116 & 118 Carruthers Avenue, Ottawa, ON

Noise Impact Study

Client:
MA Precious Holding Inc.

Attention:
Majid Ahangaran

Type of Document:
Final (Revision 1)

Project Name:
116 & 118 Carruthers Avenue

Project Number:
GTR-23015359-D0

EXP Services Inc.
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Date Submitted:
2025-1-29

Version Control

Rev.	Date	Description	Submitted by	Reviewed by
0.0	November 18, 2024	Final	Pearlie Yung	Ron Taylor
1.0	January 29, 2025	Revision 1	Pearlie Yung	Ron Taylor

Table of Contents

List of Appendices

1 Introduction

EXP Services Inc. (EXP) was retained by MA Precious Holding Inc., (“Client”) to complete a Noise Impact Study for a proposed residential development at 116 & 118 Carruthers Avenue in Ottawa (hereinafter referred to as the 'Site'). The purpose of this study is to assess the impact of noise from nearby environmental sources to the proposed residential development in accordance with Ottawa Environmental Noise Control Guidelines (ENCG). The study is to support a site plan approval application.

2 Site and Surrounding Area

The Site is located on the west side of Carruthers Avenue between Scott Street and Lyndale Avenue. The project consists of one 4-storey apartment building with a basement and a roof patio. The roof patio is a shared designated outdoor amenity area. A site plan and floor plans are provided in Appendix A.

The Site is surrounded by residential properties. The nearest arterial road is Scott Street to the south. The O-Train Confederation Line Line 1 runs in parallel with Scott Street. An aerial image of the area is shown in Figure 1. There are no significant stationary noise sources in the vicinity.

3 Noise Impact Assessment

3.1 Noise Impact from Transportation Noise Sources

The major transportation noise source that may impact the Site is the road traffic along Scott Street and LRT on O-Train Line 1.

3.1.1 Critical Noise Receptors

Critical noise receptors are those receptors likely to be most affected by the identified noise sources. The locations of critical noise receptors are listed in Table 1 and shown in Figure 2.

Table 1. Critical Noise Receptors for Transportation Noise Sources

Receptor ID	Receptor Location	Height (m)
POR1	Apartments along south facade	10.5
OLA1	Roof terrace	13.5

3.1.2 Noise Criteria

Guidelines for acceptable sound levels of road traffic on residential developments are given in ENCG which references Part C of MECP publication NPC-300 “Environmental Noise Guidelines, Stationery and Transportation Sources – Approval and Planning” (August 2013). They are summarized in the tables below.

Table 2. MECP Outdoor Sound Level Limits

Time Period	Sound Level Leq (16)
Daytime (07:00-23:00)	55 dBA

Table 3. MECP Noise Control Requirements for Outdoor Receptors

Outdoor Sound Level (Daytime Leq)	Need for Noise Reduction Measures
56 dBA to 60 dBA	Noise control measures may be implemented. If no noise control measures are planned, a Type A warning clause must be included in the unit title or lease agreement.
Above 60 dBA	Control measures (barriers) required to reduce the Leq to below 60 dBA and as close to 55 dBA as technically, economically and administratively feasible. A warning clause is required if resultant Leq exceeds 55 dBA.

Table 4. MECP Indoor Sound Level Limit

Room	Time Period	Road Sound Level (Leq)
Living/Dining Rooms	Daytime (07:00-23:00)	45 dBA
	Night-time (23:00-07:00)	45 dBA
Bedrooms	Daytime (07:00-23:00)	45 dBA
	Night-time (23:00-07:00)	40 dBA

Table 5. MECP Ventilation and Warning Clause Requirements

Time Period	Assessment Location	Leq	Ventilation Requirements	Warning Clause
Daytime (07:00-23:00)	Plane of a bedroom or living/dining room window	Greater than 55 dBA to less than or equal to 65 dBA	Forced air heating with provision for central air conditioning.	Type C
		Greater than 65 dBA	Central air conditioning	Type D
Night-time (23:00-07:00)	Plane of a bedroom or living/dining room window	Greater than 50 dBA to less than or equal to 60 dBA	Forced air heating with provision for central air conditioning.	Type C
		Greater than 60 dBA	Central air conditioning	Type D

Table 6. MECP Building Component Requirements

Time Period	Assessment Location	Road Sound Level (Leq)	Building Component Requirements
Daytime (07:00-23:00)	Plane of a bedroom or living/dining room window	Less than or equal to 65 dBA	Building compliant with the Ontario Building Code.
		Greater than 65 dBA	Building components must be designed to achieve indoor sound level criteria.
Night-time (23:00-07:00)	Plane of a bedroom or living/dining room window	Less than or equal to 60 dBA	Building compliant with the Ontario Building Code.
		Greater than 60 dBA	Building components must be designed to achieve indoor sound level criteria.

3.1.3 Transportation Sound Level Prediction

The traffic volume data for Scott Street is obtained from ENCG for a 4-lane undivided urban arterial road. The AADT is taken to be 30,000. The medium truck percentage is 7% and the heavy truck percentage is 5%. The day/night split is 92% daytime versus 8% night-time. The speed limit is 50 km/h. The traffic data are summarized in Table 7.

OC Transpo and the City of Ottawa do not release any LRT information for O-Train Line 1. Therefore, LRT traffic volume is determine from the current weekday schedule for nearby Bayview Station and Tunney's Pasture Station. An annual growth rate of 2.5% for 10 years is assumed. The traffic data are summarized in Table 7.

Table 7. Road Traffic Data Summary

Parameter	Scott Street	O-Train Line 1
Traffic Volume	30,000	417*
Annual growth percentage	-	2.5%
Day/Night Split	92% / 8%	Day: 347 and Night: 70
Heavy truck percentage	7%	-
Medium truck percentage	5%	-
Speed limit	50 km/h	80 km/h

*Projected vehicle volume for 10 years.

Calculation of traffic sound levels were performed using STAMSON 5.04, the software implementation of the MOE ORNAMENT model for road (and rail) traffic, which was developed and published by the MECP for transportation noise prediction. Annual growth of 2.5% for LRT traffic to year 2034 has been assumed and included in the calculation. The calculated sound levels are summarized in Table 8. Figure 3 shows the distances, elevation and angles between the noise sources and critical noise receptors. Calculation printouts are provided in Appendix B.

Table 8. Calculated Outdoor Sound Levels due to Road Traffic

Receptor ID	Calculated Sound Level (dBA)	
	Daytime Leq (16 hrs)	Night-time Leq (8 hrs)
POR1	58	51
OLA1	58	-

3.1.4 Noise Control Recommendations

Noise control recommendations for the critical receptors are summarized in Table 9 and discussed in the subsequent sections.

Table 9. Noise Control Measures

Receptor ID	Noise Barrier	Ventilation	Building Components	Warning Clause
POR1	N/A	Forced air heating with provision for central air conditioning	Ontario Building Code	Type C
OLA1	No	N/A	N/A	Type A

3.1.4.1 Outdoor Amenity Area

The predicted sound level in the roof terrace is between 55 dBA and 60 dBA, therefore a noise control measure is not necessary. A warning clause is required if no noise control measure is implemented.

3.1.4.2 Ventilation

Since the predicted sound levels at POR1 are between 55 dBA and 65 dBA during daytime and between 50 dBA to 60 dBA during night-time, forced air heating with provision for central air conditioning is required in the apartments.

3.1.4.3 Building Components

Since the predicted sound levels are below 60 dBA during daytime and 55 dBA during night-time, building components that meet the Ontario Building Code are sufficient to meet the indoor sound level limits.

