

Noise Control Feasibility Study

1209 Michael Street

TT Project No: 25017451

Prepared For

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February 6, 2026

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1.0 Introduction

Tomasetti (TT) was retained by CFCF / QCC 1209 Michael St. Inc. (the Client) to prepare a Noise Control Feasibility Study (NCFS) for the proposed 1209 Michael Street development (the Project) in Ottawa ON.

The report has been prepared to fulfill the requirements outlined in the City of Ottawa Pre-Consultation: *Meeting Feedback, Proposed Official Plan Amendment – 1209 Michael Street Application* for the Project, dated May 15, 2025, where a road noise study is required. This study was prepared to support Official Plan Amendment (OPA) and Re-Zoning (ZBA) application.

Where applicable, this report will provide noise control recommendations to meet the requirements of the applicable to City of Ottawa Environmental Control Noise Guidelines (ENCG), City of Ottawa Noise Study Terms of Reference, and the Ontario Ministry of the Environment, Conservation and Parks (MECP).

2.0 Site and Surrounding Area

2.1 Planned Development

The proposed development includes 2 residential towers (Tower A and Tower B) and a shared podium, with 4 levels of underground parking. The main floor includes a combination of commercial/retail units, indoor amenity space and residential units. A common outdoor amenity area is located on the podium rooftop, between the 2 towers. Individual balconies and terraces are included for the podium units and the units on the podium level.

The proposed site plan is provided in Figure 1, included in Appendix A. Copies of the Development Plans are included in Appendix B.

2.2 Project Location and Surroundings

The Project lands are located to the north-east of Michael Street and Labelle Street intersection. The lands currently include the Archdiocese of Ottawa-Cornwall building and a surface parking lot. An illustration of the project location and surrounding area is provided in Figure 2 of Appendix A.

Surrounding roadways within 100 m of the Project lands include Michael Street to the west, Labelle Street to the south and Cyrville Road to the east. Highway 417 is located approximately 165 m south of the development lands. The O-Train Line 1 is located approximately 150 m to the south.

The surrounding lands are primarily commercial/retail, including various hotels. Residential neighborhoods are in all directions beyond the commercial retail lands.

3.0 Applicable Guidelines

3.1 Ministry of the Environment Conservation and Parks

The MECP's *Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning* (NPC-300) provides province wide assessment standards and criteria for evaluating noise impacts from transportation sources such as roads, railways and aircraft, as well as stationary sources

such as mechanical equipment, and industrial facilities. In preparing this NIS report, TT has referred to *Part A Background and Part C Land Use Planning* of NPC-300.

This NIS report has been prepared to support land use planning decisions, and is not intended to support an application for an Environmental Compliance Approval (ECA) in accordance with *Part B Stationary Sources* of NPC-300, and Section 9 of the Environmental Protection Act.

3.2 City of Ottawa

In addition to adopting the MECP's recommended standards and criteria, the City of Ottawa includes additional requirements on applications for development approval. In accordance with the ENCG, the following additional considerations beyond those required by NPC-300 have been included in this report.

- ENCG includes default road categories with corresponding assumed traffic levels and related parameters;
- ENCG includes different and expanded warning clause language; and,
- ENCG includes additional requirements and recommendations for the construction of noise barriers.

4.0 Transportation Noise Assessment

4.1 Critical Transportation Noise Receptors

ENCG defines a point of reception for the assessment of transportation noise sources as either the Plane of Window (POW) of a noise sensitive indoor space or an Outdoor Amenity Area (OAA) representing an area of a noise sensitive land use intended for quiet enjoyment of the outdoor environment.

The POW receptor(s) are located on all facades and all floors of the residential towers and podium.

The podium includes private balconies/terraces/patios for the residential units. In addition, common outdoor amenity areas are located on the 7th floor podium rooftop (OAA1), between Tower A and B. The OAA location is shown in Figure 1. As the building includes a private common amenity area, an assessment of individual balconies/terraces/patios is not considered necessary based on definitions outlined in NPC-300 and ENCG.

4.2 Transportation Noise Sources

4.2.1 Road Noise Sources

The assessment of surrounding roadways is defined based on the separation distance from the Project, as defined in the ENCG. The surrounding roadways within a 100 m separation distance include Labelle Street (major collector), Cyrville Road (collector and arterial) and Cummings Avenue (major collector). In addition, Highway 417 (provincial highway) is located within the required 500 m separation distance for inclusion. As Michael Street is classified as a local road, an assessment of roadway impacts was not completed.

Road traffic data was applied based on the ENCG Appendix B - Traffic Data and Road Parameters for the municipal roads. A copy is included in Appendix C.

Highway 417 Traffic volumes and truck percentages were obtained from the MTO iCorridor website. As an annual growth rate of -1.5% was calculated based on most recent 5 years of data, a 0% growth rate was applied to the highest traffic volume. The medium and heavy truck distribution was applied based on a default 5:15 ratio of medium:heavy trucks. An 85/15 split for daytime/night-time periods was applied based on a historical day/night split for provincial highways.

The traffic data applied in the assessment is summarized in Table 1.

Table 1: Future Traffic Data Summary

Street	Implied Road Class	AADT	Med Trk	Hvy Trk	Day/Night	Speed Limit
Labelle Street	2-Lane Major Collector	12,000	7%	5%	92/8	50 km/h ^[1]
Cyrville Road (St Laurent to Labelle)	2-Lane Urban Collector	8,000	7%	5%	92/8	60 km/h
Cyrville Road (Labelle to Innes)	2-Lane Urban Arterial	15,000	7%	5%	92/8	60 km/h
Cummings Ave	2-Lane Urban Arterial	15,000	7%	5%	92/8	60 km/h ^[2]
Highway 417	Provincial Highway	146,200	2%	6%	85/15	100 km/h

Notes: [1] assumed, in the absence of speed limit signs.
 [2] assumed based on arterial road speed limits in the area.

4.3 Transportation Sound Level Limits

4.3.1 Outdoor Amenity Areas

Impacts to OLAs from road traffic are assessed against a 16-hour daytime (07:00 – 23:00) equivalent sound pressure level (L_{eq}) reported in dBA. The MECP outdoor sound level limits and the sliding scale of required noise reduction measures for road noise at OLAs are listed in Table 2.

Table 2: MECP Outdoor Sound Level Limit & Mitigation for OLAs – Road Traffic

Category	Sound Level $L_{eq,16hr}$ (dBA)	Mitigation Measures	NPC-300 Warning Clause Required
Outdoor Limit	55	None	None
OLA Mitigation Threshold	56 - 60	Optional	Type A unless sound level brought below 55 dBA
OLA Mitigation Threshold	>60	Required to achieve sound level below 60 dBA	Type B unless sound level brought below 55 dBA

4.3.2 Indoor Living Areas

Impacts to POWs from combined road traffic are assessed against a 16-hour daytime (07:00 – 23:00) and 8-hour nighttime (23:00 – 07:00) equivalent sound pressure level (L_{eq}) reported in dBA.

Requirements for ventilation and warning clauses to address transportation noise impacts to the project Façades are determined based on the impact of combined road and rail transportation sources (if

applicable). The applicable POW sound level limits and the sliding scale of required ventilation measures and warning clauses are listed in the following table.

Table 3: POW Sound Level Limit: Ventilation & Warning Clauses

Category	Daytime L _{eq,16hr} (dBA)	Mitigation Measures	NPC-300 Warning Clause Required
POW Limit	55	None	None
POW Mitigation Threshold Living Rooms & Bedrooms	56 - 65	Include forced air heating and provision for central air conditioning	ENCG - Generic
POW Mitigation Threshold Living Rooms & Bedrooms	>65	Include central air conditioning	ENCG -Extensive

The applicable indoor and POW sound level limits and required construction measures for roadway noise in the indoor environment are listed in the following table.

Table 4: Sound Level Limit: Construction Requirements

Category	Daytime L _{eq,16hr} (dBA)	Nighttime L _{eq,8hr} (dBA)	Mitigation Measures	NPC-300 Warning Clause Required
POW Limit	55	50	None	None
POW Mitigation Threshold Living & Bedrooms	56 - 65	51 – 60	Include forced air heating and provision for central air conditioning	ENCG – Generic
POW Mitigation Threshold Living & Bedrooms	>65	>60	Include central air conditioning	ENCG - Extensive

4.4 Transportation Sound Level Predictions

Road traffic noise modelling was calculated using the ORNAMENT algorithms (the MECP road traffic noise model) within the Cadna/A noise propagation software, using line source sound emissions. As STAMSON/ORNAMENT does not account for topography readily, a simplified validation file comparing the Cadna/A and MECP STAMSON 5.04 road traffic noise model is shown in Appendix D.

Façade level impacts were predicted based on reflective ground, as the intervening lands are primarily asphalt or concrete.

Noise impacts on the Project were assessed using the “building evaluation” feature in CadnaA, allowing for predicted noise levels along the entire façade of the development. Facades considered to be non-noise sensitive (blank walls, stairwells, etc.) were excluded from the assessment.

4.4.1 Outdoor Amenity Area

A summary of the calculated sound levels within the podium rooftop OAA is 70 dBA and shown in Figure 3.

As the predicted roadway sound levels are above 60 dBA, an assessment of physical noise control measures and warning clauses is required for the OLAs.

