sum of column above)

R2 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF 28 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	24	-4	76
Window	24	-4	76

Overall increase in total transmitted sound power = N/A
(sum of column above)

R2 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF 23 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	24	1	-10
Window	24	1	-10

Overall increase in total transmitted sound power = -20 (sum of column above)

R4 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF 30
(from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	27	-3	50
Window	27	-3	50

Overall increase in total transmitted sound power = N/A
(sum of column above)

R4 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF 25 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	27	2	-18
Window	27	2	-18

Overall increase in total transmitted sound power = -36 (sum of column above)

R5 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF 28
(from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	13	-15	108
Window	13	-15	108

Overall increase in total transmitted sound power = N/A
(sum of column above)

R5 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF 23
(from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	13	-10	108
Window	13	-10	108

Overall increase in total transmitted sound power = N/A
(sum of column above)

R6 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF 33
(from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	30	-3	50
Window	30	-3	50

Overall increase in total transmitted sound power = N/A
(sum of column above)

R6 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF (from Table 3) 28

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	27	-1	13
Window	27	-1	13

Overall increase in total transmitted sound power = N/A
(sum of column above)

R7 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF (from Table 3) 28

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	23	-7	108
Window	23	-7	108

Overall increase in total transmitted sound power = N/A
(sum of column above)

R7 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF (from Table 3) 23

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	23	0	0
Window	23	0	0

Overall increase in total transmitted sound power = N/A
(sum of column above)

R8 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF (from Table 3) 28

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	25	-3	50
Window	25	-3	50

Overall increase in total transmitted sound power = N/A
(sum of column above)

R8 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF (from Table 3) 23

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	25	2	-18
Window	25	2	-18

Overall increase in total transmitted sound power = -36
(sum of column above)

R9 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF 29 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	26	-3	50
Window	26	-3	50

Overall increase in total transmitted sound power = N/A
(sum of column above)

R9 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF 24 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	26	2	-18
Window	26	2	-18

Overall increase in total transmitted sound power = -36 (sum of column above)

R10 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____

Number of components 2

Type of Room Bedroom

Averaged Required AIF (from Table 3) 29

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	26	-3	50
Window	26	-3	50

Overall increase in total transmitted sound power = N/A (sum of column above)

R10 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF 24 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	26	2	-18
Window	26	2	-18

Overall increase in total transmitted sound power = -36 (sum of column above)

R11 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF 35
(from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	32	-3	50
Window	32	-3	50

Overall increase in total transmitted sound power = N/A
(sum of column above)

R11 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF 30 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	32	2	-18
Window	32	2	-18

Overall increase in total transmitted sound power = -36 (sum of column above)

R12 Primary Bedroom/Bedroom 2

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14-	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Bedroom

Averaged Required AIF 29 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	26	-3	50
Window	26	-3	50

Overall increase in total transmitted sound power = N/A
(sum of column above)

R12 Living Room

TABLE 4: Chart for redistributing AIF requirements to compensate for components whose AIF's deviate from the average required value. Values in the body of the table indicate the percentage of transmitted sound power above (+ve) or below (-ve) the specified average sound power per component

Component AIF minus Average Required AIF	Total No. of Components 2	3	4	5	6
10 or more	-45	-30	-22	-18	-15
9	-44	-29	-22	-18	-15
8	-42	-28	-21	-17	-14
7	-40	-27	-20	-16	-13
6	-37	-25	-19	-15	-12
5	-34	-23	-17	-14	-10
4	-30	-20	-15	-12	-11
3	-25	-17	-12	-10	-8
2	-18	-12	-9	-7	-6
1	-10	-7	-5	-4	-3
0	0	0	0	0	0
-1	13	9	6	5	4
-2	29	20	15	12	10
-3	50	33	25	20	17
-4	76	50	38	30	25
-5	108	72	54	43	36

Percentage change in total transmitted sound power

Worksheet for Table 4 (using Example I)

Outdoor Noise Exposure Forecast _____
Number of components 2
Type of Room Living Room

Averaged Required AIF 24 (from Table 3)

Component	AIF	AIF Minus Average Required AIF	Increase in Transmitted Sound
Wall	26	2	-18
Window	26	2	-18

Overall increase in total transmitted sound power = -36 (sum of column above)

Primary Bedroom
Floors 1 & 2
Unit 1, 2, 3, &, 4

TABLE 5: Acoustic Insulation Factor for Various Types of Windows

Window area as a percentage of total floor area of room (1)													
4	5	6	8	10	13	16	20	25	32	40	50	63	80
Acoustic Insulation Factor (AIF) (2)													
35	34	33	32	31	30	29	28	27	26	25	24	23	22
36	35	34	33	32	31	30	29	28	27	26	25	24	23
37	36	35	34	33	32	31	30	29	28	27	26	25	24
38	37	36	35	34	33	32	31	30	29	28	27	26	25
39	38	37	36	35	34	33	32	31	30	29	28	27	26
40	39	38	37	36	35	34	33	32	31	30	29	28	27
41	40	39	38	37	36	35	34	33	32	31	30	29	28
42	41	40	39	38	37	36	35	34	33	32	31	30	29
43	42	41	40	39	38	37	36	35	34	33	32	31	30
44	43	42	41	40	39	38	37	36	35	34	33	32	31
45	44	43	42	41	40	39	38	37	36	35	34	33	32
46	45	44	43	42	41	40	39	38	37	36	35	34	33
47	46	45	44	43	42	41	40	39	38	37	36	35	34
48	47	46	45	44	43	42	41	40	39	38	37	36	35
49	48	47	46	45	44	43	42	41	40	39	38	37	36
50	49	48	47	46	45	44	43	42	41	40	39	38	37

Single glazing	Double glazing of indicated glass thickness					Triple Glazing	
	2mm and 2mm glass	3mm and 3mm glass	4mm and 4mm glass	3mm and 6mm glass	6mm and 6mm glass	3mm, 3mm and 3mm glass	3mm, 3mm and 6mm glass
Thickness	Interpane spacing in mm (3)					Interpane spacings in mm (5)	
2mm	6						
	13						
3mm	15	6					
4mm, 6mm	19	13	6				
	22	16	13	6	6	6,6	
9mm (4)	28	20	16	13	13	6,10	6,6
	35	25	20	16	16	6,15	6,10
12mm (4)	42	32	25	20	20	6,20	6,15
	50	40	32	25	24	6,30	6,20
	63	50	40	32	30	6,40	6,30
	80	63	50	40	37	6,50	6,40
	100	80	63	55	50	6,65	6,50
	125	100	80	75	70	6,80	6,65
	150	125	100	95	90	6,100	6,80
		150	125	110	100		6,100
			150	135	125		

All units except L and M

Unit M

Unit L

Source: National Research Council, Division of Building Research, June 1980.

Explanatory Notes:

1) Where the calculated percentage window area is not presented as a column heading, the nearest percentage column in the table values should be used.
2) AIF data listed in the table are for well-fitted weatherstripped units that can be opened. The AIF values apply only when the windows are closed. For windows fixed and sealed to the frame, add three (3) to the AIF given in the table.
3) If the interpane spacing or glass thickness for a specific double glazed window is not listed in the table, the nearest listed values should be used.
4) The AIF ratings for 9mm and 12mm glass are for laminated glass only; for solid glass subtract two (2) from the AIF values listed in the table.
5) If the interpane spacings for a specific triple-glazed window are not listed in the table, use the listed case whose combined spacings are nearest the actual combined spacing.
6) The AIF data listed in the table are for typical windows, but details of glass mounting, window seals, etc. may result in slightly different performance for some manufacturers' products. If laboratory sound transmission loss data (conforming to ASTM test method E-90) are available, these should be used to calculate the AIF.

Bedroom 2
Floors 1 & 2
Unit 1, 2, 3, &, 4

TABLE 5: Acoustic Insulation Factor for Various Types of Windows

Window area as a percentage of total floor area of room (1)														Single glazing	Double glazing of indicated glass thickness					Triple Glazing	
4	5	6	8	10	13	16	20	25	32	40	50	63	80		2mm and 2mm glass	3mm and 3mm glass	4mm and 4mm glass	3mm and 6mm glass	6mm and 6mm glass	3mm, 3mm and 3mm glass	3mm, 3mm and 6mm glass
Acoustic Insulation Factor (AIF) (2)														Thickness	Interpane spacing in mm (3)					Interpane spacings in mm (5)	
35	34	33	32	31	30	29	28	27	26	25	24	23	22	2mm	6						
36	35	34	33	32	31	30	29	28	27	26	25	24	23		13						
37	36	35	34	33	32	31	30	29	28	27	26	25	24	3mm	15	6					
38	37	36	35	34	33	32	31	30	29	28	27	26	25	4mm, 6mm	18	13	6				
39	38	37	36	35	34	33	32	31	30	29	28	27	26		22	16	13	6	6	6,6	
40	39	38	37	36	35	34	33	32	31	30	29	28	27	9mm (4)	28	20	16	13	13	6,10	6,6
41	40	39	38	37	36	35	34	33	32	31	30	29	28		35	25	20	16	16	6,15	6,10
42	41	40	39	38	37	36	35	34	33	32	31	30	29	12mm (4)	42	32	25	20	20	6,20	6,15
43	42	41	40	39	38	37	36	35	34	33	32	31	30		50	40	32	25	24	6,30	6,20
44	43	42	41	40	39	38	37	36	35	34	33	32	31		63	50	40	32	30	6,40	6,30
45	44	43	42	41	40	39	38	37	36	35	34	33	32		80	63	50	40	37	6,50	6,40
46	45	44	43	42	41	40	39	38	37	36	35	34	33		100	80	63	55	50	6,65	6,50
47	46	45	44	43	42	41	40	39	38	37	36	35	34		125	100	80	75	70	6,80	6,65
48	47	46	45	44	43	42	41	40	39	38	37	36	35		150	125	100	95	90	6,100	6,80
49	48	47	46	45	44	43	42	41	40	39	38	37	36			150	125	110	100		6,100
50	49	48	47	46	45	44	43	42	41	40	39	38	37				150	135	125		

All units except L and M

Unit M

Unit L

Source: National Research Council, Division of Building Research, June 1980.

Explanatory Notes:

1) Where the calculated percentage window area is not presented as a column heading, the nearest percentage column in the table values should be used.
2) AIF data listed in the table are for well-fitted weatherstripped units that can be opened. The AIF values apply only when the windows are closed. For windows fixed and sealed to the frame, add three (3) to the AIF given in the table.
3) If the interpane spacing or glass thickness for a specific double glazed window is not listed in the table, the nearest listed values should be used.
4) The AIF ratings for 9mm and 12mm glass are for laminated glass only; for solid glass subtract two (2) from the AIF values listed in the table.
5) If the interpane spacings for a specific triple-glazed window are not listed in the table, use the listed case whose combined spacings are nearest the actual combined spacing.
6) The AIF data listed in the table are for typical windows, but details of glass mounting, window seals, etc. may result in slightly different performance for some manufacturers' products. If laboratory sound transmission loss data (conforming to ASTM test method E-90) are available, these should be used to calculate the AIF.

Living Room
Floors 1 & 2
Unit 1, 2, 3, &, 4

TABLE 5: Acoustic Insulation Factor for Various Types of Windows

Window area as a percentage of total floor area of room (1)													
4	5	6	8	10	13	16	20	25	32	40	50	63	80
Acoustic Insulation Factor (AIF) (2)													
35	34	33	32	31	30	29	28	27	26	25	24	23	22
36	35	34	33	32	31	30	29	28	27	26	25	24	23
37	36	35	34	33	32	31	30	29	28	27	26	25	24
38	37	36	35	34	33	32	31	30	29	28	27	26	25
39	38	37	36	35	34	33	32	31	30	29	28	27	26
40	39	38	37	36	35	34	33	32	31	30	29	28	27
41	40	39	38	37	36	35	34	33	32	31	30	29	28
42	41	40	39	38	37	36	35	34	33	32	31	30	29
43	42	41	40	39	38	37	36	35	34	33	32	31	30
44	43	42	41	40	39	38	37	36	35	34	33	32	31
45	44	43	42	41	40	39	38	37	36	35	34	33	32
46	45	44	43	42	41	40	39	38	37	36	35	34	33
47	46	45	44	43	42	41	40	39	38	37	36	35	34
48	47	46	45	44	43	42	41	40	39	38	37	36	35
49	48	47	46	45	44	43	42	41	40	39	38	37	36
50	49	48	47	46	45	44	43	42	41	40	39	38	37

Single glazing	Double glazing of indicated glass thickness					Triple Glazing	
	2mm and 2mm glass	3mm and 3mm glass	4mm and 4mm glass	3mm and 6mm glass	6mm and 6mm glass	3mm, 3mm and 3mm glass	3mm, 3mm and 6mm glass
Thickness	Interpane spacing in mm (3)					Interpane spacings in mm (5)	
2mm	6						
	13						
3mm	15	6					
4mm, 6mm	18	13	6				
	22	16	13	6	6	6,6	
9mm (4)	28	20	16	13	13	6,10	6,6
	35	25	20	16	16	6,15	6,10
12mm (4)	42	32	25	20	20	6,20	6,15
	50	40	32	25	24	6,30	6,20
	63	50	40	32	30	6,40	
	80	63	50	40	37	6,50	6,40
	100	80	63	55	50	6,65	6,50
	125	100	80	75	70	6,80	6,65
	150	125	100	95	90	6,100	6,80
		150	125	110	100		6,100
			150	135	125		

All units except L and M

Unit M

Unit L

Source: National Research Council, Division of Building Research, June 1980.

Explanatory Notes:

1) Where the calculated percentage window area is not presented as a column heading, the nearest percentage column in the table values should be used.
2) AIF data listed in the table are for well-fitted weatherstripped units that can be opened. The AIF values apply only when the windows are closed. For windows fixed and sealed to the frame, add three (3) to the AIF given in the table.
3) If the interpane spacing or glass thickness for a specific double glazed window is not listed in the table, the nearest listed values should be used.
4) The AIF ratings for 9mm and 12mm glass are for laminated glass only; for solid glass subtract two (2) from the AIF values listed in the table.
5) If the interpane spacings for a specific triple-glazed window are not listed in the table, use the listed case whose combined spacings are nearest the actual combined spacing.
6) The AIF data listed in the table are for typical windows, but details of glass mounting, window seals, etc. may result in slightly different performance for some manufacturers' products. If laboratory sound transmission loss data (conforming to ASTM test method E-90) are available, these should be used to calculate the AIF.

