NOISE & VIBRATION IMPACT STUDY

18-STOREY MIXED-USE BUILDING
388 MAIN STREET EAST
MILTON, ON

Prepared for:

Mikmada Homes
P.O. Box 20
Burlington, ON
L7P 0N4

Prepared By:

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Reviewed By:

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Our File No: 24-2079
November 2024

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1.0 INTRODUCTION

dBA Acoustical Consulting Inc. has been retained to provide a noise and vibration impact study on behalf of Mikmada Homes for the proposed 16-storey tower connected to an 18-storey tower by a 6-storey podium Mixed-Use Building located at 388 Main Street East, Milton, ON.

The purpose of the study is to determine the noise and vibration impact from Main Street East and Ontario Street South vehicular traffic as well as the Canadian Pacific Railway (CP) and the Milton GO train traffic that may impact the proposed residential buildings as required for Site Plan Application (SPA) resubmission for the Town of Milton, Regional Municipality of Halton.

This study will detail noise impact relative to the site plan and recommend noise control measures necessary (if applicable) to meet Ministry of Environment Conservation and Parks (MECP) Publication NPC-300 entitled "Stationary & Transportation Sources-Approval & Planning guidelines while satisfying the planning requirements of the Town of Milton, Regional Municipality of Halton.

Vibration is not considered as the railway lines are not within the required 75m setback distance. Aircraft is not a concern as the development is located outside the NEF 25 contour of any area Airports. Site Location attached as Figure 1.

2.0 SITE DESCRIPTION

Proposed for the site is one building with a 16-storey tower connected to an 18-storey tower by a 6-storey podium. There are 3 levels of underground parking and an enclosed mechanical room on the rooftop of each tower. The 16-storey building has 269 units, and the 18-storey building has 299 units for a total of 568 residential units. Standard balconies are proposed and are less than 4m in depth and therefore not considered as Outdoor Living Areas (OLA's). Currently there are no outdoor amenity areas included on the site plan.

The proposed mixed-use building is located approximately 16.5m south from the center line of Main Street East which is a 2-lane roadway running east and west and has a speed of 50 km/hr. Ontario Street South is approximately 159m, east of the proposed 18-storey building and is a 4-lane roadway with a center turn lane as well as a right turn lane. The roadway runs north and south and has a speed limit of 50 km/hr.

The immediate area surrounding the proposed mixed-use building is comprised of residential dwellings as well as commercial buildings. To the north approximately 165m is the Canadian Pacific Rail (CPR) followed by GO Transit (Metrolinx) train line, approximately 8m north of the CP line. While there are nearby 1-2 storey commercial properties to the north, east and west of the proposed building with rooftop HVAC units, these units will not have an acoustical impact on the proposed building due to distance separation, shielding and the road and rail traffic noise exceeds the sound of these HVAC units. See Figure 2 for Site Plan.

3.0 NOISE IMPACT ASSESSMENT

3.1 NOISE CRITERIA

MECP specifies limits for road noise relative to new residential developments. The MECP Publication NPC-300 entitled "Stationary & Transportation Sources-Approval & Planning, specifies the criteria, summarized as follows:

TABLE 1- Road Traffic Sound Levels Limits	
Time Period	Leq (dBA)
07:00 – 23:00 (16 hr.)	55 Outdoor Living Area
07:00 – 23:00 (16 hr.)	55 Plane of Window
23:00 – 07:00 (8 hr.)	50 Plane of Bedroom Window

Where noise levels estimated at the Plane of the Window (POW) are equal to or less than the values listed in Table 1, no noise control measures are required. Where noise levels exceed Table 1 values, the following action is required:

TABLE 2 – Noise Control Requirements		
Time Period	Noise Level Leq (dBA)	Action Required
07:00 - 23:00 Daytime (OLA)	56 to 60	Warning Clause Type "A"
	> 60	Barrier & Warning Clause Type "B"
07:00 – 23:00 Daytime (POW)	> 55	Provision for A/C, Warning Clause "C"
	> 65	Central A/C, Warning Clause "D"
	> 65	Building Component Specification
23:00 to 07:00 Nighttime (POW)	> 50	Provision for A/C and Warning Clause Type "C"
	> 60	Building Component Specification
	> 60	Central Air and Warning Clause Type "D"

Where nighttime noise levels exceed 60 dBA, building components must be designed to meet Table 3 indoor sound level limits.

TABLE 3 - Indoor Road Sound Level Limits	
Indoor Location	Leq (dBA)
	Road
Living/Dining/ Bedroom 7:00 – 23:00	45
Living/Dining/ Bedroom 23:00 - 07:00	40

3.2 RAIL NOISE

Train traffic data dated August 16, 2024, obtained from Metrolinx (see Appendix "A"), was used to carry out prediction calculations using the MECP "Stamson, Version 5.04" computer program. CP Rail no longer supplies train traffic data; therefore, we anticipated the number of trains for this track location. Calculations were performed for daytime and nighttime periods. An annual growth factor of 2.5% per annum was projected over 10 years for CP Rail and for GO Transit. The data is summarized in Table 4.

TABLE 4 – GO Transit (Metrolinx) Train Traffic Data	
Type	Passenger/GO
Number of Trains 07:00 - 23:00 23:00 - 07:00	36 8
Number of Cars per Train	10
Number of Locomotives per Train	1
Maximum Train Speed (km/hr.)	121 km/hr.

TABLE 5 – CP Rail Train Traffic Data	
Type	Freight
Number of Trains 07:00 - 23:00 23:00 - 07:00	5 3
Number of Cars per Train	140
Number of Locomotives per Train	4
Maximum Train Speed (km/hr.)	80 km/hr.

The following Table 6A summarizes the "free field" traffic noise prediction results for GO Transit (Metrolinx). (See Figure 3 Receptor Locations).

TABLE 6A - Predicted Rail Traffic Noise Levels-Free Field		
Location from GO Transit	L_{eq} (dBA)	
	07:00 - 23:00	23:00 - 07:00
R1 – Northwest Façade 2nd Floor Residential (6.5m)	42 dBA	45 dBA
R2 – Northwest Façade 10th Floor Residential (31.5)	46 dBA	49 dBA
R3 – Northwest Façade 16th Floor Residential (50m)	46 dBA	49 dBA
R4 – Northeast Façade 2nd Floor Residential (6.5m)	44 dBA	47 dBA
R5 – Northeast Façade 10th Floor Residential (31.5m)	47 dBA	50 dBA
R6 – Northeast Façade 18th Floor Residential (56m)	47 dBA	50 dBA
R7 – East Façade 1st Floor Residential (2.5m)	43 dBA	46 dBA
R8 – East Façade 10th Floor Residential (31.5m)	43 dBA	46 dBA
R9 – East Facade 18th Floor Residential (56m)	43 dBA	46 dBA
R10 – Southeast Façade 2nd Floor Residential (6.5m)	33 dBA	36 dBA
R11 – Southeast Façade 6th Floor Residential (19m)	33 dBA	36 dBA
R12 – Southwest Façade 1st Floor Residential (2.5m)	31 dBA	34 dBA
R13 – Southwest Façade 6th Floor Residential (19m)	34 dBA	37 dBA
R14 – West Façade 1st Floor Residential (2.5m)	41 dBA	44 dBA
R15 – West Façade 10th Floor Residential (31.5m)	41 dBA	44 dBA
R16 – West Façade 16th Floor Residential (50m)	41 dBA	44 dBA

The following Table 6B summarizes the "free field" traffic noise prediction results for CP Rail. (See Figure 3 Receptor Locations).

TABLE 6B - Predicted Rail Traffic Noise Levels-Free Field		
Rail Location from CP Rail	L_{eq} (dBA)	
	07:00 - 23:00	23:00 - 07:00
R1 – Northwest Façade 2nd Floor Residential (6.5m)	50 dBA	53 dBA
R2 – Northwest Façade 10th Floor Residential (31.5)	54 dBA	57 dBA
R3 – Northwest Façade 16th Floor Residential (50m)	54 dBA	57 dBA
R4 – Northeast Façade 2nd Floor Residential (6.5m)	52 dBA	55 dBA
R5 – Northeast Façade 10th Floor Residential (31.5m)	55 dBA	58 dBA
R6 – Northeast Façade 18th Floor Residential (56m)	55 dBA	58 dBA
R7 – East Façade 1st Floor Residential (2.5m)	51 dBA	54 dBA
R8 – East Façade 10th Floor Residential (31.5m)	51 dBA	54 dBA
R9 – East Facade 18th Floor Residential (56m)	51 dBA	54 dBA
R10 – Southeast Façade 2nd Floor Residential (6.5m)	41 dBA	44 dBA
R11 – Southeast Façade 6th Floor Residential (19m)	41 dBA	44 dBA
R12 – Southwest Façade 1st Floor Residential (2.5m)	39 dBA	42 dBA
R13 – Southwest Façade 6th Floor Residential (19m)	39 dBA	42 dBA
R14 – West Façade 1st Floor Residential (2.5m)	49 dBA	52 dBA
R15 – West Façade 10th Floor Residential (31.5m)	49 dBA	52 dBA
R16 – West Façade 16th Floor Residential (50m)	49 dBA	52 dBA

The following Table 6C summarizes the "free field" traffic noise prediction results for both GO Transit and CP Rail. (See Figure 3 Receptor Locations).

TABLE 6C – COMBINED Predicted Rail Traffic Noise Levels-Free Field		
COMBINED GO Transit & CP Rail	L_{eq} (dBA)	
	07:00 - 23:00	23:00 - 07:00
R1 – Northwest Façade 2nd Floor Residential (6.5m)	50 dBA	53 dBA
R2 – Northwest Façade 10th Floor Residential (31.5)	55 dBA	58 dBA
R3 – Northwest Façade 16th Floor Residential (50m)	55 dBA	58 dBA
R4 – Northeast Façade 2nd Floor Residential (6.5m)	53 dBA	56 dBA
R5 – Northeast Façade 10th Floor Residential (31.5m)	55 dBA	58 dBA
R6 – Northeast Façade 18th Floor Residential (56m)	55 dBA	58 dBA
R7 – East Façade 1st Floor Residential (2.5m)	51 dBA	54 dBA
R8 – East Façade 10th Floor Residential (31.5m)	51 dBA	54 dBA
R9 – East Facade 18th Floor Residential (56m)	51 dBA	54 dBA
R10 – Southeast Façade 2nd Floor Residential (6.5m)	41 dBA	44 dBA
R11 – Southeast Façade 6th Floor Residential (19m)	41 dBA	44 dBA
R12 – Southwest Façade 1st Floor Residential (2.5m)	40 dBA	43 dBA
R13 – Southwest Façade 6th Floor Residential (19m)	40 dBA	43 dBA
R14 – West Façade 1st Floor Residential (2.5m)	50 dBA	53 dBA
R15 – West Façade 10th Floor Residential (31.5m)	50 dBA	53 dBA
R16 – West Façade 16th Floor Residential (50m)	50 dBA	53 dBA

3.3 ROAD NOISE

Predicted road traffic noise levels were calculated for Main Street East (2018) and Ontario Street South (2024), the main road noise sources in the proposed site area. The AADT road traffic volumes for both roadways were obtained via email from Heide Schlegl, C.E.T., MITE, Dipl. M.M., Manager, Traffic, Town of Milton. These are the most up to date AADT road traffic volumes available. The MECP computer program STAMSON version 5.04 was used to carry out prediction calculations (See Appendix "A"). Traffic data is summarized in Table 4.

The daytime/nighttime volume ratios relative to Main Street East and Ontario Street South are typically calculated using a 90/10 split and a 16/8 hr assessment is required by the MECP. The percentage of annual growth was figured at 2% over 10 and 16 years. The AADT (Annual Average Daily Traffic) volumes used are reflective of the worst-case scenario. Truck volumes were factored at 2% medium and 2% heavy of the total vehicle volumes for Main Street East and Ontario Street South.

TABLE 7 – Future Road Traffic Volumes (2034)			
Main Street East	AADT - 31339 Vehicles		
	Cars	Medium Trucks	Heavy Trucks
Day	27077	564	564
Night	3009	63	63
Ontario Street South	AADT - 30475 Vehicles		
	Cars	Medium Trucks	Heavy Trucks
Day	26330	549	549
Night	2926	61	61

The following Table 8A represents the free field noise levels of road traffic from Main Street East. 16 Receptor locations were considered for this report for the north, east, south and west facades. See Figure 3 Receptor Locations.

TABLE 8A – Predicted Future Traffic Noise (dBA) Main Street East		
Location	07:00 – 23:00	23:00 – 07:00
R1 – Northwest Façade 2nd Floor Residential (6.5m)	68 dBA	62 dBA
R2 – Northwest Façade 10th Floor Residential (31.5)	68 dBA	61 dBA
R3 – Northwest Façade 16th Floor Residential (50m)	68 dBA	61 dBA
R4 – Northeast Façade 2nd Floor Residential (6.5m)	68 dBA	62 dBA
R5 – Northeast Façade 10th Floor Residential (31.5m)	68 dBA	61 dBA
R6 – Northeast Façade 18th Floor Residential (56m)	68 dBA	61 dBA
R7 – East Façade 1st Floor Residential (2.5m)	63 dBA	56 dBA
R8 – East Façade 10th Floor Residential (31.5m)	63 dBA	56 dBA
R9 – East Facade 18th Floor Residential (56m)	63 dBA	56 dBA
R10 – Southeast Façade 2nd Floor Residential (6.5m)	49 dBA	42 dBA
R11 – Southeast Façade 6th Floor Residential (19m)	49 dBA	42 dBA
R12 – Southwest Façade 1st Floor Residential (2.5m)	49 dBA	42 dBA
R13 – Southwest Façade 6th Floor Residential (19m)	52 dBA	45 dBA
R14 – West Façade 1st Floor Residential (2.5m)	52 dBA	45 dBA
R15 – West Façade 10th Floor Residential (31.5m)	52 dBA	45 dBA
R16 – West Façade 16th Floor Residential (50m)	52 dBA	45 dBA

The following Table 8B represents the free field noise levels of road traffic from Ontario Street South. 16 Receptor locations were considered for this report for the north, east, south and west facades. See Figure 3 Receptor Locations.