4.4.2 Façade Sound Levels

A summary of the worst-case calculated sound levels for each building are presented in the following table and shown in Figure 4a/b for the daytime and night-time periods, respectively.

Table 5: Worst-case Façade Sound Levels due to Road Sources

Building	Predicted Transportation Sound Levels (dBA)	
	Daytime (07:00–23:00)	Nighttime (23:00–07:00)
	$L_{eq,16hr}$	$L_{eq,8hr}$
Podium	73	68
Tower A	73	68
Tower B	73	68

As the predicted sound levels are above 65 dBA during the daytime and above 60 dBA during the night-time, an assessment of noise mitigation measures is required.

4.5 Transportation Noise Control Recommendations

Noise control recommendations are summarized in Table 6 the following table and discussed in the subsequent sections.

Table 6: Transportation Noise Control Measures Summary

Building	Façade	Barrier	Building Components	Ventilation	Warning Clause
Podium	N	yes ⁽¹⁾	Meet OBC Requirements	Central Air Conditioning	ENCG - Extensive
	E		Designed to achieve indoor req't	Central Air Conditioning	ENCG - Extensive
	S		Designed to achieve indoor req't	Central Air Conditioning	ENCG - Extensive
	W		Designed to achieve indoor req't	Central Air Conditioning	ENCG - Extensive
Tower A	N	yes ⁽¹⁾	Meet OBC Requirements	Central Air Conditioning	ENCG - Extensive
	E		Designed to achieve indoor req't	Central Air Conditioning	ENCG - Extensive
	S		Designed to achieve indoor req't	Central Air Conditioning	ENCG - Extensive
	W		Designed to achieve indoor req't	Central Air Conditioning	ENCG - Extensive
Tower B	N	yes ⁽¹⁾	Meet OBC Requirements	Central Air Conditioning	ENCG - Extensive
	E		Designed to achieve indoor req't	Central Air Conditioning	ENCG - Extensive
	S		Designed to achieve indoor req't	Central Air Conditioning	ENCG - Extensive
	W		Designed to achieve indoor req't	Central Air Conditioning	ENCG - Extensive

Notes: [1] applicable to the common amenity area located on the podium rooftop.

4.5.1 Outdoor Living Areas – Barriers

To reduce noise levels to 60 dBA within the podium rooftop amenity area, the following noise barrier is recommended.

- Height of 3.0 m, which is understood to be the practical limit for construction and maintenance of a rooftop acoustic barrier. In addition, the ENCG identifies an acoustic barrier maximum height of 3 m. Therefore, an assessment of taller acoustic barriers was not completed (i.e. to reach 55 dBA in 1 dBA increments).
- Approx. length of 40 m.
- Located along the south perimeter of the terrace.

With the inclusion of the above barrier, the mitigated outdoor area noise levels are predicted to be 60 dBA, as shown in Figure 5. Also included in Figure 5 are the barrier location and extents.

Acoustic barriers can be constructed as glass/plexiglass panels, overlapped wood panels or other materials. The materials are to be selected to have a minimum surface density of 20 kg/m² to attenuate road traffic noise and be sealed with no gaps. Any holes required for draining are to be kept to a minimum. Alternatively, noise barriers complying with the requirements and certification of CAN/CSA-Z107.9-00 (R2004) - Standard for Certification of Noise Barriers (Reaffirmed 2004), are acceptable.

4.5.2 Indoor Living Areas - Ventilation

Sensitive receptors along the south, east and west façades of the podium and towers are predicted to be above 65 dBA during the 16-hour day (07:00 – 23:00) and/or 60 dBA during the 8-hour night (23:00 – 07:00) due to road noise, therefore central air conditioning will be required for the south facade units of the podium and Tower A and B.

Sensitive receptors along the north façades of the podium and towers are predicted to have sound levels between 55 dBA and 65 dBA during the 16-hour day (07:00 – 23:00) and/or 50 dBA and 60 dBA during the 8-hour night (23:00 – 07:00) due to road noise. For low to medium-density development, the installation of a central heating system with provisions for future installation central air conditioning would be required. However, as this is a high-density development, central air conditioning will be required for the south façade units.

4.5.3 Indoor Living Areas - Building Components

Based on the above roadway analysis, the south, west and east façades must be designed to achieve the indoor sound level limit. The building component requirements were determined using the National Research Council Building Practice Note BPN-56.

At the time of the assessment, suite layouts showing room types and dimensions were not available. The following assumptions were applied for the Project:

- 70% glazing for the wall component of living room and bedroom facades;
- Bedroom façade-to-floor area ratio of 100%
- Living/Dining room façade-to-floor area ratio of 50%
- Non-glazing wall component to have an STC 42 rating for all facades.

A summary of the building component requirements is included in the following table.

Table 7: Building Envelope Requirements

Building	Façade	Non-Glazing	Living/Dining Glazing	Bedroom Glazing
Podium	North	STC 42	OBC	OBC
	East	STC 42	OBC	OBC
	South	STC 42	STC 32	STC 33
	West	STC 42	OBC	STC 31
	Corner units (SW&SE)	STC 42	STC 35	STC 36
Building A	North	STC 42	OBC	OBC
	East	STC 42	OBC	OBC
	South	STC 42	STC 32	STC 33
	West	STC 42	OBC	STC 31
	Corner units (SW&SE)	STC 42	STC 35	STC 36
Building B	North	STC 42	OBC	OBC
	East	STC 42	OBC	OBC
	South	STC 42	STC 31	STC 32
	West	STC 42	OBC	OBC
	Corner units (SW&SE)	STC 42	STC 34	STC 35

Notes: OBC = meets the minimum requirements outlined in the Ontario Building Code.

Once suite layouts, room dimensions and façade plans are available, a detailed assessment of glazing requirements should be completed to confirm the above glazing recommendations have not changed.

4.5.4 Warning Clauses

The following are examples of applicable warning clause wording as outlined in the ENCG. Precise wordings may be modified by the Client with input from the City of Ottawa, stakeholders, and/or legal counsel if required.

“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.

To help address the need for sound attenuation this development includes:

- *Installation of windows with upgraded STC ratings*
- *central air conditioning; and*
- *rooftop 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 building 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”

Warning clauses are to be included in all agreements of Offers of Purchase and Sale, lease/rental agreements and condominium declarations. A summary of the warning clause requirements is shown in Table 6 above.

5.0 Concluding Comments

Transportation noise impacts on the Project are expected to meet all applicable MECP & ENCG noise requirements with the inclusion of the recommended acoustic barriers, upgraded façade construction, ventilation requirements, and warning clauses as presented in Section 4.5 of this report.

Based on the above, the proposed development is considered feasible regarding noise impacts from surrounding roadways.

Yours Truly,

Thornton Tomasetti



Marcus L.P. Eng.
Vice President

Reviewed by:
Robert Fuller, P.Eng.
Senior Project Engineer

Disclaimer

This report is provided in accordance with the contractual agreement between TT and the Client. In addition to our contractual obligations TT notes the following general disclaimers and qualifications regarding the content of this report.

In preparing this report, TT has relied upon the accuracy and completeness of information provided by the Client and other third parties (manufacturers, other consultants, etc.) and accepts no responsibility for errors or omissions by other parties in the information provided to TT.

This report has been prepared solely for the benefit of the Client and the content of this report is intended for informational purposes only. This report shall not be relied upon by any other parties, including but not limited to other consultants retained by the Client, or utilized for any other purposes.

Ultimate responsibility for the design and construction remains solely with the architect/engineer of record and/or the contractor(s). Achieving the required mitigation requirements relies on correct incorporation of mitigation recommendations into Architectural and Mechanical drawings and specifications, as well as correct installation during construction. It is recommended that the implementation of mitigation measures be reviewed by a qualified consultant.

On request, TT will provide a proposal for additional work such as to peer review mitigation measures or observe on-site conditions as appropriate; however, notwithstanding the foregoing, it is expressly understood and agreed that TT shall not have control or charge of, and shall not be responsible for the acts or omissions, including but not limited to means, methods, techniques, sequences and procedures, of the Design Professionals and/or Contractors performing design and/or construction on the Project. Accordingly, TT shall not be held responsible for the failure of any party to properly incorporate the mitigation measures stated in this report.

Appendix A: Figures

Figure 1: Project Site Plan

Figure 2: Project Location & Surroundings

Figure 3: Outdoor Levels – Roadway

Figure 4: Façade Levels – Roadway

Figure 5: Outdoor Levels – Roadway (Mitigated)

Client Name

CFCC / QCC 1209 Michael St. Inc.