3.1.4.4 Warning Clause

Since the unmitigated daytime sound level at OLA 1 is between 55 dBA and 60 dBA, the following Type A warning clause should be inserted in all development agreements of all dwellings in the apartment building:

> "Purchasers/tenants are advised that sound levels due to increasing road 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."

Since the forced air heating with provision for central air conditioning is required for the apartment building, the following Type C warning clause should be inserted in all development agreements of all dwellings:

> "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."

3.2 Noise Impact from On-Site Stationary Noise Sources

As it is in the early stage of design for the project, the mechanical systems for the proposed apartment building have not been designed. It is also uncertain whether the building will be served by central air conditioning as it is not necessary for noise control purposes. It is anticipated that potential stationary noise sources associated with the Site are rooftop mechanical equipment, if any.

We recommend analysis to be performed when information of the proposed mechanical system is available. Noise control measures shall be implemented to ensure that sound level limits for stationary noise sources in ENCG are met for both on-site and off-site noise sensitive receptors. Typical noise control measures include selecting quieter equipment and noise barrier.

4 Conclusions

Noise impact of transportation noise sources on the proposed residential development will meet the ENCG criteria with the noise control recommendations described in Section 3.1.4. There is no significant stationary noise source in the area. The proposed residential development at 116 & 118 Carruthers Avenue in Ottawa should therefore be approved from the noise perspective.

5 General Limitations

The information and conclusions in this report are considered to be privileged and confidential and have been prepared exclusively for MA Precious Holding Inc. The purpose of this report is to provide MA Precious Holding Inc. with an assessment of the potential noise impact to the proposed residential development at 116 & 118 Carruthers Avenue.

The information presented in this report is based on information provided by others and visual observations as identified herein. Achieving the objectives stated in this report has required us to arrive at conclusions based upon the best information presently known to us. No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information; it can only reduce the possibility to an acceptable level. Professional judgment was exercised in gathering and analyzing the information obtained and in the formulation of the conclusions. Like all professional persons rendering advice, we do not act as absolute insurers of the conclusions we reach, but we commit ourselves to care and competence in reaching those conclusions.

Any use which a third party makes of this report, or any part thereof, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EXP accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Noise and vibration levels at various times may differ from those assessed. In addition, any changes to the proposed design or introduction of new processes and/or sources may render the conclusions of this report inaccurate or invalid. In the event of any such changes, EXP should be contacted to re-evaluate the conditions within the assessed areas and make appropriate revisions to the original conclusions of this report.

6 Closure

We trust this report is satisfactory for your purposes. Should you have any questions, please do not hesitate to contact this office.

Yours truly,

EXP Services Inc.

Pearlie Yung, M.Sc., P.Eng.
Senior Acoustic Engineer
Environmental Services

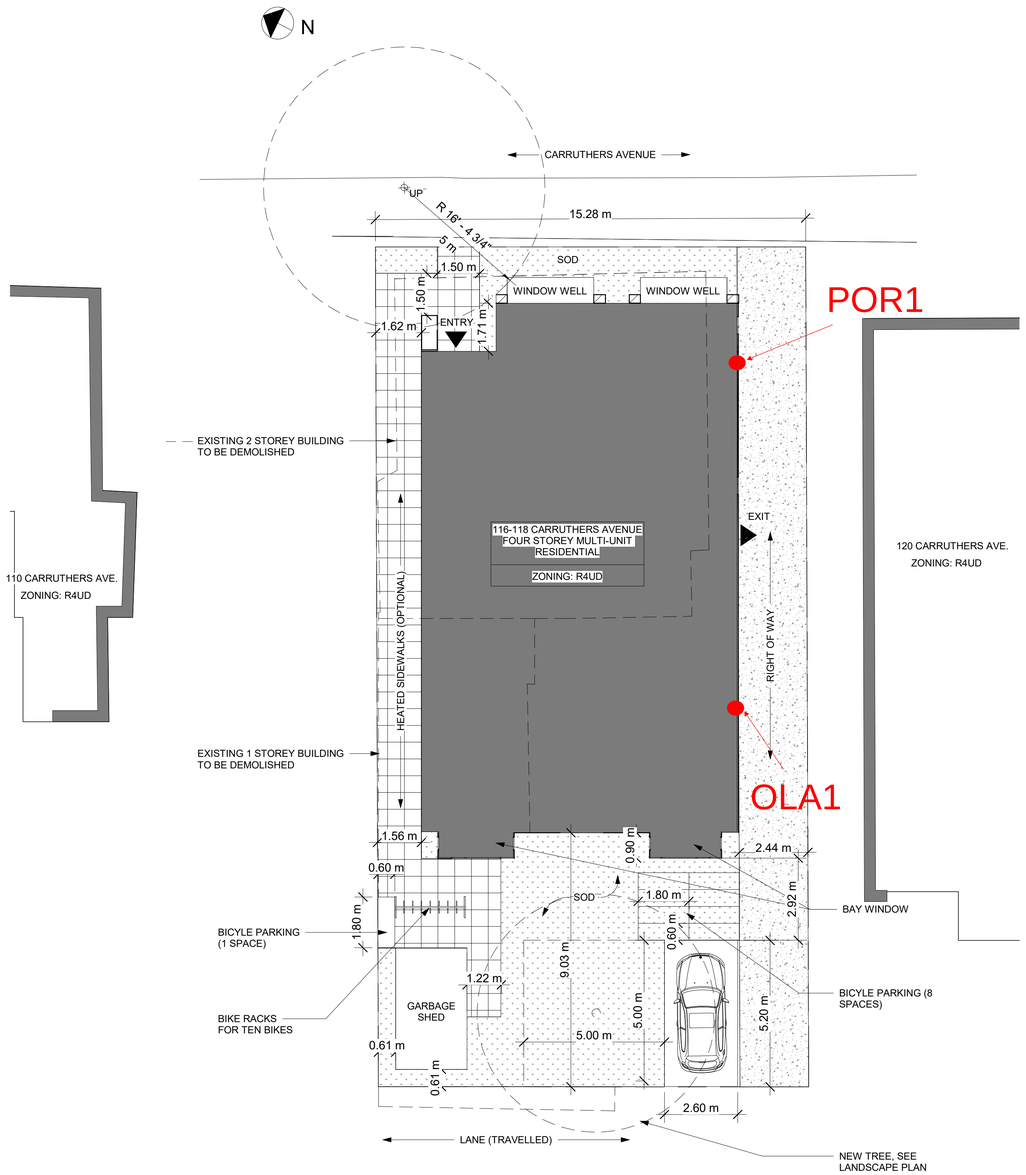
Ron Taylor, M.Sc., C.Chem., CIH
Discipline Lead, Air Quality & Industrial Hygiene
Environmental Services

7 References

- MECP Publication NPC-300. 2013. Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning.