Primary Bedroom
Floors 1 & 2
Unit 1 & 4

Table 6.3 - Acoustic Insulation Factor for Various Types of Exterior Wall

	Percentage of exterior wall area to total floor area of room											Type of Exterior Wall
	16	20	25	32	40	50	63	80	100	125	160	
Acoustic Insulation Factor	39	38	37	36	35	34	33	32	31	30	29	EW1
	41	40	39	38	37	36	35	34	33	32	31	EW2
	44	43	42	41	40	39	38	37	36	35	34	EW3
	47	46	45	44	43	42	41	40	39	38	37	EW4
	48	47	46	45	44	43	42	41	40	39	38	EW1R
	49	48	47	46	45	44	43	42	41	40	39	EW2R
	50	49	48	47	46	45	44	43	42	41	40	EW3R
	55	54	53	52	51	50	49	48	47	46	45	EW5
	56	55	54	53	52	51	50	49	48	47	46	EW4R
	58	57	56	55	54	53	52	51	50	49	48	EW6
	59	58	57	56	55	54	53	52	51	50	49	EW7 or EW5R
	63	62	61	60	59	58	57	56	55	54	53	EW8

Source : National Research Council, Division of Building Research, December 1980.

Explanatory Notes :

1) Where the calculated percentage wall area is not presented as a column heading, the nearest percentage column in the table should be used.
2) The common structure of walls EW1 to EW5 is composed of 12.7 mm gypsum board, vapour barrier, and 38 x 89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in inter-stud cavities.
3) EW1 denotes exterior wall as in Note 2), plus sheathing, plus wood siding or metal siding and fibre backer board.
EW2 denotes exterior wall as in Note 2), plus rigid insulation (25-30 mm), and wood siding or metal siding and fibre backer board.
EW3 denotes simulated mansard with structure as in Note 2), plus sheathing, 28 x 89 mm framing, sheathing, and asphalt roofing material.
EW4 denotes exterior wall as in Note 2), plus sheathing and 20 mm stucco.
EW5 denotes exterior wall as in Note 2), plus sheathing, 25 mm air space, 100 mm brick veneer.
EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 100 mm back-up block, 100 mm face brick.
EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 140 mm back-up block, 100 mm face brick.
EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 200 mm concrete.
4) R signifies the mounting of the interior gypsum board on resilient clips.
5) An exterior wall conforming to rainscreen design principles and composed of 12.7 mm gypsum board, 100 mm concrete block, rigid insulation (25-50 mm), 25 mm air space, and 100 mm brick veneer has the same AIF as EW6.
6) An exterior wall described in EW1 with the addition of rigid insulation (25-50 mm) between the sheathing and the external finish has the same AIF as EW2.

Primary Bedroom
Floors 1 & 2
Unit 2 & 3

Table 6.3 - Acoustic Insulation Factor for Various Types of Exterior Wall

Percentage of exterior wall area to total floor area of room											Type of Exterior Wall
	16	20	25	32	40	50	63	80	100	125	160	
					32							
Acoustic Insulation Factor	39	38	37	36	35	34	33	32	31	30	29	EW1
	41	40	39	38	37	36	35	34	33	32	31	EW2
	44	43	42	41	40	39	38	37	36	35	34	EW3
	47	46	45	44	43	42	41	40	39	38	37	EW4
	48	47	46	45	44	43	42	41	40	39	38	EW1R
	49	48	47	46	45	44	43	42	41	40	39	EW2R
	50	49	48	47	46	45	44	43	42	41	40	EW3R
	55	54	53	52	51	50	49	48	47	46	45	EW5
	56	55	54	53	52	51	50	49	48	47	46	EW4R
	58	57	56	55	54	53	52	51	50	49	48	EW6
	59	58	57	56	55	54	53	52	51	50	49	EW7 or EW5R
	63	62	61	60	59	58	57	56	55	54	53	EW8

Source : National Research Council, Division of Building Research, December 1980.

Explanatory Notes :

1) Where the calculated percentage wall area is not presented as a column heading, the nearest percentage column in the table should be used.
2) The common structure of walls EW1 to EW5 is composed of 12.7 mm gypsum board, vapour barrier, and 38 x 89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in inter-stud cavities.
3) EW1 denotes exterior wall as in Note 2), plus sheathing, plus wood siding or metal siding and fibre backer board.
EW2 denotes exterior wall as in Note 2), plus rigid insulation (25-30 mm), and wood siding or metal siding and fibre backer board.
EW3 denotes simulated mansard with structure as in Note 2), plus sheathing, 28 x 89 mm framing, sheathing, and asphalt roofing material.
EW4 denotes exterior wall as in Note 2), plus sheathing and 20 mm stucco.
EW5 denotes exterior wall as in Note 2), plus sheathing, 25 mm air space, 100 mm brick veneer.
EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 100 mm back-up block, 100 mm face brick.
EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 140 mm back-up block, 100 mm face brick.
EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 200 mm concrete.
4) R signifies the mounting of the interior gypsum board on resilient clips.
5) An exterior wall conforming to rainscreen design principles and composed of 12.7 mm gypsum board, 100 mm concrete block, rigid insulation (25-50 mm), 25 mm air space, and 100 mm brick veneer has the same AIF as EW6.
6) An exterior wall described in EW1 with the addition of rigid insulation (25-50 mm) between the sheathing and the external finish has the same AIF as EW2.

Bedroom 2
Floors 1 & 2
Unit 1 & 4

Table 6.3 - Acoustic Insulation Factor for Various Types of Exterior Wall

Percentage of exterior wall area to total floor area of room											Type of Exterior Wall
	16	20	25	32	40	50	63	80	100	125	160	
Acoustic Insulation Factor	39	38	37	36	35	34	33	32	31	30	29	EW1
	41	40	39	38	37	36	35	34	33	32	31	EW2 For all units except "L"
	44	43	42	41	40	39	38	37	36	35	34	EW3 Unit "L" only
	47	46	45	44	43	42	41	40	39	38	37	EW4
	48	47	46	45	44	43	42	41	40	39	38	EW1R
	49	48	47	46	45	44	43	42	41	40	39	EW2R
	50	49	48	47	46	45	44	43	42	41	40	EW3R
	55	54	53	52	51	50	49	48	47	46	45	EW5
	56	55	54	53	52	51	50	49	48	47	46	EW4R
	58	57	56	55	54	53	52	51	50	49	48	EW6
	59	58	57	56	55	54	53	52	51	50	49	EW7 or EW5R
	63	62	61	60	59	58	57	56	55	54	53	EW8

Source : National Research Council, Division of Building Research, December 1980.

Explanatory Notes :

1) Where the calculated percentage wall area is not presented as a column heading, the nearest percentage column in the table should be used.
2) The common structure of walls EW1 to EW5 is composed of 12.7 mm gypsum board, vapour barrier, and 38 x 89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in inter-stud cavities.
3) EW1 denotes exterior wall as in Note 2), plus sheathing, plus wood siding or metal siding and fibre backer board.
EW2 denotes exterior wall as in Note 2), plus rigid insulation (25-30 mm), and wood siding or metal siding and fibre backer board.
EW3 denotes simulated mansard with structure as in Note 2), plus sheathing, 28 x 89 mm framing, sheathing, and asphalt roofing material.
EW4 denotes exterior wall as in Note 2), plus sheathing and 20 mm stucco.
EW5 denotes exterior wall as in Note 2), plus sheathing, 25 mm air space, 100 mm brick veneer.
EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 100 mm back-up block, 100 mm face brick.
EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 140 mm back-up block, 100 mm face brick.
EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 200 mm concrete.
4) R signifies the mounting of the interior gypsum board on resilient clips.
5) An exterior wall conforming to rainscreen design principles and composed of 12.7 mm gypsum board, 100 mm concrete block, rigid insulation (25-50 mm), 25 mm air space, and 100 mm brick veneer has the same AIF as EW6.
6) An exterior wall described in EW1 with the addition of rigid insulation (25-50 mm) between the sheathing and the external finish has the same AIF as EW2.

Bedroom 2
Floors 1 & 2
Unit 2 & 3

Table 6.3 - Acoustic Insulation Factor for Various Types of Exterior Wall

Percentage of exterior wall area to total floor area of room											Type of Exterior Wall
	16	20	25	32	40	50	63	80	100	125	160	
Acoustic Insulation Factor	39	38	37	36	35	34	33	32	31	30	29	EW1
	41	40	39	38	37	36	35	34	33	32	31	EW2
	44	43	42	41	40	39	38	37	36	35	34	EW3
	47	46	45	44	43	42	41	40	39	38	37	EW4
	48	47	46	45	44	43	42	41	40	39	38	EW1R
	49	48	47	46	45	44	43	42	41	40	39	EW2R
	50	49	48	47	46	45	44	43	42	41	40	EW3R
	55	54	53	52	51	50	49	48	47	46	45	EW5
	56	55	54	53	52	51	50	49	48	47	46	EW4R
	58	57	56	55	54	53	52	51	50	49	48	EW6
	59	58	57	56	55	54	53	52	51	50	49	EW7 or EW5R
	63	62	61	60	59	58	57	56	55	54	53	EW8

Source : National Research Council, Division of Building Research, December 1980.

Explanatory Notes :

1) Where the calculated percentage wall area is not presented as a column heading, the nearest percentage column in the table should be used.
2) The common structure of walls EW1 to EW5 is composed of 12.7 mm gypsum board, vapour barrier, and 38 x 89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in inter-stud cavities.
3) EW1 denotes exterior wall as in Note 2), plus sheathing, plus wood siding or metal siding and fibre backer board.
EW2 denotes exterior wall as in Note 2), plus rigid insulation (25-30 mm), and wood siding or metal siding and fibre backer board.
EW3 denotes simulated mansard with structure as in Note 2), plus sheathing, 28 x 89 mm framing, sheathing, and asphalt roofing material.
EW4 denotes exterior wall as in Note 2), plus sheathing and 20 mm stucco.
EW5 denotes exterior wall as in Note 2), plus sheathing, 25 mm air space, 100 mm brick veneer.
EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 100 mm back-up block, 100 mm face brick.
EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 140 mm back-up block, 100 mm face brick.
EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 200 mm concrete.
4) R signifies the mounting of the interior gypsum board on resilient clips.
5) An exterior wall conforming to rainscreen design principles and composed of 12.7 mm gypsum board, 100 mm concrete block, rigid insulation (25-50 mm), 25 mm air space, and 100 mm brick veneer has the same AIF as EW6.
6) An exterior wall described in EW1 with the addition of rigid insulation (25-50 mm) between the sheathing and the external finish has the same AIF as EW2.

Living Room
Floors 1 & 2
Unit 1, 2, 3, & 4

Table 6.3 - Acoustic Insulation Factor for Various Types of Exterior Wall

Percentage of exterior wall area to total floor area of room											Type of Exterior Wall
	16	20	25	32	40	50	63	80	100	125	160	
				32								
Acoustic Insulation Factor	39	38	37	36	35	34	33	32	31	30	29	EW1
	41	40	39	38	37	36	35	34	33	32	31	EW2
	44	43	42	41	40	39	38	37	36	35	34	EW3
	47	46	45	44	43	42	41	40	39	38	37	EW4
	48	47	46	45	44	43	42	41	40	39	38	EW1R
	49	48	47	46	45	44	43	42	41	40	39	EW2R
	50	49	48	47	46	45	44	43	42	41	40	EW3R
	55	54	53	52	51	50	49	48	47	46	45	EW5
	56	55	54	53	52	51	50	49	48	47	46	EW4R
	58	57	56	55	54	53	52	51	50	49	48	EW6
	59	58	57	56	55	54	53	52	51	50	49	EW7 or EW5R
	63	62	61	60	59	58	57	56	55	54	53	EW8

Source : National Research Council, Division of Building Research, December 1980.

Explanatory Notes :

1) Where the calculated percentage wall area is not presented as a column heading, the nearest percentage column in the table should be used.
2) The common structure of walls EW1 to EW5 is composed of 12.7 mm gypsum board, vapour barrier, and 38 x 89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in inter-stud cavities.
3) EW1 denotes exterior wall as in Note 2), plus sheathing, plus wood siding or metal siding and fibre backer board.
EW2 denotes exterior wall as in Note 2), plus rigid insulation (25-30 mm), and wood siding or metal siding and fibre backer board.
EW3 denotes simulated mansard with structure as in Note 2), plus sheathing, 28 x 89 mm framing, sheathing, and asphalt roofing material.
EW4 denotes exterior wall as in Note 2), plus sheathing and 20 mm stucco.
EW5 denotes exterior wall as in Note 2), plus sheathing, 25 mm air space, 100 mm brick veneer.
EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 100 mm back-up block, 100 mm face brick.
EW7 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 140 mm back-up block, 100 mm face brick.
EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25-50 mm), 200 mm concrete.
4) R signifies the mounting of the interior gypsum board on resilient clips.
5) An exterior wall conforming to rainscreen design principles and composed of 12.7 mm gypsum board, 100 mm concrete block, rigid insulation (25-50 mm), 25 mm air space, and 100 mm brick veneer has the same AIF as EW6.
6) An exterior wall described in EW1 with the addition of rigid insulation (25-50 mm) between the sheathing and the external finish has the same AIF as EW2.

R1
Primary Bedroom
Floors 1 & 2
Unit 1, 2, 3, &, 4

TABLE 11: Approximate conversion from STC to AIF for windows and doors:

Window (or door) area expressed as percentage of room floor area	Acoustic Insulation Factor (AIF)
80	STC-5
63	STC-4
50	STC-3
40	STC-2
32	STC-1
25	STC
20	STC+1
16	STC+2
12.5	STC+3
10	STC+4
8	STC+5
6.3	STC+6
5	STC+7
4	STC+8

Note: For area percentages not listed in the table use the nearest listed value.

Examples: For a window whose area = 20% of the room floor area and STC = 32 the AIF is 32 + 1 = 33.

For a window whose area = 60% of the room floor area and STC = 29 the AIF is 29 - 4 = 25.