Project Name

1209 Michael Street

Notes:

1) Not to Scale

Figure Title

Project Site Plan

Produced By

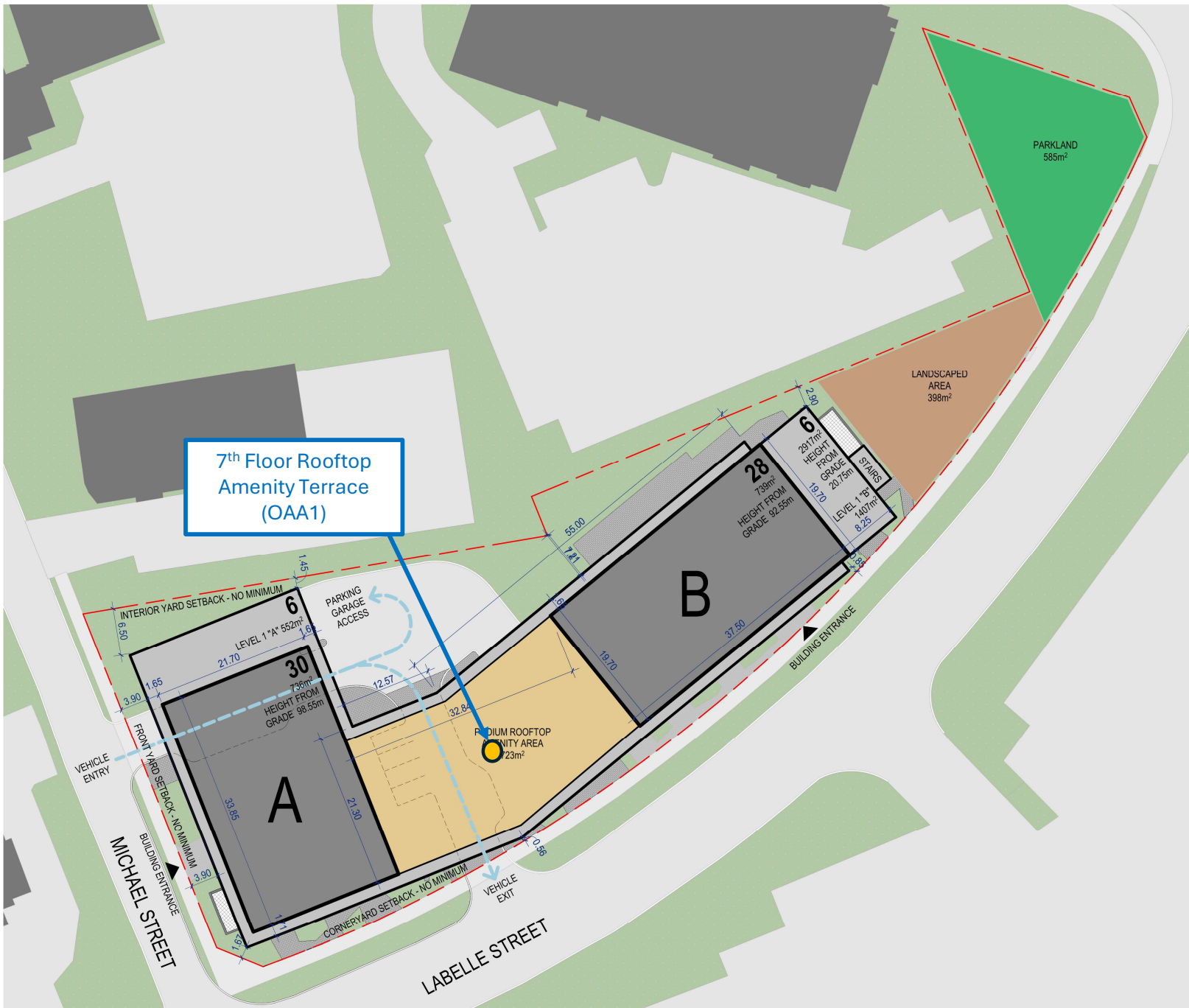
MTL

TT Project #

25017451

Date

Feb 3, 2026



7th Floor Rooftop
Amenity Terrace
(OAA1)

Client Name
CFCF / QCC 1209 Michael St. Inc.

Project Name
1209 Michael Street

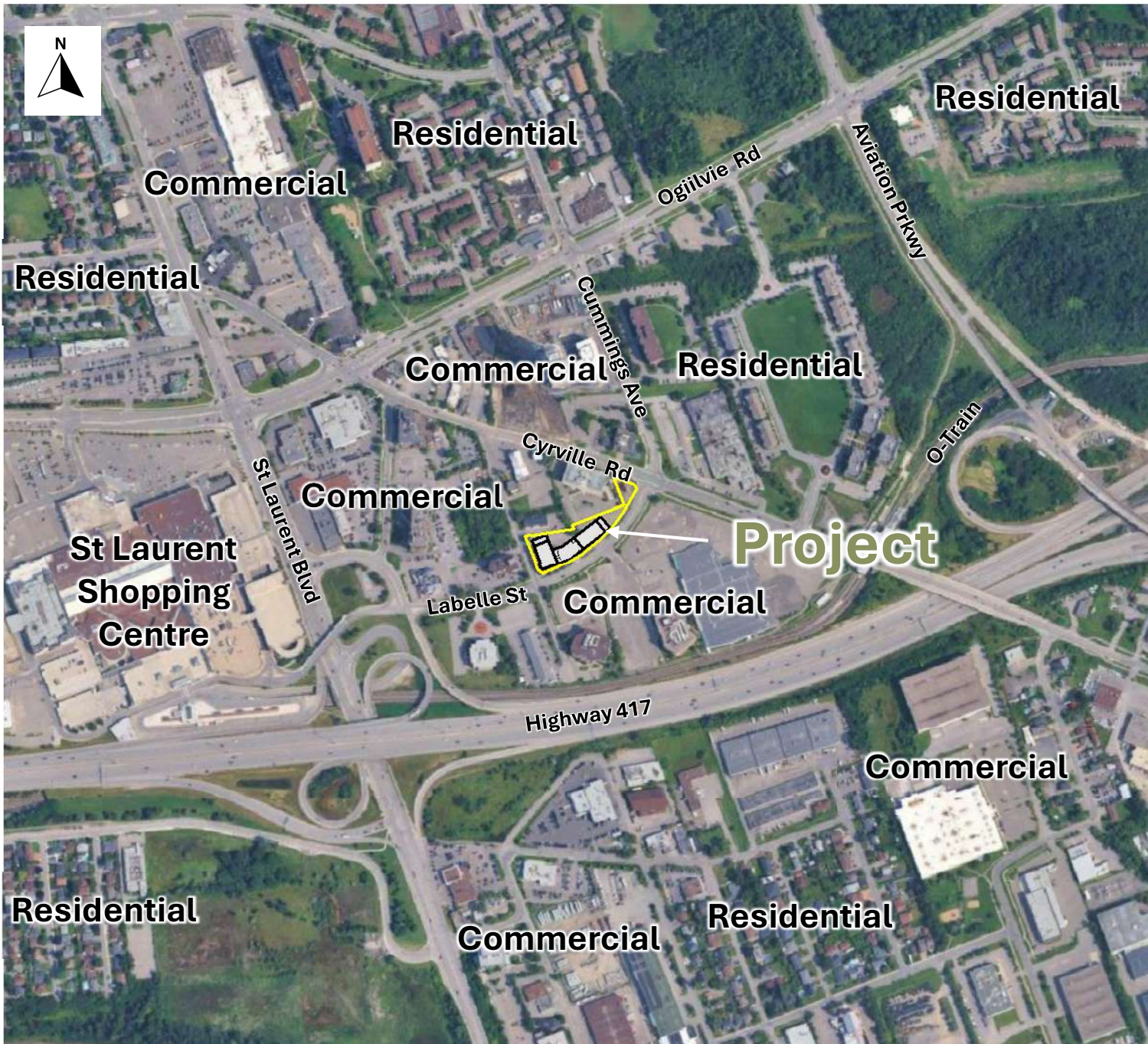
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Figure Title
Project Location and Surroundings

Produced By
MTL

TT Project #
25017451

Date
Feb 3, 2026



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Thornton Tomasetti

Client Name
CFCF / QCC 1209 Michael St. Inc.