TABLE 8B – Predicted Future Traffic Noise (dBA) Ontario Street South		
Location	07:00 – 23:00	23:00 – 07:00
R1 – Northwest Façade 2nd Floor Residential (6.5m)	51 dBA	45 dBA
R2 – Northwest Façade 10th Floor Residential (31.5)	51 dBA	45 dBA
R3 – Northwest Façade 16th Floor Residential (50m)	51 dBA	45 dBA
R4 – Northeast Façade 2nd Floor Residential (6.5m)	52 dBA	46 dBA
R5 – Northeast Façade 10th Floor Residential (31.5m)	52 dBA	46 dBA
R6 – Northeast Façade 18th Floor Residential (56m)	52 dBA	46 dBA
R7 – East Façade 1st Floor Residential (2.5m)	46 dBA	39 dBA
R8 – East Façade 10th Floor Residential (31.5m)	58 dBA	52 dBA
R9 – East Facade 18th Floor Residential (56m)	58 dBA	52 dBA
R10 – Southeast Façade 2nd Floor Residential (6.5m)	46 dBA	39 dBA
R11 – Southeast Façade 6th Floor Residential (19m)	46 dBA	39 dBA
R12 – Southwest Façade 1st Floor Residential (2.5m)	45 dBA	38 dBA
R13 – Southwest Façade 6th Floor Residential (19m)	45 dBA	38 dBA
R14 – West Façade 1st Floor Residential (2.5m)	44 dBA	38 dBA
R15 – West Façade 10th Floor Residential (31.5m)	44 dBA	38 dBA
R16 – West Façade 16th Floor Residential (50m)	44 dBA	38 dBA

The following Table 8C represents the free field noise levels of combined road traffic from Simcoe Street South and Olive Avenue. 16 Receptor locations were considered for this report for the north, east, south and west facades. See Figure 3 Receptor Locations.

TABLE 8C – Predicted Combined Future Road Traffic Noise (dBA)		
Location	07:00 – 23:00	23:00 – 07:00
R1 – Northwest Façade 2nd Floor Residential (6.5m)	68 dBA	62 dBA
R2 – Northwest Façade 10th Floor Residential (31.5)	68 dBA	61 dBA
R3 – Northwest Façade 16th Floor Residential (50m)	68 dBA	61 dBA
R4 – Northeast Façade 2nd Floor Residential (6.5m)	68 dBA	62 dBA
R5 – Northeast Façade 10th Floor Residential (31.5m)	68 dBA	61 dBA
R6 – Northeast Façade 18th Floor Residential (56m)	68 dBA	61 dBA
R7 – East Façade 1st Floor Residential (2.5m)	63 dBA	56 dBA
R8 – East Façade 10th Floor Residential (31.5m)	64 dBA	57 dBA
R9 – East Facade 18th Floor Residential (56m)	64 dBA	57 dBA
R10 – Southeast Façade 2nd Floor Residential (6.5m)	51 dBA	44 dBA
R11 – Southeast Façade 6th Floor Residential (19m)	51 dBA	44 dBA
R12 – Southwest Façade 1st Floor Residential (2.5m)	50 dBA	44 dBA
R13 – Southwest Façade 6th Floor Residential (19m)	53 dBA	46 dBA
R14 – West Façade 1st Floor Residential (2.5m)	63 dBA	56 dBA
R15 – West Façade 10th Floor Residential (31.5m)	63 dBA	56 dBA
R16 – West Façade 16th Floor Residential (50m)	63 dBA	56 dBA

The following Table 8D represents the free field noise levels of combined road traffic from Main Street East, Ontario Street South, CP Rail trains and GO Transit Rail traffic. 16 Receptor locations were considered for this report for the north, east, south and west facades. See Figure 3 Receptor Locations.

TABLE 8D - COMBINED Rail and Road Traffic Noise Levels		
Location	L_{eq} (dBA)	
	07:00 - 23:00	23:00 - 07:00
R1 – Northwest Façade 2nd Floor Residential (6.5m)	68 dBA	62 dBA
R2 – Northwest Façade 10th Floor Residential (31.5)	68 dBA	63 dBA
R3 – Northwest Façade 16th Floor Residential (50m)	68 dBA	63 dBA
R4 – Northeast Façade 2nd Floor Residential (6.5m)	68 dBA	63 dBA
R5 – Northeast Façade 10th Floor Residential (31.5m)	68 dBA	63 dBA
R6 – Northeast Façade 18th Floor Residential (56m)	68 dBA	63 dBA
R7 – East Façade 1st Floor Residential (2.5m)	63 dBA	58 dBA
R8 – East Façade 10th Floor Residential (31.5m)	64 dBA	59 dBA
R9 – East Facade 18th Floor Residential (56m)	64 dBA	59 dBA
R10 – Southeast Façade 2nd Floor Residential (6.5m)	51 dBA	47 dBA
R11 – Southeast Façade 6th Floor Residential (19m)	51 dBA	47 dBA
R12 – Southwest Façade 1st Floor Residential (2.5m)	50 dBA	46 dBA
R13 – Southwest Façade 6th Floor Residential (19m)	53 dBA	48 dBA
R14 – West Façade 1st Floor Residential (2.5m)	63 dBA	58 dBA
R15 – West Façade 10th Floor Residential (31.5m)	63 dBA	58 dBA
R16 – West Façade 16th Floor Residential (50m)	63 dBA	58 dBA

3.4 VIBRATION

The Town of Milton Oshawa and/or the Regional Municipality of Halton may require pre-condition surveys of area buildings within the area of influence, vibration protocol, and vibration monitoring may be required during all heavy construction activities. Further information will be provided prior to the issuance of a building permit.

4.0 RECOMMENDATIONS - NOISE CONTROL

4.1 OUTDOOR LIVING AREAS

Standard balconies are proposed and are less than 4m in depth and therefore not considered as Outdoor Living Areas (OLA's). Currently there are no outdoor amenity areas listed on the site plan therefore mitigation measures are not required.

4.2 INDOOR NOISE LEVELS

Calculated nighttime road and rail noise levels at the Plane of Window (POW) exceed the 50 dBA criteria outlined in Table 1 for indoor space for all residential units. Specific building components (walls, windows, doors etc.) are required and confirmed using the STC (Sound Transmission Class) method. Building design specifications were not made available at report time and STC calculations (Sound Transmission Class) method are summarized in Table 11 following.

As a cost-efficient consideration for the builder, all windows for all floors and facades of the proposed building require the same window STC value configurations. Acoustically tested windows must be installed and verified by a letter from the appropriate window company be issued to confirm the STC values have been achieved.

TABLE 11 – Recommended Door, Wall, and Window Construction

LOCATION	Acoustically Tested Window STC	Exterior Wall STC	Patio Door Construction STC
All Units	Example	Example	Example
Bedroom	STC-36	STC-38	STC-36
Living room	STC-36	STC-38	STC-36

5.0 VENTILATION / WARNING CLAUSES

Ventilation and warning clause requirements are required for this project as noted in Table 12 following. The proposed site plans appear to have a top floor mechanical room which will be completely enclosed for the heat and air ventilation systems. As these units are enclosed, no noise shall emanate from the mechanical room.

TABLE 12 - Ventilation and Warning Clause Requirements

LOCATION	VENTILATION	WARNING CLAUSE
All Units	Central Air Conditioning	Type "B" & "D"

It is recommended that the appropriate warning clauses be inserted into all Offers and Agreements of Purchase and Sale or Lease. See the following for specific warning clause wording:

TYPE B: All Residential Units
"Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the buildings units, sound levels due to increasing road and rail traffic may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the Municipality's and the MECP's noise criteria."

TYPE D: All Residential Units
"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 Municipality's and the MECP's noise criteria."

METROLINX/GO TRANSIT: All Units
"Warning: Metrolinx and its assigns and successors in interest operate commuter transit service within 300 metres from the subject land. In addition to the current use of these lands, there may be alterations or expansions of the rail and other facilities on such lands in the future including the possibility that Metrolinx or any other railway assigns or successors as aforesaid may expand their operations, which expansion may affect the environment of the occupants in the vicinity, notwithstanding the inclusion of any noise and vibration attenuating measures in the design of the development and individual units. Metrolinx will not be responsible for any complaints or claims arising from use of such facilities and/or operations on, over or under these lands."

CPR WARNING CLAUSE: All Units
"Warning: Canadian Pacific Railway Company or its assigns or successors in interest have a right-of-way within 300m from the land the subject hereof. There may be alterations to, or exceptions of, the railway facilities on such rights-of-way in the future including the possibility that the railway or its assigns or successors as aforesaid may expand its operations, which expansion may affect the living environment of the residents in the vicinity, notwithstanding the inclusion of any noise and vibration attenuating measures in the design of the development and individual dwelling(S). CPR will not be responsible for any complaints or claims arising from use of such facilities and/or operations on, over or under the aforesaid rights-of-way."

6.0 SUMMARY OF RECOMMENDATIONS

The following noise control measures are required to satisfy the indoor and outdoor noise level criterion:

- Central Air Conditioning for all Residential Units as recommended in Table 12.
- Window, Door, and Wall construction as recommended in Table 11
- Type "B" & "D" Warning Clauses as well as CP Rail and Metrolinx Warning Clauses for all residential units are required and registered on title (All Units).
- A letter from the window company be issued to confirm STC values for all proposed windows to be installed and an Acoustical Certificate to be sent to the Town of Milton confirming that STC values have been achieved.
- It is recommended that a qualified acoustical consultant certify that the required noise control measures have been incorporated into the builder's plans prior to issuance of a building permit.
- It is recommended that a qualified acoustical consultant certify that the required control measures have been properly installed prior to an occupancy permit.

7.0 CONCLUSIONS

dBA Acoustical Consulting Inc. has provided a noise and vibration impact study on behalf of Mikmada Homes for the proposed 16-storey tower connected to an 18-storey tower by a 6-storey podium Mixed-Use Building located at 388 Main Street East, Milton, ON.

The study determined the noise and vibration impact from Main Street East and Ontario Street South vehicular traffic as well as the Canadian Pacific Railway (CP) and the Milton GO train traffic that impacts the proposed residential buildings as required for Site Plan Application (SPA) resubmission for the Town of Milton, Regional Municipality of Halton.

This study detailed noise impact relative to the site plan and recommended noise control measures necessary to meet Ministry of Environment Conservation and Parks (MECP) Publication NPC-300 entitled “Stationary & Transportation Sources-Approval & Planning guidelines while satisfying the planning requirements of the Town of Milton, Regional Municipality of Halton.

