



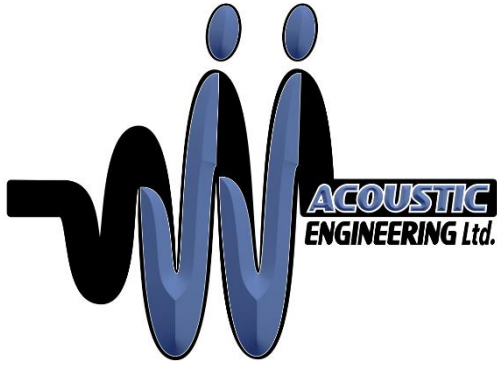
## **Road Traffic and Stationary Noise Impact Study**

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4280 Howard Place, Windsor, Ontario

**JJ-00565 NIS1**





October 23, 2023

Reference No. JJ-00565-NIS1

OLIVIA BYRNE  
Junior Project Manager  
ADA Architects  
1670 Mercer St.  
Windsor, Ontario, N8X 3P7

Dear Ms. Byrne:

**Re: Road Traffic and Stationary Noise Impact Study  
4280 Howard Place, Windsor, Ontario**

## **1. Introduction**

JJ Acoustic Engineering Ltd. (JJAE) was retained to complete a Road Traffic and Stationary Noise Impact Study (Study) for the residential development located at 4280 Howard Place in Windsor, Ontario (Site). The Site will be developed into three 3-storey residential buildings. JJAE has provided a copy of the most up-to-date Site Plan in Attachment A.

The Study was prepared consistent with Ontario Ministry of the Environment, Conservation and Park (MOECP) NPC 300, "Environmental Noise Guideline, Stationary and Transportation Sources—Approval and Planning" dated August 2013.

This Study has determined that the potential environmental noise impact from road traffic noise is significant. The proposed development will need the following: a requirement for central air-conditioning, noise warning clauses and special building components. Road traffic noise control requirements for the Site were determined based on road traffic volumes provided by the City of Windsor (City) and forecasted to 10 years from the date of this study.

JJ Acoustic Engineering Ltd.  
[joey@jjae.ca](mailto:joey@jjae.ca)  
226-346-6473

The following attachments were included with this Study:

- Attachment A – Site Plan
- Attachment B – Traffic Data Summary Table & Sample Stamson Traffic Model Outputs
- Attachment C – Stationary Noise Impact Figures
- Attachment D – Stationary Noise Impact Source Table

## **2. Road Traffic Analysis**

### **2.1 Road Traffic Noise Modeling Methodology**

The road traffic noise impact was conducted using STAMSON, the MOECP's computerized model of ORNAMENT. The Application of the model for the site was consistent with the ORNAMENT technical documents. The computer model input parameters include, among other data, the number of road segments, number of house rows, the positional relationship of the receptor to a noise source or barrier in terms of distance, elevation and angle of exposure to the source, the basic site topography, the ground surface type, traffic volumes, traffic composition and speed limit.

The predicted sound level is based on the 1-hour equivalent sound level, designated as Leq, and is adjusted by the STAMSON program to the 16-hour daytime and the 8-hour nighttime equivalent sound level. The applicable noise criteria for noise sensitive spaces are specified in terms of the 16-hour daytime period (7:00 a.m. to 11:00 p.m.) and 8-hour nighttime period (11:00 p.m. to 7:00 a.m.) enabling a direct comparison between the STAMSON model output and the noise limits.

### **2.2 Road Traffic Model Input Parameters**

This section describes the STAMSON model input parameters used to predict road traffic noise impact for the Site.

The Site has four significant roadways in the vicinity of the development: North Talbot approximately 45 meters to the East of Block A, Howard Avenue approximately 15 meters to the West of Block A, Dougall Parkway East Bound approximately 290 meters to the North of Block A, Dougall Parkway South Bound approximately 300 meters to the North of Block A. Where there are intervening and off-site structures that provide line-of-sight obstruction to the roads, JJAЕ did not include line-of-sight obstruction in our analysis as to calculate worst-case noise impact.