Project Name
1209 Michael Street

Notes:
Legend
— Line Source

Figure Title
Outdoor Levels – Roadway

Produced By
MTL

TT Project #
25017451

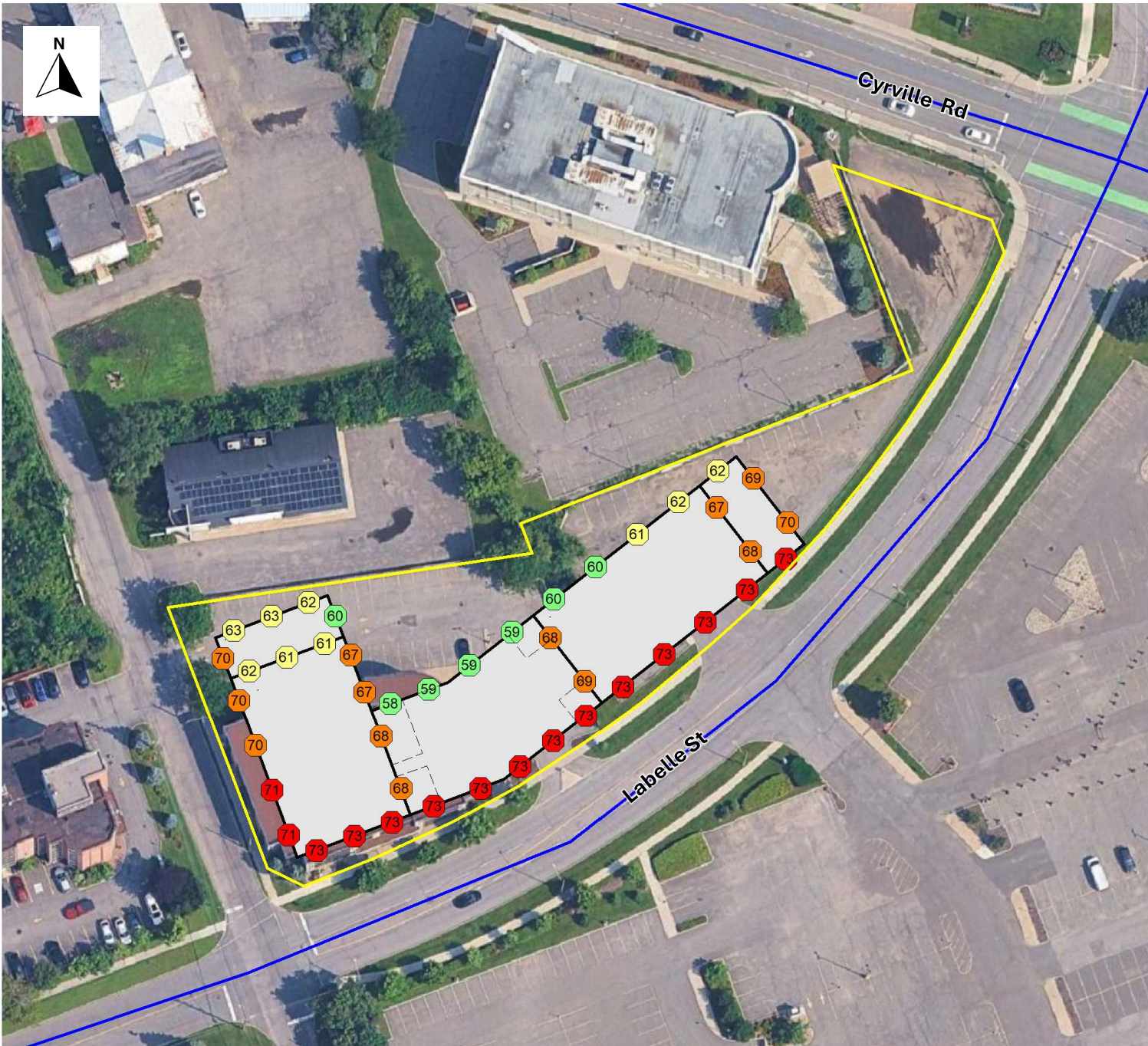
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Client Name

CFCF / QCC 1209 Michael St. Inc.

Project Name

1209 Michael Street

Notes:

Legend

— Line Source

Sound Pressure Levels

- 0 to 30 dBA
- 31 to 40 dBA
- 41 to 45 dBA
- 46 to 50 dBA
- 51 to 55 dBA
- 56 to 60 dBA
- 61 to 65 dBA
- 66 to 70 dBA
- 71 to 75 dBA
- 76 + dBA

Figure Title

Facade Levels – Roadway, Daytime

Produced By

MTL

TT Project

25017451

Date

Feb 3, 2026

4a

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Thornton Tomasetti

Client Name

CFCF / QCC 1209 Michael St. Inc.

Project Name

1209 Michael Street

Notes:

Legend

— Line Source

Sound Pressure Levels

- 0 to 30 dBA
- 31 to 40 dBA
- 41 to 45 dBA
- 46 to 50 dBA
- 51 to 55 dBA
- 56 to 60 dBA
- 61 to 65 dBA
- 66 to 70 dBA
- 71 to 75 dBA
- 76 + dBA

Figure Title

Facade Levels – Roadway, Night-time

Produced By

MTL

TT Project

25017451

Date

Feb 3, 2026

4b

Client Name

CFCF / QCC 1209 Michael St. Inc.

Project Name

1209 Michael Street

Notes:

Legend

- Line Source
- Acoustic Barrier

Figure Title

Outdoor Levels – Roadway (Mitigated)

Produced By

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TT Project #

25017451

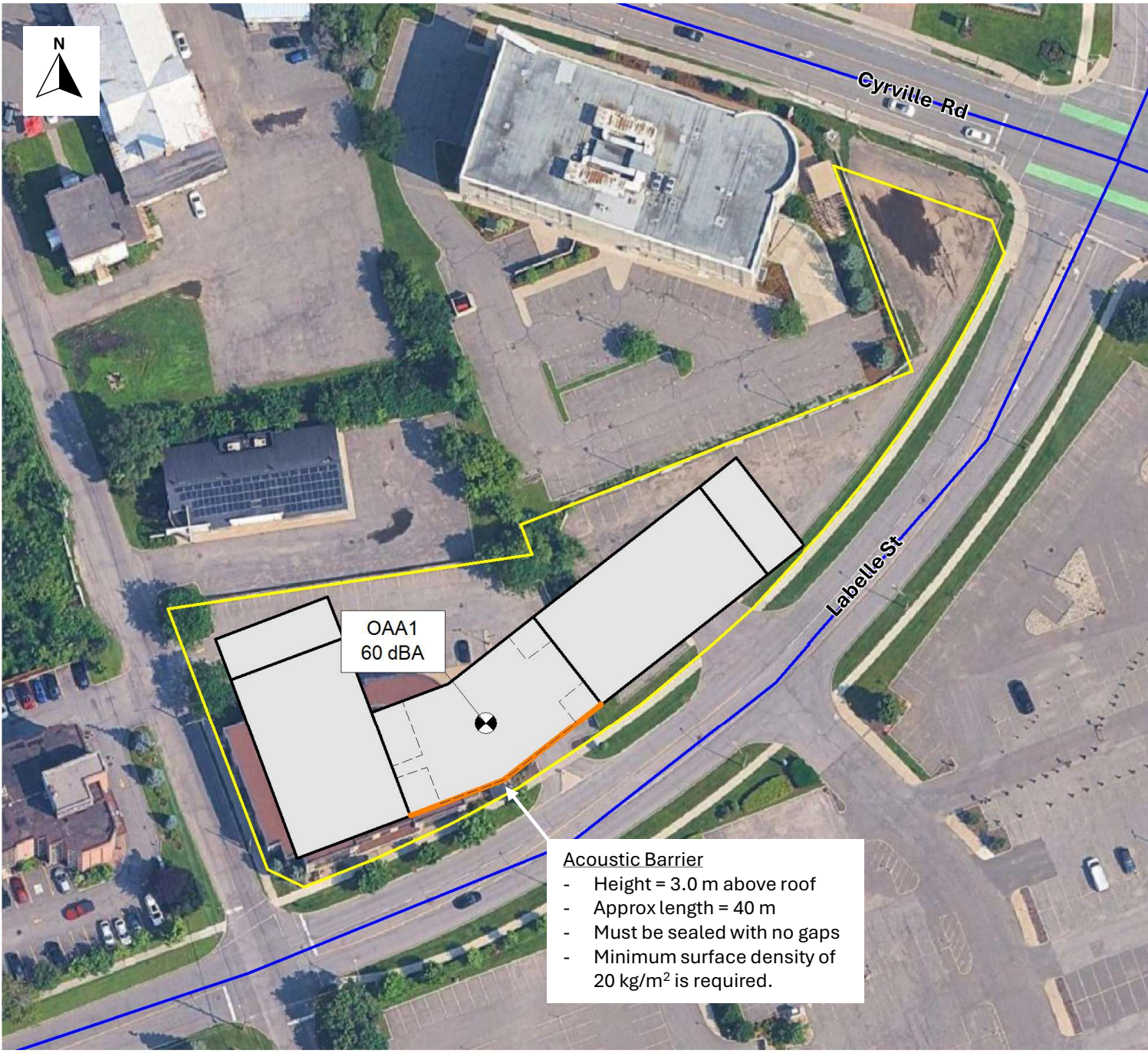
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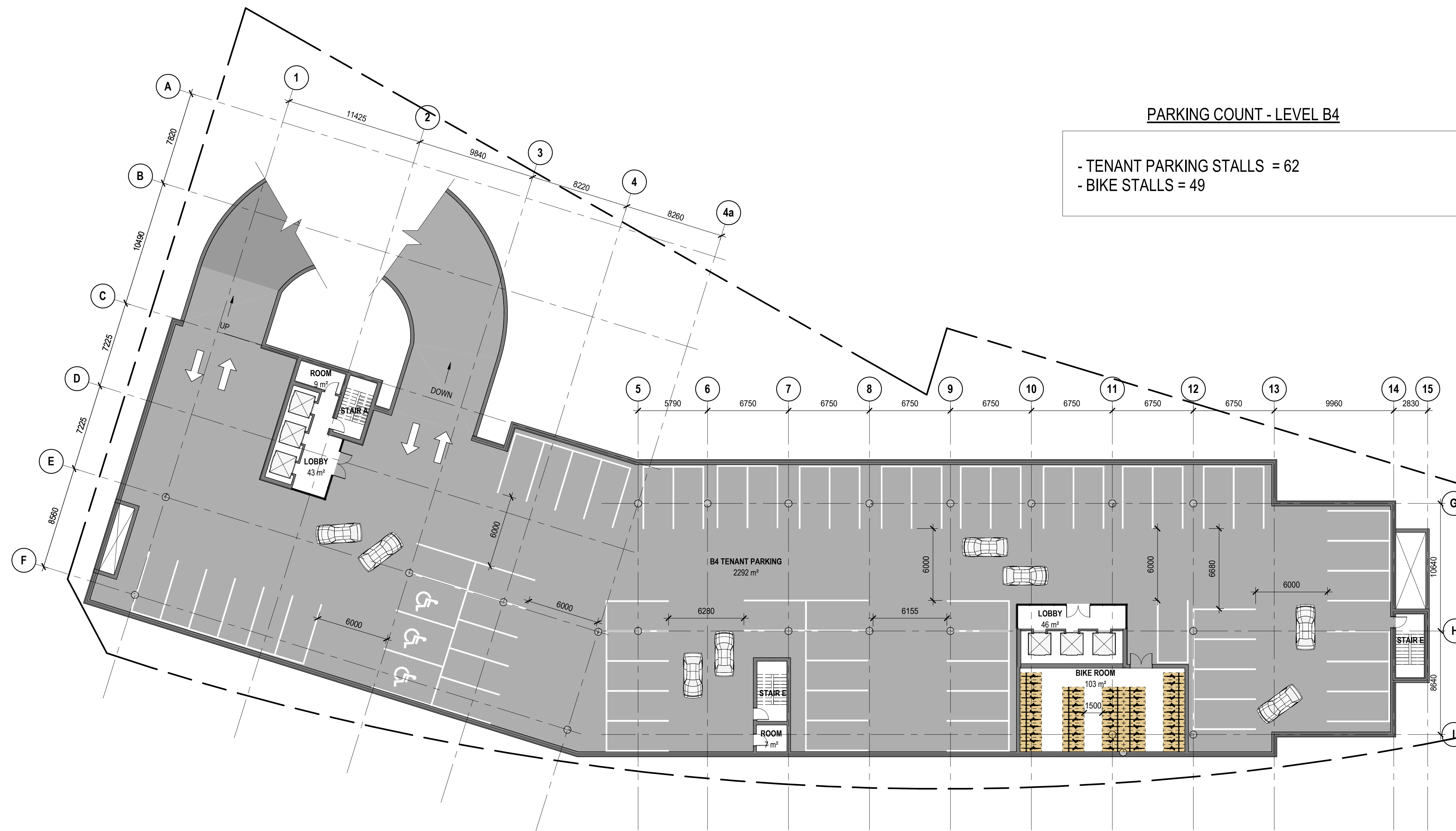
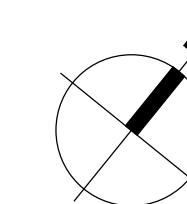
OAA1
60 dBA