AIF = STC-2

AIF
Daytime/Nighttime

R1 = 29/27
R2 = 24/21
R4 = 27/24
R5 = 14/11
R6 = 30/28
R7 = 23/21
R8 = 25/23
R9 = 26/23
R10 = 26/24
R11 = 32/29
R12 = 27/25

STC
Daytime/Nighttime

R1 = 31/29
R2 = 26/23
R4 = 29/26
R5 = 16/13
R6 = 32/30
R7 = 25/23
R8 = 27/25
R9 = 28/25
R10 = 28/26
R11 = 34/31
R12 = 29/27

R1
Bedroom 2
Floors 1 & 2
Unit 1, 2, 3, &, 4

TABLE 11: Approximate conversion from STC to AIF for windows and doors:

Window (or door) area expressed as percentage of room floor area	Acoustic Insulation Factor (AIF)
80	STC-5
63	STC-4
50	STC-3
40	STC-2
32	STC-1
25	STC
20	STC+1
16	STC+2
12.5	STC+3
10	STC+4
8	STC+5
6.3	STC+6
5	STC+7
4	STC+8

Note: For area percentages not listed in the table use the nearest listed value.

Examples: For a window whose area = 20% of the room floor area and STC = 32 the AIF is 32 + 1 = 33.

For a window whose area = 60% of the room floor area and STC = 29 the AIF is 29 - 4 = 25.

AIF = STC+2

AIF
Daytime/Nighttime

R1 = 29/27
R2 = 24/21
R4 = 27/24
R5 = 14/11
R6 = 30/28
R7 = 23/21
R8 = 25/23
R9 = 26/23
R10 = 26/24
R11 = 32/29
R12 = 27/25

STC
Daytime/Nighttime

R1 = 27/25
R2 = 22/19
R4 = 25/22
R5 = 12/9
R6 = 28/26
R7 = 21/19
R8 = 23/21
R9 = 24/21
R10 = 24/22
R11 = 30/27
R12 = 25/23

R1
Living Room
Floors 1 & 2
Unit 1, 2, 3, &, 4

TABLE 11: Approximate conversion from STC to AIF for windows and doors:

Window (or door) area expressed as percentage of room floor area	Acoustic Insulation Factor (AIF)
80	STC-5
63	STC-4
50	STC-3
40	STC-2
32	STC-1
25	STC
20	STC+1
16	STC+2
12.5	STC+3
10	STC+4
8	STC+5
6.3	STC+6
5	STC+7
4	STC+8

Note: For area percentages not listed in the table use the nearest listed value.

Examples: For a window whose area = 20% of the room floor area and STC = 32 the AIF is 32 + 1 = 33.

For a window whose area = 60% of the room floor area and STC = 29 the AIF is 29 - 4 = 25.

AIF = STC-1

AIF
Daytime/Nighttime

R1 = 29/27
R2 = 24/21
R4 = 27/24
R5 = 14/11
R6 = 30/28
R7 = 23/21
R8 = 25/23
R9 = 26/23
R10 = 26/24
R11 = 32/29
R12 = 27/25

STC
Daytime/Nighttime

R1 = 30/28
R2 = 25/22
R4 = 28/25
R5 = 15/12
R6 = 31/29
R7 = 24/22
R8 = 26/24
R9 = 27/24
R10 = 27/25
R11 = 33/30
R12 = 28/26

Primary Bedroom
Floors 1 & 2
Unit 1 & 4

TABLE 12: Approximate conversion from STC to AIF for exterior walls:

Exterior wall area expressed as percentage of room floor area	Acoustic Insulation Factor (AIF)
200	STC-10
160	STC-9
125	STC-8
100	STC-7
80	STC-6
63	STC-5
50	STC-4
40	STC-3
32	STC-2
25	STC-1
20	STC
16	STC+1
12.5	STC+2
10	STC+3
8	

Note: For area percentages not listed in the table use the nearest listed value.

Example: For a wall whose area = 120% of room floor area and STC = 48 the AIF is 48 - 8 = 40.

AIF = STC-8

AIF Daytime/Nighttime	STC Daytime/Nighttime
R1 = 29/27	R1 = 37/35
R2 = 24/21	R2 = 32/29
R4 = 27/24	R4 = 35/32
R5 = 14/11	R5 = 22/19
R6 = 30/28	R6 = 38/36
R7 = 23/21	R7 = 31/29
R8 = 25/23	R8 = 33/31
R9 = 26/23	R9 = 34/31
R10 = 26/24	R10 = 34/32
R11 = 32/29	R11 = 40/37
R12 = 27/25	R12 = 35/33

Primary Bedroom
Floors 1 & 2
Unit 2 & 3

TABLE 12: Approximate conversion from STC to AIF for exterior walls:

Exterior wall area expressed as percentage of room floor area	Acoustic Insulation Factor (AIF)
200	STC-10
160	STC-9
125	STC-8
100	STC-7
80	STC-6
63	STC-5
50	STC-4
40	STC-3
32	STC-2
25	STC-1
20	STC
16	STC+1
12.5	STC+2
10	STC+3
8	

Note: For area percentages not listed in the table use the nearest listed value.

Example: For a wall whose area = 120% of room floor area and STC = 48 the AIF is 48 - 8 = 40.

AIF = STC-3

AIF Daytime/Nighttime	STC Daytime/Nighttime
R1 = 29/27	R1 = 32/30
R2 = 24/21	R2 = 27/24
R4 = 27/24	R4 = 30/27
R5 = 14/11	R5 = 17/14
R6 = 30/28	R6 = 33/31
R7 = 23/21	R7 = 26/24
R8 = 25/23	R8 = 28/26
R9 = 26/23	R9 = 29/26
R10 = 26/24	R10 = 29/27
R11 = 32/29	R11 = 35/32
R12 = 27/25	R12 = 30/28

Bedroom 2
Floors 1 & 2
Unit 1 & 4

TABLE 12: Approximate conversion from STC to AIF for exterior walls:

Exterior wall area expressed as percentage of room floor area	Acoustic Insulation Factor (AIF)
200	STC-10
160	STC-9
125	STC-8
100	STC-7
80	STC-6
63	STC-5
50	STC-4
40	STC-3
32	STC-2
25	STC-1
20	STC
16	STC+1
12.5	STC+2
10	STC+3
8	

Note: For area percentages not listed in the table use the nearest listed value.

Example: For a wall whose area = 120% of room floor area and STC = 48 the AIF is 48 - 8 = 40.

AIF = STC-9

AIF Daytime/Nighttime	STC Daytime/Nighttime
R1 = 29/27	R1 = 38/36
R2 = 24/21	R2 = 33/30
R4 = 27/24	R4 = 36/33
R5 = 14/11	R5 = 23/20
R6 = 30/28	R6 = 39/30
R7 = 23/21	R7 = 32/30
R8 = 25/23	R8 = 34/32
R9 = 26/23	R9 = 35/32
R10 = 26/24	R10 = 35/33
R11 = 32/29	R11 = 41/38
R12 = 27/25	R12 = 36/34

Bedroom 2
Floors 1 & 2
Unit 2 & 3

TABLE 12: Approximate conversion from STC to AIF for exterior walls:

Exterior wall area expressed as percentage of room floor area	Acoustic Insulation Factor (AIF)
200	STC-10
160	STC-9
125	STC-8
100	STC-7
80	STC-6
63	STC-5
50	STC-4
40	STC-3
32	STC-2
25	STC-1
20	STC
16	STC+1
12.5	STC+2
10	STC+3
8	

Note: For area percentages not listed in the table use the nearest listed value.

Example: For a wall whose area = 120% of room floor area and STC = 48 the AIF is 48 - 8 = 40.

AIF = STC-6

AIF Daytime/Nighttime	STC Daytime/Nighttime
R1 = 29/27	R1 = 35/33
R2 = 24/21	R2 = 30/27
R4 = 27/24	R4 = 33/30
R5 = 14/11	R5 = 20/17
R6 = 30/28	R6 = 36/34
R7 = 23/21	R7 = 29/27
R8 = 25/23	R8 = 31/29
R9 = 26/23	R9 = 32/29
R10 = 26/24	R10 = 32/29
R11 = 32/29	R11 = 38/35
R12 = 27/25	R12 = 33/31

Living Room
Floors 1 & 2
Unit 1, 2, 3, & 4

TABLE 12: Approximate conversion from STC to AIF for exterior walls:

Exterior wall area expressed as percentage of room floor area	Acoustic Insulation Factor (AIF)
200	STC-10
160	STC-9
125	STC-8
100	STC-7
80	STC-6
63	STC-5
50	STC-4
40	STC-3
32	STC-2
25	STC-1
20	STC
16	STC+1
12.5	STC+2
10	STC+3
8	

Note: For area percentages not listed in the table use the nearest listed value.

Example: For a wall whose area = 120% of room floor area and STC = 48 the AIF is 48 - 8 = 40.

AIF = STC-2

AIF Daytime/Nighttime	STC Daytime/Nighttime
R1 = 29/27	R1 = 31/27
R2 = 24/21	R2 = 26/23
R4 = 27/24	R4 = 29/26
R5 = 14/11	R5 = 16/13
R6 = 30/28	R6 = 32/30
R7 = 23/21	R7 = 25/23
R8 = 25/23	R8 = 27/25
R9 = 26/23	R9 = 28/25
R10 = 26/24	R10 = 28/26
R11 = 32/29	R11 = 34/31
R12 = 27/25	R12 = 29/27

APPENDIX D

Architectural Drawings & Correspondence

From: Steve Zorgel
Sent: Tuesday, May 25, 2021 1:53 PM
To: Steve Zorgel
Subject: FW: Hydro Pole Anchors - 5331 Fernbank

From: Colleen McKeracher <cmckeracher@rlaarchitecture.ca>
Sent: Thursday, May 6, 2021 6:14 PM
To: Drew Blair <D.Blair@novatech-eng.com>
Subject: RE: Hydro Pole Anchors - 5331 Fernbank

Hi Drew,

At Bridlewood we required a few windows with an STC not less than 31, and being around the same neighbourhood and facing the same road as this project I would expect a similar requirement and hope we wouldn't need higher than that. We don't typically specify an STC performance for our woodframe buildings, but the base products would be around the 27 STC range, although the shop drawings we receive for these often don't carry that information. Our walls themselves are around a max of 37 STC (for the Hardie board and siding, the brick will perform better) our problem being finding a tested assembly that fits our wall types exactly.

Colleen McKeracher *M.Arch, OAA*
Architect
RLA/ Architecture
Tel: 613.724.9932 x 316

From: Drew Blair <D.Blair@novatech-eng.com>
Sent: May 6, 2021 11:45 AM
To: Colleen McKeracher <cmckeracher@rlaarchitecture.ca>
Subject: RE: Hydro Pole Anchors - 5331 Fernbank

Thanks Colleen,

Early question but do you have typical STC window values? Do you have a range that you use? Is there a maximum you'd like to stay below? We have our noise study to perform but I'm curious about what architect's would normally prescribe.

Thanks,

Drew

Drew Blair, P.Eng., Project Manager | Land Development Engineering
NOVATECH Engineers, Planners & Landscape Architects
240 Michael Cowpland Drive, Suite 200, Ottawa, ON, K2M 1P6 | Tel: 613.254.9643 x 236 | Fax: 613.254.5867

IRON VALLEY II - TERRACE HOMES

5331 FERNBANK ROAD, OTTAWA, ON

RLA PROJECT #: 2033

ISSUED FOR STRUCTURAL COORDINATION

2025-12-10

ARCHITECTURAL

RLA ARCHITECTURE
56 BEECH ST
OTTAWA, ON K1S 3J6
613-724-9932

ARCHITECTURAL	
Sheet Number	Sheet Name

ELECTRICAL

QM&E ENGINEERING
9 GURDWARA RD, SUITE 200
NEPEAN K2E 7X6
(613) 366-4763

MECHANICAL

QM&E ENGINEERING
9 GURDWARA RD, SUITE 200
NEPEAN K2E 7X6
(613) 366-4763

STRUCTURAL

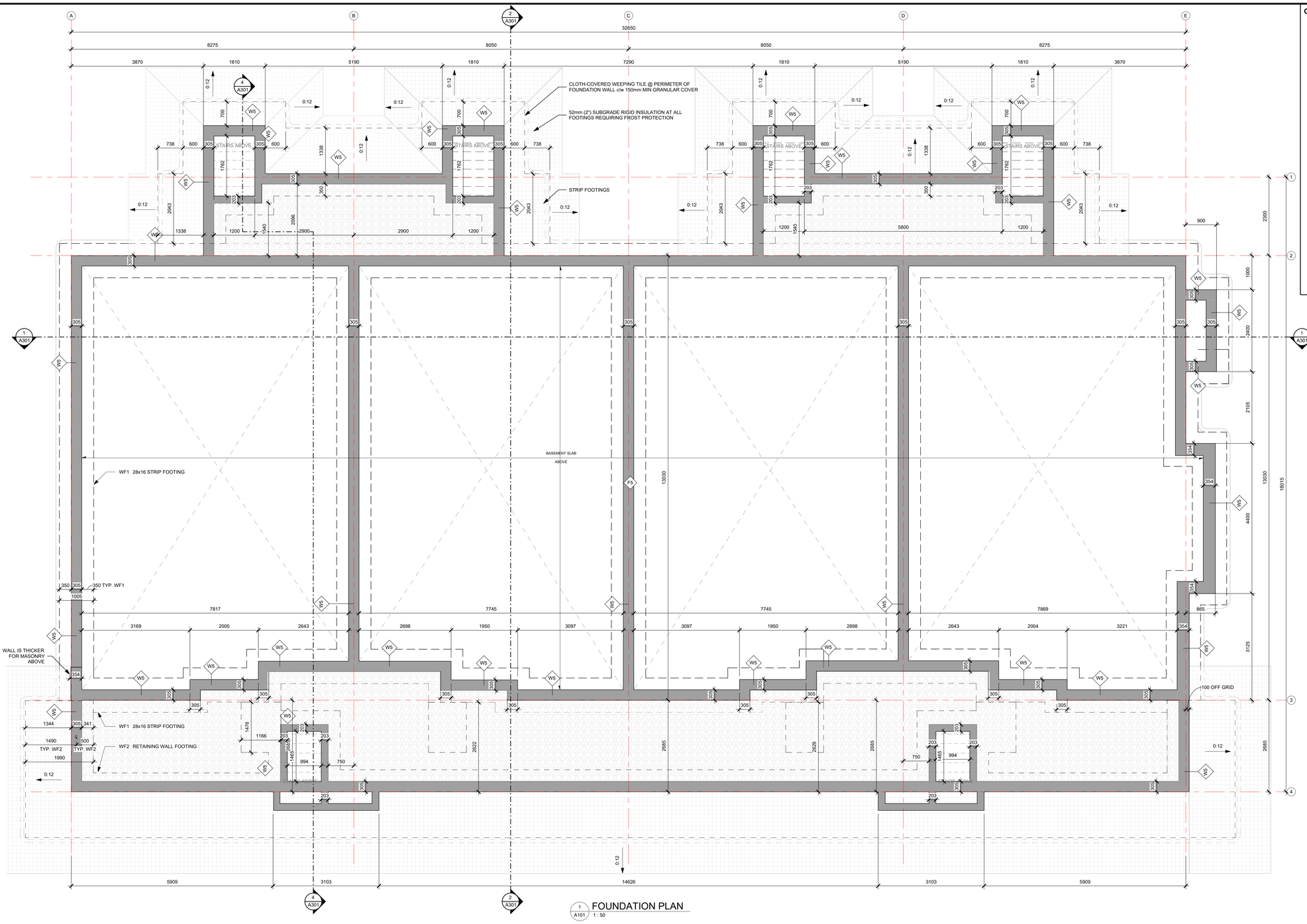
ADJELEIAN ALLEN RUBELI LTD.
75 ALBERT STREET, SUITE 1005
OTTAWA K1P 5E7
(613) 232-5786