FIGURE 1
AREA OVERVIEW

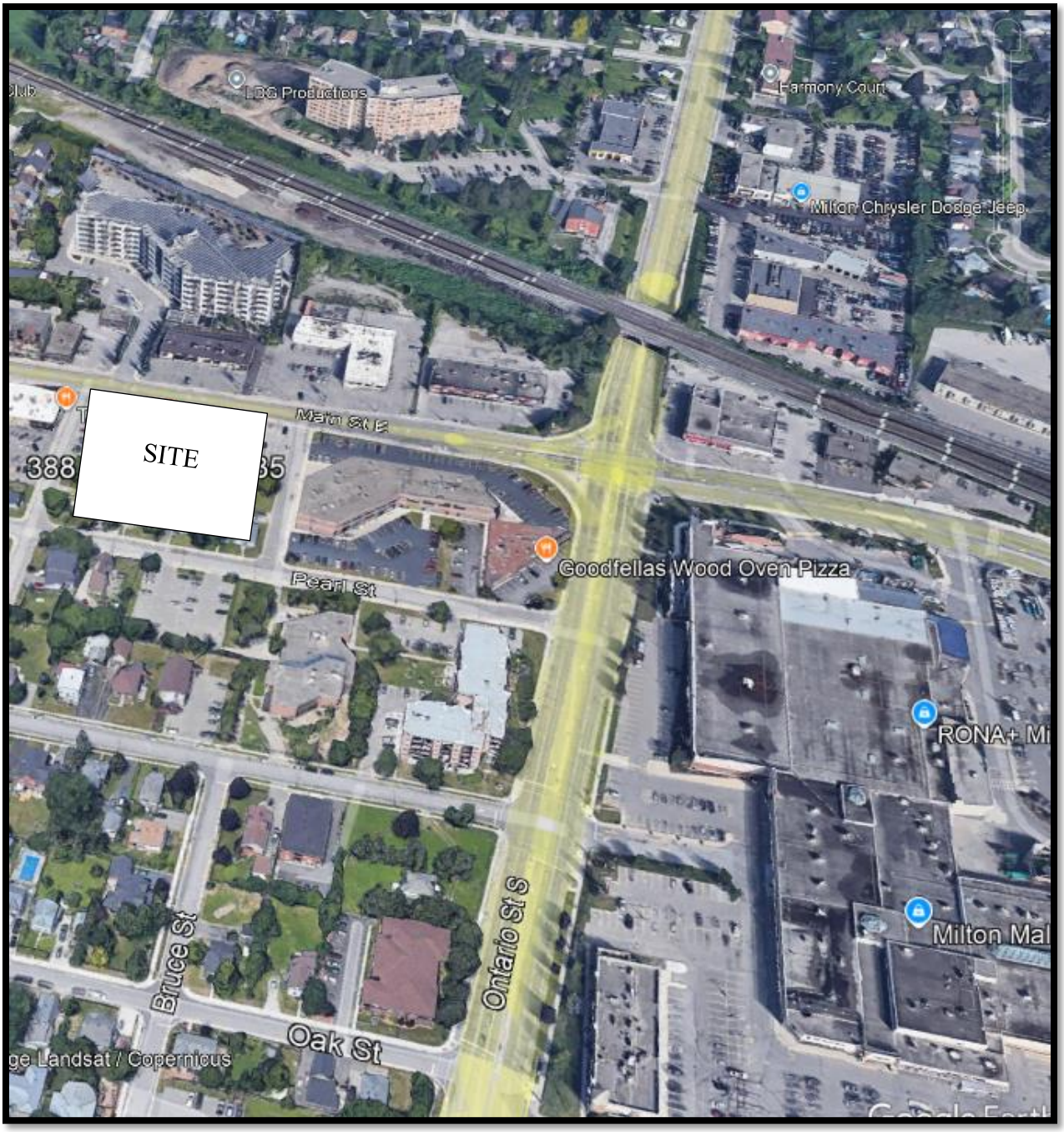


FIGURE 2
SITE PLAN

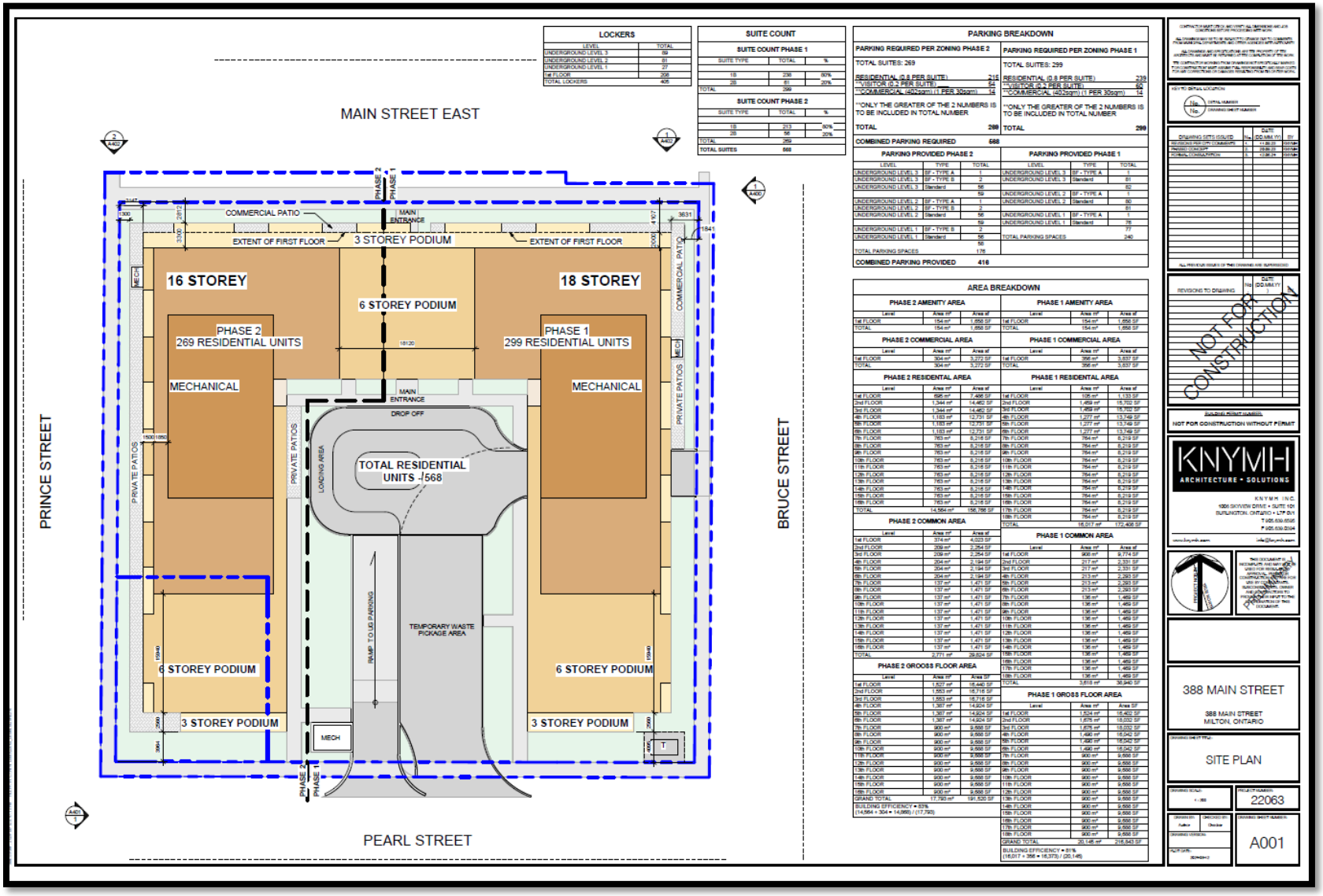
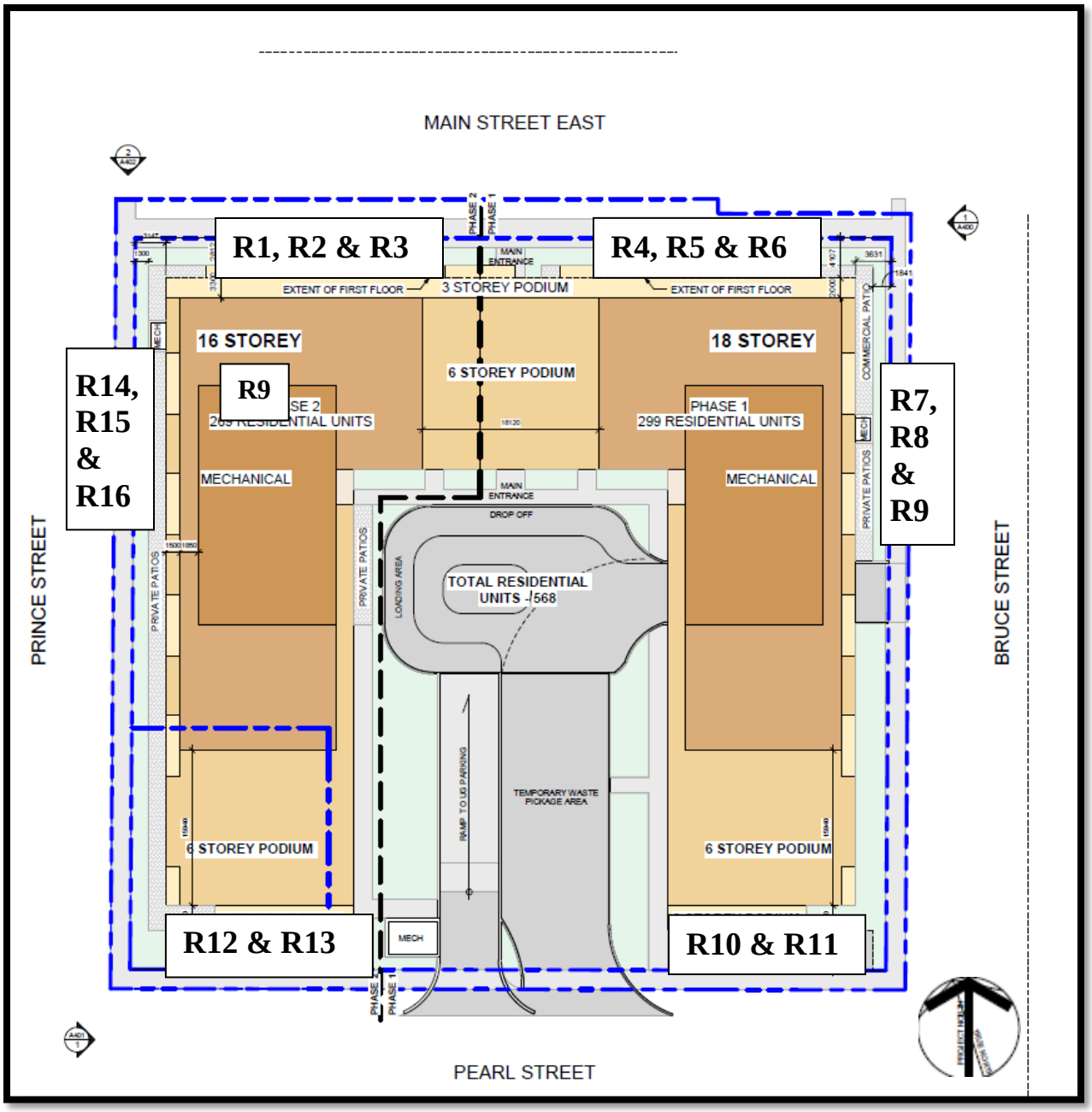


FIGURE 3
RECEPTOR LOCATIONS



APPENDIX “A”

2018 & 2024 TOWN OF MILTON AADT TRAFFIC DATA MAIN STREET EAST & ONTARIO STREET SOUTH

Main Street East at Ontario Street Intersection
- 22,829 from 2018

Ontario Street South near Donald Campbell Avenue
- 25,000 from 2024

Heide Schlegl, C.E.T., MITE, Dipl. M.M.
Manager, Traffic
150 Mary Street, Milton ON, L9T 6Z5
905-878-7252 ext. 2506
www.milton.ca

Hi Nicole,

Further to your request dated August 13, 2024, the subject lands (388 Main Street East, Milton) are located within 300 metres of the Canadian Pacific (CP) Galt Subdivision (which carries Milton GO rail service).

It's anticipated that GO rail service on this Subdivision will be comprised of diesel trains only. The GO rail fleet combination on this Subdivision will consist of up to 1 locomotive and 10 passenger cars. The typical GO rail weekday train volume forecast near the subject lands, including both revenue and equipment trips is in the order of 44 trains. The planned detailed trip breakdown is listed below:

	1 Diesel Locomotive		1 Diesel Locomotive
Day (0700-2300)	36	Night (2300-0700)	8

The current track design speed near the subject lands is 75 mph (121 km/h).

There are *anti-whistling by-laws* in affect near the subject lands Martin St.
Operational information is subject to change and may be influenced by, among other factors, service planning priorities, operational considerations, funding availability and passenger demand.

It should be noted that this information only pertains to Metrolinx rail service. It would be prudent to contact other rail operators in the area directly for rail traffic information pertaining to non-Metrolinx rail service.

I trust this information is useful. Should you have any questions or concerns, please do not hesitate to contact me.

Best,

Jenna Auger (She/Her)
Third Party Projects Review (TPPR)
Development & Real Estate Management
10 Bay Street | Toronto | Ontario | M5J 2N8

METROLINX

CP RAIL EMAIL

Good Morning Frank, Wed 2020-12-16 12:50 PM

Per our phone call conversation this morning, please note that CP Real Estate has changed its position regarding the sharing of train information and will no longer provide Rail Data information.

We appreciate that this is a change to what was previously provided by our group.

CP freight trains operate 24/7 and scheduled/volumes are subject to change.

The attached link provides some basic information related to train information for any given corridor.

To be clear, CP is not in favour of residential uses adjacent to its rail facilities and/or operations.
Recommend a clause be inserted in all offers of purchase and sale or lease and in the title deed or lease of **each dwelling within 300m of the railway right of way**, warning prospective purchasers or tenants of the existence of the Railway's operating right-of-way; the possibility of alterations including the possibility that the Railway may expand its operations, which expansion may affect the living environment of the residents notwithstanding the inclusion of noise and vibration attenuating measures in the design of the subdivision and the individual units, and that the Railway will not be responsible for complaints or claims arising from the use of its facilities and/or operations.

Sincerely,

Frank Gulas
Manager Real Estate
–
Ontario & Manitoba
O 403-319-3436
F 403-319-3727
7550 Ogden Dale Road
SE Calgary AB T2C
4X9

CANADIAN PACIFIC RAILWAY

PRINCIPAL MAIN LINE REQUIREMENTS

1. Berm, or combination berm and noise attenuation fence, having extensions or returns at the ends, to be erected on adjoining property, parallel to the railway right-of-way with construction according to the following:

   a) Minimum total height 5.5 metres above top-of-rail;
   b) Berm minimum height 2.5 metres and side slopes not steeper than 2.5 to 1.
   c) Fence, or wall, to be constructed without openings and of a durable material weighing not less than 20 kg. per square metre (4 lb/sq.ft.) of surface area.

   No part of the berm/noise barrier is to be constructed on railway property.

   A clause should be inserted in all offers of purchase and sale or lease, and be registered on title or included in the lease for each dwelling affected by any noise and vibration attenuation measures, advising that any berm, fencing, or vibration isolation features implemented are not to be tampered with or altered, and further that the owner shall have the sole responsibility for and shall maintain these features.

   Dwellings must be constructed such that the interior noise levels meet the criteria of the appropriate Ministry. A noise study should be carried out by a professional noise consultant to determine what impact, if any, railway noise would have on residents of proposed subdivisions and to recommend mitigation measures, if required. The Railway may consider other measures recommended by the study.

2. Setback of dwellings from the railway right-of-way to be a minimum of 30 metres. While no dwelling should be closer to the right-of-way than the specified setback, an unoccupied building, such as a garage, may be built closer. The 2.5 metre high earth berm adjacent to the right-of-way must be provided in all instances.

3. Ground vibration transmission to be estimated through site tests. If in excess of the acceptable levels, all dwellings within 75 metres of the nearest track should be protected. The measures employed may be:

   a) Support the building on rubber pads between the foundation and the occupied structure so that the maximum vertical natural frequency of the structure on the pads is 12 Hz;
   b) Insulate the building from the vibration originating at the railway tracks by an intervening discontinuity or by installing adequate insulation outside the building, protected from the compaction that would reduce its effectiveness so that vibration in the building became unacceptable; or
   c) Other suitable measures that will retain their effectiveness over time.

4. A clause should be inserted in all offers of purchase and sale or lease and in the title deed or lease of each dwelling within 300m of the railway right-of-way, warning prospective purchasers or tenants of the existence of the Railway's operating right-of-way; the possibility of alterations including the possibility that the Railway may expand its operations, which expansion may affect the living environment of the residents notwithstanding the inclusion of noise and vibration attenuating measures in the design of the subdivision and individual units, and that the Railway will not be responsible for complaints or claims arising from the use of its facilities and/or operations.

5. Any proposed alterations to the existing drainage pattern affecting railway property must receive prior concurrence from the Railway, and be substantiated by a drainage report to be reviewed by the Railway.

6. A 1.83 metre high chain link security fence be constructed and maintained along the common property line of the Railway and the development by the developer at his expense, and the developer is made aware of the necessity of including a covenant running with the lands, in all deeds, obliging the purchasers of the land to maintain the fence in a satisfactory condition at their expense.