Acoustic Barrier

- Height = 3.0 m above roof
- Approx length = 40 m
- Must be sealed with no gaps
- Minimum surface density of 20 kg/m² is required.

450500 450520 450540 450560 450580 450600 450620 450640 450660 450680

Appendix B: Development Drawings



PARKING COUNT - LEVEL B4
- TENANT PARKING STALLS = 62
- BIKE STALLS = 49

1 UNDERGROUND PARKING B4
A-1.01 SCALE: 1:200



REV	YYYY-MM-DD	REVISION / DRAWING ISSUE	REVIEW
1	2025-11-20	ISSUED FOR UDRP PACKAGE	

CONSULTANT

PERMIT STAMP

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PROJECT

1209 MICHAEL ST.

OTTAWA, ONTARIO

DRAWING TITLE

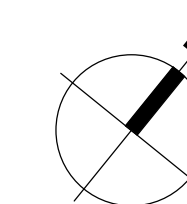
B4 UNDERGROUND PARKING PLAN

DRAWING ISSUE

ISSUED FOR UDRP PACKAGE

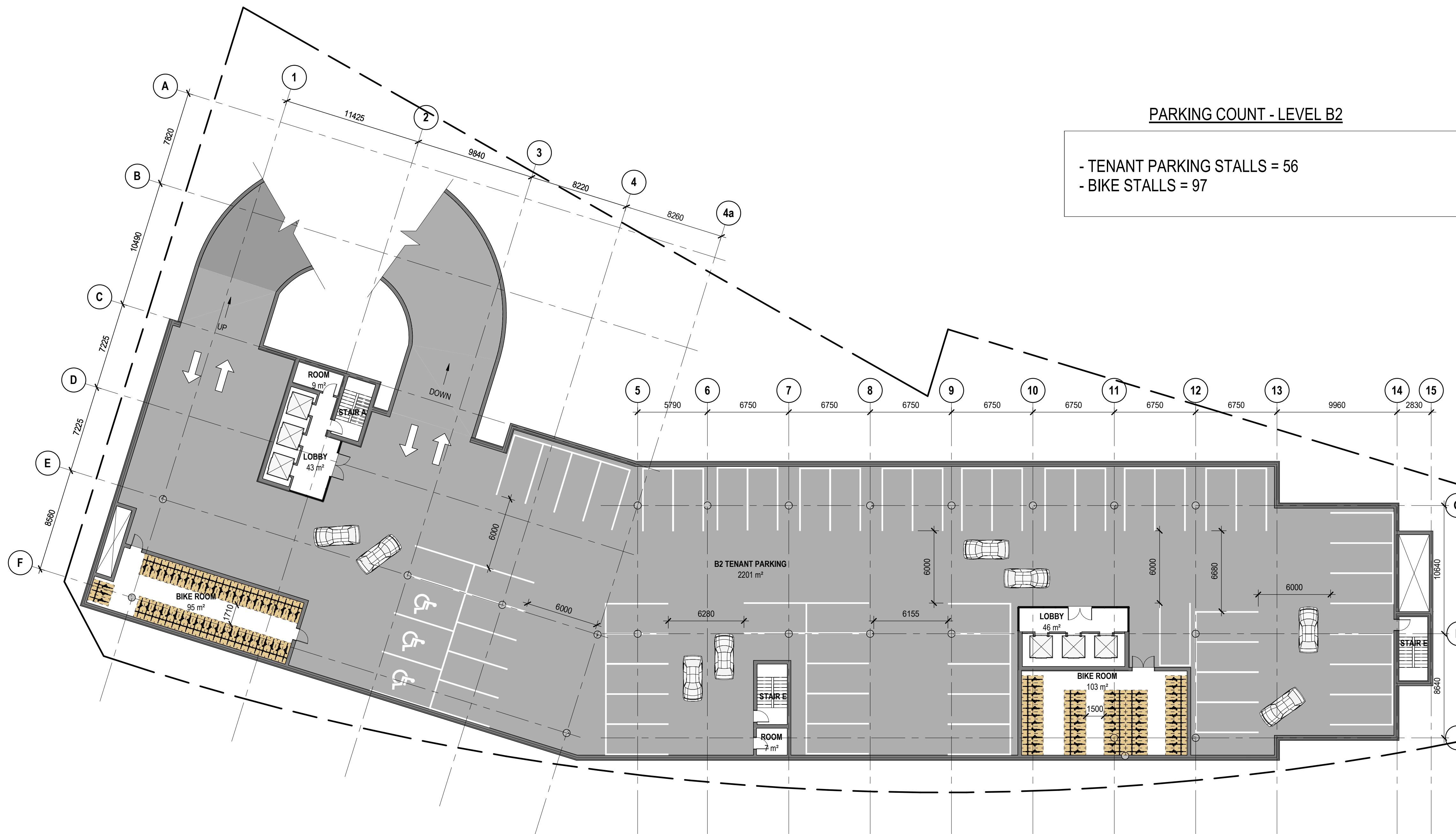
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DRAWING NO.	SCALE	REVIEWED	A.B.
A-1.01	1:200		

REVISION	1
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PARKING COUNT - LEVEL B2

- TENANT PARKING STALLS = 56
- BIKE STALLS = 97



1 UNDERGROUND PARKING B2
A-1.03 SCALE: 1:200



REV	YYYY-MM-DD	REVISION / DRAWING ISSUE	REVIEW
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PROJECT

1209 MICHAEL ST.

OTTAWA, ONTARIO

DRAWING TITLE

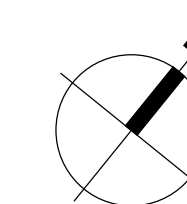
B2 UNDERGROUND PARKING PLAN

DRAWING ISSUE

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PROJECT NO.	PLOT DATE	DRAWN	W.Q.
350979-00	2025-11-20		
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	1:200		

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A-1.03	1



TENANT UNIT SCHEDULE

LEVEL	UNIT TYPE	UNIT COUNT PER FLOOR	TOTAL UNIT COUNT	TOTAL AREA PER FLOOR (m ²)	TOTAL AREA (m ²)
LEVEL 20-30 (TOWER A)	2 BEDROOM	2	4	170	340
	1 BEDROOM	5	10	302	604
	STUDIO	3	6	132	264
TOTAL:		10	20	604	1,208
LEVEL 8-20 (TOWER A & B)	2 BEDROOM	4	84	326	6,846
	1 BEDROOM	12	252	739	15,513
	STUDIO	3	63	139	2,972
TOTAL:		19	399	1,197	25,137
LEVEL 7 (TOWER A & B, PODIUM)	2 BEDROOM	2	2	172	372
	1 BEDROOM	15	15	956	356
	STUDIO	1	1	48	48
TOTAL:		18	18	1,176	1,176
LEVEL 2-6 (PODIUM)	2 BEDROOM	5	25	452	6,240
	1 BEDROOM	17	85	1,078	5,350
	STUDIO	11	55	556	2,763
TOTAL:		33	165	2,078	10,390
LEVEL 1 (PODIUM)	2 BEDROOM	1	1	87	87
	1 BEDROOM	4	4	276	276
	STUDIO	0	0	0	0
TOTAL:		5	5	363	363
GRAND TOTAL:			607		38,274