CIVIL

COMPANY NAME
ADDRESS
CITY POSTAL CODE
PHONE NUMBER

LANDSCAPE

COMPANY NAME
ADDRESS
CITY POSTAL CODE
PHONE NUMBER



1 A101 FOUNDATION PLAN
1 : 50

GENERAL NOTES

1. ALL ENTRY CLOSETS TO RECEIVE 1 ROD & SHELF. ALL BEDROOM CLOSETS TO RECEIVE 2 RODS & 1 SHELF. ALL LINENS TO RECEIVE 5 SHELVES.
2. STRUCTURE LOCATED IN FLOOR ASSEMBLY MAY VARY DUE TO FINAL JOIST LAYOUT. STRUCTURE LOCATED IN ROOF ASSEMBLY MAY VARY DUE TO FINAL TRUSS LAYOUT. FINAL LOCATIONS AND LAYOUTS TO BE CONFIRMED BY MANUFACTURER'S SHOP DRAWINGS.
3. ALL WINDOWS & DOORS TO BE FOAMED IN PLACE WITH LOW-EXPANDING POLYURETHANE FOAM INSULATION
4. ALL STAIR STRINGERS TO INCLUDE A 15mm AIR SPACE BETWEEN ADJACENT ASSEMBLY, TO BE RESERVED FOR ACOUSTIC SEALANTS AND FIRE/SMOKE CAULKS AS PER DRAWINGS AND SPECIFICATIONS.
5. STONE & BRICK MASONRY TO OVERHANG SUPPORTING FOUNDATION BY 15mm U.N.O.
6. THROUGH-WALL FLASHINGS TO BE LAPPED BENEATH BUILDING PAPER, ALL JOINTS TO BE TAPED & SEALED
7. ALL EXPOSED STEEL TO RECEIVE CORROSION RESISTANT PAINT, COMPATIBLE PRIMER, AND FINISHING COAT
8. SUPPLY AND INSTALL COMBINED c02/STROBE TYPE SMOKE DETECTORS AS PER O.B.C. 9.10.19. REQUIREMENTS - SEE PLAN FOR GENERAL LOCATIONS, EXACT LOCATIONS TO BE CONFIRMED ON SITE.
9. ALL INTERIOR DIMENSIONS TAKEN FROM FINISHED FACE
10. ALL EXTERIOR DIMENSIONS TAKEN FROM FACE OF STUDS, CONCRETE, OR GRIDLINES.
11. ALL INTERIOR PARTITION WALLS TO BE WALL TYPE P4 U.N.O.
12. ALL GUARDS AND HANDRAILS TO BE INSTALLED IN ACCORDANCE WITH O.B.C. 9.8.7. AND 9.8.8. MANUFACTURER TO PROVIDE SHOP DRAWINGS c/w CONNECTION DETAILS FOR ARCHITECT'S REVIEW PRIOR TO FABRICATION.
13. FINISH FLOORING TO BE CARPET OR LAMINATE FLOORING IN ALL DRY LIVING SPACES, CERAMIC TILE IN ALL WET AREAS, AND SHEET VINYL IN M&E CLOSETS.
14. ALL WASHING MACHINES TO BE c/w GALVANIZED METAL PAN AND DRAIN. WASHERS LOCATED AT BASEMENT LEVEL TO BE LOCATED ABOVE A FLOOR DRAIN.
15. ALL AIR/VAPOUR BARRIERS TO BE CONTINUOUS, LAPPED, TAPED, AND SEALED AROUND DOOR & WINDOW OPENINGS
16. PROVIDE DRAINAGE TILE AT PERIMETER OF FOUNDATION WALL

NOTATION SYMBOLS:

- (##) INDICATES DRAWING NOTES, LISTED ON EACH SHEET
- <F##> INDICATES ASSEMBLY TYPE; REFER TO TYPICAL ASSEMBLIES SCHEDULE
- (###) INDICATES DOOR TYPE
- WXX INDICATES WINDOW TYPE
- X INDICATES GRID NUMBER
- ROOM NAME 101 150 SF INDICATES ROOM NAME, NUMBER, & AREA
- # A### Ref INDICATES BUILDING SECTION
- 1 A101 Ref INDICATES FLOOR PLAN, WALL SECTION, AND DETAIL CALLOUTS
- INDICATES SPOT ELEVATIONS
- 1 A### DETAIL NUMBER; View Name; View Scale; DETAIL REFERENCE PAGE; DETAIL CALLOUT LOCATION; Ref: # / A###

No.	DESCRIPTION	YYYY-MM-DD
06	ISSUED FOR CONSULTANT MEETING	2025-12-18
05	ISSUED FOR STRUCTURAL COORDINATION	2025-12-10
04	ISSUED FOR BUILDING PERMIT	2025-12-01

REVISIONS:

ARCHITECT SEAL:

NORTH ARROW: TRUE NORTH

CLIENT: CLARIDGE HOMES

ARCHITECT:
rla/architecture
56 Beech Street, Ottawa, Ontario K1S 3J6
t.613.724.9932 f.613.724.1209 www.rodericklahey.ca

PROJECT TITLE:
IRON VALLEY II - TERRACE HOMES
5331 FERNBANK ROAD, OTTAWA, ON

SHEET TILE:
FOUNDATION PLAN

DRAWN:	CHECKED:
JWD	Checker
SCALE: 1:50	SHEET No: A101
PROJECT No: 2033	

PAPER SIZE: ISO Full Bleed B1 (707.00 x 1000.00mm)

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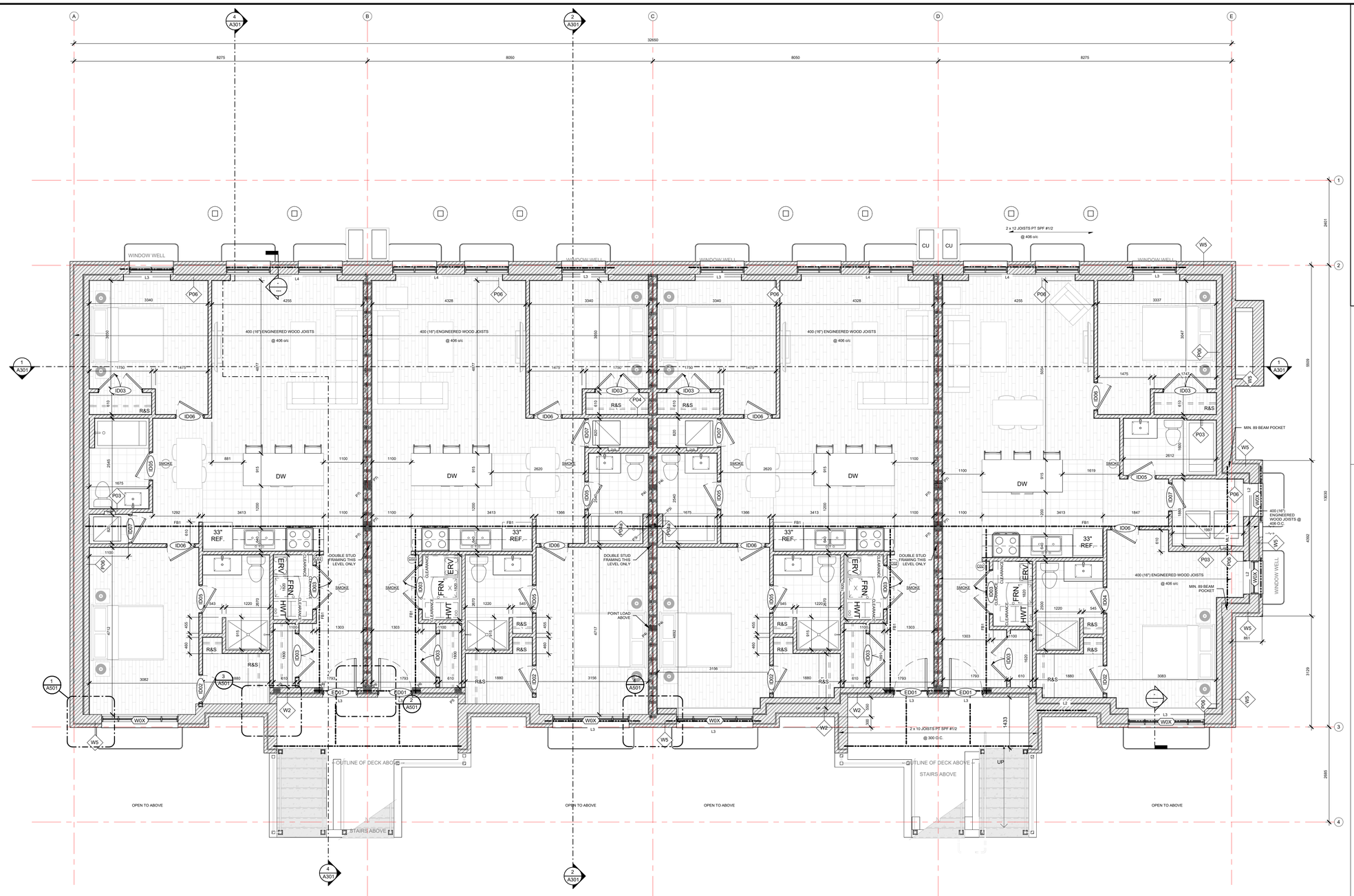
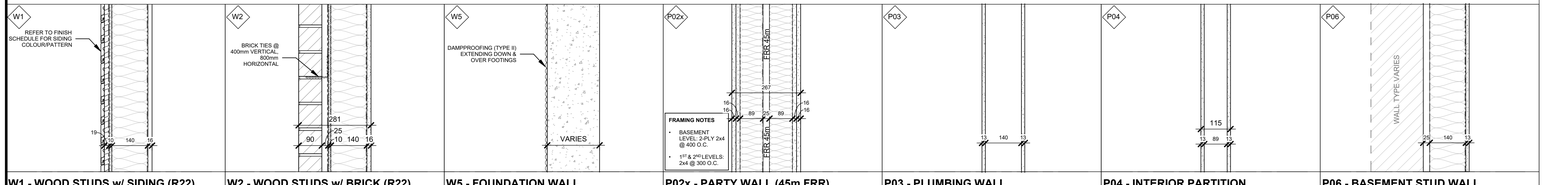


1 A151 BASEMENT FLOOR PLAN
1 : 50

CONSTRUCTION ASSEMBLIES ON SHEET



W1 - WOOD STUDS w/ SIDING (R22)
19 VINYL SIDING (SEE FINISH SCHEDULE)
19 STRAPPING
0 AIR BARRIER
10 OSB SHEATHING
140 WOOD STUDS @ 400 O.C. c/w R22 BATT INSULATION
0 POLYETHYLENE VAPOUR BARRIER
16 TYPE 'X' GYPSUM WALL BOARD

W2 - WOOD STUDS w/ BRICK (R22)
90 METRIC MODULAR BRICK (SEE FINISH SCHEDULE)
25 AIR GAP
0 AIR BARRIER
10 OSB SHEATHING
140 WOOD STUDS @ 400 O.C. c/w R22 BATT INSULATION
0 POLYETHYLENE VAPOUR BARRIER
16 TYPE 'X' GYPSUM WALL BOARD

W5 - FOUNDATION WALL
13 DRAINAGE BOARD
305 CAST IN PLACE FOUNDATION WALL

P02x - PARTY WALL (45m FRR)
16 TYPE 'X' GYPSUM WALL BOARD
16 TYPE 'X' GYPSUM WALL BOARD
89 WOOD LUMBER STUDS
25 AIR GAP
89 WOOD LUMBER STUDS
16 TYPE 'X' GYPSUM WALL BOARD
16 TYPE 'X' GYPSUM WALL BOARD

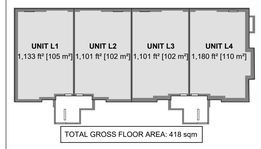
P03 - PLUMBING WALL
13 TYPE 'X' GYPSUM WALL BOARD
140 WOOD LUMBER STUDS
13 TYPE 'X' GYPSUM WALL BOARD