Figures

Figure 1 Aerial Image



1 SITE
1:100

116-118 CARRUTHERS AVENUE

SITE PLAN OF SURVEY PART OF LOT 15, WEST CARRUTHERS AVENUE
REGISTERED PLAN 35, CITY OF OTTAWA
PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD., COMPLETED MARCH 1, 2024

R4UD - RESIDENTIAL FOURTH DENSITY ZONE (SEC. 161-162) CITY OF OTTAWA;
DWELLING TYPE: 4 STOREY LOW-RISE RESIDENTIAL

ZONING MECHANISMS	REQUIREMENT	PROVIDED	SECTION
A) MINIMUM LOT AREA	450 m²	456.07 m²	Section 162, Table 162A
B) MINIMUM LOT WIDTH	15 m	15.29 m	Section 162, Table 162A
C) MINIMUM LOT DEPTH	N/A	29.84 m	Section 162, Table 162A
D) MINIMUM FRONT YARD SET BACK	Lesser of the average of abutting lots' corresponding FYS (~ 1.99 m) or 4.5 m	2 m	Section 144(1)(a); Section 162, Table 162A
E) MINIMUM INTERIOR SIDE YARD SET BACK	1.5 m	1.5 m, 2.44 m	Section 144, Table 144A
F) MINIMUM REAR YARD SETBACK	%30 of lot depth (8.952m)	9 m	Section 144(3)(a)
G) MINIMUM REAR YARD AREA	25% of lot area (114.32 m2)	133.3 m2	Section 162, Table 162A
H) MAXIMUM BUILDING HEIGHT	14.5 m	TBD < 14.5m	
I) LOT COVERAGE	25% of lot area (114.32 m2)	46%	
J) PERCENTAGE OF LANDSCAPE AREA OF THE LOT AREA	30% of lot area (136.82 m2)	46.13% (210.38 m2)	Section 161(8)
K) MINIMUM AREA OF SOFTLANDSCAPING IN REAR YARD AREA	On a lot greater than 450 m2 in area: 50% of rear yard Minimum aggregate area of 25 m2, with a longer dimension <= 2 x shorter dimension	67.47 m2 50.6%	Section 161(15)(b)(i) Section 161(15)(b) (iv)
L) MINIMUM AGGREGATE FRONT YARD SOFTLANDSCAPED AREA	For lot where FYS is 1.5-3m: 20% (7.64 m2)	20.4 m2	Section 161, Table 161
M) MINIMUM FENESTRATION REQUIREMENT	Front facade: at least 25% windows	34% windows	Section 161(15)(g)
N) MINIMUM FRONT FACADE ADDITIONAL RECESS	At least 20% of front facade minimum of 0.6 m from front setback line	23.6%	Section 161(15)(h)
O) MINIMUM VEHICULE PARKING (RESIDENTS) Area Z on Schedule 1A	0	0	Section 101(2)
P) MINIMUM VEHICULE PARKING (VISITOR)	No Visitor parking spaces are required for the first 12 units, 0.1 per unit parking space per unit after 12 units ((17-12)x0.1=0.5 (1) parking space)	1	Section 102(2)
R) MINIMUM PARKING SPACE	2.6 m (width) x 5.2 m (length) Maximum width of 3.1 m		Section 106(1)
S) UNIT BREAKDOWN	25% 2 bedroom units (4)	Total unit number=17 Number of 2 bedroom unit=4	Section 161(16)
T) MINIMUM BICYCLE PARKING	0.5 per dwelling unit (17x0.5=8.5= 9 parking spaces)	19 parking spaces	Section 111, Table 111A(b)
U) AMENITY AREA	0	133.3 m² rear yard 13.7 m² balcony 46 m² roop top patio	

BUILDING AREAS

BASEMENT	
BUILDING AREA	205.2 m²
GFA	145.6 m²
GROUND FLOOR	
BUILDING AREA	210 m²
GFA	151 m²
SECOND FLOOR	
BUILDING AREA	210 m²
GFA	162.4 m²
THIRD FLOOR	
BUILDING AREA	196 m²
GFA	148.5 m²
FOURTH FLOOR	
BUILDING AREA	196 m²
GFA	150.5 m²
TOTAL BUILDING AREA	1017.2 m²
TOTAL GFA	758 m²

GARBAGE REQUIREMENT

GARBAGE, RECYCLING AND COMPOSTING ARE TO BE STORED IN THE GARBAGE SHED AND REMOVED PRIVATELY DURING COLLECTION

SNOW REMOVAL REQUIREMENT

PROPERTY OWNER WILL BE RESPONSIBLE FOR THE REMOVAL AND STORAGE OF SNOW FOR ALL WALKWAYS THROUGHOUT THE WINTER

AVERAGE GRADE:

CALCULATED FROM EXISTING ELEVATION POINTS AT A DISTANCE EQUAL TO THE MINIMUM FRONT YARD & REAR YARD SETBACKS, AT THE INTERIOR SIDE PROPERTY LINES

AVERAGE GRADE : 62.14m (62.09m + 61.86m + 62.27m + 62.35m) /4

Figure 2 Locations of Critical Noise Receptor

RA REDLINE ARCHITECTURE

REDLINE ARCHITECTURE INC.

Tel: 613-612-2232
info@redlinearchitecture.ca
www.redlinearchitecture.ca

RESPONSIBILITIES:
DO NOT SCALE DRAWINGS

ALL DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE 2012

ALL CONTRACTORS MUST WORK IN ACCORDANCE WITH ALL LAWS, REGULATIONS AND BYLAWS HAVING JURISDICTION

IT IS THE RESPONSIBILITY OF THE APPROPRIATE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT/DESIGNER

GENERAL NOTES:

ONTARIO ASSOCIATION OF ARCHITECTS
LEVENT TATAR
LICENCE
9542

116-118 CARRUTHERS AVE.
FOUR STOREY LOW RISE
APARTMENT DWELLING

CONSULTANTS

STRUCTURAL -
MECHANICAL -
ELECTRICAL: -

M/D/Y

NO.	REVISION/ISSUE	DATE
9		
8		
7		
6		
5		
4		
3		
2		
1	ISSUED FOR SPA	11/12/24

PROJECT:
116-118 CARRUTHERS AVE.
116-118 CARRUTHERS AVE.
OTTAWA, ON K1Y 1N5

SITE PLAN

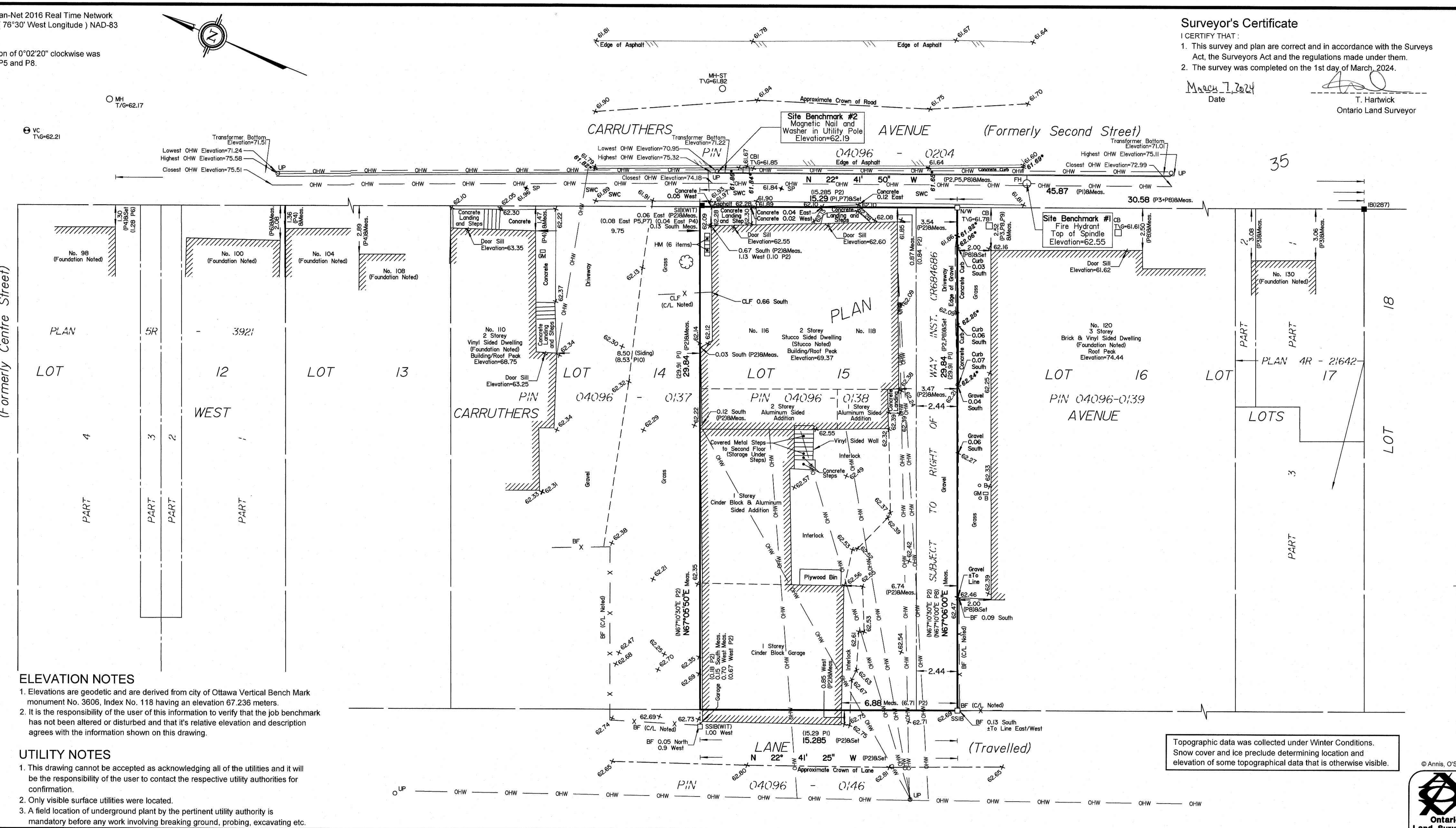
DRAWN BY:
DATE:MAY 3, 2024
SCALE: AS NOTED
SHEET: A0