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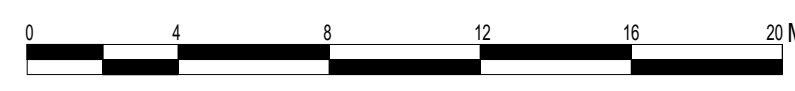
LEVEL 1 FLOOR PLAN

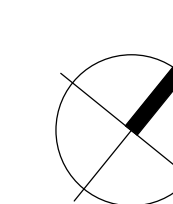
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PROJECT NO.	PLOT DATE	DRAWN	W.Q.
350979-00	2025-11-20		
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DRAWING NO.	A-1.05		REVISION
			1

1 LEVEL 1 FLOOR PLAN
A-1.05 SCALE: 1 : 200





TENANT UNIT SCHEDULE

LEVEL	UNIT TYPE	UNIT COUNT PER FLOOR	TOTAL UNIT COUNT	TOTAL AREA PER FLOOR (m ²)	TOTAL AREA (m ²)
LEVEL 20-30 (TOWER A)	2 BEDROOM	2	4	170	740
	1 BEDROOM	5	10	302	604
	STUDIO	3	6	152	264
	TOTAL	10	20	604	1,608
LEVEL 8-20 (TOWER A & B)	2 BEDROOM	4	84	326	6,846
	1 BEDROOM	12	252	739	15,513
	STUDIO	3	63	139	2,972
	TOTAL	19	399	1,204	26,131
LEVEL 7 (TOWER A & B, PODIUM)	2 BEDROOM	2	2	172	372
	1 BEDROOM	15	15	956	396
	STUDIO	1	1	49	48
	TOTAL	18	18	1,176	1,376
LEVEL 2-6 (PODIUM)	2 BEDROOM	5	25	452	6,240
	1 BEDROOM	17	85	1,079	5,350
	STUDIO	11	55	556	2,760
	TOTAL	33	165	2,078	10,990
LEVEL 1 (PODIUM)	2 BEDROOM	1	1	87	87
	1 BEDROOM	4	4	276	216
	STUDIO	0	0	0	0
	TOTAL	5	5	363	363
GRAND TOTAL:			607		38,274



1 LEVEL 2-6 FLOOR PLAN (PODIUM TYPICAL)
A-1.06 SCALE: 1 : 200



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LEVEL 2-6 FLOOR PLAN (PODIUM TYPICAL)

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PROJECT NO.

350979-00

PLOT DATE

2025-11-20

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W.Q.

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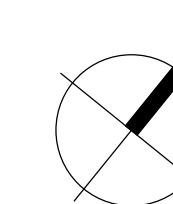
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DRAWING NO.

A-1.06

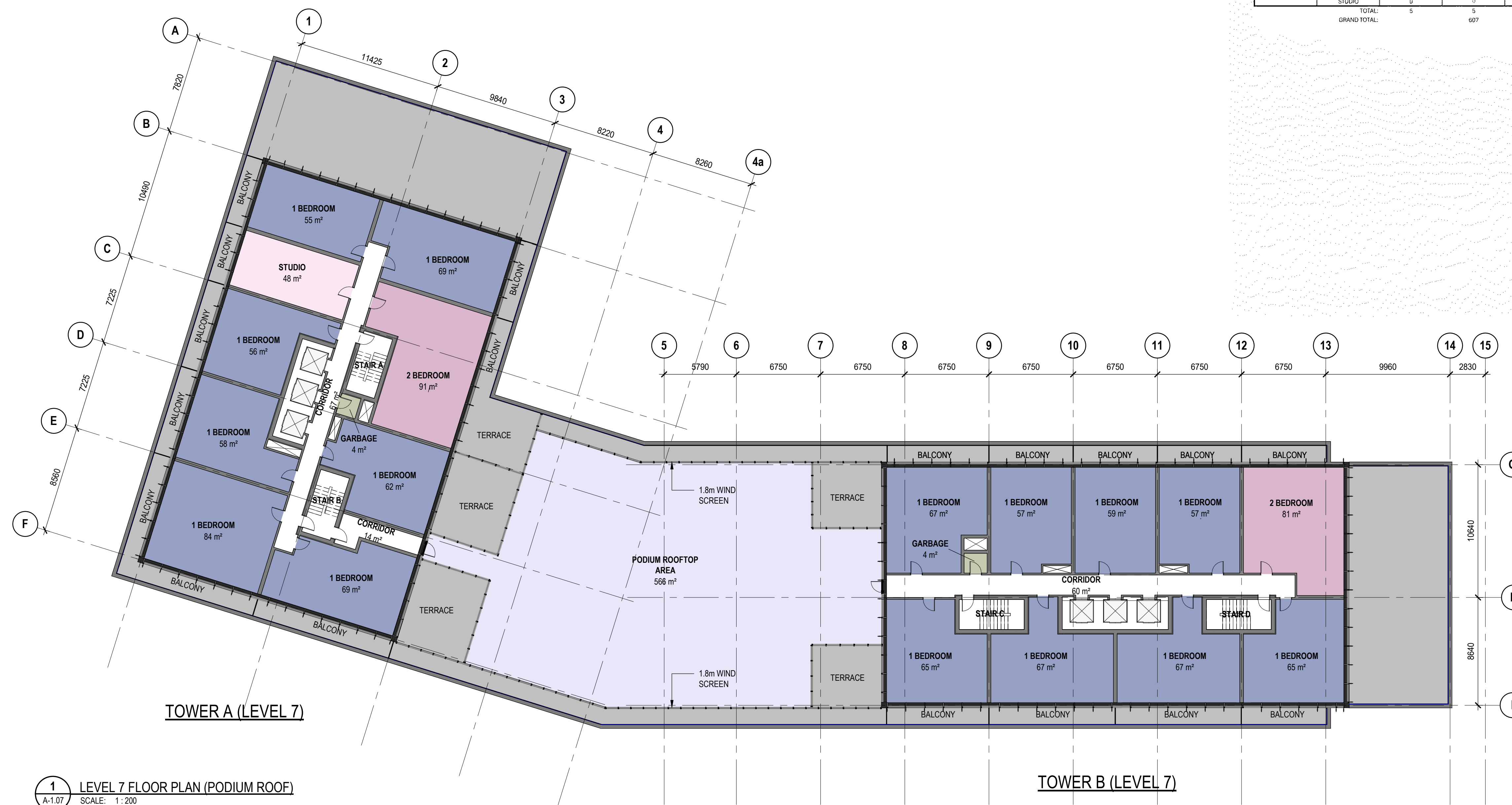
REVISION

1

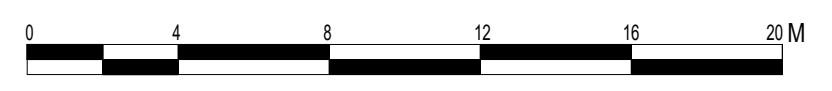


TENANT UNIT SCHEDULE

LEVEL	UNIT TYPE	UNIT COUNT PER FLOOR	TOTAL UNIT COUNT	TOTAL AREA PER FLOOR (m ²)	TOTAL AREA (m ²)
LEVEL 20-30 (TOWER A)	2 BEDROOM	2	4	170	740
	1 BEDROOM	5	10	302	604
	STUDIO	3	6	152	264
	TOTAL	10	20	604	1,208
LEVEL 8-20 (TOWER A & B)	2 BEDROOM	4	84	326	6,846
	1 BEDROOM	12	252	739	15,513
	STUDIO	3	63	139	2,972
	TOTAL	19	399	1,204	25,331
LEVEL 7 (TOWER A & B, PODIUM)	2 BEDROOM	2	2	172	372
	1 BEDROOM	15	15	956	3956
	STUDIO	1	1	48	48
	TOTAL	18	18	1,176	1,376
LEVEL 2-6 (PODIUM)	2 BEDROOM	5	25	452	6,240
	1 BEDROOM	17	85	1,078	5,350
	STUDIO	11	55	556	2,763
	TOTAL	33	165	2,078	10,390
LEVEL 1 (PODIUM)	2 BEDROOM	1	1	87	87
	1 BEDROOM	4	4	276	276
	STUDIO	0	0	0	0
	TOTAL	5	5	363	363
GRAND TOTAL:			607	363	38,274



1 LEVEL 7 FLOOR PLAN (PODIUM ROOF)
SCALE: 1:200



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1209 MICHAEL ST.