7. Any proposed utilities under or over railway property to serve the development must be approved prior to their installation and be covered by the Railway's standard agreement.

STAMSON CALCULATIONS

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 12:52:08
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: R1MainE.te           Time Period: Day/Night 16/8 hours
```
Description: R1 Main St East Northwest Facade 2nd Floor Res.
TOTAL Leq FROM ALL SOURCES (DAY): 68.29
(NIGHT): 62.28

```
Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -10.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 294.00 / 294.00 m
Receiver height           :   6.50 / 6.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -10.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 288.00 / 288.00 m
Receiver height           :   6.50 / 6.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    41.24 !    33.64 !       -- !       -- !    41.94
 2.CP Rail           !    48.68 !    42.08 !       -- !       -- !    49.54
---------------------+----------+----------+----------+----------+---------
                       Total                                      50.24 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    44.25 !    36.65 !       -- !       -- !    44.95
 2.CP Rail           !    51.69 !    45.09 !       -- !       -- !    52.55
---------------------+----------+----------+----------+----------+---------
                       Total                                      53.25 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth         :   2.00
    Number of Years of Growth           :  16.00
    Medium Truck % of Total Volume      :   2.00
    Heavy Truck  % of Total Volume      :   2.00
    Day (16 hrs) % of Total Volume      :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  16.50 / 16.50  m
Receiver height           :   6.50 / 6.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           :  -0.00 deg   45.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 205.00 / 205.00 m
Receiver height           :   6.50 / 6.50   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.Main St E	1.19	68.14	68.14
2.Ontario	1.19	51.06	51.06
Total			68.22 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	61.62	61.62
2.Ontario	1.19	44.52	44.52
Total			61.70 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 13:06:01
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r2maine.te           Time Period: Day/Night 16/8 hours
Description: R2 Main St East Northwest Facade 10th Floor Res.
                  TOTAL Leq FROM ALL SOURCES              (DAY): 68.05
                                                         (NIGHT): 62.87

Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 197.00 / 197.00 m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 189.00 / 189.00 m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    45.53 !    37.93 !       -- !       -- !    46.23
 2.CP Rail           !    53.06 !    46.46 !       -- !       -- !    53.92
---------------------+----------+----------+----------+----------+---------
                       Total                                      54.60 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    48.54 !    40.94 !       -- !       -- !    49.24
 2.CP Rail           !    56.07 !    49.47 !       -- !       -- !    56.93
---------------------+----------+----------+----------+----------+---------
                       Total                                      57.61 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth         :   2.00
    Number of Years of Growth           :  16.00
    Medium Truck % of Total Volume      :   2.00
    Heavy Truck  % of Total Volume      :   2.00
    Day (16 hrs) % of Total Volume      :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  18.00 / 18.00  m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   45.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 205.00 / 205.00 m
Receiver height           :  31.50 / 31.50  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.Main St E	1.19	67.76	67.76
2.Ontario	1.19	51.06	51.06
Total			67.85 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	61.24	61.24
2.Ontario	1.19	44.52	44.52
Total			61.33 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 13:10:49
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r3maine.te           Time Period: Day/Night 16/8 hours
```
Description: R3 Main St East Northwest Facade 16th Floor Res.
TOTAL Leq FROM ALL SOURCES (DAY): 68.05
(NIGHT): 62.87

```
Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 197.00 / 197.00 m
Receiver height           :  50.00 / 50.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 189.00 / 189.00 m
Receiver height           :  50.00 / 50.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    45.53 !    37.93 !       -- !       -- !    46.23
 2.CP Rail           !    53.06 !    46.46 !       -- !       -- !    53.92
---------------------+----------+----------+----------+----------+---------
                       Total                                      54.60 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    48.54 !    40.94 !       -- !       -- !    49.24
 2.CP Rail           !    56.07 !    49.47 !       -- !       -- !    56.93
---------------------+----------+----------+----------+----------+---------
                       Total                                      57.61 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth         :   2.00
    Number of Years of Growth           :  16.00
    Medium Truck % of Total Volume      :   2.00
    Heavy Truck  % of Total Volume      :   2.00
    Day (16 hrs) % of Total Volume      :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  18.00 / 18.00  m
Receiver height           :  50.00 / 50.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   45.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 205.00 / 205.00 m
Receiver height           :  50.00 / 50.00  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.Main St E	1.19	67.76	67.76
2.Ontario	1.19	51.06	51.06
Total			67.85 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	61.24	61.24
2.Ontario	1.19	44.52	44.52
Total			61.33 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 13:25:52
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r4maine.te           Time Period: Day/Night 16/8 hours
Description: R4 Main St East Northeast Facade 2nd Floor Res.
                  TOTAL Leq FROM ALL SOURCES              (DAY): 68.37
                                                          (NIGHT): 62.69

Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -10.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 173.00 / 173.00 m
Receiver height           :   6.50 / 6.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -10.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 165.00 / 165.00 m
Receiver height           :   6.50 / 6.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    43.55 !    35.94 !       -- !       -- !    44.24
 2.CP Rail           !    51.10 !    44.50 !       -- !       -- !    51.96
---------------------+----------+----------+----------+----------+---------
                       Total                                      52.64 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    46.56 !    38.95 !       -- !       -- !    47.25
 2.CP Rail           !    54.11 !    47.51 !       -- !       -- !    54.97
---------------------+----------+----------+----------+----------+---------
                       Total                                      55.65 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  16.50 / 16.50  m
Receiver height           :   6.50 / 6.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           :  -0.00 deg   45.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 150.00 / 150.00 m
Receiver height           :   6.50 / 6.50   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.Main St E	1.19	68.14	68.14
2.Ontario	1.19	52.41	52.41
Total			68.25 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	61.62	61.62
2.Ontario	1.19	45.88	45.88
Total			61.73 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 13:28:51
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r5maine.te           Time Period: Day/Night 16/8 hours
Description: R5 Main St East Northeast Facade 10th Floor Res.  e
                 TOTAL Leq FROM ALL SOURCES              (DAY): 68.11
                                                        (NIGHT): 63.07

Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 173.00 / 173.00 m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 165.00 / 165.00 m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    46.10 !    38.49 !       -- !       -- !    46.79
 2.CP Rail           !    53.65 !    47.05 !       -- !       -- !    54.51
---------------------+----------+----------+----------+----------+---------
                       Total                                      55.19 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    49.11 !    41.50 !       -- !       -- !    49.80
 2.CP Rail           !    56.66 !    50.06 !       -- !       -- !    57.52
---------------------+----------+----------+----------+----------+---------
                       Total                                      58.20 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  18.00 / 18.00  m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           :  -0.00 deg   45.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 150.00 / 150.00 m
Receiver height           :  31.50 / 31.50  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.Main St E	1.19	67.76	67.76
2.Ontario	1.19	52.41	52.41
Total			67.88 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	61.24	61.24
2.Ontario	1.19	45.88	45.88
Total			61.36 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 13:37:47
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r6maine.te           Time Period: Day/Night 16/8 hours
```
Description: R6 Main St East Northeast Facade 18th Floor Res.
TOTAL Leq FROM ALL SOURCES (DAY): 68.11
(NIGHT): 63.07

```
Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 173.00 / 173.00 m
Receiver height           :  56.00 / 56.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
```

```
Surface                    :      2       (Reflective ground surface)
Receiver source distance   : 165.00 / 165.00 m
Receiver height            :  56.00 / 56.00  m
Topography                 :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle            :   0.00
Result summary (day)
--------------------
```

	Loc Leq (dBA)	Wheel Leq (dBA)	Whistle Left Leq (dBA)	Whistle Right Leq (dBA)	Total Leq (dBA)
1.GO Rail	46.10	38.49	--	--	46.79
2.CP Rail	53.65	47.05	--	--	54.51
Total					55.19 dBA

```
  * Bright Zone  !

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

	Loc Leq (dBA)	Wheel Leq (dBA)	Whistle Left Leq (dBA)	Whistle Right Leq (dBA)	Total Leq (dBA)
1.GO Rail	49.11	41.50	--	--	49.80
2.CP Rail	56.66	50.06	--	--	57.52
Total					58.20 dBA

```
  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  18.00 / 18.00  m
Receiver height           :  56.00 / 56.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           :  -0.00 deg   45.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 150.00 / 150.00 m
Receiver height           :  56.00 / 56.00  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.Main St E	1.19	67.76	67.76
2.Ontario	1.19	52.41	52.41
Total			67.88 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	61.24	61.24
2.Ontario	1.19	45.88	45.88
Total			61.36 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 13:48:51
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r7maine.te           Time Period: Day/Night 16/8 hours
Description: R7 Main St East East Facade 1st Floor Res.
                  TOTAL Leq FROM ALL SOURCES              (DAY): 62.94
                                                          (NIGHT): 58.35

Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 205.00 / 205.00 m
Receiver height           :   2.50 / 2.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 197.00 / 197.00 m
Receiver height           :   2.50 / 2.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    42.35 !    34.75 !       -- !       -- !    43.05
 2.CP Rail           !    49.87 !    43.27 !       -- !       -- !    50.73
---------------------+----------+----------+----------+----------+---------
                       Total                                      51.41 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    45.36 !    37.76 !       -- !       -- !    46.06
 2.CP Rail           !    52.88 !    46.28 !       -- !       -- !    53.74
---------------------+----------+----------+----------+----------+---------
                       Total                                      54.42 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth         :   2.00
    Number of Years of Growth           :  16.00
    Medium Truck % of Total Volume      :   2.00
    Heavy Truck  % of Total Volume      :   2.00
    Day (16 hrs) % of Total Volume      :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  30.00 / 30.00  m
Receiver height           :   2.50 / 2.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           : -10.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 159.00 / 159.00 m
Receiver height           :   2.50 / 2.50   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.Main St E	1.19	62.53	62.53
2.Ontario	1.19	45.63	45.63
Total			62.62 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	56.01	56.01
2.Ontario	1.19	39.10	39.10
Total			56.10 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 13:57:58
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r8maine.te           Time Period: Day/Night 16/8 hours
Description: R8 Main St East East Facade 10th Floor Res.
                  TOTAL Leq FROM ALL SOURCES              (DAY): 64.13
                                                         (NIGHT): 59.15

Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 205.00 / 205.00 m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 197.00 / 197.00 m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    42.35 !    34.75 !       -- !       -- !    43.05
 2.CP Rail           !    49.87 !    43.27 !       -- !       -- !    50.73
---------------------+----------+----------+----------+----------+---------
                       Total                                      51.41 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    45.36 !    37.76 !       -- !       -- !    46.06
 2.CP Rail           !    52.88 !    46.28 !       -- !       -- !    53.74
---------------------+----------+----------+----------+----------+---------
                       Total                                      54.42 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  30.00 / 30.00  m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 159.00 / 159.00 m
Receiver height           :  31.50 / 31.50  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.Main St E	1.19	62.53	62.53
2.Ontario	1.19	58.18	58.18
Total			63.89 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	56.01	56.01
2.Ontario	1.19	51.65	51.65
Total			57.37 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 14:02:22
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r9maine.te           Time Period: Day/Night 16/8 hours
```
Description: R9 Main St East East Facade 18th Floor Res.
TOTAL Leq FROM ALL SOURCES (DAY): 64.13
(NIGHT): 59.15

```
Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 205.00 / 205.00 m
Receiver height           :  56.00 / 56.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 197.00 / 197.00 m
Receiver height           :  56.00 / 56.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    42.35 !    34.75 !       -- !       -- !    43.05
 2.CP Rail           !    49.87 !    43.27 !       -- !       -- !    50.73
---------------------+----------+----------+----------+----------+---------
                       Total                                      51.41 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    45.36 !    37.76 !       -- !       -- !    46.06
 2.CP Rail           !    52.88 !    46.28 !       -- !       -- !    53.74
---------------------+----------+----------+----------+----------+---------
                       Total                                      54.42 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  30.00 / 30.00  m
Receiver height           :  56.00 / 56.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 159.00 / 159.00 m
Receiver height           :  56.00 / 56.00  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.Main St E	1.19	62.53	62.53
2.Ontario	1.19	58.18	58.18
Total			63.89 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	56.01	56.01
2.Ontario	1.19	51.65	51.65
Total			57.37 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 14:08:04
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r10maine.te          Time Period: Day/Night 16/8 hours
```
Description: R10 Main St East Southeast Facade 2nd Floor Res.
TOTAL Leq FROM ALL SOURCES (DAY): 50.59
(NIGHT): 44.07

```
Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 229.00 / 229.00 m
Receiver height           :   6.50 / 6.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 220.00 / 220.00 m
Receiver height           :   6.50 / 6.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    32.33 !    24.72 !       -- !       -- !    33.02
 2.CP Rail           !    39.85 !    33.25 !       -- !       -- !    40.71
---------------------+----------+----------+----------+----------+---------
                       Total                                      41.39 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    35.34 !    27.73 !       -- !       -- !    36.03
 2.CP Rail           !    42.86 !    36.26 !       -- !       -- !    43.72
---------------------+----------+----------+----------+----------+---------
                       Total                                      44.40 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -10.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  79.00 / 79.00  m
Receiver height           :   6.50 / 6.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           : -10.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 149.00 / 149.00 m
Receiver height           :   6.50 / 6.50   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.Main St E	1.19	48.78	48.78
2.Ontario	1.19	45.91	45.91
Total			50.59 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	42.27	42.27
2.Ontario	1.19	39.38	39.38
Total			44.07 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 14:17:38
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r11maine.te          Time Period: Day/Night 16/8 hours
```
Description: R11 Main St East Southeast Facade 6th Floor Res.
TOTAL Leq FROM ALL SOURCES (DAY): 51.15
(NIGHT): 47.29

```
Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 229.00 / 229.00 m
Receiver height           :  19.00 / 19.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 220.00 / 220.00 m
Receiver height           :  19.00 / 19.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    32.33 !    24.72 !       -- !       -- !    33.02
 2.CP Rail           !    39.85 !    33.25 !       -- !       -- !    40.71
---------------------+----------+----------+----------+----------+---------
                       Total                                      41.39 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    35.34 !    27.73 !       -- !       -- !    36.03
 2.CP Rail           !    42.86 !    36.26 !       -- !       -- !    43.72
---------------------+----------+----------+----------+----------+---------
                       Total                                      44.40 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth         :   2.00
    Number of Years of Growth           :  16.00
    Medium Truck % of Total Volume      :   2.00
    Heavy Truck  % of Total Volume      :   2.00
    Day (16 hrs) % of Total Volume      :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -10.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  77.00 / 77.00  m
Receiver height           :  19.00 / 19.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           : -10.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 149.00 / 149.00 m
Receiver height           :  19.00 / 19.00  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.Main St E	1.19	48.89	48.89
2.Ontario	1.19	45.91	45.91
Total			50.66 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	42.38	42.38
2.Ontario	1.19	39.38	39.38
Total			44.14 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 14:23:38
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r12maine.te          Time Period: Day/Night 16/8 hours
Description: R12 Main St East Southwest Facade 1st Floor Res.
                 TOTAL Leq FROM ALL SOURCES              (DAY): 50.55
                                                        (NIGHT): 46.17

Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 341.00 / 341.00 m
Receiver height           :   2.50 / 2.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 337.00 / 337.00 m
Receiver height           :   2.50 / 2.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
```

Result summary (day)

	Loc Leq (dBA)	Wheel Leq (dBA)	Whistle Left Leq (dBA)	Whistle Right Leq (dBA)	Total Leq (dBA)
1.GO Rail	30.60	22.99	--	--	31.29
2.CP Rail	37.99	31.39	--	--	38.85
Total					39.55 dBA

* Bright Zone !