P04 - INTERIOR PARTITION
13 TYPE 'X' GYPSUM WALL BOARD
89 WOOD LUMBER STUDS
13 TYPE 'X' GYPSUM WALL BOARD

P06 - BASEMENT STUD WALL
25 AIR GAP
140 0 WOOD LUMBER STUDS
13 POLYETHYLENE VAPOUR BARRIER
TYPE 'X' GYPSUM WALL BOARD

GENERAL NOTES

1. ALL ENTRY CLOSETS TO RECEIVE 1 ROD & SHELF. ALL BEDROOM CLOSETS TO RECEIVE 2 RODS & 1 SHELF. ALL LINENS TO RECEIVE 5 SHELVES.
2. STRUCTURE LOCATED IN FLOOR ASSEMBLY MAY VARY DUE TO FINAL JOIST LAYOUT. STRUCTURE LOCATED IN ROOF ASSEMBLY MAY VARY DUE TO FINAL TRUSS LAYOUT. FINAL LOCATIONS AND LAYOUTS TO BE CONFIRMED BY MANUFACTURER'S SHOP DRAWINGS.
3. ALL WINDOWS & DOORS TO BE FOAMED IN PLACE WITH LOW-EXPANDING POLYURETHANE FOAM INSULATION
4. ALL STAIR STRINGERS TO INCLUDE A 15mm AIR SPACE BETWEEN ADJACENT ASSEMBLY, TO BE RESERVED FOR ACOUSTIC SEALANTS AND FIRE/SMOKE CAULKS AS PER DRAWINGS AND SPECIFICATIONS.
5. STONE & BRICK MASONRY TO OVERHANG SUPPORTING FOUNDATION BY 15mm U.N.O.
6. THROUGH-WALL FLASHINGS TO BE LAPPED BENEATH BUILDING PAPER, ALL JOINTS TO BE TAPED & SEALED
7. ALL EXPOSED STEEL TO RECEIVE CORROSION RESISTANT PAINT, COMPATIBLE PRIMER, AND FINISHING COAT
8. SUPPLY AND INSTALL COMBINED c02/STROBE TYPE SMOKE DETECTORS AS PER O.B.C. 9.10.19. REQUIREMENTS - SEE PLAN FOR GENERAL LOCATIONS, EXACT LOCATIONS TO BE CONFIRMED ON SITE.
9. ALL INTERIOR DIMENSIONS TAKEN FROM FINISHED FACE
10. ALL EXTERIOR DIMENSIONS TAKEN FROM FACE OF STUDS, CONCRETE, OR GRIDLINES.
11. ALL PARTITION WALLS TO BE WALL TYPE P04 U.N.O.
12. ALL GUARDS AND HANDRAILS TO BE INSTALLED IN ACCORDANCE WITH O.B.C. 9.8.7. AND 9.8.8. MANUFACTURER TO PROVIDE SHOP DRAWINGS c/w CONNECTION DETAILS FOR ARCHITECT'S REVIEW PRIOR TO FABRICATION.
13. FINISH FLOORING TO BE CARPET OR LAMINATE FLOORING IN ALL DRY LIVING SPACES, CERAMIC TILE IN ALL WET AREAS, AND SHEET VINYL IN MSE CLOSETS.
14. ALL WASHING MACHINES TO BE c/w GALVANIZED METAL PAN AND DRAIN. WASHERS LOCATED AT BASEMENT LEVEL TO BE LOCATED ABOVE A FLOOR DRAIN.
15. ALL AIR/VAPOUR BARRIERS TO BE CONTINUOUS, LAPPED, TAPED, AND SEALED AROUND DOOR & WINDOW OPENINGS
16. PROVIDE DRAINAGE TILE AT PERIMETER OF FOUNDATION WALL



GFA BASEMENT FLOOR

SCHEDULES

COLUMN SCHEDULE

MARK	DESCRIPTION
P3	3-2x6 SPF #1/2 BUILT-UP COLUMN
P3i	3-2x4 SPF #1/2 BUILT-UP COLUMN
P4	4-2x6 SPF #1/2 BUILT-UP COLUMN
P4i	4-2x4 SPF #1/2 BUILT-UP COLUMN
P5	5-2x6 SPF #1/2 BUILT-UP COLUMN
P6	6-2x6 SPF #1/2 BUILT-UP COLUMN
P7	7-2x6 SPF #1/2 BUILT-UP COLUMN
P7i	7-2x4 SPF #1/2 BUILT-UP COLUMN

LINTEL SCHEDULE

MARK	DESCRIPTION
L2	2-PLY 2x10 SPF No. 1/2
L3	3-PLY 2x10 SPF No. 1/2
L4	2-PLY 1 3/4" x 9 1/2" LVL 2.0E
L7	3-PLY 1 3/4" x 11 7/8" LVL 2.0E

BEAM SCHEDULE

MARK	DESCRIPTION
FB1	FLUSH FLOOR BEAM BY FLOOR JOIST MANUFACTURER
ML1	3-178 x 406 (1.75" x 16") LVL 2.0E
SB1	W200 x 31 STEEL BEAM

NOTATION SYMBOLS:

- ## — INDICATES DRAWING NOTES, LISTED ON EACH SHEET
- F## — INDICATES ASSEMBLY TYPE; . REQ'D FIRE RESISTANCE RATING REFER TO TYPICAL ASSEMBLIES SCHEDULE
- ### — INDICATES DOOR TYPE
- WXX — INDICATES WINDOW TYPE
- X — INDICATES GRID NUMBER
- ROOM NAME / 101 / 150 SF — INDICATES ROOM NAME, NUMBER, & AREA
- # / A### — INDICATES BUILDING SECTION
- 1 / A101 — INDICATES FLOOR PLAN, WALL SECTION, AND DETAIL CALLOUTS
- INDICATES SPOT ELEVATIONS
- 1 / A### — DETAIL NUMBER / DETAIL REFERENCE PAGE; DETAIL CALLOUT LOCATION; View Name; View Scale; Ref: # / A###

3 HOUR REQ'D FIRE RESISTANCE RATING
1.5 HOUR REQ'D FIRE RESISTANCE RATING
1 HOUR REQ'D FIRE RESISTANCE RATING

06	ISSUED FOR REVIEW	2026-01-26
05	ISSUED FOR STRUCTURAL COORDINATION	2025-12-10
04	ISSUED FOR BUILDING PERMIT	2025-12-01
No.	DESCRIPTION	YYYY-MM-DD

REVISIONS:

ARCHITECT SEAL:

NORTH ARROW: TRUE NORTH

CLIENT: CLARIDGE HOMES

ARCHITECT:
rla/architecture
56 Beech Street, Ottawa, Ontario K1S 3J6
t.613.724.9932 f.613.724.1209 www.rodericklahey.ca

PROJECT TITLE:
IRON VALLEY II - TERRACE HOMES
5331 FERNBANK ROAD, OTTAWA, ON

SHEET TILE:
BASEMENT FLOOR PLAN

DRAWN:	CHECKED:
JWD	Checker
SCALE: 1:50	SHEET No: A151
PROJECT No: 2033	

PAPER SIZE: ISO Full Bleed B1 (707.00 x 1000.00mm)

DOT-12-17-0171

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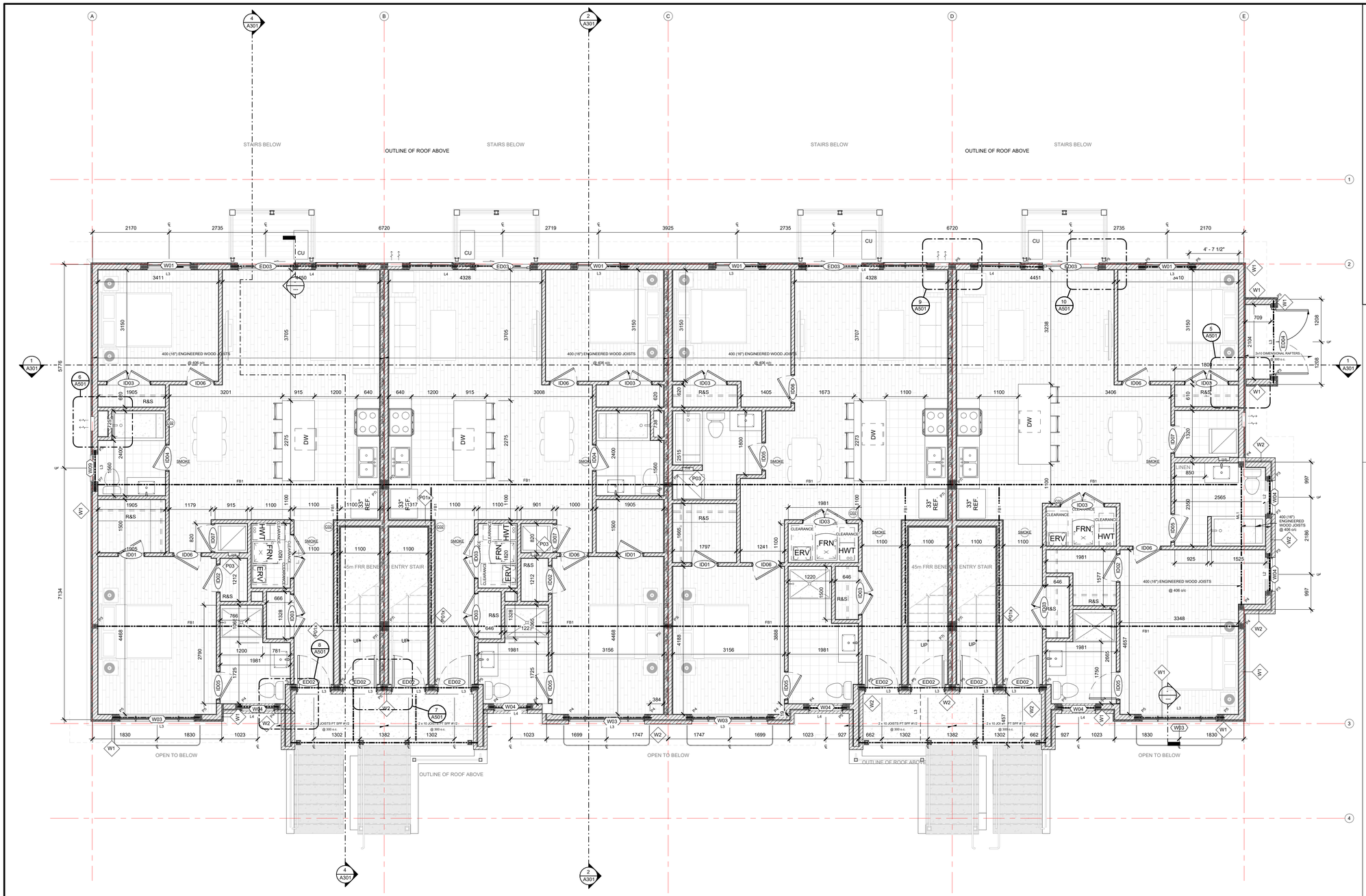

1 A152 FIRST FLOOR PLAN
1 : 50

CONSTRUCTION ASSEMBLIES ON SHEET

GENERAL NOTES

1. ALL ENTRY CLOSETS TO RECEIVE 1 ROD & SHELF. ALL BEDROOM CLOSETS TO RECEIVE 2 RODS & 1 SHELF. ALL LINENS TO RECEIVE 5 SHELVES.
2. STRUCTURE LOCATED IN FLOOR ASSEMBLY MAY VARY DUE TO FINAL JOIST LAYOUT. STRUCTURE LOCATED IN ROOF ASSEMBLY MAY VARY DUE TO FINAL TRUSS LAYOUT. FINAL LOCATIONS AND LAYOUTS TO BE CONFIRMED BY MANUFACTURER'S SHOP DRAWINGS.
3. ALL WINDOWS & DOORS TO BE FOAMED IN PLACE WITH LOW-EXPANDING POLYURETHANE FOAM INSULATION
4. ALL STAIR STRINGERS TO INCLUDE A 15mm AIR SPACE BETWEEN ADJACENT ASSEMBLY, TO BE RESERVED FOR ACOUSTIC SEALANTS AND FIRE/SMOKE CAULKS AS PER DRAWINGS AND SPECIFICATIONS.
5. STONE & BRICK MASONRY TO OVERHANG SUPPORTING FOUNDATION BY 15mm U.N.O.
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7. ALL EXPOSED STEEL TO RECEIVE CORROSION RESISTANT PAINT, COMPATIBLE PRIMER, AND FINISHING COAT
8. SUPPLY AND INSTALL COMBINED c02/STROBE TYPE SMOKE DETECTORS AS PER O.B.C. 9.10.19. REQUIREMENTS - SEE PLAN FOR GENERAL LOCATIONS, EXACT LOCATIONS TO BE CONFIRMED ON SITE.
9. ALL INTERIOR DIMENSIONS TAKEN FROM FINISHED FACE
10. ALL EXTERIOR DIMENSIONS TAKEN FROM FACE OF STUDS, CONCRETE, OR GRIDLINES.
11. ALL PARTITION WALLS TO BE WALL TYPE P04 U.N.O.
12. ALL GUARDS AND HANDRAILS TO BE INSTALLED IN ACCORDANCE WITH O.B.C. 9.8.7. AND 9.8.8. MANUFACTURER TO PROVIDE SHOP DRAWINGS c/w CONNECTION DETAILS FOR ARCHITECT'S REVIEW PRIOR TO FABRICATION.
13. FINISH FLOORING TO BE CARPET OR LAMINATE FLOORING IN ALL DRY LIVING SPACES, CERAMIC TILE IN ALL WET AREAS, AND SHEET VINYL IN M&E CLOSETS.
14. ALL WASHING MACHINES TO BE c/w GALVANIZED METAL PAN AND DRAIN. WASHERS LOCATED AT BASEMENT LEVEL TO BE LOCATED ABOVE A FLOOR DRAIN.
15. ALL AIR/VAPOUR BARRIERS TO BE CONTINUOUS, LAPPED, TAPED, AND SEALED AROUND DOOR & WINDOW OPENINGS
16. PROVIDE DRAINAGE TILE AT PERIMETER OF FOUNDATION WALL

NOTATION SYMBOLS:

- (##) INDICATES DRAWING NOTES, LISTED ON EACH SHEET
- <F##> INDICATES ASSEMBLY TYPE; REFER TO TYPICAL ASSEMBLIES SCHEDULE
- (###) INDICATES DOOR TYPE
- (WXX) INDICATES WINDOW TYPE
- (X) INDICATES GRID NUMBER
- ROOM NAME 101 150 SF — INDICATES ROOM NAME, NUMBER, & AREA
- Ref # A### — INDICATES BUILDING SECTION
- Ref 1 A101 — INDICATES FLOOR PLAN, WALL SECTION, AND DETAIL CALLOUTS
- INDICATES SPOT ELEVATIONS
- DETAIL NUMBER / DETAIL CALLOUT LOCATION — 1 A### View Name (View Scale) Ref: # / A### — DETAIL REFERENCE PAGE

UNIT G1	UNIT G2	UNIT G3	UNIT G4
1,068 ft² [99 m²]	1,034 ft² [96 m²]	1,034 ft² [96 m²]	1,108 ft² [103 m²]