Figure 3 Dimensions of Separation between Sources and Receptors

Appendix A – Drawings

Bearings are grid, derived from Can-Net 2016 Real Time Network GPS observations, MTM Zone 9 (76°30' West Longitude) NAD-83 (original).

For bearing comparisons, a rotation of 0°02'20" clockwise was applied to bearings on plans P2, P5 and P8.



Surveyor's Certificate

I CERTIFY THAT :

1. This survey and plan are correct and in accordance with the Surveys Act, the Surveyors Act and the regulations made under them.
2. The survey was completed on the 1st day of March, 2024.

March 7, 2024
Date

T. Hartwick
Ontario Land Surveyor

TOPOGRAPHIC PLAN OF SURVEY OF LOT 15 WEST CARRUTHERS AVENUE REGISTERED PLAN 35 CITY OF OTTAWA

Surveyed by Annis, O'Sullivan, Vollebekk Ltd.

Scale 1 : 150

6 4.5 3.0 1.5 0 3 6 Metres

Metric

DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

Notes & Legend

Symbol	Denotes	
—□—	"	Survey Monument Planted
—■—	"	Survey Monument Found
IB	"	Iron Bar
SIB	"	Standard Iron Bar
SSIB	"	Short Standard Iron Bar
N/W	"	Magnetic Nail and Washer
(WIT)	"	Witness
Meas.	"	Measured
(AOG)	"	Annis, O'Sullivan, Vollebekk Ltd.
(P1)	"	Registered Plan 35
(P2)	"	(1473) Plan dated November 3, 1989
(P3)	"	Plan 4R-21642
(P4)	"	(1319) Plan dated January 10, 1986
(P5)	"	Plan 5R-7356
(P6)	"	Plan 5R-3921
(P7)	"	(1287) Plan dated February 27, 1986
(P8)	"	(1287) Plan dated September 3, 1992
(P9)	"	Plan 4R-21011
(P10)	"	(857) Plan dated May 22, 1981
○ MH-ST	"	Maintenance Hole (Storm Sewer)
○ MH	"	Maintenance Hole (Unidentified)
⊖ VC	"	Valve Chamber (Watermain)
— OHW —	"	Overhead Wires
○ UP	"	Utility Pole
□ CB	"	Catch Basin
□ CBI	"	Catch Basin Inlet
FH	"	Fire Hydrant
T/G	"	Top of Grate
▭ GM	"	Gas Meter
▭ HM	"	Hydro Meter
∘ SP	"	Water Stand Post
∘ B	"	Bollard
CLF	"	Chain Link Fence
BF	"	Board Fence
SWC	"	Concrete Sidewalk
RWC	"	Concrete Retaining Wall
+ 65.00	"	Location of Elevations
+ 65.00*	"	Top of Concrete Curb Elevation
C/L	"	Centreline
——	"	Property Line
	"	Shrub

Topographic data was collected under Winter Conditions. Snow cover and ice preclude determining location and elevation of some topographical data that is otherwise visible.

ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 Concourse Gate, Suite 500
Nepean, Ont. K2E 7S6
Phone: (613) 727-0850 / Fax: (613) 727-1079
Email: Nepean@aovltd.com

Ontario Land Surveyors

Job No. 24752-24 MA Precision Holding Inc.Lt 15 RP 35 O D2 | ND

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
V-69245

THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR In accordance with Regulation 1026, Section 29 (3).