Result summary (night)

	Loc Leq (dBA)	Wheel Leq (dBA)	Whistle Left Leq (dBA)	Whistle Right Leq (dBA)	Total Leq (dBA)
1.GO Rail	33.61	26.00	--	--	34.30
2.CP Rail	41.00	34.40	--	--	41.86
Total					42.56 dBA

* Bright Zone !

```
Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -10.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  79.00 / 79.00  m
Receiver height           :   2.50 / 2.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           : -10.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 200.00 / 200.00 m
Receiver height           :   2.50 / 2.50   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.Main St E	1.19	48.78	48.78
2.Ontario	1.19	44.63	44.63
Total			50.19 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	42.27	42.27
2.Ontario	1.19	38.10	38.10
Total			43.68 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 14:30:15
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r13maine.te          Time Period: Day/Night 16/8 hours
```
Description: R13 Main St East Southwest Facade 6th Floor Res.
TOTAL Leq FROM ALL SOURCES (DAY): 52.89
(NIGHT): 47.91

```
Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           : -10.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 341.00 / 341.00 m
Receiver height           :  19.00 / 19.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 337.00 / 337.00 m
Receiver height           :  19.00 / 19.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    33.61 !    26.00 !       -- !       -- !    34.30
 2.CP Rail           !    37.99 !    31.39 !       -- !       -- !    38.85
---------------------+----------+----------+----------+----------+---------
                       Total                                      40.16 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    36.62 !    29.02 !       -- !       -- !    37.32
 2.CP Rail           !    41.00 !    34.40 !       -- !       -- !    41.86
---------------------+----------+----------+----------+----------+---------
                       Total                                      43.17 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           : -10.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  77.00 / 77.00  m
Receiver height           :  19.00 / 19.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           : -10.00 deg   0.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 200.00 / 200.00 m
Receiver height           :  19.00 / 19.00  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.Main St E	1.19	51.91	51.91
2.Ontario	1.19	44.63	44.63
Total			52.65 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	45.39	45.39
2.Ontario	1.19	38.10	38.10
Total			46.13 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 14:35:06
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r14maine.te          Time Period: Day/Night 16/8 hours
```
Description: R14 Main St West Facade 1st Floor Res.
TOTAL Leq FROM ALL SOURCES (DAY): 62.81
(NIGHT): 57.68

```
Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 307.00 / 307.00 m
Receiver height           :   2.50 / 2.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 302.00 / 302.00 m
Receiver height           :   2.50 / 2.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    40.60 !    32.99 !       -- !       -- !    41.29
 2.CP Rail           !    48.01 !    41.41 !       -- !       -- !    48.87
---------------------+----------+----------+----------+----------+---------
                       Total                                      49.57 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    43.61 !    36.00 !       -- !       -- !    44.30
 2.CP Rail           !    51.02 !    44.42 !       -- !       -- !    51.88
---------------------+----------+----------+----------+----------+---------
                       Total                                      52.58 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           :  -0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  30.00 / 30.00  m
Receiver height           :   2.50 / 2.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-------------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 218.00 / 218.00 m
Receiver height           :   2.50 / 2.50   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.Main St E	1.19	62.53	62.53
2.Ontario	1.19	44.26	44.26
Total			62.59 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	56.01	56.01
2.Ontario	1.19	37.72	37.72
Total			56.07 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 14:44:00
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r15maine.te          Time Period: Day/Night 16/8 hours
Description: R15 Main St West Facade 10th Floor Res.
                 TOTAL Leq FROM ALL SOURCES              (DAY): 62.81
                                                        (NIGHT): 57.68

Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 307.00 / 307.00 m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 302.00 / 302.00 m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    40.60 !    32.99 !       -- !       -- !    41.29
 2.CP Rail           !    48.01 !    41.41 !       -- !       -- !    48.87
---------------------+----------+----------+----------+----------+---------
                       Total                                      49.57 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    43.61 !    36.00 !       -- !       -- !    44.30
 2.CP Rail           !    51.02 !    44.42 !       -- !       -- !    51.88
---------------------+----------+----------+----------+----------+---------
                       Total                                      52.58 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           :  -0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  30.00 / 30.00  m
Receiver height           :  31.50 / 31.50  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 218.00 / 218.00 m
Receiver height           :  31.50 / 31.50  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.Main St E	1.19	62.53	62.53
2.Ontario	1.19	44.26	44.26
Total			62.59 dBA

Result summary (night)

	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	56.01	56.01
2.Ontario	1.19	37.72	37.72
Total			56.07 dBA

```
STAMSON 5.04        SUMMARY REPORT        Date: 25-10-2024 14:48:20
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: r16maine.te          Time Period: Day/Night 16/8 hours
Description: R16 Main St West Facade 16th Floor Res.
                 TOTAL Leq FROM ALL SOURCES              (DAY): 62.81
                                                        (NIGHT): 57.68

Rail data, segment # 1: GO Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. Go Rail     !   1.3/1.3   ! 121.0 !  1.0 ! 10.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. Go Rail        !   1.0/1.0   !    2.50  !   10.00  !

Data for Segment # 1: GO Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 307.00 / 307.00 m
Receiver height           :  50.00 / 50.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Rail data, segment # 2: CP Rail (day/night)
-------------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
* 1. CP Rail     !   1.3/1.3   !  80.0 !  4.0 !140.0 !Diesel! Yes

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

Train type:         ! Unadj. ! Annual % ! Years of !
 No  Name           ! Trains ! Increase !  Growth  !
--------------------+--------+----------+----------+
  1. CP Rail        !   1.0/1.0   !    2.50  !   10.00  !
```

```
Data for Segment # 2: CP Rail (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 302.00 / 302.00 m
Receiver height           :  50.00 / 50.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00
Result summary (day)
--------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    40.60 !    32.99 !       -- !       -- !    41.29
 2.CP Rail           !    48.01 !    41.41 !       -- !       -- !    48.87
---------------------+----------+----------+----------+----------+---------
                       Total                                      49.57 dBA

  * Bright Zone  !

Result summary (night)
----------------------
                     !   Loc    !  Wheel   ! Whistle  ! Whistle  !  Total
                     !   Leq    !   Leq    ! Left Leq ! Right Leq!   Leq
                     !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)   !  (dBA)
---------------------+----------+----------+----------+----------+---------
 1.GO Rail           !    43.61 !    36.00 !       -- !       -- !    44.30
 2.CP Rail           !    51.02 !    44.42 !       -- !       -- !    51.88
---------------------+----------+----------+----------+----------+---------
                       Total                                      52.58 dBA

  * Bright Zone  !

Road data, segment # 1: Main St E (day/night)
---------------------------------------------
Car traffic volume  : 27077/3009  veh/TimePeriod  *
Medium truck volume :   564/63    veh/TimePeriod  *
Heavy truck volume  :   564/63    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):  22829
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  16.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00
```