TOTAL GROSS FLOOR AREA: 419 sqm

GFA GROUND FLOOR

SCHEDULES

COLUMN SCHEDULE

MARK	DESCRIPTION
P3	3-2x6 SPF #1/2 BUILT-UP COLUMN
P3i	3-2x4 SPF #1/2 BUILT-UP COLUMN
P4	4-2x6 SPF #1/2 BUILT-UP COLUMN
P4i	4-2x4 SPF #1/2 BUILT-UP COLUMN
P5	5-2x6 SPF #1/2 BUILT-UP COLUMN
P6	6-2x6 SPF #1/2 BUILT-UP COLUMN
P7	7-2x6 SPF #1/2 BUILT-UP COLUMN
P7i	7-2x4 SPF #1/2 BUILT-UP COLUMN

LINTEL SCHEDULE

MARK	DESCRIPTION
L2	2-PLY 2x10 SPF No. 1/2
L3	3-PLY 2x10 SPF No. 1/2
L4	2-PLY 1 3/4" x 9 1/2" LVL 2.0E
L7	3-PLY 1 3/4" x 11 7/8" LVL 2.0E

BEAM SCHEDULE

MARK	DESCRIPTION
FB1	FLUSH FLOOR BEAM BY FLOOR JOIST MANUFACTURER
ML1	3-178 x 406 (1.75" x 16") LVL 2.0E
SB1	W200 x 31 STEEL BEAM

No.	DESCRIPTION	YYYY-MM-DD
06	ISSUED FOR REVIEW	2026-01-26
05	ISSUED FOR STRUCTURAL COORDINATION	2025-12-10
04	ISSUED FOR BUILDING PERMIT	2025-12-01

REVISIONS:

ARCHITECT SEAL:

NORTH ARROW: TRUE NORTH

CLIENT: CLARIDGE HOMES

ARCHITECT:
rla/architecture
56 Beech Street, Ottawa, Ontario K1S 3J6
t.613.724.9932 f.613.724.1209 www.rodericklahey.ca

PROJECT TITLE:
IRON VALLEY II - TERRACE HOMES
5331 FERNBANK ROAD, OTTAWA, ON

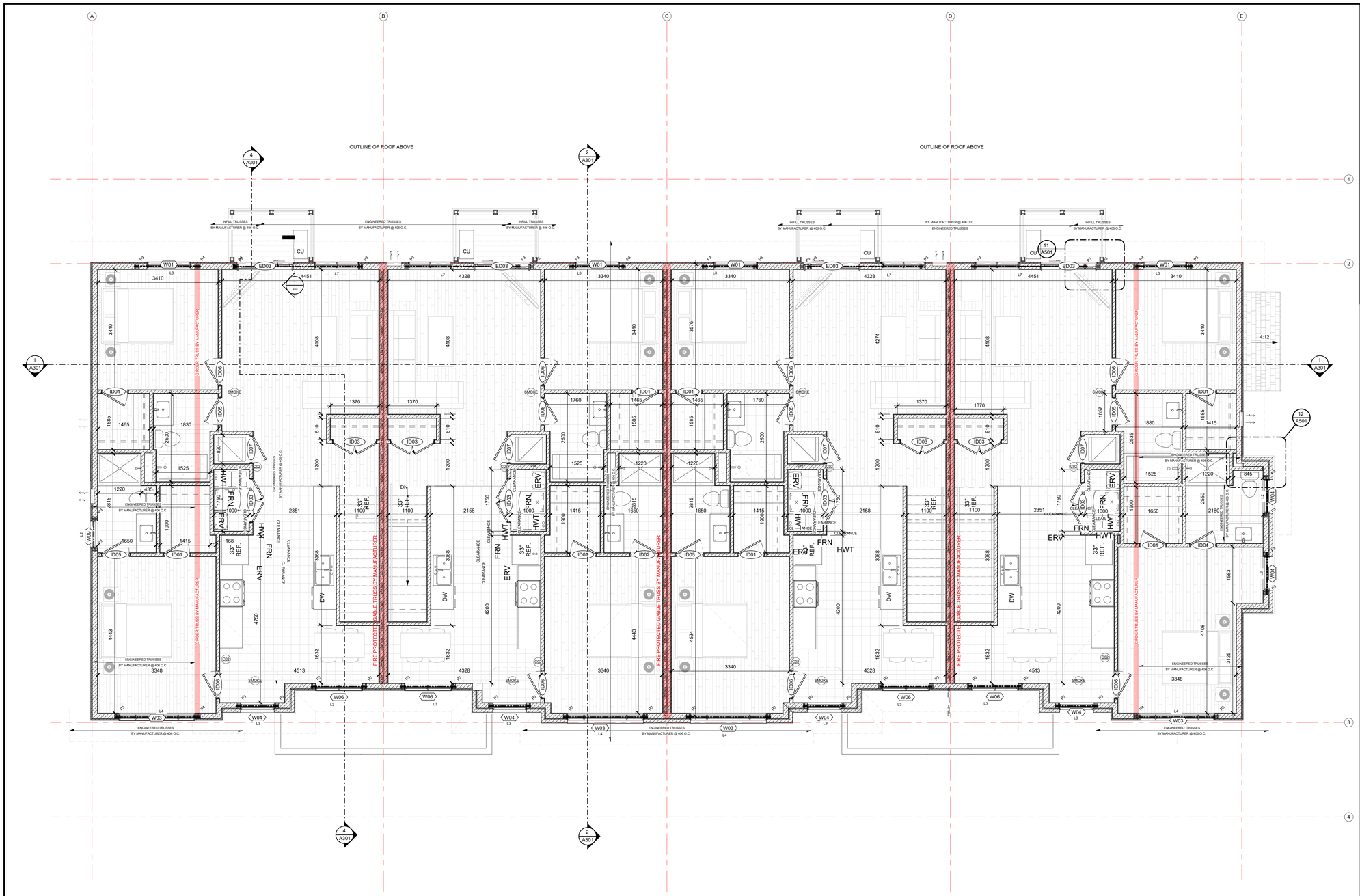
SHEET TILE:
FIRST FLOOR PLAN

DRAWN:	CHECKED:
JWD	Checker
SCALE: 1:50	SHEET No: A152
PROJECT No: 2033	

PAPER SIZE: ISO Full Bleed B1 (707.00 x 1000.00mm)

DOT-12-17-0171

PLOT DATE: 2026-02-11 5:08:43 PM



1 A153 SECOND FLOOR PLAN
1 : 50

GENERAL NOTES

1. ALL ENTRY CLOSETS TO RECEIVE 1 ROD & SHELF. ALL BEDROOM CLOSETS TO RECEIVE 2 RODS & 1 SHELF. ALL LINENS TO RECEIVE 5 SHELVES.
2. STRUCTURE LOCATED IN FLOOR ASSEMBLY MAY VARY DUE TO FINAL JOIST LAYOUT. STRUCTURE LOCATED IN ROOF ASSEMBLY MAY VARY DUE TO FINAL TRUSS LAYOUT. FINAL LOCATIONS AND LAYOUTS TO BE CONFIRMED BY MANUFACTURER'S SHOP DRAWINGS.
3. ALL WINDOWS & DOORS TO BE FOAMED IN PLACE WITH LOW-EXPANDING POLYURETHANE FOAM INSULATION
4. ALL STAIR STRINGERS TO INCLUDE A 15mm AIR SPACE BETWEEN ADJACENT ASSEMBLY, TO BE RESERVED FOR ACOUSTIC SEALANTS AND FIRE/SMOKE CAULKS AS PER DRAWINGS AND SPECIFICATIONS.
5. STONE & BRICK MASONRY TO OVERHANG SUPPORTING FOUNDATION BY 15mm U.N.O.
6. THROUGH-WALL FLASHINGS TO BE LAPPED BENEATH BUILDING PAPER, ALL JOINTS TO BE TAPED & SEALED
7. ALL EXPOSED STEEL TO RECEIVE CORROSION RESISTANT PAINT, COMPATIBLE PRIMER, AND FINISHING COAT
8. SUPPLY AND INSTALL COMBINED c02/STROBE TYPE SMOKE DETECTORS AS PER O.B.C. 9.10.19. REQUIREMENTS - SEE PLAN FOR GENERAL LOCATIONS, EXACT LOCATIONS TO BE CONFIRMED ON SITE.
9. ALL INTERIOR DIMENSIONS TAKEN FROM FINISHED FACE
10. ALL EXTERIOR DIMENSIONS TAKEN FROM FACE OF STUDS, CONCRETE, OR GRIDLINES.
11. ALL PARTITION WALLS TO BE WALL TYPE P04 U.N.O.
12. ALL GUARDS AND HANDRAILS TO BE INSTALLED IN ACCORDANCE WITH O.B.C. 9.8.7. AND 9.8.8. MANUFACTURER TO PROVIDE SHOP DRAWINGS c/w CONNECTION DETAILS FOR ARCHITECT'S REVIEW PRIOR TO FABRICATION.
13. FINISH FLOORING TO BE CARPET OR LAMINATE FLOORING IN ALL DRY LIVING SPACES, CERAMIC TILE IN ALL WET AREAS, AND SHEET VINYL IN M&E CLOSETS.
14. ALL WASHING MACHINES TO BE c/w GALVANIZED METAL PAN AND DRAIN. WASHERS LOCATED AT BASEMENT LEVEL TO BE LOCATED ABOVE A FLOOR DRAIN.
15. ALL AIR/VAPOUR BARRIERS TO BE CONTINUOUS, LAPPED, TAPED, AND SEALED AROUND DOOR & WINDOW OPENINGS
16. PROVIDE DRAINAGE TILE AT PERIMETER OF FOUNDATION WALL

IT IS THE RESPONSIBILITY OF THE APPROPRIATE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND TO REPORT ALL ERRORS AND/OR OMISSIONS TO THE ARCHITECT.

ALL CONTRACTORS MUST COMPLY WITH ALL PERTINENT CODES AND BY-LAWS.

THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION UNTIL SIGNED BY THE ARCHITECT.

DO NOT SCALE DRAWINGS.

NOTATION SYMBOLS:

- (##) INDICATES DRAWING NOTES, LISTED ON EACH SHEET
- (F##) INDICATES ASSEMBLY TYPE; REFER TO TYPICAL ASSEMBLIES SCHEDULE
- (###) INDICATES DOOR TYPE
- (WXX) INDICATES WINDOW TYPE
- (X) INDICATES GRID NUMBER
- ROOM NAME 101 150 SF — INDICATES ROOM NAME, NUMBER, & AREA
- Ref # A### — INDICATES BUILDING SECTION
- Ref 1 A101 — INDICATES FLOOR PLAN, WALL SECTION, AND DETAIL CALLOUTS
- INDICATES SPOT ELEVATIONS
- DETAIL NUMBER / DETAIL CALLOUT LOCATION — 1 A### View Name — View Scale / Ref: # / A### — DETAIL REFERENCE PAGE

UNIT S1	UNIT S2	UNIT S3	UNIT S4
1,134 ft² [105 m²]	1,101 ft² [102 m²]	1,101 ft² [102 m²]	1,168 ft² [108 m²]

TOTAL GROSS FLOOR AREA: 417 sqm

GFA SECOND FLOOR

WINDOW SCHEDULE

MARK	DESCRIPTION	QTY.	SIZE INFORMATION WIDTH	HEIGHT	ROUGH WIDTH	ROUGH HEIGHT	OPERATION	COMMENTS
W0X		18	<varies>	<varies>	<varies>	<varies>		
W01	SINGLE CASEMENT, SINGLE FIXED, DOUBLE SASH	16	1220	1220	1240	1245	CASEMENT	
W03	FIXED	8	2135	2000	2155	2025	-	
W04	SINGLE CASEMENT WITH TRANSOM	12	940	1576	960	1601	CASEMENT	
W06	SINGLE CASEMENT, SINGLE FIXED, DOUBLE SASH, DOUBLE TRANSOM	4	1320	2006	1340	2031		
W09		2	762	610	782	635		

COLUMN SCHEDULE

MARK	DESCRIPTION
P3	3-2x6 SPF #1/2 BUILT-UP COLUMN
P3i	3-2x4 SPF #1/2 BUILT-UP COLUMN
P4	4-2x6 SPF #1/2 BUILT-UP COLUMN
P4i	4-2x4 SPF #1/2 BUILT-UP COLUMN
P5	5-2x6 SPF #1/2 BUILT-UP COLUMN
P6	6-2x6 SPF #1/2 BUILT-UP COLUMN
P7	7-2x6 SPF #1/2 BUILT-UP COLUMN
P7i	7-2x4 SPF #1/2 BUILT-UP COLUMN

DOOR SCHEDULE

MARK	DESCRIPTION	QTY.	SIZE INFORMATION WIDTH	HEIGHT	THICK.	ROUGH WIDTH	ROUGH HEIGHT	HARDWARE, FIRE, & FINISHES TYPE	FINISH	FRAME TYPE	FRAME FINISH	F.R.R.	HARDWARE	COMMENTS
ED01	EXTERIOR GLAZED ENTRY DOOR w/ TRANSOM	4	915	2030	50	979	2062	INSUL. H.M.	PAINT	INSUL METAL	PAINT	N/A	LOCK SET, VIEWER, & CLOSER	METAL THRESHOLD
ED02	EXTERIOR GLAZED ENTRY DOOR w/ TRANSOM	8	915	2134	50	979	2166	INSUL. H.M.	PAINT	INSUL METAL	PAINT	N/A	LOCK SET, VIEWER, & CLOSER	METAL THRESHOLD
ED03		8	1525	2134	50	1595	2194					N/A		
ED04	EXTERIOR STEEL MECHANICAL CLOSET DOOR	1	1830	2134	35	1950	2194	INSUL. H.M.	PAINT	INSUL METAL	PAINT	N/A	LOCK SET	METAL THRESHOLD
ID01	CLOSET	11	710	2030	35	770	2060	H.W.C.	PAINT	WOOD	PAINT	N/A	PASSAGE SET	
ID02	CLOSET	8	760	2030	35	820	2060	H.W.C.	PAINT	WOOD	PAINT	N/A	PASSAGE SET	
ID03	CLOSET, DOUBLE LEAF	32	1220	2030	35	1266	2053	H.W.C.	PAINT	WOOD	PAINT	N/A	PASSAGE SET	
ID04	BATHROOM	4	710	2030	35	770	2060	H.W.C.	PAINT	WOOD	PAINT	N/A	PRIVACY SET	MARBLE THRESHOLD
ID05	BATHROOM	19	760	2030	35	820	2060	H.W.C.	PAINT	WOOD	PAINT	N/A	PRIVACY SET	MARBLE THRESHOLD
ID06	BEDROOM	24	760	2030	35	820	2060	H.W.C.	PAINT	WOOD	PAINT	N/A	PASSAGE SET	
ID07	LAUNDRY CLOSET	11	760	2030	35	820	2060	H.W.C.	PAINT	WOOD	PAINT	N/A	PASSAGE SET	MARBLE THRESHOLD