OTTAWA, ONTARIO

DRAWING TITLE

LEVEL 7 FLOOR PLAN (PODIUM ROOF)

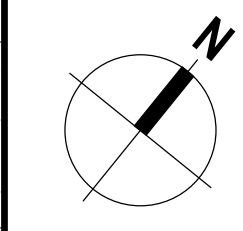
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PROJECT NO.	PLOT DATE	DRAWN
350979-00	2025-11-20	W.Q.

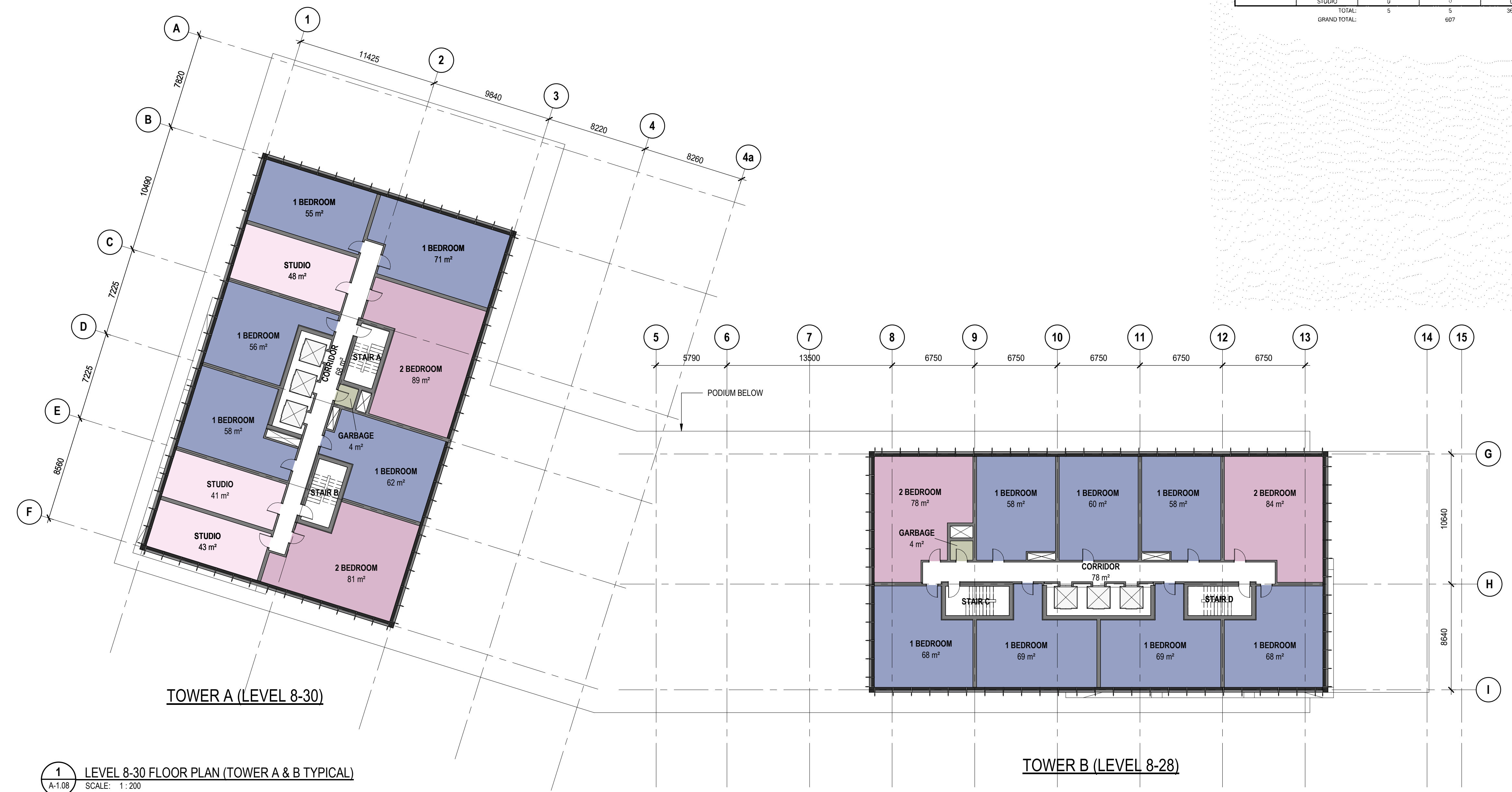
SCALE	REVIEWED
1:200	A.B.

DRAWING NO.	REVISION
A-1.07	1



TENANT UNIT SCHEDULE

LEVEL	UNIT TYPE	UNIT COUNT PER FLOOR	TOTAL UNIT COUNT	TOTAL AREA PER FLOOR (m ²)	TOTAL AREA (m ²)
LEVEL 20-30 (TOWER A)	2 BEDROOM	2	4	170	340
	1 BEDROOM	5	10	302	604
	STUDIO	3	6	132	264
TOTAL:		10	20	604	1,208
LEVEL 8-28 (TOWER A & B)	2 BEDROOM	4	84	326	6,846
	1 BEDROOM	12	252	739	15,513
	STUDIO	3	63	139	2,972
TOTAL:		19	399	1,204	25,331
LEVEL 7 (TOWER A & B, PODIUM)	2 BEDROOM	2	2	172	372
	1 BEDROOM	15	15	956	3956
	STUDIO	1	1	48	48
TOTAL:		18	18	1,176	1,176
LEVEL 2-6 (PODIUM)	2 BEDROOM	5	25	452	6,240
	1 BEDROOM	17	85	1,078	5,350
	STUDIO	11	55	556	2,763
TOTAL:		33	165	2,078	10,390
LEVEL 1 (PODIUM)	2 BEDROOM	1	1	87	87
	1 BEDROOM	4	4	276	216
	STUDIO	0	0	0	0
TOTAL:		5	5	363	363
GRAND TOTAL:			607	363	38,274



1 LEVEL 8-30 FLOOR PLAN (TOWER A & B TYPICAL)
SCALE: 1:200

TOWER B (LEVEL 8-28)

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PROJECT

1209 MICHAEL ST.

OTTAWA, ONTARIO

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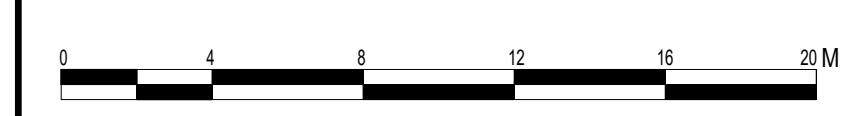
LEVEL 8-30 FLOOR PLAN (TOWER TYPICAL)

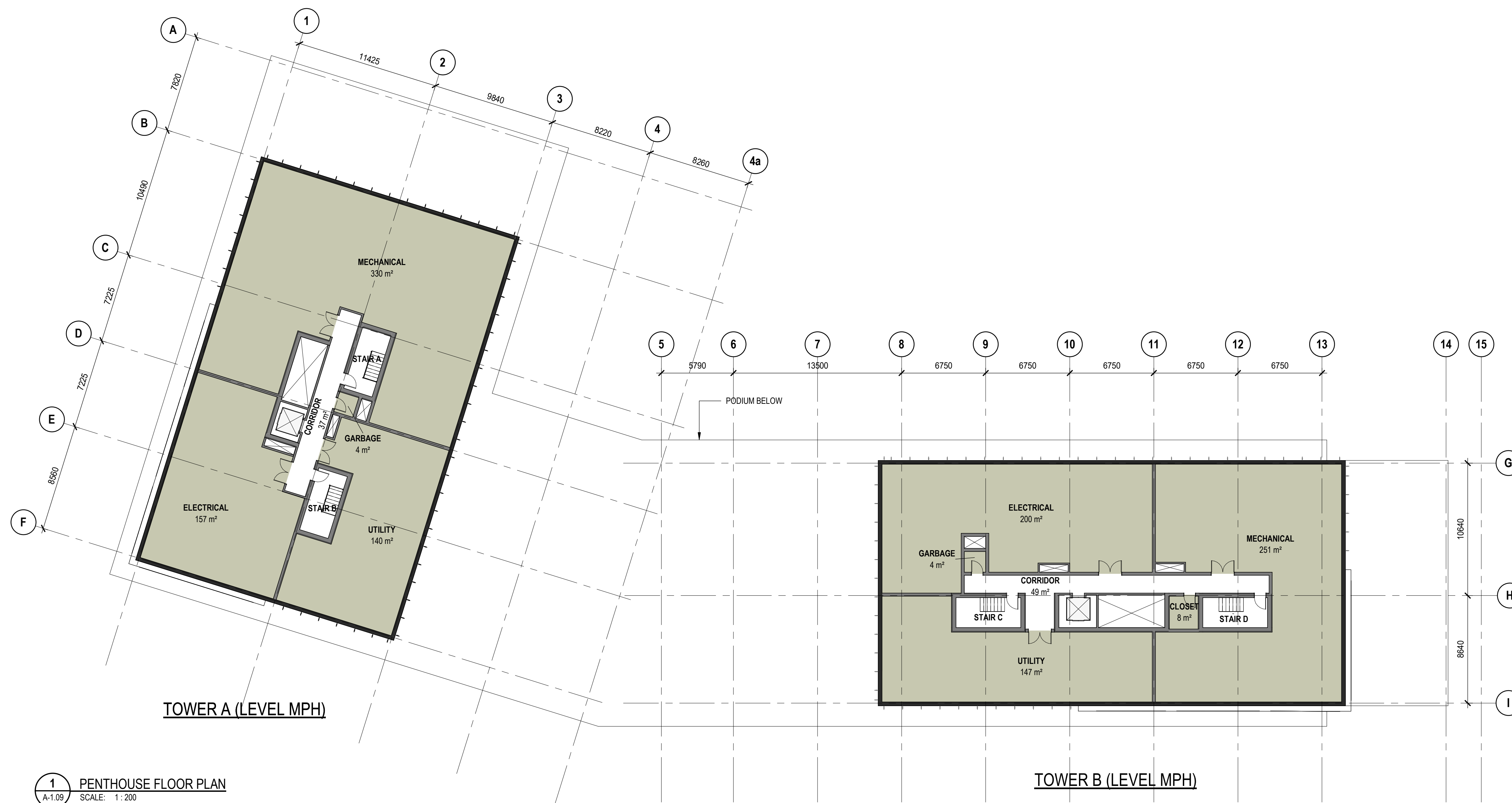
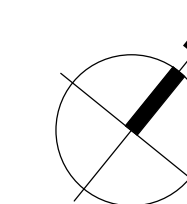
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PROJECT NO.	PLOT DATE	DRAWN	W.Q.
350979-00	2025-11-20		
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A-1.08	1