```
Data for Segment # 1: Main St E (day/night)
-------------------------------------------
Angle1   Angle2           :  -0.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  30.00 / 30.00  m
Receiver height           :  50.00 / 50.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Ontario (day/night)
-------------------------------------------
Car traffic volume  : 26330/2926  veh/TimePeriod  *
Medium truck volume :   549/61    veh/TimePeriod  *
Heavy truck volume  :   549/61    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):  25000
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  10.00
    Medium Truck % of Total Volume     :   2.00
    Heavy Truck  % of Total Volume     :   2.00
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Ontario (day/night)
-----------------------------------------
Angle1   Angle2           :  -0.00 deg   10.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  : 218.00 / 218.00 m
Receiver height           :  50.00 / 50.00  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00
```

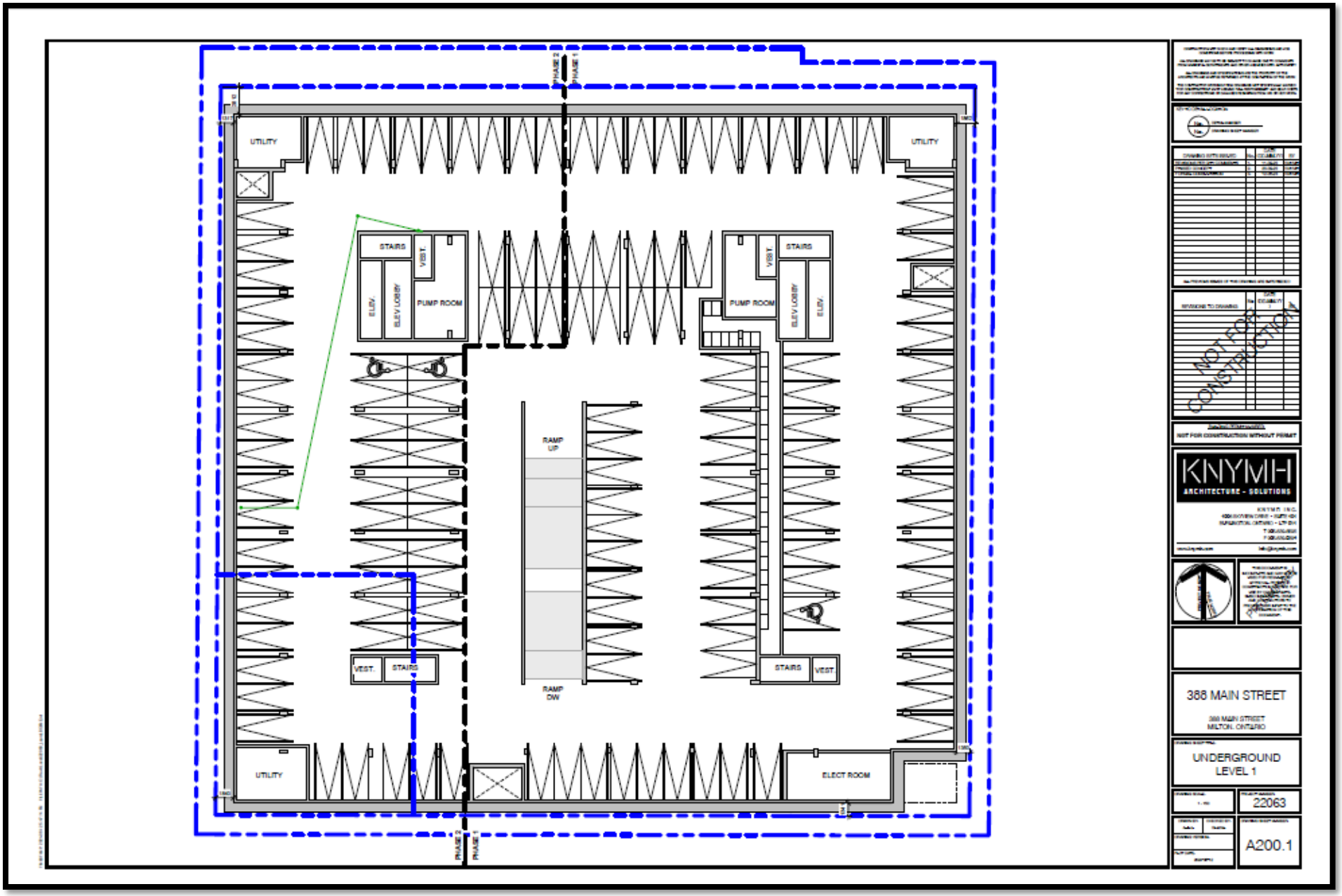
Result summary (day)

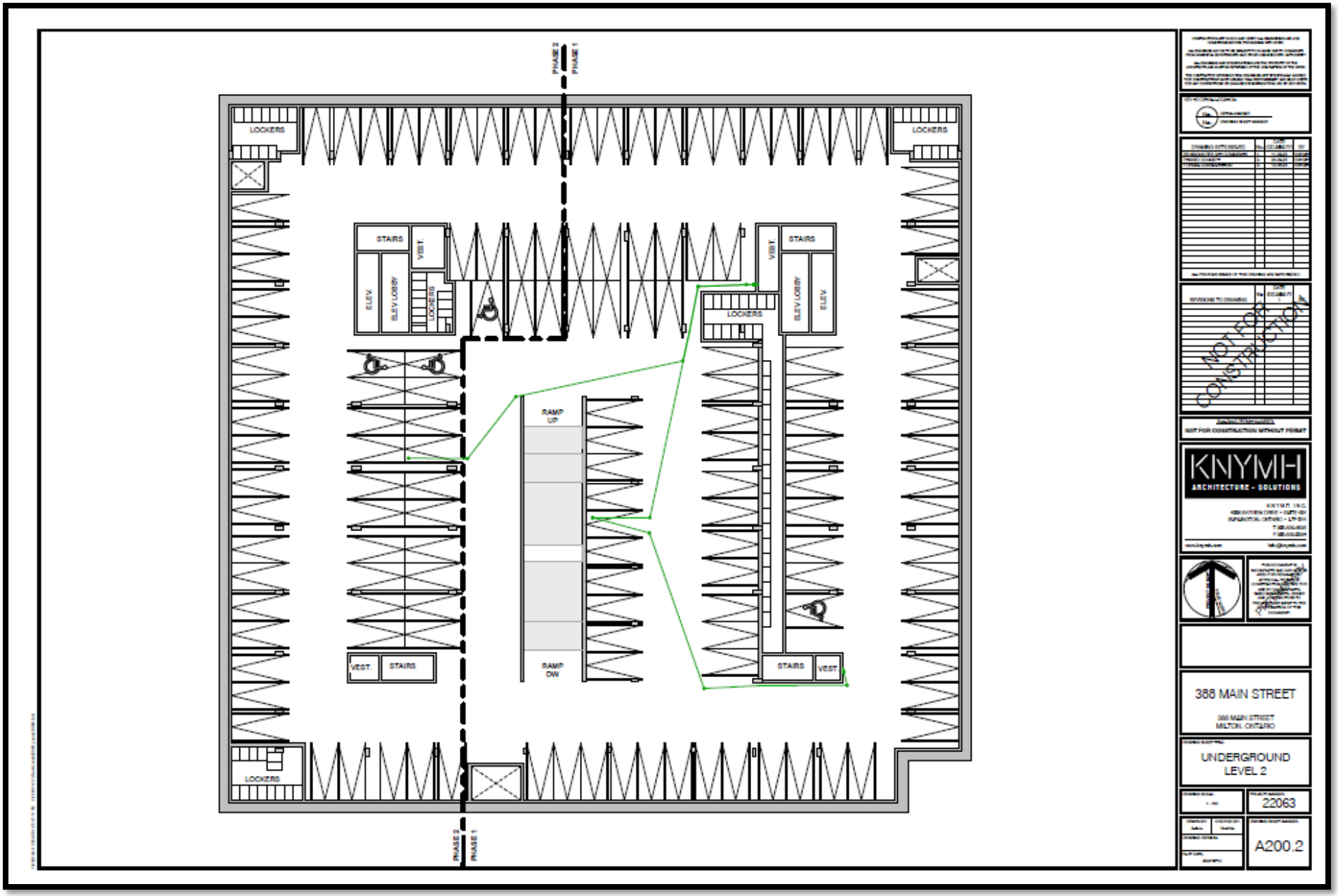
	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	62.53	62.53
2.Ontario	1.19	44.26	44.26
Total			62.59 dBA

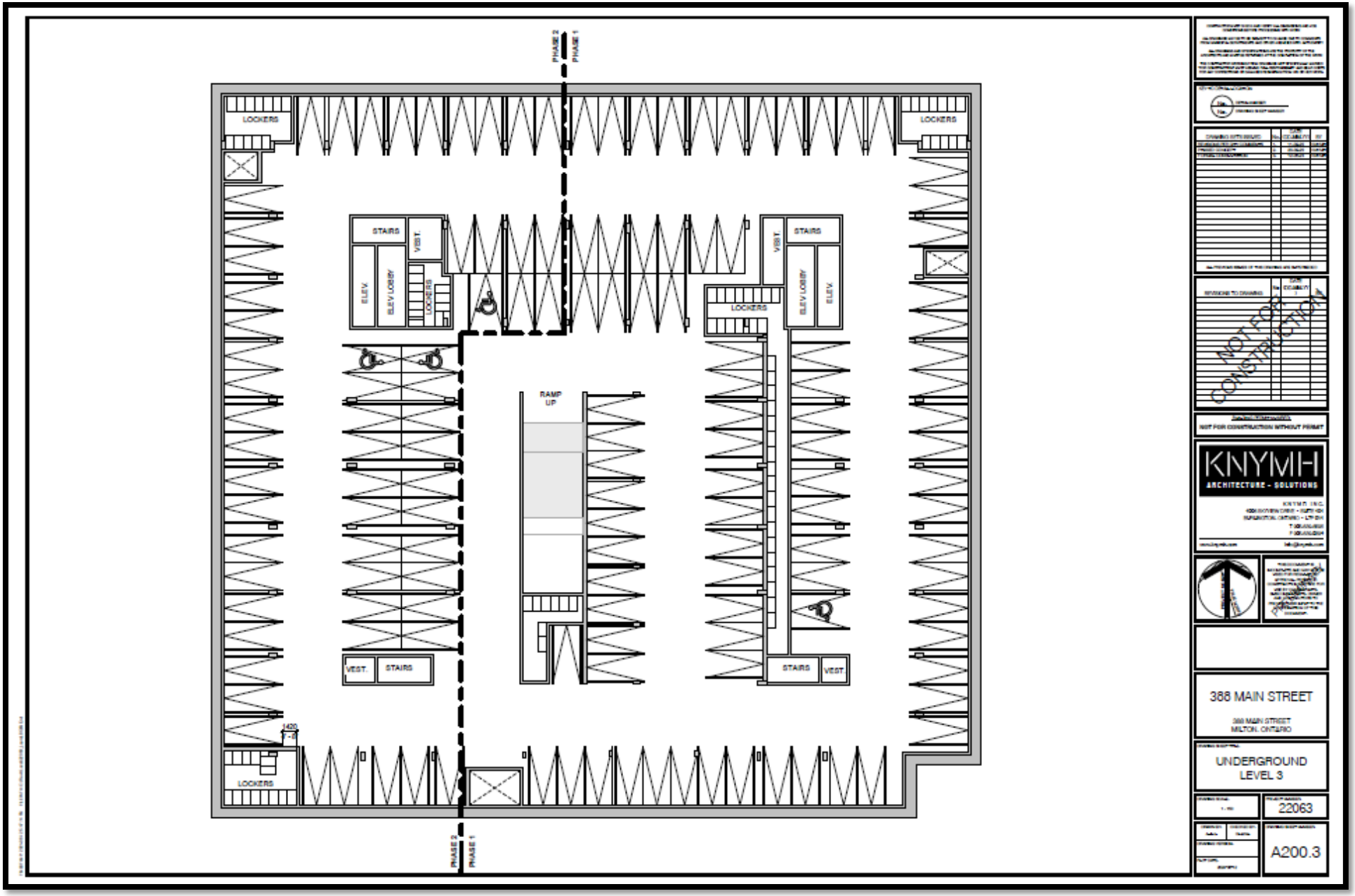
Result summary (night)

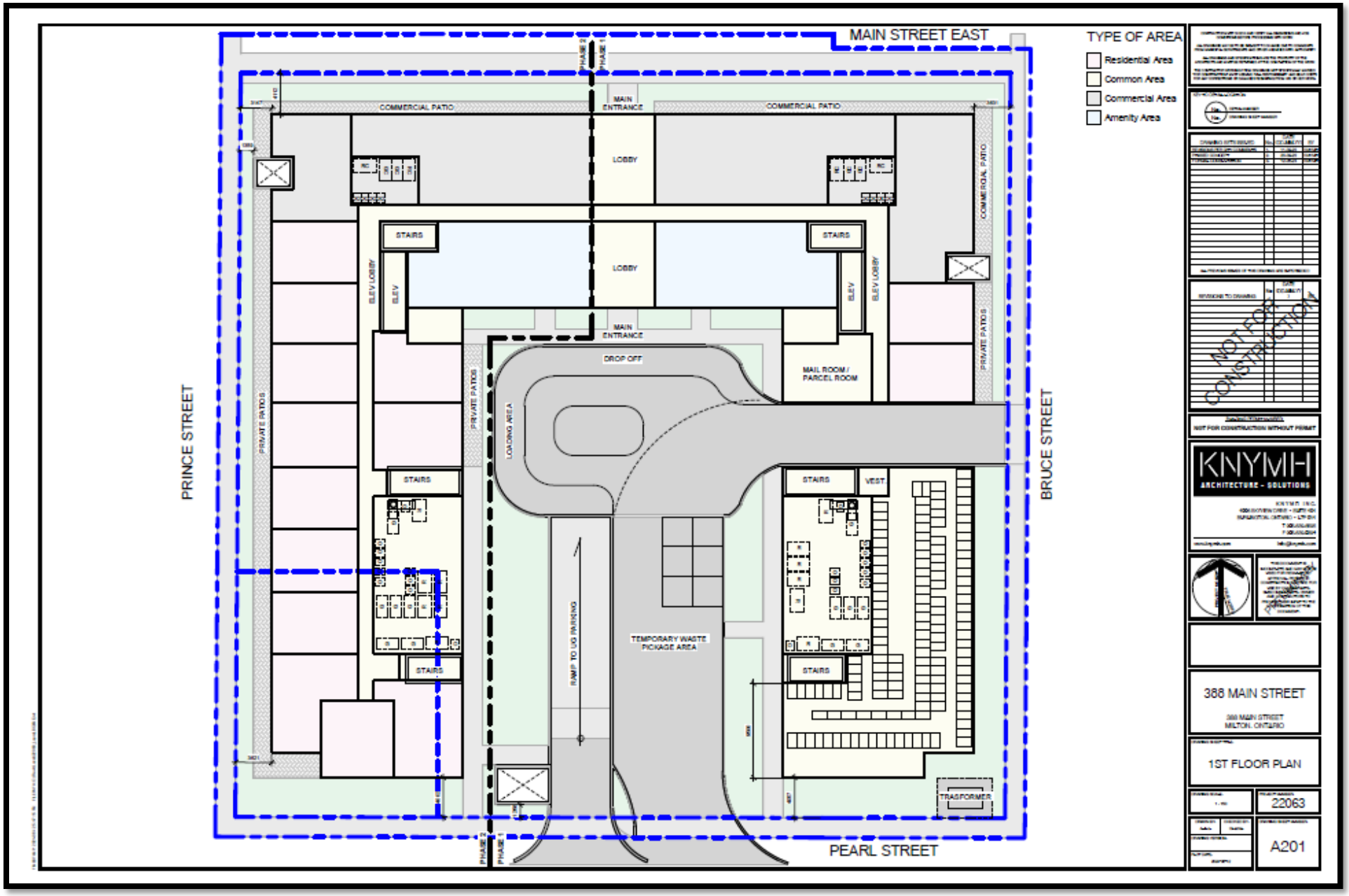
	source height (m)	Road Leq (dBA)	Total Leq (dBA)
1.Main St E	1.19	56.01	56.01
2.Ontario	1.19	37.72	37.72
Total			56.07 dBA

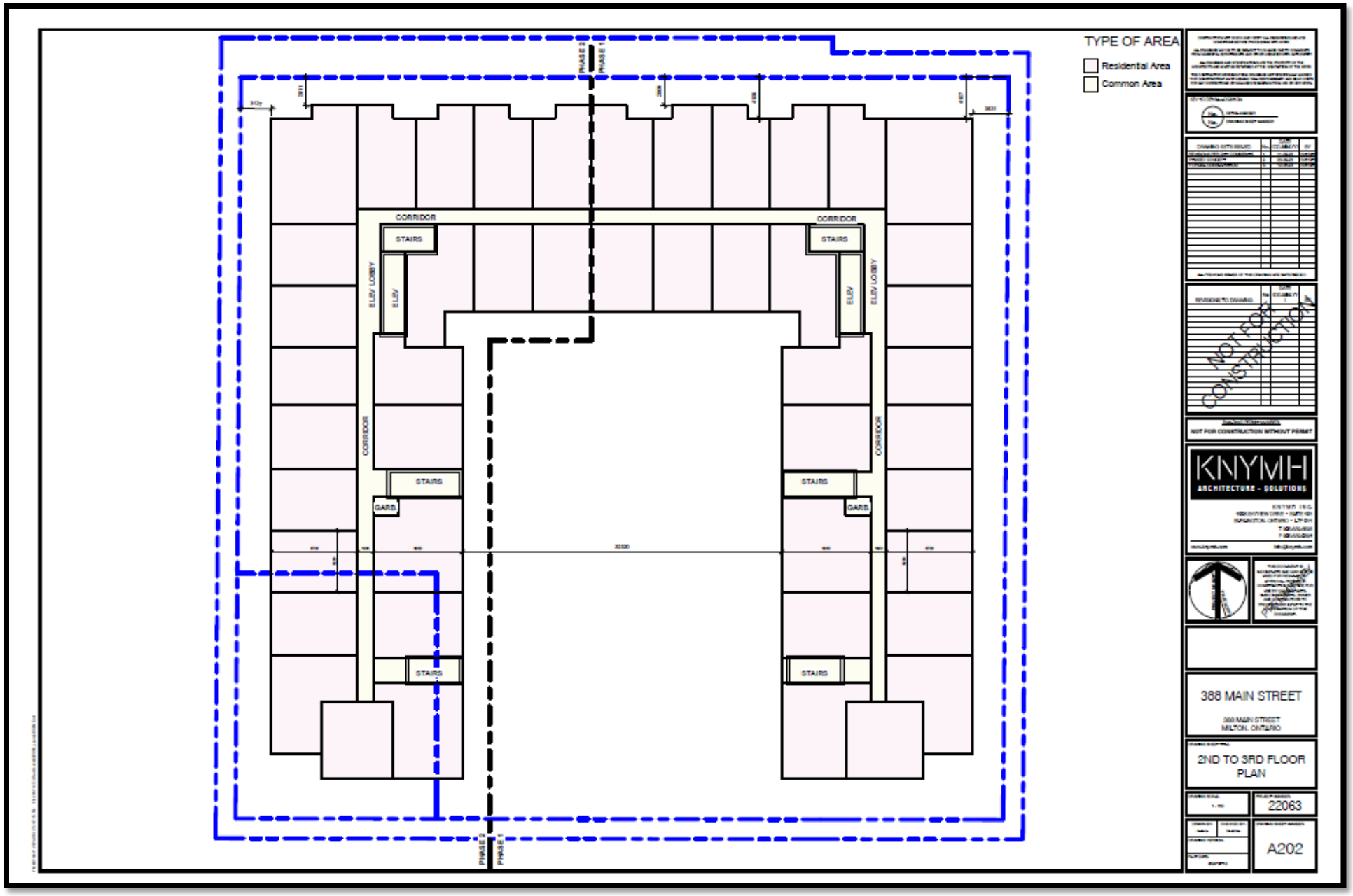
FLOOR PLANS

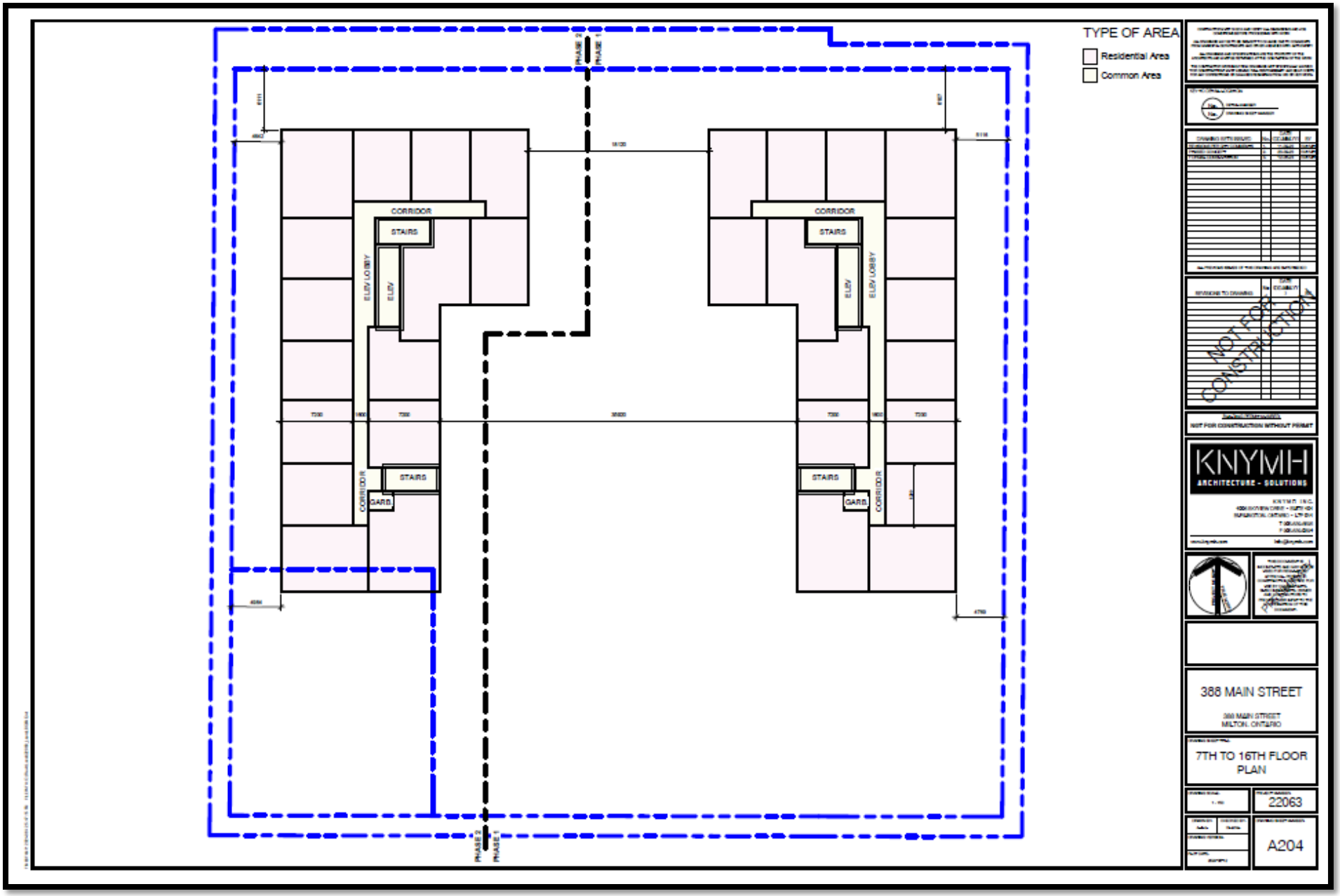

PHASE 2
PHASE 1
UTILITY
UTILITY
STAIRS
ELEV.
ELEV LOBBY
VEST.
PUMP ROOM
PUMP ROOM
VEST.
STAIRS
ELEV LOBBY
ELEV.
RAMP UP
RAMP DW
VEST.
STAIRS
STAIRS
VEST.
UTILITY
ELECT ROOM
PHASE 2
PHASE 1
NOT FOR CONSTRUCTION
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
388 MAIN STREET
MILTON, ONTARIO
UNDERGROUND
LEVEL 1
22063
A200.1

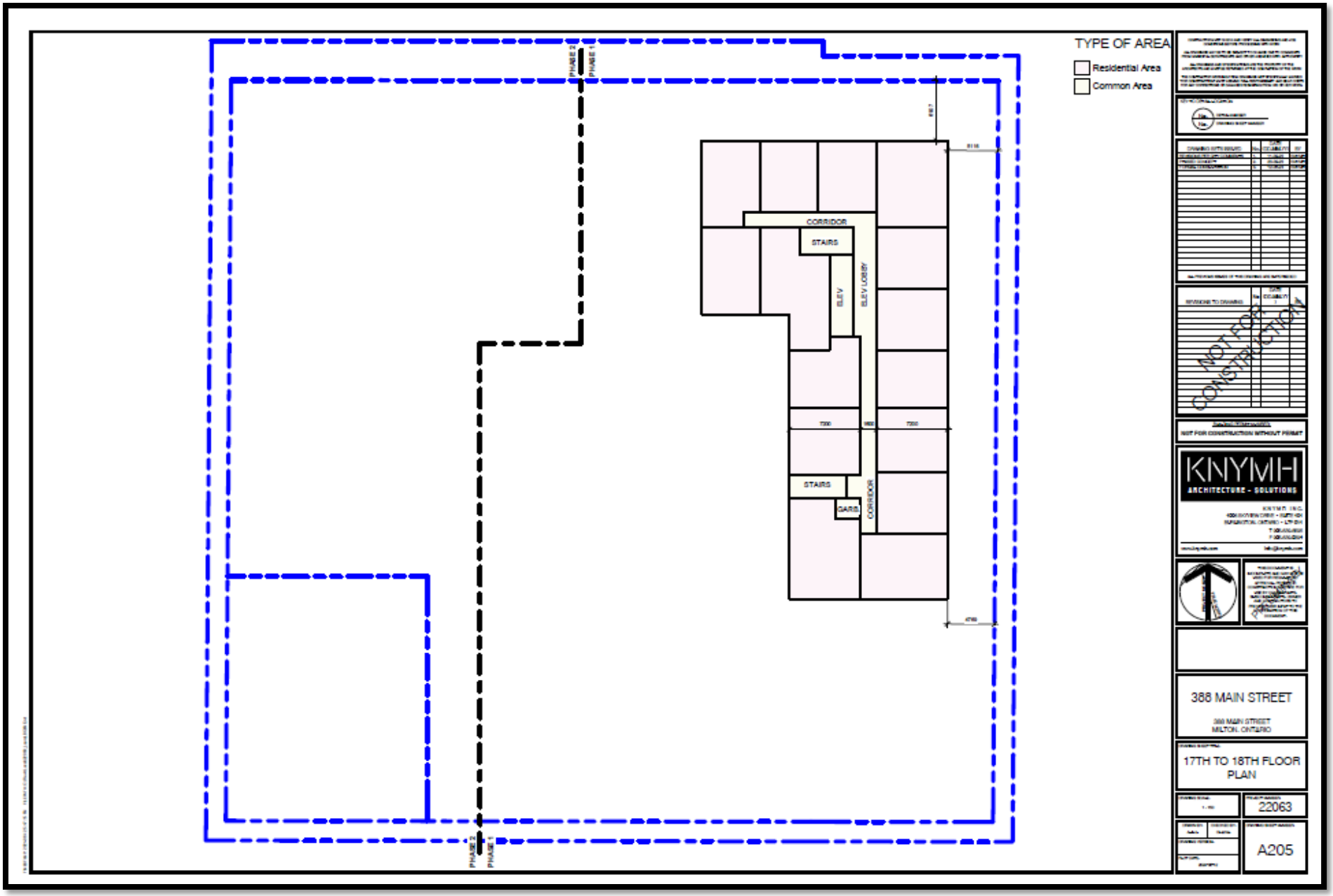

PHASE 2
PHASE 1
LOCKERS
STAIRS
VEST.
ELEV
ELEV LOBBY
RAMP UP
RAMP DN
NOT FOR CONSTRUCTION
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
UNDERGROUND LEVEL 2
22063
A200.2


PHASE 2
PHASE 1
LOCKERS
LOCKERS
STAIRS
VEST.
ELEV.
ELEV LOBBY
LOCKERS
VEST.
STAIRS
LOCKERS
ELEV LOBBY
ELEV.
RAMP UP
VEST.
STAIRS
STAIRS
VEST.
1420
LOCKERS
PHASE 2
PHASE 1
NOT FOR CONSTRUCTION
NOT FOR CONSTRUCTION WITHOUT PERMIT
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
388 MAIN STREET
MILTON, ONTARIO
UNDERGROUND LEVEL 3
22063
A200.3

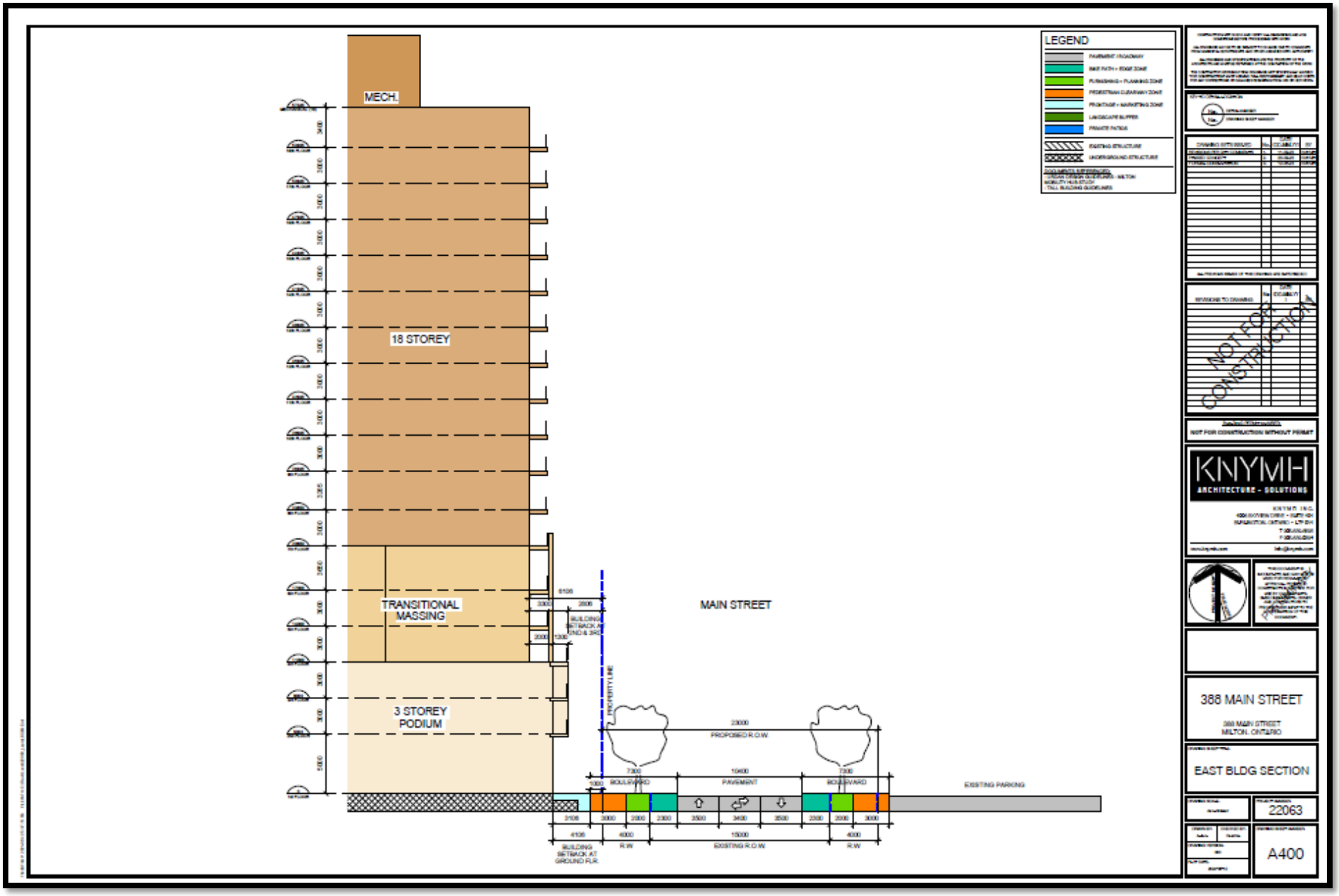

MAIN STREET EAST
PRINCE STREET
BRUCE STREET
PEARL STREET
TYPE OF AREA