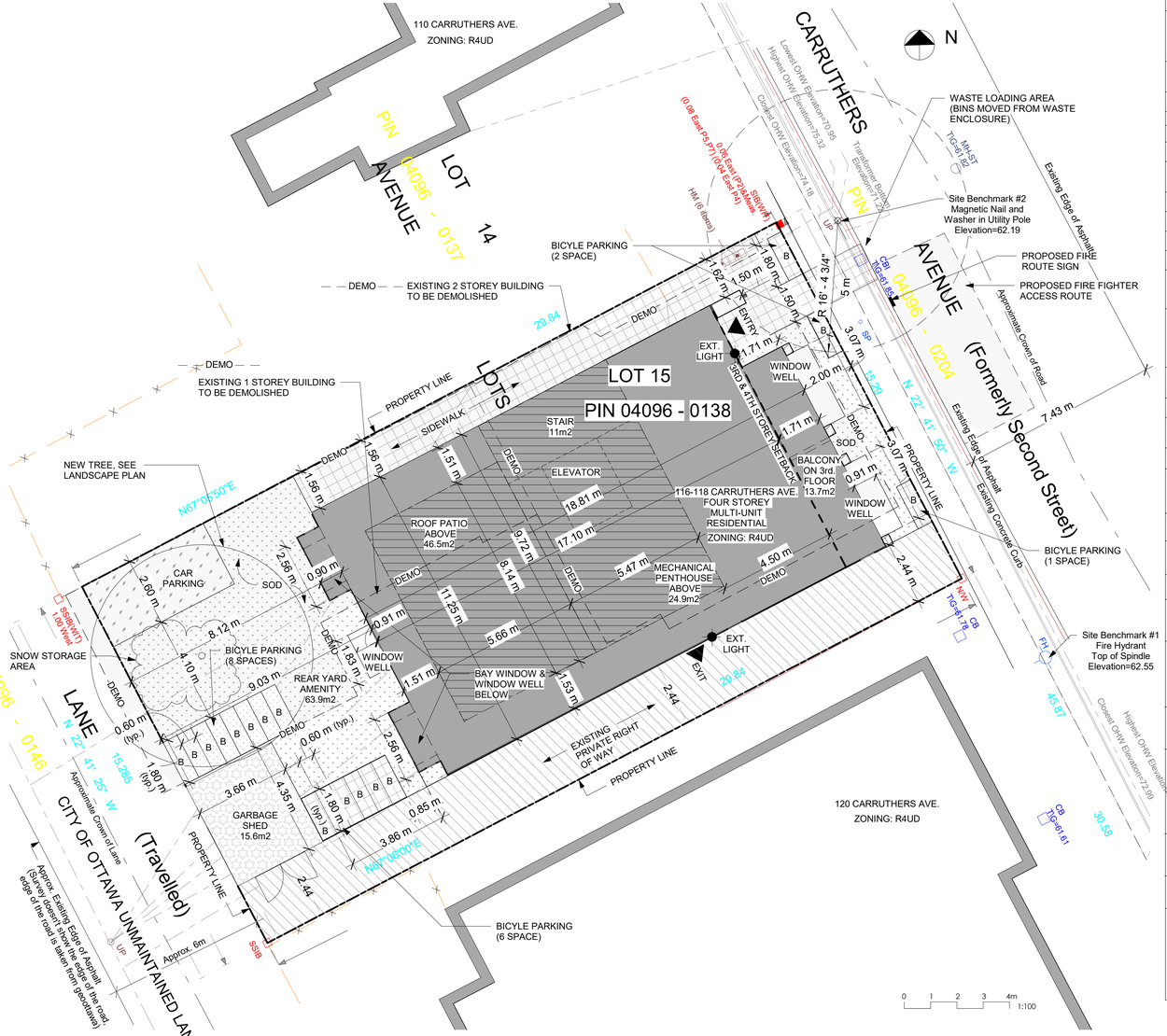
ELEVATION NOTES

1. Elevations are geodetic and are derived from city of Ottawa Vertical Bench Mark monument No. 3606, Index No. 118 having an elevation 67.236 metres.
2. It is the responsibility of the user of this information to verify that the job benchmark has not been altered or disturbed and that it's relative elevation and description agrees with the information shown on this drawing.

UTILITY NOTES

1. This drawing cannot be accepted as acknowledging all of the utilities and it will be the responsibility of the user to contact the respective utility authorities for confirmation.
2. Only visible surface utilities were located.
3. A field location of underground plant by the pertinent utility authority is mandatory before any work involving breaking ground, probing, excavating etc.

Y:\2024\24752-24_MA Precision Holding Inc_116 Carruthers Avenue_Topo_T\Drawing\24752-24 MA Precision Holding Inc.Lt 15 RP 35 O D2.dwg



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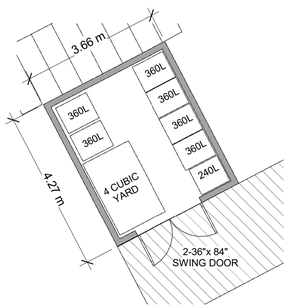

3 GARBAGE ENCLOSURE
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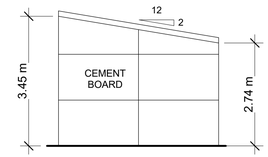

4 SIDE ELEVATION
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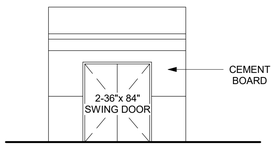

5 FRONT ELEVATION
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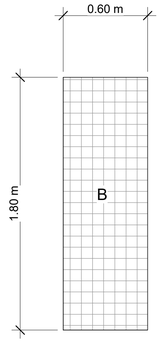


6 BICYCLE PARKING @ GRADE (TYP.)
1 : 20

116-118 CARRUTHERS AVENUE

SITE PLAN OF SURVEY PART OF LOT 15, WEST CARRUTHERS AVENUE REGISTERED PLAN 35, CITY OF OTTAWA

PREPARED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD., COMPLETED MARCH 1, 2024

R4UD - RESIDENTIAL FOURTH DENSITY ZONE (SEC. 161-162) CITY OF OTTAWA; DWELLING TYPE: 4 STOREY LOW-RISE RESIDENTIAL

SURVEY INFO.

SURVEY INFO TAKEN FROM TOPOGRAPHIC PLAN OF LOT 15, WEST CARRUTHERS AVENUE REGISTERED PLAN 35, CITY OF OTTAWA PREPARED BY: ANNIS, O'SULLIVAN, VOLLEBEKK LTD., MARCH 1, 2024

ZONING MECHANISMS	REQUIREMENT	PROVIDED	SECTION
A) MINIMUM LOT AREA	450 m²	456.07 m²	Section 162, Table 162A
B) MINIMUM LOT WIDTH	15 m	15.29 m	Section 162, Table 162A
C) MINIMUM LOT DEPTH	N/A	29.84 m	Section 162, Table 162A
D) MINIMUM FRONT YARD SET BACK	Lesser of the average of abutting lots' corresponding FYS (~ 1.99 m) or 4.5 m	2 m	Section 144(1)(a); Section 162, Table 162A
E) MINIMUM INTERIOR SIDE YARD SET BACK	1.5 m	1.5 m, 2.44 m	Section 144, Table 144A
F) MINIMUM REAR YARD SETBACK	%30 of lot depth (8.952m)	9 m	Section 144(3)(a)
G) MINIMUM REAR YARD AREA	25% of lot area (114.32 m2)	138.5 m2	Section 162, Table 162A
H) MAXIMUM BUILDING HEIGHT	14.5 m	TBD < 14.5m	
I) PERCENTAGE OF LANDSCAPE AREA OF THE LOT AREA	30% of lot area (136.82 m2)	30.04% (136.99 m2)	Section 161(8)
J) MINIMUM AREA OF SOFTLANDSCAPING IN REAR YARD AREA	On a lot greater than 450 m2 in area: 50% of rear yard Minimum aggregate area of 25 m2, with a longer dimension </= 2 x shorter dimension	73.63 m2 53.15%	Section 161(15)(b)(i) Section 161(15)(b) (iv)
K) MINIMUM AGGREGATE FRONT YARD SOFTLANDSCAPED AREA	For lot where FYS is 1.5-3m: 20% (7.64 m2)	39.21% (12 m2)	Section 161, Table 161
L) MINIMUM FENESTRATION REQUIREMENT	Front facade: at least 25% windows	34% windows	Section 161(15)(g)
M) MINIMUM FRONT FACADE ADDITIONAL RECESS	At least 20% of front facade minimum of 0.6 m from front setback line	23.6%	Section 161(15)(h)
N) MINIMUM VEHICULE PARKING (RESIDENTS) Area Z on Schedule 1A	0	0	Section 101(2)
O) MINIMUM VEHICULE PARKING (VISITOR)	No Visitor parking spaces are required for the first 12 units, 0.1 per unit parking space per unit after 12 units ((17-12)x0.1=0.5 (1) parking space)	1 30.04% (136.99 m2)	Section 102(2)
P) MINIMUM PARKING SPACE	2.6 m (width) x 5.2 m (length) Maximum width of 3.1 m		Section 106(1)
R) UNIT BREAKDOWN	25% 2 bedroom units (4)	Total unit number=17 Number of 2 bedroom unit=4	Section 161(16)
S) MINIMUM BICYCLE PARKING	0.5 per dwelling unit (17x0.5=8.5= 9 parking spaces)	17 parking spaces	Section 111, Table 111A(b)
T) AMENITY AREA	0	63.9 m² rear yard 13.7 m² balcony 46.5 m² roop top patio	

BUILDING AREAS

BASEMENT	
BUILDING AREA	205.2 m²
GFA	145.6 m²
GROUND FLOOR	
BUILDING AREA	210 m²
GFA	151 m²
SECOND FLOOR	
BUILDING AREA	210 m²
GFA	162.4 m²
THIRD FLOOR	
BUILDING AREA	196 m²
GFA	148.5 m²
FOURTH FLOOR	
BUILDING AREA	196 m²
GFA	150.5 m²
TOTAL BUILDING AREA	1017.2 m²
TOTAL GFA	758 m²