1 PENTHOUSE FLOOR PLAN
A-1.09 SCALE: 1:200



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PROJECT

1209 MICHAEL ST.

OTTAWA, ONTARIO

DRAWING TITLE

PENTHOUSE FLOOR PLAN

DRAWING ISSUE

ISSUED FOR UDRP PACKAGE

PROJECT NO. 350979-00 PLOT DATE 2025-11-20 DRAWN W.Q.

SCALE 1:200 REVIEWED A.B.

DRAWING NO. A-1.09 REVISION 1

Appendix C: Traffic Data

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.

Appendix D: STAMSON Validation File

Client Name

CFCC / QCC 1209 Michael St. Inc.

Project Name

1209 Michael Street

Notes:**Legend**

— Line Source

Figure Title

STAMSON Validation File

Produced By

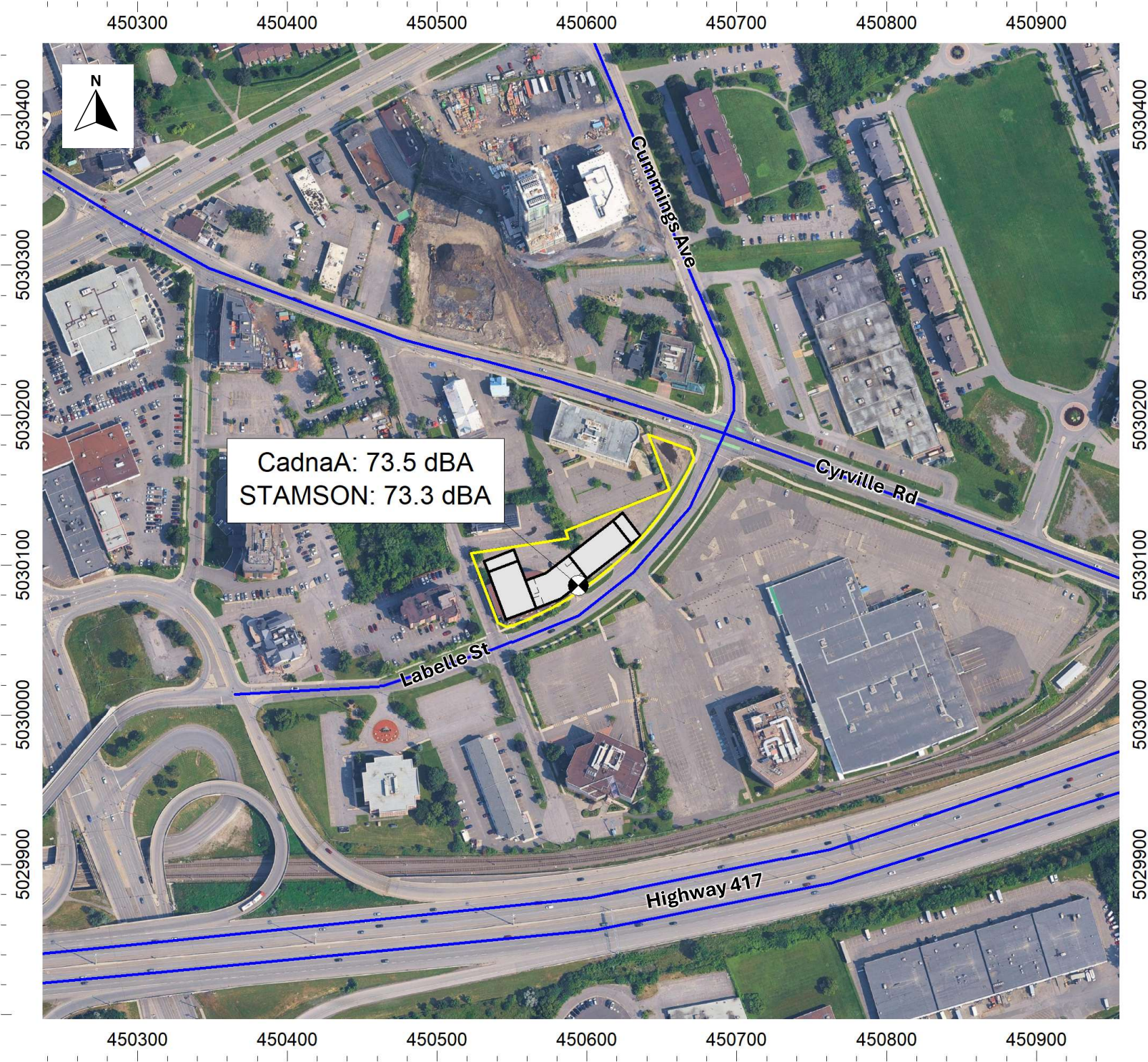
MTL

TT Project #

25017451

Date

Feb 3, 2026

D.1

Filename: sfac.te Time Period: 16 hours
Description: South Facade, 1st floor

Road data, segment # 1: Cyrville2

Car traffic volume : 12144 veh/TimePeriod
Medium truck volume : 966 veh/TimePeriod
Heavy truck volume : 690 veh/TimePeriod
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: Cyrville2

Angle1 Angle2 : 35.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 125.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Labelle

Car traffic volume : 9715 veh/TimePeriod
Medium truck volume : 773 veh/TimePeriod
Heavy truck volume : 552 veh/TimePeriod
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: Labelle

Angle1 Angle2 : -90.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 16.20 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 3: Hwy401WB

Car traffic volume : 57164 veh/TimePeriod
Medium truck volume : 1243 veh/TimePeriod
Heavy truck volume : 3728 veh/TimePeriod
Posted speed limit : 100 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 3: Hwy401WB

```

-----
Angle1  Angle2      : -86.00 deg   90.00 deg
Wood depth      :      0      (No woods.)
No of house rows :      0
Surface         :      2      (Reflective ground surface)
Receiver source distance : 201.00 m
Receiver height  :      1.50 m
Topography      :      1      (Flat/gentle slope; no barrier)
Reference angle  :      0.00
  
```

Road data, segment # 4: Hwy401EB

```

-----
Car traffic volume : 57164 veh/TimePeriod
Medium truck volume : 1243 veh/TimePeriod
Heavy truck volume : 3728 veh/TimePeriod
Posted speed limit : 100 km/h
Road gradient      :      0 %
Road pavement     :      1 (Typical asphalt or concrete)
  
```

Data for Segment # 4: Hwy401EB

```

-----
Angle1  Angle2      : -86.00 deg   90.00 deg
Wood depth      :      0      (No woods.)
No of house rows :      0
Surface         :      2      (Reflective ground surface)
Receiver source distance : 228.00 m
Receiver height  :      1.50 m
Topography      :      1      (Flat/gentle slope; no barrier)
Reference angle  :      0.00
  
```

Results segment # 1: Cyrville2

Source height = 1.50 m

ROAD (0.00 + 55.64 + 0.00) = 55.64 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
35	90	0.00	70.00	0.00	-9.21	-5.15	0.00	0.00	0.00	55.64

Segment Leq : 55.64 dBA

Results segment # 2: Labelle

Source height = 1.50 m

ROAD (0.00 + 67.18 + 0.00) = 67.18 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	67.51	0.00	-0.33	0.00	0.00	0.00	0.00	67.18

Segment Leq : 67.18 dBA

Results segment # 3: Hwy401WB

Source height = 1.57 m

ROAD (0.00 + 69.25 + 0.00) = 69.25 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-86	90	0.00	80.62	0.00	-11.27	-0.10	0.00	0.00	0.00	69.25

Segment Leq : 69.25 dBA

Results segment # 4: Hwy401EB

Source height = 1.57 m

ROAD (0.00 + 68.71 + 0.00) = 68.71 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-86	90	0.00	80.62	0.00	-11.82	-0.10	0.00	0.00	0.00	68.71

Segment Leq : 68.71 dBA

Total Leq All Segments: 73.31 dBA

TOTAL Leq FROM ALL SOURCES: 73.31