LINTEL SCHEDULE

MARK	DESCRIPTION
L2	2-PLY 2x10 SPF No. 1/2
L3	3-PLY 2x10 SPF No. 1/2
L4	2-PLY 1 3/4" x 9 1/2" LVL 2.0E
L7	3-PLY 1 3/4" x 11 7/8" LVL 2.0E

BEAM SCHEDULE

MARK	DESCRIPTION
FB1	FLUSH FLOOR BEAM BY FLOOR JOIST MANUFACTURER
ML1	3-1?8 x 406 (1.75" x 16") LVL 2.0E
SB1	W200 x 31 STEEL BEAM

No.	DESCRIPTION	YYYY-MM-DD
06	ISSUED FOR REVIEW	2026-01-26
05	ISSUED FOR STRUCTURAL COORDINATION	2025-12-10
04	ISSUED FOR BUILDING PERMIT	2025-12-01

REVISIONS:

ARCHITECT SEAL:

NORTH ARROW: TRUE NORTH

CLIENT: CLARIDGE HOMES

ARCHITECT:
rla/architecture
56 Beech Street, Ottawa, Ontario K1S 3J6
t.613.724.9932 f.613.724.1209 www.rodericklahey.ca

PROJECT TITLE:
IRON VALLEY II - TERRACE HOMES
5331 FERNBANK ROAD, OTTAWA, ON

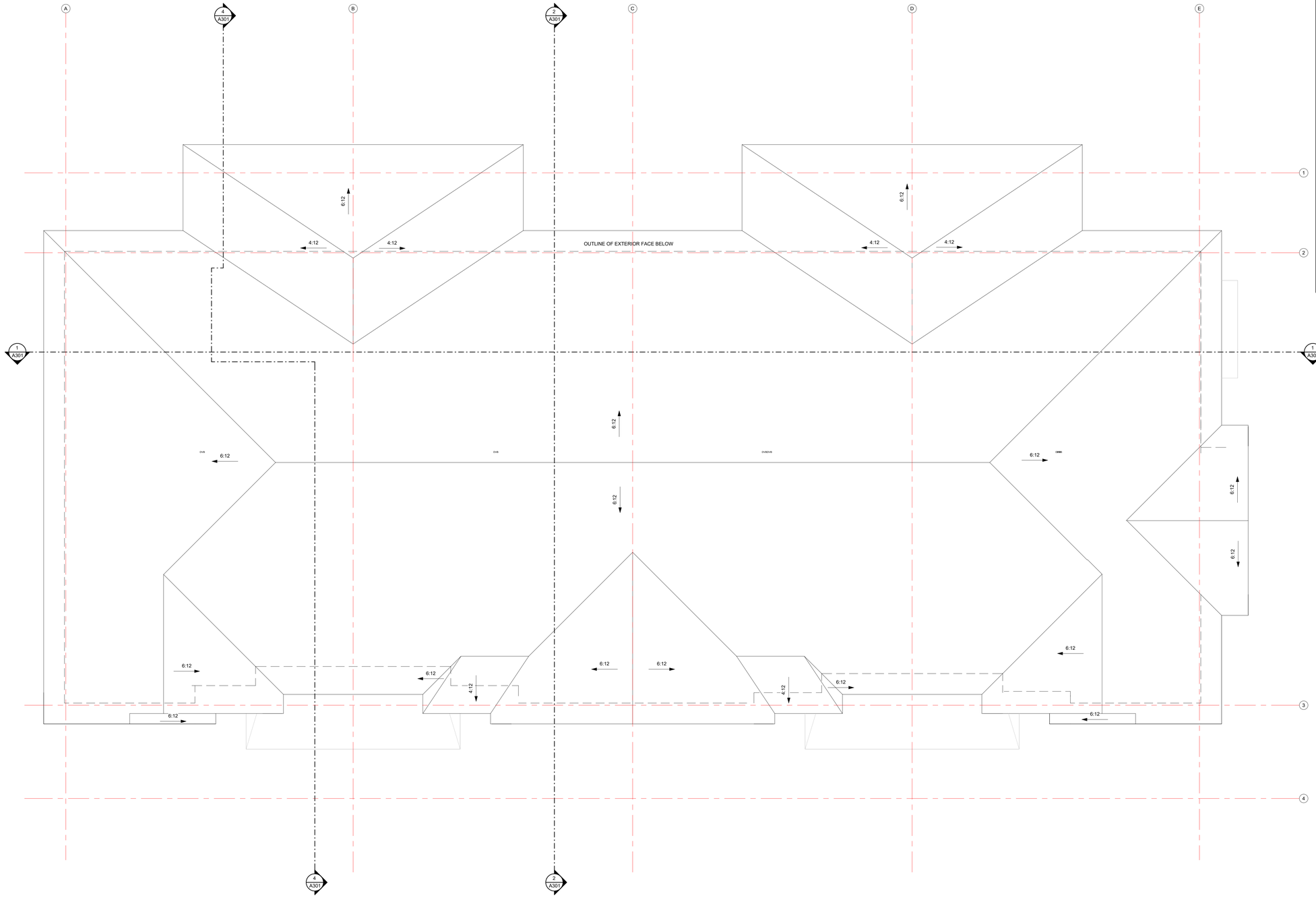
SHEET TILE:
SECOND FLOOR PLAN

DRAWN: JWD
CHECKED: Checker
SCALE: 1:50
SHEET No: A153
PROJECT No: 2033

PAPER SIZE: ISO Full Bleed B1 (707.00 x 1000.00mm)

D07-12-17-0171

PLOT DATE: 2026-02-11 5:08:46 PM



1 A154 ROOF PLAN
1 : 50

GENERAL NOTES

1. ALL ENTRY CLOSETS TO RECEIVE 1 ROD & SHELF. ALL BEDROOM CLOSETS TO RECEIVE 2 RODS & 1 SHELF. ALL LINENS TO RECEIVE 5 SHELVES.
2. STRUCTURE LOCATED IN FLOOR ASSEMBLY MAY VARY DUE TO FINAL JOIST LAYOUT. STRUCTURE LOCATED IN ROOF ASSEMBLY MAY VARY DUE TO FINAL TRUSS LAYOUT. FINAL LOCATIONS AND LAYOUTS TO BE CONFIRMED BY MANUFACTURER'S SHOP DRAWINGS.
3. ALL WINDOWS & DOORS TO BE FOAMED IN PLACE WITH LOW-EXPANDING POLYURETHANE FOAM INSULATION
4. ALL STAIR STRINGERS TO INCLUDE A 15mm AIR SPACE BETWEEN ADJACENT ASSEMBLY, TO BE RESERVED FOR ACOUSTIC SEALANTS AND FIRE/SMOKE CAULKS AS PER DRAWINGS AND SPECIFICATIONS.
5. STONE & BRICK MASONRY TO OVERHANG SUPPORTING FOUNDATION BY 15mm U.N.O.
6. THROUGH-WALL FLASHINGS TO BE LAPPED BENEATH BUILDING PAPER, ALL JOINTS TO BE TAPED & SEALED
7. ALL EXPOSED STEEL TO RECEIVE CORROSION RESISTANT PAINT, COMPATIBLE PRIMER, AND FINISHING COAT
8. SUPPLY AND INSTALL COMBINED c02/STROBE TYPE SMOKE DETECTORS AS PER O.B.C. 9.10.19. REQUIREMENTS - SEE PLAN FOR GENERAL LOCATIONS, EXACT LOCATIONS TO BE CONFIRMED ON SITE.
9. ALL INTERIOR DIMENSIONS TAKEN FROM FINISHED FACE
10. ALL EXTERIOR DIMENSIONS TAKEN FROM FACE OF STUDS, CONCRETE, OR GRIDLINES.
11. ALL INTERIOR PARTITION WALLS TO BE WALL TYPE P4 U.N.O.
12. ALL GUARDS AND HANDRAILS TO BE INSTALLED IN ACCORDANCE WITH O.B.C. 9.8.7. AND 9.8.8. MANUFACTURER TO PROVIDE SHOP DRAWINGS c/w CONNECTION DETAILS FOR ARCHITECTS REVIEW PRIOR TO FABRICATION.
13. FINISH FLOORING TO BE CARPET OR LAMINATE FLOORING IN ALL DRY LIVING SPACES, CERAMIC TILE IN ALL WET AREAS, AND SHEET VINYL IN M&E CLOSETS.
14. ALL WASHING MACHINES TO BE c/w GALVANIZED METAL PAN AND DRAIN. WASHERS LOCATED AT BASEMENT LEVEL TO BE LOCATED ABOVE A FLOOR DRAIN.
15. ALL AIR/VAPOUR BARRIERS TO BE CONTINUOUS, LAPPED, TAPED, AND SEALED AROUND DOOR & WINDOW OPENINGS
16. PROVIDE DRAINAGE TILE AT PERIMETER OF FOUNDATION WALL

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NOTATION SYMBOLS:

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- (###) INDICATES DOOR TYPE
- (WXX) INDICATES WINDOW TYPE
- (X) INDICATES GRID NUMBER
- ROOM NAME 101 150 SF — INDICATES ROOM NAME, NUMBER, & AREA
- Ref # A### — INDICATES BUILDING SECTION
- Ref 1 A101 — INDICATES FLOOR PLAN, WALL SECTION, AND DETAIL CALLOUTS
- INDICATES SPOT ELEVATIONS
- DETAIL NUMBER / DETAIL CALLOUT LOCATION — 1 A### View Name — View Scale / Ref: # / A### — DETAIL REFERENCE PAGE

No.	DESCRIPTION	YYYY-MM-DD
06	ISSUED FOR CONSULTANT MEETING	2025-12-18
05	ISSUED FOR STRUCTURAL COORDINATION	2025-12-10
04	ISSUED FOR BUILDING PERMIT	2025-12-01

REVISIONS:

ARCHITECT SEAL:

NORTH ARROW: TRUE NORTH

CLIENT: CLARIDGE HOMES

ARCHITECT:
rla/architecture
56 Beech Street, Ottawa, Ontario K1S 3J6
t.613.724.9932 f.613.724.1209 www.rodericklahey.ca

PROJECT TITLE:
IRON VALLEY II - TERRACE HOMES
5331 FERNBANK ROAD, OTTAWA, ON

SHEET TILE:
ROOF PLAN

DRAWN: Author
CHECKED: Checker
SCALE: As indicated
SHEET No: A154
PROJECT No: 2033

PLOT DATE: 2025-12-17 4:59:21 PM

PAPER SIZE: ISO Full Bleed B1 (707.00 x 1000.00mm)

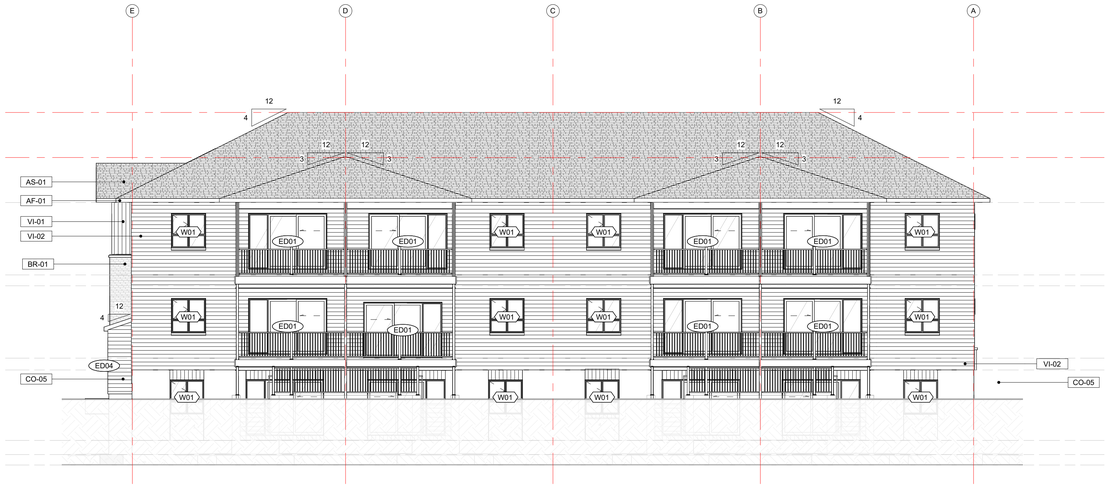
D07-12-17-0171

MATERIAL KEYNOTE LEGEND

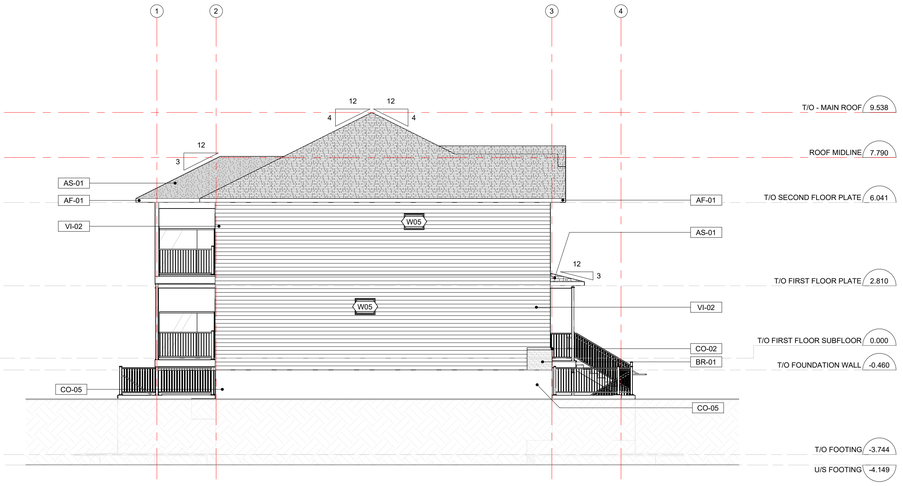
1	CONCRETE FOUNDATION WALL: DAMPPROOFING TO EXTEND DOWN AND OVER FOOTINGS. PARGING TO EXTEND 150mm BELOW GRADE
2	CLOTH COVERED DRAINAGE TILE @ PERIMETER OF FOUNDATION WALL c/w 150mm MIN. GRANULAR COVER - ALL EXTERIOR CONNECTIONS TO BE COORDINATED WITH AND CONFIRMED BY CIVIL
3	STEEL ANCHOR BOLTS EMBEDDED IN CONCRETE FOUNDATION WALL THROUGH SILL PLATE
4	TYVEK RIM BOARD WRAP c/w BATT INSULATION
AF-01	ALUMINUM FASCIA - DARK GREY
AS-01	ASPHALT SHINGLES - DARK GREY
BR-01	MASONRY - PACKAGE 1: ARRISCRAFT CAMBRIDGE RENAISSANCE - BIRCHBARK
CO-02	PRECAST SILL
CO-05	PARGING
RA-01	ALUMINUM BALCONY RAILINGS c/w GLAZING AS PER MANUFACTURER'S INSTRUCTIONS
RA-02	ALUMINUM BALCONY RAILINGS c/w PICKETS @ 100mm o.c. MAX AS PER MANUFACTURER'S INSTRUCTIONS
VI-01	VINYL - PACKAGE 1: VERTICAL BOARD & BATTEN SIDING - LIGHT GRAY
VI-02	VINYL - PACKAGE 2: HORIZONTAL LAP SIDING - LIGHT GREY

1 A201 **FRONT ELEVATION**
1 : 100

2 A201 **RIGHT ELEVATION**
1 : 100



3 A201 **REAR ELEVATION**
1 : 100



4 A201 **LEFT ELEVATION**
1 : 100

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DO NOT SCALE DRAWINGS.