UNIT BREAKDOWN

	BACHELOR	1 BED	2 BED	TOTAL
BASEMENT	1	1	1	3
GROUND FLOOR	1	1	1	3
SECOND FLOOR	2	1	1	4
THIRD FLOOR	3	1	0	4
FOURTH FLOOR	1	1	1	3
TOTAL	8	5	4	17

GARBAGE REQUIREMENT

GARBAGE, RECYCLING AND COMPOSTING ARE TO BE STORED IN THE GARBAGE SHED AND REMOVED PRIVATELY DURING COLLECTION

SNOW REMOVAL REQUIREMENT

PROPERTY OWNER WILL BE RESPONSIBLE FOR THE REMOVAL AND STORAGE OF SNOW FOR ALL WALKWAYS & WINDOW WELLS THROUGHOUT THE WINTER

AVERAGE GRADE:

CALCULATED FROM EXISTING ELEVATION POINTS AT A DISTANCE EQUAL TO THE MINIMUM FRONT YARD & REAR YARD SETBACKS, AT THE INTERIOR SIDE PROPERTY LINES

AVERAGE GRADE : 62.14m (62.09m + 61.86m + 62.27m + 62.35m) /4

SITE LEGEND

- NEW TREE
- EX. TREE TO BE REMOVED
- NEW SHRUB
- PROPOSED BUILDING
- DEMO / DEMO — EXISTING BUILDING TO BE DEMOLISHED
- PROPOSED / EXISTING ENTRY / EXIT
- PROPERTY LINE
- DENOTES HARD LANDSCAPING
- DENOTES SOFT LANDSCAPING
- UP — EXISTING UTILITY POLE
- FH — EXISTING FIRE HAYDRANT
- EXISTING PRIVATE RIGHT OF WAY
- SNOW STORAGE AREA
- WASTE COLLECTION AREA
- BYCYCLE PARKING (SOD)
- BYCYCLE PARKING (PAVER)
- BIKE RACKS
- CAR PARKING SPACE (ASPHALT)
- EX. CHAINED LINK/BOARD FENCE
- EXTERIOR LIGHT

WASTE COLLECTION LEGEND

GB	4YD GARBAGE CONTAINER
BB	3-360L BLUE BIN
B	3-360L BLACK BIN
G	240L ORGANICS

SITE NOTES

NEW ROOF DOWN SPOUTS SHALL NOT BE DIRECTED TOWARDS THE ADJACENT PROPERTIES

EXCAVATED MATERIAL TO BE REMOVED FROM PROPERTY

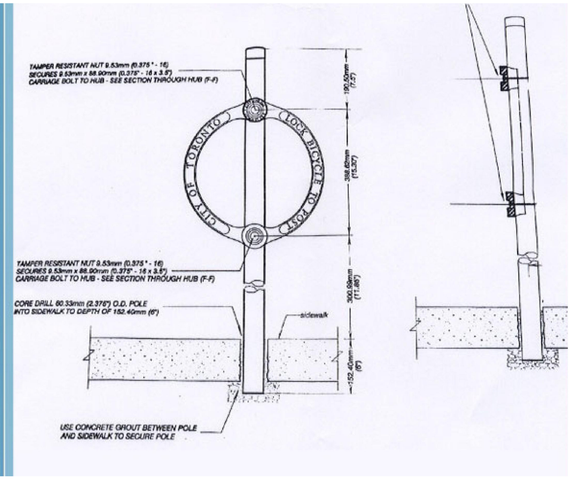
ALL GRADE TO SLOPE 2% AWAY FROM FOUNDATION WALL

ALL MEASUREMENTS ARE METRIC (ACCOMPANYING IMPERIAL MEAS. MAY APPEAR)

EXISTING GRADING AND DRAINAGE PATTERNS NOT TO BE ALTERED UNLESS OTHERWISE NOTED BY THE CIVIL ENGINEER

SNOW ACCUMULATION TO BE REMOVED OFF SITE IMMEDIATELY AS NEEDED

EXTERIOR BICYCLE PARKING @ GRADE



RA REDLINE ARCHITECTURE

REDLINE ARCHITECTURE INC.
Tel: 613-612-2232
info@redlinearchitecture.ca
www.redlinearchitecture.ca

RESPONSIBILITIES:

DO NOT SCALE DRAWINGS

ALL DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE ONTARIO BUILDING CODE 2012

ALL CONTRACTORS MUST WORK IN ACCORDANCE WITH ALL LAWS, REGULATIONS AND BYLAWS HAVING JURISDICTION

IT IS THE RESPONSIBILITY OF THE APPROPRIATE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT/DESIGNER

THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION UNTIL SIGNED BY THE ARCHITECT

GENERAL NOTES:

ONTARIO ASSOCIATION OF ARCHITECTS
LEVENT TATAR LICENCE 8648

116-118 CARRUTHERS AVE.
FOUR STOREY LOW RISE APARTMENT DWELLING

OWNER/DEVELOPER:
MA PRECIOUS HOLDING INC.

ARCHITECT:
REDLINE ARCHITECTURE INC.

APPLICANT:
Q9 PLANNING + DESIGN,
DAYNA EDWARDS
24 KIRKSTALL AVENUE, OTTAWA, ON K2G 3M5

CIVIL ENGINEER:
EXP SERVICES INC.
100-2650 QUEENSVIEW DRIVE
OTTAWA, ONTARIO K2B 8H6

LANDSCAPING:
JAMES B. LENNOX & ASSOCIATES INC.
3332 CARLING AVE OTTAWA ON. K2H 5A8
CANADA

SURVEYOR:
AOV LTD.
14 CONCOURSE GATE, SUITE 500
OTTAWA, ON. K2E-7S6

CONSULTANTS:

STRUCTURAL - TBD
MECHANICAL - TBD
ELECTRICAL - TBD

NO.	REVISION/ISSUE	M/D/Y DATE
9		
8		
7		
6		
5		
4		
3		
2	ISSUED FOR SPA REV.	01/02/25
1	ISSUED FOR SPA	11/12/24

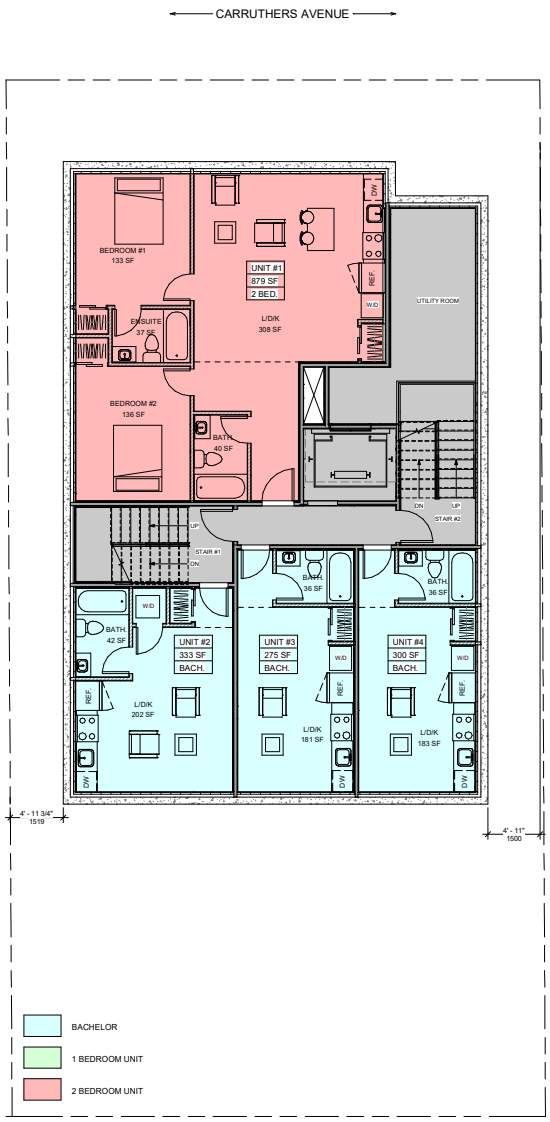
PROJECT:
116-118 CARRUTHERS AVE.
116-118 CARRUTHERS AVE.
OTTAWA, ON K1Y 1N5