Residential Area
Common Area
Commercial Area
Amenity Area
COMMERCIAL PATIO
MAIN ENTRANCE
LOBBY
STAIRS
ELEV LOBBY
ELEV
PRIVATE PATIOS
DROP OFF
LOADING AREA
MAIL ROOM / PARCEL ROOM
VEST.
RAMP TO UG PARKING
TEMPORARY WASTE PICKAGE AREA
TRASFORMER
PHASE 1
PHASE 2
NOT FOR CONSTRUCTION
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
388 MAIN STREET
MILTON, ONTARIO
1ST FLOOR PLAN
22063
A201


TYPE OF AREA
Residential Area
Common Area
PHASE 2
PHASE 1
CORRIDOR
STAIRS
ELEV LOBBY
ELEV
GARB.
NOT FOR CONSTRUCTION
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
388 MAIN STREET
MILTON, ONTARIO
2ND TO 3RD FLOOR PLAN
22063
A202

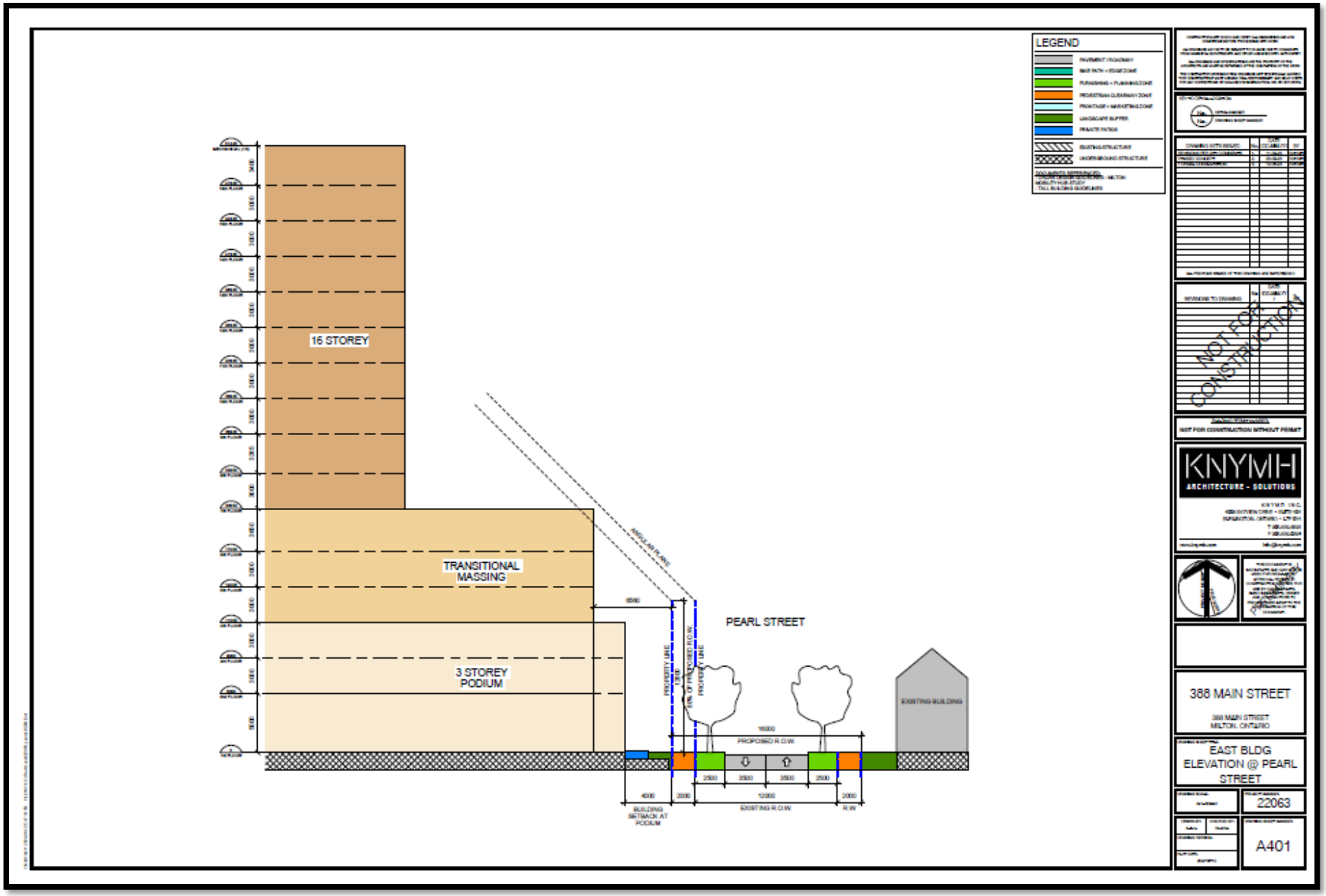

TYPE OF AREA
Residential Area
Common Area
PHASE 2
PHASE 1
CORRIDOR
STAIRS
ELEV LOBBY
ELEV
GARB.
NOT FOR CONSTRUCTION
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
388 MAIN STREET
MILTON, ONTARIO
7TH TO 16TH FLOOR PLAN
22063
A204

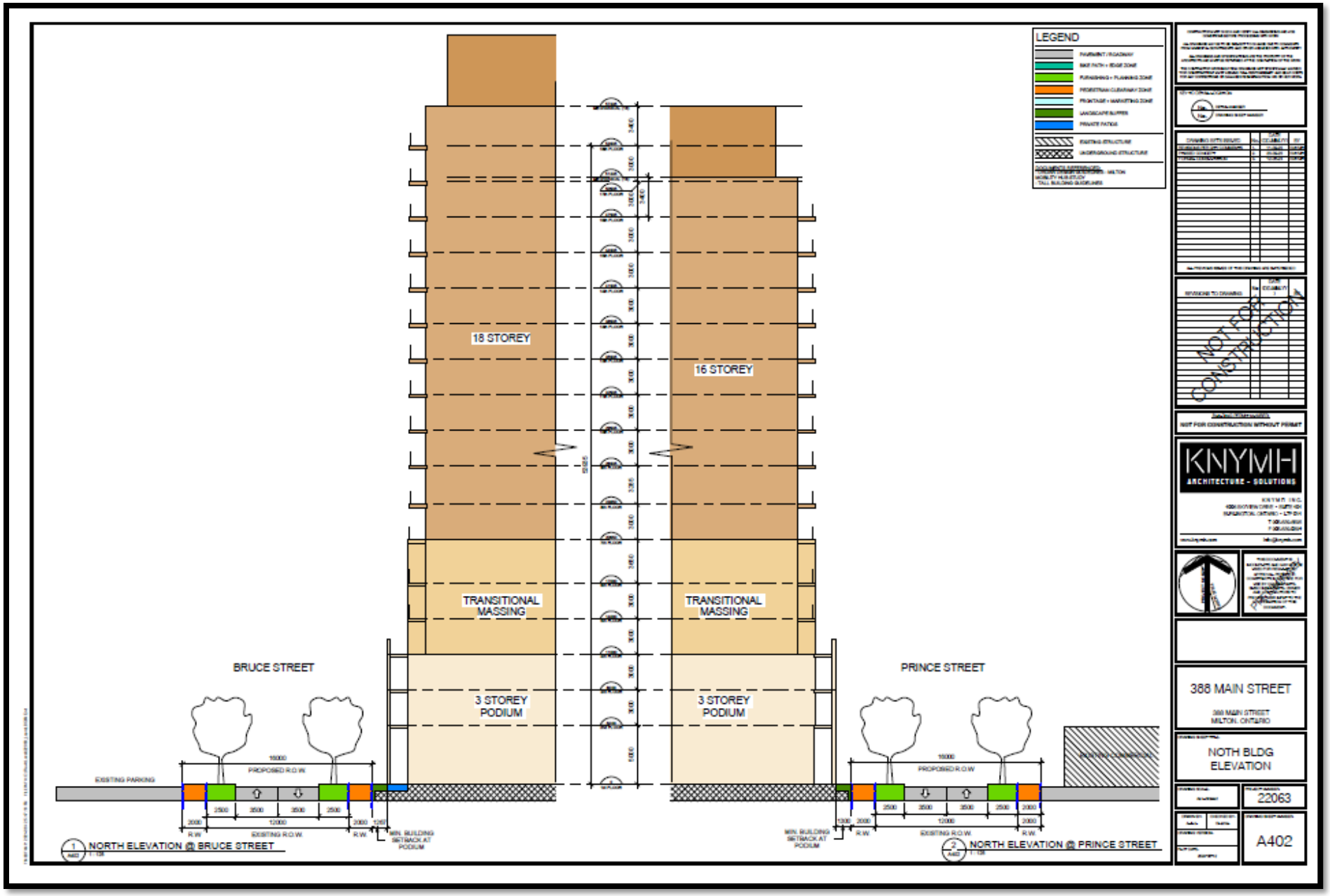

TYPE OF AREA
Residential Area
Common Area
PHASE 2
PHASE 1
CORRIDOR
STAIRS
ELEV
ELEV LOBBY
STAIRS
CORRIDOR
NOT FOR CONSTRUCTION
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
17TH TO 18TH FLOOR PLAN
22063
A205

BUILDING SECTION


LEGEND
MECH.
18 STOREY
TRANSITIONAL MASSING
3 STOREY PODIUM
MAIN STREET
PROPERTY LINE
PROPOSED R.O.W
BOULEVARD
PAVEMENT
BOULEVARD
EXISTING PARKING
BUILDING SETBACK AT GROUND FLR.
R.W
EXISTING R.O.W
R.W
NOT FOR CONSTRUCTION
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
388 MAIN STREET
MILTON, ONTARIO
EAST BLDG SECTION
22063
A400

ELEVATIONS


LEGEND
16 STOREY
TRANSITIONAL MASSING
3 STOREY PODIUM
PEARL STREET
EXISTING BUILDING
PROPOSED R.O.W.
EXISTING R.O.W.
BUILDING SETBACK AT PODIUM
NOT FOR CONSTRUCTION
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
388 MAIN STREET
MILTON, ONTARIO
EAST BLDG ELEVATION @ PEARL STREET
22063
A401


LEGEND
18 STOREY
16 STOREY
TRANSITIONAL MASSING
TRANSITIONAL MASSING
3 STOREY PODIUM
3 STOREY PODIUM
BRUCE STREET
PRINCE STREET
EXISTING PARKING
PROPOSED R.O.W
EXISTING R.O.W
R.W
MIN. BUILDING SETBACK AT PODIUM
1 NORTH ELEVATION @ BRUCE STREET
2 NORTH ELEVATION @ PRINCE STREET
NOT FOR CONSTRUCTION
KNYMH
ARCHITECTURE - SOLUTIONS
388 MAIN STREET
388 MAIN STREET
MILTON, ONTARIO
NOTH BLDG ELEVATION
22063
A402

SITE STATISTICS

PARKING BREAKDOWN

PARKING REQUIRED PER ZONING PHASE 2		PARKING REQUIRED PER ZONING PHASE 1	
TOTAL SUITES: 269		TOTAL SUITES: 299	
RESIDENTIAL (0.8 PER SUITE)	215	RESIDENTIAL (0.8 PER SUITE)	239
**VISITOR (0.2 PER SUITE)	54	**VISITOR (0.2 PER SUITE)	60
**COMMERCIAL (402sqm) (1 PER 30sqm)	14	**COMMERCIAL (402sqm) (1 PER 30sqm)	14
**ONLY THE GREATER OF THE 2 NUMBERS IS TO BE INCLUDED IN TOTAL NUMBER		**ONLY THE GREATER OF THE 2 NUMBERS IS TO BE INCLUDED IN TOTAL NUMBER	
TOTAL	**269**	**TOTAL**	**299**