PROTECTED OPENING WITH DELUGE SPRINKLERS

OPERABLE GLAZING

No.	DESCRIPTION	YYYY-MM-DD
06	ISSUED FOR CONSULTANT MEETING	2025-12-18
05	ISSUED FOR STRUCTURAL COORDINATION	2025-12-10
04	ISSUED FOR BUILDING PERMIT	2025-12-01
03	ISSUED FOR REVISED SITE PLAN CONTROL APP.	2025-11-17
01	ISSUED FOR CLIENT COMMENTS	2025-10-15

REVISIONS:

ARCHITECT SEAL:

NORTH ARROW:

CLIENT:

CLARIDGE HOMES

ARCHITECT:
rla/architecture
56 Beech Street, Ottawa, Ontario K1S 3J6
t.613.724.9932 f.613.724.1209 www.rodericklahey.ca

PROJECT TITLE:

IRON VALLEY II - TERRACE HOMES

5331 FERNBANK ROAD, OTTAWA, ON

SHEET TILE:

ELEVATIONS

DRAWN: JWD

CHECKED: VP

SCALE: As Indicated

SHEET No: A201

PROJECT No: 2033

PAPER SIZE: ISO Full Bleed B1 (707.00 x 1000.00mm)

D07-12-17-0171

PLOT DATE: 2025-12-17 4:59:28 PM

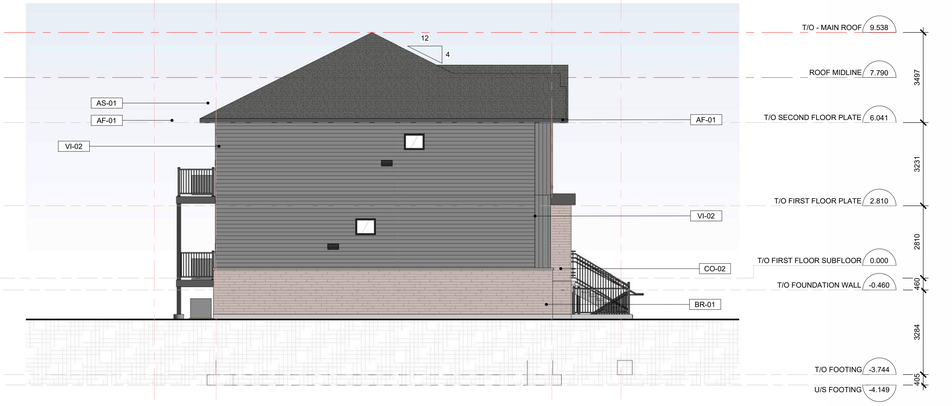
MATERIAL KEYNOTE LEGEND

1	CONCRETE FOUNDATION WALL: DAMPPROOFING TO EXTEND DOWN AND OVER FOOTINGS. PARGING TO EXTEND 150mm BELOW GRADE
2	CLOTH COVERED DRAINAGE TILE @ PERIMETER OF FOUNDATION WALL c/w 150mm MIN. GRANULAR COVER - ALL EXTERIOR CONNECTIONS TO BE COORDINATED WITH AND CONFIRMED BY CIVIL
3	STEEL ANCHOR BOLTS EMBEDDED IN CONCRETE FOUNDATION WALL THROUGH SILL PLATE
4	TYVEK RIM BOARD WRAP c/w BATT INSULATION
AF-01	ALUMINUM FASCIA - DARK GREY
AS-01	ASPHALT SHINGLES - DARK GREY
BR-01	MASONRY - PACKAGE 1: ARRISCRAFT CAMBRIDGE RENAISSANCE - BIRCHBARK
CO-02	PRECAST SILL
CO-05	PARGING
VI-01	VINYL - PACKAGE 1: VERTICAL BOARD & BATTEN SIDING - LIGHT GRAY
VI-02	VINYL - PACKAGE 2: HORIZONTAL LAP SIDING - LIGHT GREY

1 A202 **FRONT ELEVATION**
1 : 100

2 A202 **RIGHT ELEVATION**
1 : 100

3 A202 **REAR ELEVATION**
1 : 100



4 A202 **LEFT ELEVATION**
1 : 100

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DO NOT SCALE DRAWINGS.

PROTECTED OPENING WITH DELUGE SPRINKLERS

OPERABLE GLAZING

No.	DESCRIPTION	YYYY-MM-DD
06	ISSUED FOR REVIEW	2026-01-26
03	ISSUED FOR REVISED SITE PLAN CONTROL APP.	2025-11-17
01	ISSUED FOR CLIENT COMMENTS	2025-10-15

REVISIONS:

ARCHITECT SEAL:

NORTH ARROW:

CLIENT:

CLARIDGE HOMES

ARCHITECT:
rla/architecture
56 Beech Street, Ottawa, Ontario K1S 3J6
t.613.724.9932 f.613.724.1209 www.rodericklahey.ca

PROJECT TITLE:

IRON VALLEY II - TERRACE HOMES

5331 FERNBANK ROAD, OTTAWA, ON

SHEET TILE:

ELEVATIONS - SHADED

DRAWN: JWD	CHECKED: VP
SCALE: 1:100	SHEET No: A202
PROJECT No: 2033	

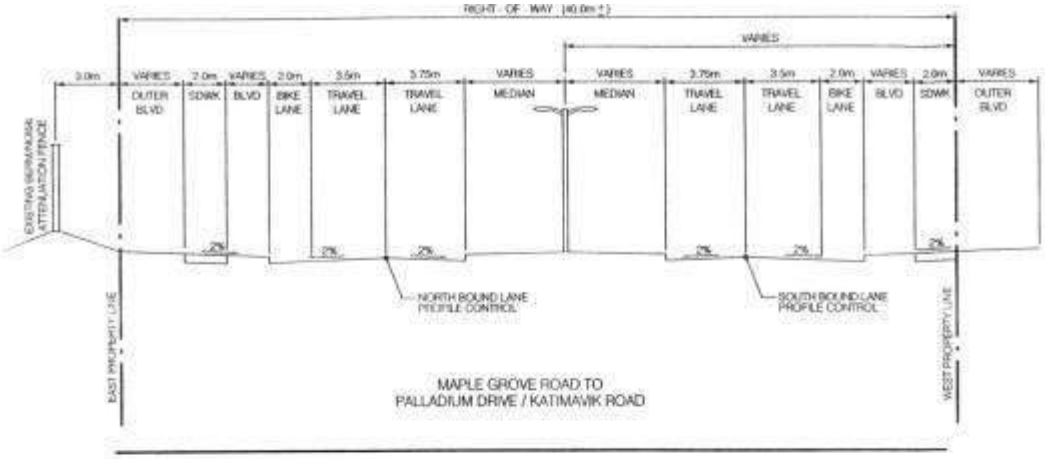
PAPER SIZE: ISO Full Bleed B1 (707.00 x 1000.00mm)

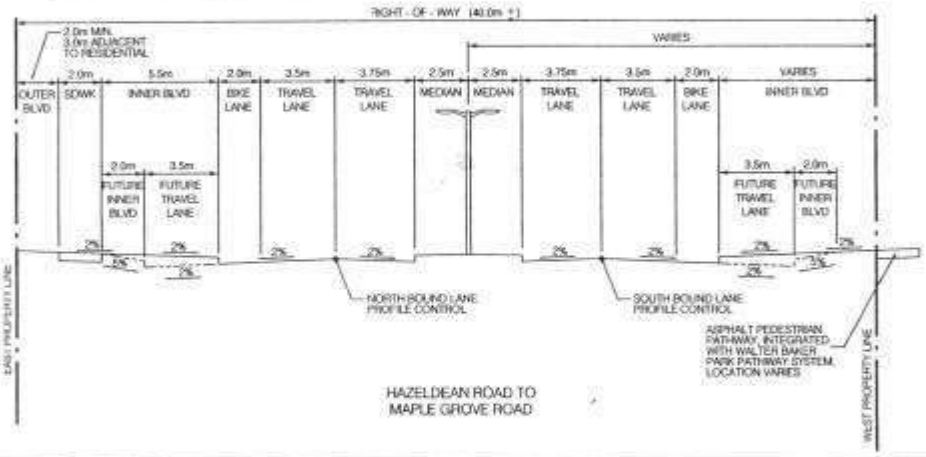
D07-12-17-0171

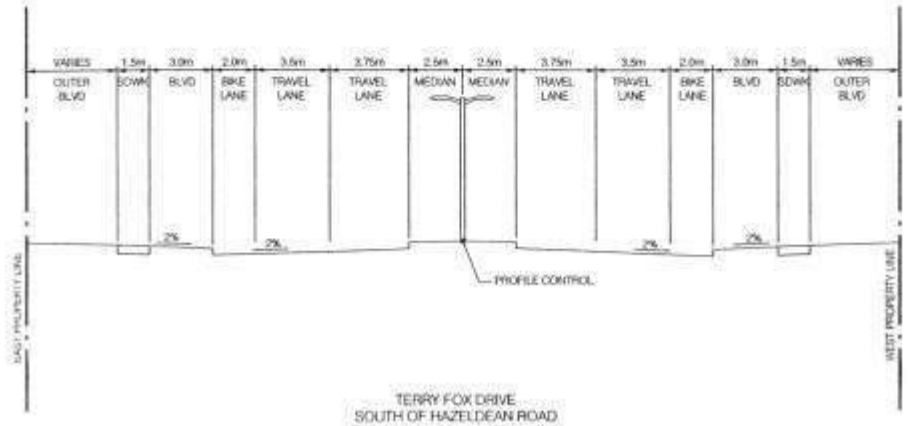
PLOT DATE: 2026-02-11 5:08:51 PM

APPENDIX E

Terry Fox Drive Ultimate Condition Typical Cross Section
Grading Plan GR1
Grading Plan GR2


RIGHT - OF - WAY (40.0m ±)
VARIES
3.0m
VARIES
OUTER BLVD
2.0m
SDWK
VARIES
BLVD
2.0m
BIKE LANE
3.5m
TRAVEL LANE
3.75m
TRAVEL LANE
VARIES
MEDIAN
VARIES
MEDIAN
3.75m
TRAVEL LANE
3.5m
TRAVEL LANE
2.0m
BIKE LANE
VARIES
BLVD
2.0m
SDWK
VARIES
OUTER BLVD
EXISTING NOISE ATTENUATION FENCE
2%
NORTH BOUND LANE PROFILE CONTROL
SOUTH BOUND LANE PROFILE CONTROL
EAST PROPERTY LINE
WEST PROPERTY LINE
MAPLE GROVE ROAD TO
PALLADIUM DRIVE / KATIMAVIK ROAD


RIGHT - OF - WAY (40.0m ±)
2.0m MIN.
3.0m ADJACENT
TO RESIDENTIAL
VARIES
2.0m
OUTER BLVD
5.5m
SDWK
INNER BLVD
2.0m
FUTURE INNER BLVD
3.5m
FUTURE TRAVEL LANE
2.0m
BIKE LANE
3.5m
TRAVEL LANE
3.75m
TRAVEL LANE
2.5m
MEDIAN
2.5m
MEDIAN
3.75m
TRAVEL LANE
3.5m
TRAVEL LANE
2.0m
BIKE LANE
VARIES
INNER BLVD
3.5m
FUTURE TRAVEL LANE
2.0m
FUTURE INNER BLVD
2%
NORTH BOUND LANE PROFILE CONTROL
SOUTH BOUND LANE PROFILE CONTROL
ASPHALT PEDESTRIAN PATHWAY, INTEGRATED WITH WALTER BAKER PARK PATHWAY SYSTEM, LOCATION VARIES
EAST PROPERTY LINE
WEST PROPERTY LINE
HAZELDEAN ROAD TO
MAPLE GROVE ROAD


VARIES
OUTER BLVD
1.5m
SDWK
3.0m
BLVD
2.0m
BIKE LANE
3.5m
TRAVEL LANE
3.75m
TRAVEL LANE
2.5m
MEDIAN
2.5m
MEDIAN
3.75m
TRAVEL LANE
3.5m
TRAVEL LANE
2.0m
BIKE LANE
3.0m
BLVD
1.5m
SDWK
VARIES
OUTER BLVD
2%
PROFILE CONTROL
EAST PROPERTY LINE
WEST PROPERTY LINE
TERRY FOX DRIVE
SOUTH OF HAZELDEAN ROAD