### **2.2.1 Road Traffic Parameters**

The traffic data provided by the City has been summarized below:

#### ***North Talbot:***

- Current AADT (2012): 8,900
- Forecast AADT (2033): 14,948
- Commercial Vehicle Rates: 2% medium trucks and 3% heavy trucks
- Posted Speed Limit: 50 km/h
- Day Night Splits: 90% day and 10% night

#### ***Howard Avenue:***

- Current AADT (2018): 18,000
- Forecast AADT (2033): 26,069
- Commercial Vehicle Rates: 2% medium trucks and 3% heavy trucks
- Posted Speed Limit: 50 km/h
- Day Night Splits: 90% day and 10% night

#### ***Dougall Parkway East Bound:***

- Current AADT (2019): 12,000
- Forecast AADT (2033): 16,959
- Commercial Vehicle Rates: 2% medium trucks and 3% heavy trucks
- Posted Speed Limit: 60 km/h
- Day Night Splits: 90% day and 10% night

#### ***Dougall Parkway South Bound:***

- Current AADT (2019): 4,600
- Forecast AADT (2033): 6,500
- Commercial Vehicle Rates: 2% medium trucks and 3% heavy trucks
- Posted Speed Limit: 60 km/h
- Day Night Splits: 90% day and 10% night

It should be noted that traffic along Howard Place is 500 AADT, which is considered environmentally insignificant and has not been included in this report.

Moreover, JJAEE was not provided with commercial vehicle rates and assumes that medium trucks are 2% and heavy trucks are 3%.

The traffic data is the foundation of this analysis and the Study will be updated if the values change. JJAEE assumed 2.5% annual growth to forecast AADT. Traffic data was supplied by the City. The City's AADT report for this Noise Studies report has been supplied in Attachment B.

## 2.3 Road Traffic Noise Modeling Results

JJAE calculated the Plane of Window (POW) noise exposure for each floor at the Site for the separate daytime and nighttime periods.

The STAMSON road traffic model outputs are provided in Attachment B.

## 2.4 Road Traffic Modeling Discussion

Noise control requirements will be defined based on NPC 300.

### *Daytime Outdoor Living Area Assessment (NPC 300, Section C7.1.1)*

NPC 300 section A5 (pages 13-14) defines an Outdoor Living Area (OLA). As part of this definition, a balcony or terrace is considered an OLA if it has a minimum depth of 4 meters. All balconies are less than 4 m in depth and therefore will not be considered as OLAs.

The OLA is located approximately 10 meters from the East façade of Block C. JJAE has calculated the noise impact to the OLA to be 65dBA. Due to the excess noise level of road traffic, the OLA is not feasible at the location indicated in Attachment A.

### *Plane of a Window – Ventilation Requirements (NPC 300, Section C7.1.2)*

The predicted daytime and nighttime Plane of Window (POW) noise impact assumes a worst-case and direct line of sight noise exposure to both roads, unless the building itself blocks line-of-sight (full or partial).

JJAE has used the following criteria, which is a summary of NPC 300 requirements, to evaluate the Site noise impacts from road traffic noise:

<b>Daytime Level (dBA)</b>	<b>Nighttime Level (dBA)</b>	<b>Ventilation Requirements and Warning Clauses</b>	<b>Special Building Components</b>
55	50	Not Required	Not Required
55 – 65	50 – 60	Yes, with Type C Warning Clause	Not Required
66 or more	60 or more	Yes, with Type D Warning Clause	Yes

Table B.1 summarizes the predicted worst-case sound levels and the requirements for the units. The following warning clause is required:

**Warning Clause C:** "This dwelling unit has been designed with the provision for adding central air conditioning at the occupant's discretion. Installation of central air conditioning by the occupant in low and medium density developments will allow windows and exterior doors to remain closed, thereby ensuring that the indoor sound levels are within the sound level limits of the Municipality and the Ministry of the Environment, Conservation and Parks."