SITE PLAN

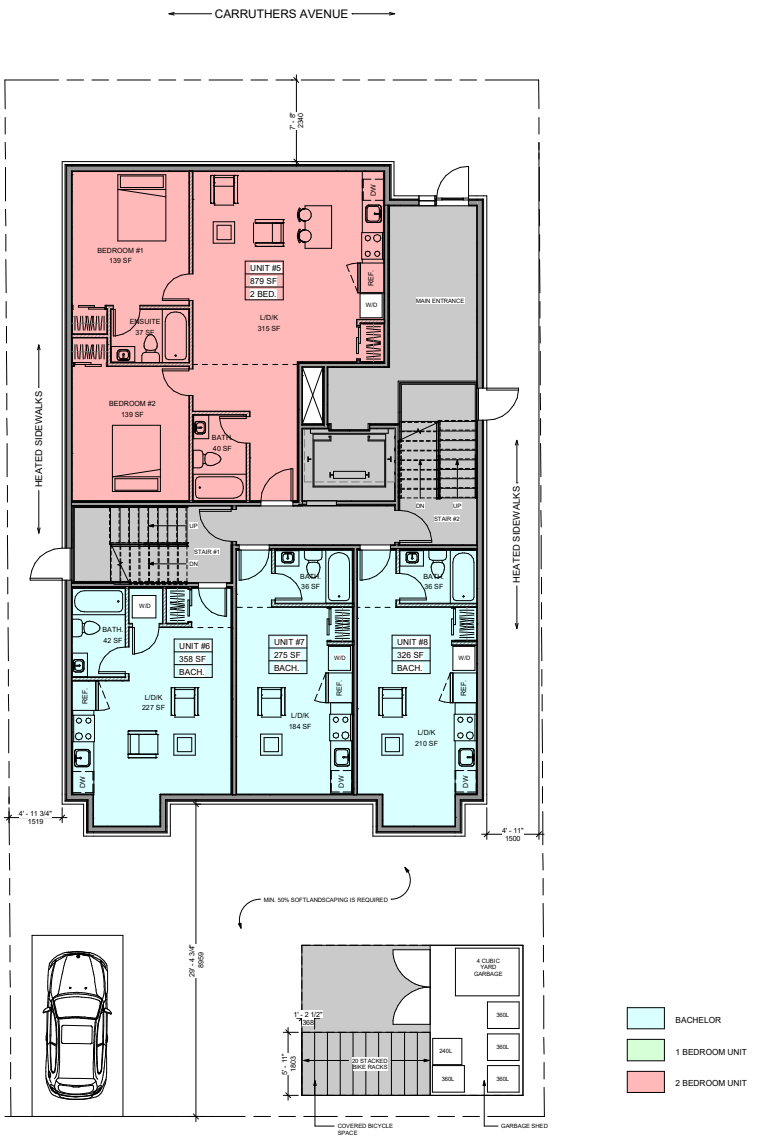
DRAWN BY:
DATE: MAY 3, 2024
SCALE: AS NOTED
SHEET: A0