COMBINED PARKING REQUIRED 568

PARKING PROVIDED PHASE 2

LEVEL	TYPE	TOTAL
UNDERGROUND LEVEL 3	BF - TYPE A	1
UNDERGROUND LEVEL 3	BF - TYPE B	2
UNDERGROUND LEVEL 3	Standard	56
		59
UNDERGROUND LEVEL 2	BF - TYPE A	1
UNDERGROUND LEVEL 2	BF - TYPE B	2
UNDERGROUND LEVEL 2	Standard	56
		59
UNDERGROUND LEVEL 1	BF - TYPE B	2
UNDERGROUND LEVEL 1	Standard	56
		58
TOTAL PARKING SPACES		176

PARKING PROVIDED PHASE 1

LEVEL	TYPE	TOTAL
UNDERGROUND LEVEL 3	BF - TYPE A	1
UNDERGROUND LEVEL 3	Standard	81
		82
UNDERGROUND LEVEL 2	BF - TYPE A	1
UNDERGROUND LEVEL 2	Standard	80
		81
UNDERGROUND LEVEL 1	BF - TYPE A	1
UNDERGROUND LEVEL 1	Standard	76
		77
TOTAL PARKING SPACES		240

COMBINED PARKING PROVIDED 416

EXTERIOR WALL STC RATINGS

EXTERIOR WALL STC RATINGS

Wall Configuration	EW1	EW2	EW3	EW4	EW1R	EW2R	EW3R	EW5	EW4R	EW6	EW7 EW5R	EW8
STC Rating	**38**	**40**	**43**	**46**	**47**	**48**	**49**	**54**	**55**	**57**	**58**	**62**

Source: National Research Council, Division of Building Research

NOTES:

1 The common structure of walls EW1 to EW5 is composed of 12.7mm gypsum board, vapour barrier and 38x89 mm studs with 50 mm (or thicker) mineral wool or glass fibre batts in inter-stud cavities.

- EW1 denotes the common structure, plus sheathing, plus wood siding or metal siding and fibre backer board
- EW2 denotes the common structure, plus rigid insulation (25 to 30 mm), and wood siding or metal siding and fibre backer board.
- EW3 denotes simulated mansard with the common structure, plus sheathing, 28 X89 mm framing, sheathing and asphalt roofing material
- EW4 denotes the common structure, plus sheathing and 20 mm stucco.
- EW5 denotes the common structure, plus sheathing, 25 mm air space, 100mm brick veneer.
- EW6 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25 to 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 to 50 mm), 140mm back-up block, 100 mm face brick.
- EW8 denotes exterior wall composed of 12.7 mm gypsum board, rigid insulation (25 to 50 mm), 200 mm concrete.

2 R signifies the mounting of the interior gypsum board on resilient clips.

3 An exterior wall conforming to rainscreen design principles and composed of 12.7 mm gypsum board, 100 mm concrete block, rigid insulation (25 to 50 mm), 25 mm air space, and 100 mm brick veneer has the same STC as EW6.

4 An exterior wall described in EW1 with the addition of rigid insulation (25 to 50 mm) between the sheathing and the external finish has the same STC as EW2.