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

### ***Indoor Living Areas – Building Components (NPC 300, Section C7.1.3)***

At minimum, the building must be constructed to standard Ontario Building Code requirements. Improved building components are required and summarized in Table B.1. JJAЕ has assumed 35% window to floor area coverage and that windows are thick and operable. In addition, exterior wall compositions must be a minimum of STC 46, with brick veneer or masonry equivalent.

## **3. Stationary Noise Impact Analysis**

### **3.1 Stationary Noise Impact Sound Level Criteria**

The general criteria for stationary noise sources are defined by NPC 300. The criteria defined in Table C-5 and C-6, "Exclusion Limit Values of One-Hour Equivalent Sound Level (Leq, dBA) Outdoor Points of Reception" and "Exclusion Limit Values of One-Hour Equivalent Sound Level (Leq, dBA) Plane of Window of Noise Sensitive Spaces" are used to evaluate the noise impact at the proposed development.

The criteria for a Class 1 area have been summarized below:

<b>Receiver Category</b>	<b>Time Period</b>	<b>Stationary Noise Criteria</b>
Outdoor Living Area (OLA)	Day = 7:00 to 23:00	Leq = 50 dBA
Plane of Window (POW)	Day = 7:00 to 23:00	Leq = 50 dBA
	Night = 23:00 to 7:00	Leq = 45 dBA

### **3.2 Modelling Methodology**

The stationary noise impact was evaluated using the CADNA A acoustic modelling software that is based on the ISO 9613-2 standard. The data for all potential stationary noise sources was summarized in Attachment D.

JJAЕ used the following assumptions in our Cadna A model:

- **Ground Absorption:** Default ground absorption coefficient of 0.7 was used.
- **Temperature:** 10°C
- **Humidity:** 70%
- **Building Reflection Coefficient:** Absorption Coefficient Alpha of 0.37 (Reflection Loss of 2dB, Structured Façade) was used.
- **Time-Weighted Adjustment:** where sources operate non-continuously JJAЕ has provided operating times and as shown in Sections 4 and 5.
- **Tonality:** A 5 dbA tonal penalty was applied to all tonal sources, where applicable. JJAЕ has provided a (T) for sources identified as tonal in Sections 4 and 5.
- **Reflection Order:** A maximum reflection order of 1 was used to evaluate indirect noise impact.

#### 4. Noise Impact Summary – From Site

The noise from the Site to the neighboring buildings could not be accounted for because the site has not undergone mechanical design yet. An addendum to this report should be completed once a mechanical design is done to account for noise from the Site to the neighboring building.

#### 5. Noise Impact Summary – From Environment to Site

There are several buildings near the site. JJAЕ has identified several potential stationary noise sources including:

- Small HVAC Units

A summary of the noise sources used in our modelling is provided in Attachment D.

JJAЕ modelled the noise impact from all significant noise sources to the Site. The results are summarized in the table below and illustrated on Figure 1.

<b>Block A</b>	<b>Worst Case Daytime Sound Level (dBA)</b>	<b>Daytime Noise Limit (dBA)</b>	<b>Worst Case Nighttime Sound Level (dBA)</b>	<b>Nighttime Noise Limit (dBA)</b>	<b>Limits met</b>
North	30	50	30	45	Yes
East	31	50	31	45	Yes
South	31	50	31	45	Yes
West	<30	50	<30	45	Yes

From the table above it can be seen that all façades are below noise limits.

<b>Block B</b>	<b>Worst Case Daytime Sound Level (dBA)</b>	<b>Daytime Noise Limit (dBA)</b>	<b>Worst Case Nighttime Sound Level (dBA)</b>	<b>Nighttime Noise Limit (dBA)</b>	<b>Limits met</b>
North	31	50	31	45	Yes
East	<30	50	<30	45	Yes
South	<30	50	<30	45	Yes
West	<30	50	<30	45	Yes

From the table above it can be seen that all façades are below noise limits.