D07-12-24-0153

19212

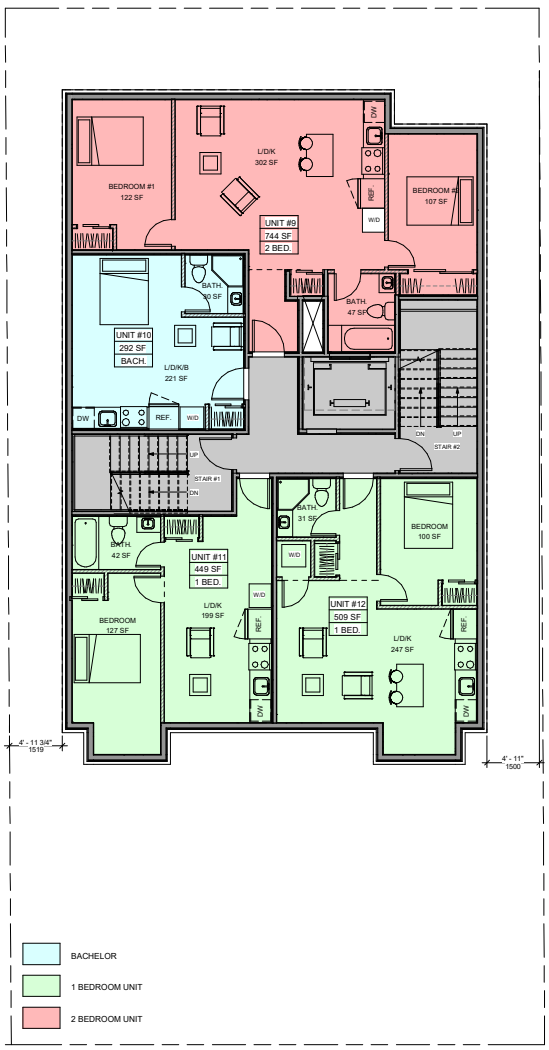


4 STOREY OPTION (BASEMENT)
TOTAL: 19 UNITS

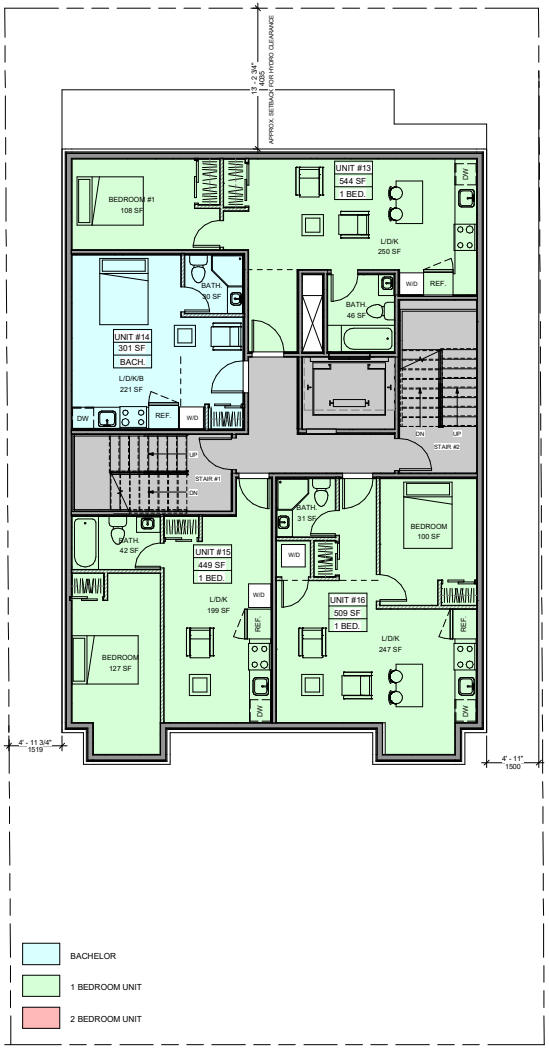


4 STOREY OPTION (GROUND FLOOR)
TOTAL: 19 UNITS

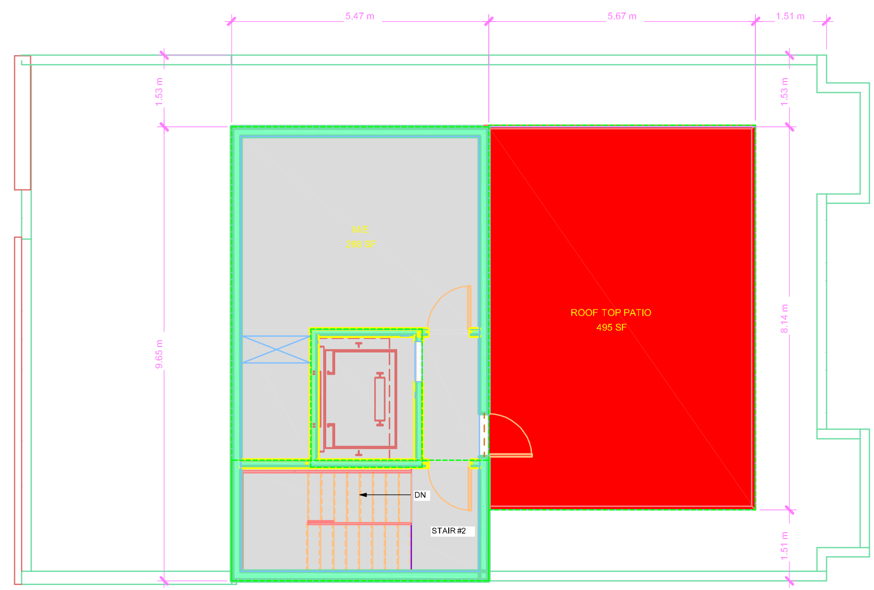
CARRUTHERS AVENUE



4 STOREY OPTION (2nd FLOOR)
TOTAL: 19 UNITS



4 STOREY OPTION (3rd FLOOR)
TOTAL: 19 UNITS



1 ROOF
1/4" = 1'-0"

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GENERAL NOTES:

116-118 CARRUTHERS AVE.

FOUR STOREY LOW RISE APARTMENT DWELLING

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3332 CARLING AVE OTTAWA ON. K2H 5A8
CANADA

SURVEYOR:
AOV LTD.
14 CONCOURSE GATE, SUITE 500
OTTAWA, ON. K2E-7S6

CONSULTANTS:

STRUCTURAL - TBD
MECHANICAL - TBD
ELECTRICAL - TBD

NO.	REVISION/ISSUE	DATE (M/D/Y)
9		
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2	ISSUED FOR SPA REV.	01/02/25
1	ISSUED FOR SPA	11/12/24

PROJECT:
116-118 CARRUTHERS AVE.
116-118 CARRUTHERS AVE.
OTTAWA, ON K1Y 1N5

FLOOR PLANS

DRAWN BY:
DATE: MAY 3, 2024
SCALE: AS NOTED
SHEET: A6

D07-12-24-0153

19212

Appendix B – STAMSON Calculation Output

STAMSON 5.0 NORMAL REPORT Date: 18-11-2024 08:58:46
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: por1.te Time Period: Day/Night 16/8 hours
Description: Predicted Traffic Sound Level at POR1

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

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 30000
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: Carruthers (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 3 / 3
House density : 50 %
Surface : 2 (Reflective ground surface)
Receiver source distance : 115.00 / 115.00 m
Receiver height : 10.50 / 10.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Carruthers (day)

Source height = 1.50 m

ROAD (0.00 + 57.04 + 0.00) = 57.04 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	71.49	0.00	-8.85	0.00	0.00	-5.61	0.00	57.04

Segment Leq : 57.04 dBA

Total Leq All Segments: 57.04 dBA

Results segment # 1: Carruthers (night)

Source height = 1.50 m

ROAD (0.00 + 49.44 + 0.00) = 49.44 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	63.89	0.00	-8.85	0.00	0.00	-5.61	0.00	49.44

Segment Leq : 49.44 dBA

Total Leq All Segments: 49.44 dBA

RT/Custom data, segment # 1: OTrain (day/night)
---
1 - 4-car SRT:
Traffic volume : 347/70 veh/TimePeriod
Speed : 80 km/h

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

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 3 / 3
House density : 50 %
Surface : 2 (Reflective ground surface)
Receiver source distance : 91.00 / 91.00 m
Receiver height : 10.50 / 10.50 m
Topography : 3 (Elevated; no barrier)
Elevation : 6.00 m
Reference angle : 0.00

Results segment # 1: OTrain (day)

Source height = 0.50 m

RT/Custom (0.00 + 49.20 + 0.00) = 49.20 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	62.68	-7.83	0.00	0.00	-5.65	0.00	49.20

Segment Leq : 49.20 dBA

Total Leq All Segments: 49.20 dBA

Results segment # 1: OTrain (night)

Source height = 0.50 m

RT/Custom (0.00 + 45.26 + 0.00) = 45.26 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	58.73	-7.83	0.00	0.00	-5.65	0.00	45.26

Segment Leq : 45.26 dBA

Total Leq All Segments: 45.26 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 57.70
(NIGHT): 50.84

STAMSON 5.0 NORMAL REPORT Date: 18-11-2024 08:59:04
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: ola1.te Time Period: Day/Night 16/8 hours
Description: Predicted Traffic Sound Level at OLA1

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

Car traffic volume : 24288/2112 veh/TimePeriod *
Medium truck volume : 1932/168 veh/TimePeriod *
Heavy truck volume : 1380/120 veh/TimePeriod *
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 30000
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: Carruthers (day/night)

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 3 / 3
House density : 50 %
Surface : 2 (Reflective ground surface)
Receiver source distance : 115.00 / 115.00 m
Receiver height : 13.50 / 13.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Carruthers (day)

Source height = 1.50 m

ROAD (0.00 + 57.04 + 0.00) = 57.04 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	71.49	0.00	-8.85	0.00	0.00	-5.61	0.00	57.04

Segment Leq : 57.04 dBA

Total Leq All Segments: 57.04 dBA

Results segment # 1: Carruthers (night)

Source height = 1.50 m

ROAD (0.00 + 49.44 + 0.00) = 49.44 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	63.89	0.00	-8.85	0.00	0.00	-5.61	0.00	49.44

Segment Leq : 49.44 dBA

Total Leq All Segments: 49.44 dBA

RT/Custom data, segment # 1: OTrain (day/night)
---
1 - 4-car SRT:
Traffic volume : 347/70 veh/TimePeriod
Speed : 80 km/h

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

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 3 / 3
House density : 50 %
Surface : 2 (Reflective ground surface)
Receiver source distance : 91.00 / 91.00 m
Receiver height : 13.50 / 10.50 m
Topography : 3 (Elevated; no barrier)
Elevation : 6.00 m
Reference angle : 0.00

Results segment # 1: OTrain (day)

Source height = 0.50 m

RT/Custom (0.00 + 49.20 + 0.00) = 49.20 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	62.68	-7.83	0.00	0.00	-5.65	0.00	49.20

Segment Leq : 49.20 dBA

Total Leq All Segments: 49.20 dBA

Results segment # 1: OTrain (night)

Source height = 0.50 m

RT/Custom (0.00 + 45.26 + 0.00) = 45.26 dBA

Angle1	Angle2	Alpha	RefLeq	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	58.73	-7.83	0.00	0.00	-5.65	0.00	45.26

Segment Leq : 45.26 dBA

Total Leq All Segments: 45.26 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 57.70
(NIGHT): 50.84