<b>Block C</b>	<b>Worst Case Daytime Sound Level (dBA)</b>	<b>Daytime Noise Limit (dBA)</b>	<b>Worst Case Nighttime Sound Level (dBA)</b>	<b>Nighttime Noise Limit (dBA)</b>	<b>Limits met</b>
North	32	50	32	45	Yes
East	32	50	32	45	Yes
South	<30	50	<30	45	Yes
West	<30	50	<30	45	Yes

From the table above it can be seen that all façades are below noise limits.

## **6. Recommendations**

The road traffic noise impacts were above the NPC 300 requirements. Noise mitigation measures include:

### **Block A:**

- Warning Clause Type C for the North and East façades.
- Warning Clause Type D for the South and West façades.
- A minimum of STC 35 is required for all exterior glazing for the West façade.
- A minimum of STC 32 is required for all exterior glazing for the South façade.
- JJAЕ and the client require air conditioning for all units.

### **Block B:**

- Warning Clause Type C for all façades.
- JJAЕ and the client require air conditioning for all units.

### **Block C:**

- Warning Clause Type C for all façades.
- JJAЕ and the client require air conditioning for all units.

### **Outdoor Living Area (OLA):**

- Due to the excess noise level of road traffic, the OLA is not feasible at the location indicated in Attachment A.

The stationary noise impacts from neighboring buildings to the site were evaluated and the sound level predictions were determined to be below noise limits.

The noise from the Site to the neighboring buildings could not be accounted for because the site has not undergone mechanical design yet. An addendum to this report should be completed once a mechanical design is done to account for noise from the Site to the neighboring building.



## 7. Conclusions

The results of this Study indicate that the potential environmental impact from road traffic sources are significant. Mitigation measures will be required including ventilation requirements, special building components and noise warning clauses for each unit. With the mitigation measures, provided in Section 6.

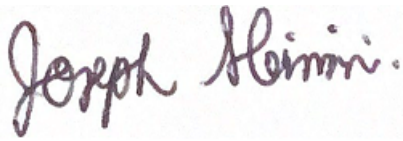
Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,

Written By:

Reviewed by:

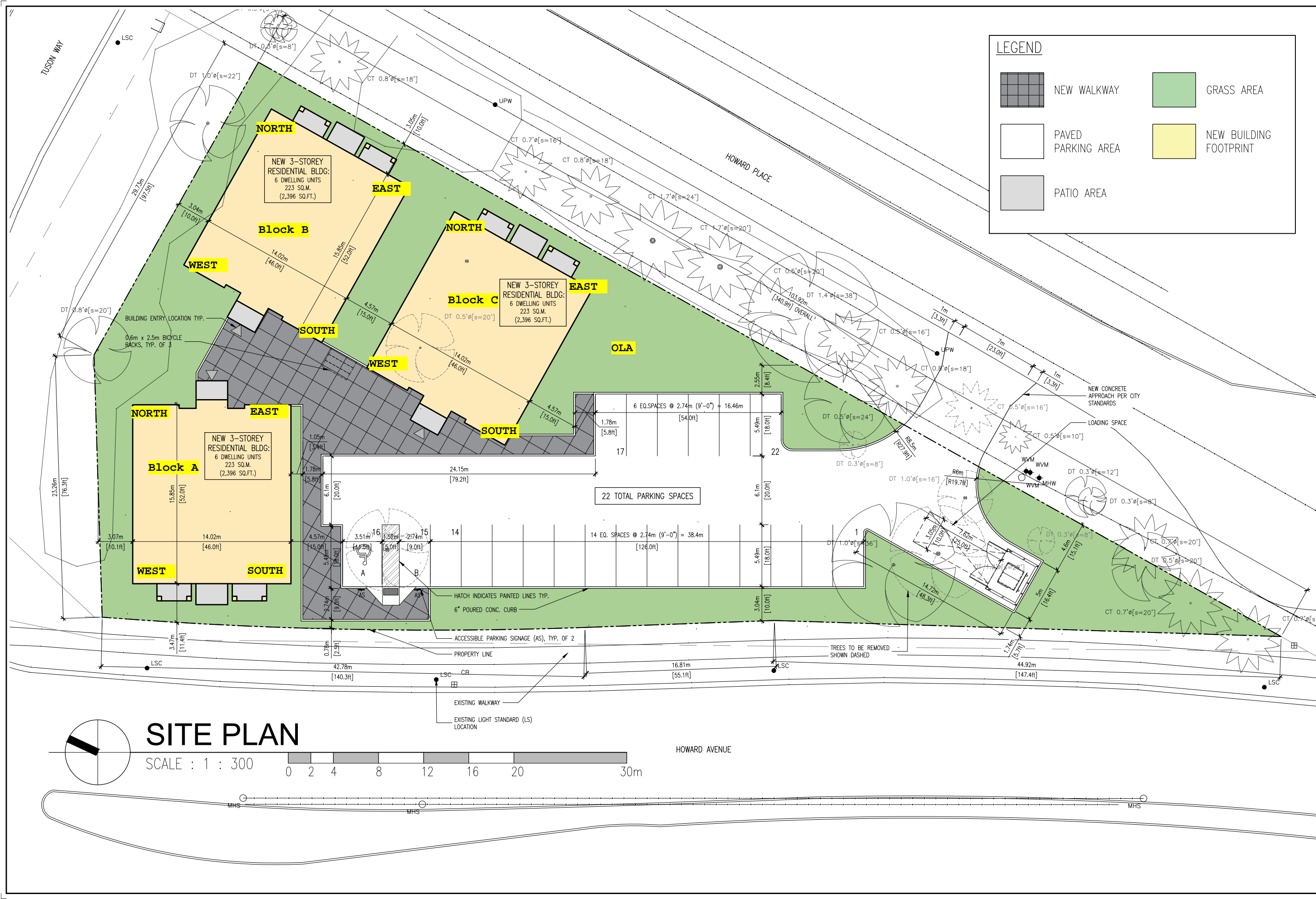
Oct . 23 , 2023

A handwritten signature in dark ink that reads "Joseph Sleiman". The signature is written in a cursive style and is positioned above the printed name of the author.

Joseph Sleiman  
Acoustic Technician

Joey Jraige, P.Eng., B.A.Sc.  
President (Owner)

# ATTACHMENT A



**LEGEND**

- NEW WALKWAY
- GRASS AREA
- PAVED PARKING AREA
- NEW BUILDING FOOTPRINT
- PATIO AREA

# SITE PLAN

SCALE : 1 : 300

0 2 4 8 12 16 20 30m

date:	OCT. 2023
comm. no.:	2021-057
dwg. no.:	SPC-1a
title:	SITE PLAN
drawn by:	OB
checked by:	JBK
project:	0 HOWARD AVENUE NEW MULTI-RESIDENTIAL DEVELOPMENT
client:	RAFCO PROPERTY TRUST LTD.
1670 mercer street windsor ontario canada n8x 3p7 ph 519 254 3430 fax 519 254 3642 email: info@ad-a-architect.ca www.ad-a-architect.ca	inc. architect design associates

## ATTACHMENT B

Table B1

**Road Traffic Noise Levels and Mitigation Measures Summary**  
**4280 Howard Place Block A, Windsor, Ontario**

<b>Point of Reception</b>	<b>Road Sound Level Daytime (dBA)</b>	<b>Road Sound Level Nighttime (dBA)</b>	<b>Ventilation Requirements NPC 300</b>	<b>Warning Clauses From NPC 300</b>	<b>Special Building Components</b>
<b>North Façade</b>					
Plane of Window Level 1	64 (dBA)	57 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	64 (dBA)	57 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	64 (dBA)	57 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
<b>East Façade</b>					
Plane of Window Level 1	60 (dBA)	53 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	60 (dBA)	53 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	60 (dBA)	53 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
<b>South Façade</b>					
Plane of Window Level 1	66 (dBA)	60 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 32
Plane of Window Level 2	66 (dBA)	59 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 32
Plane of Window Level 3	66 (dBA)	59 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 32
<b>West Façade</b>					
Plane of Window Level 1	69 (dBA)	62 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 35
Plane of Window Level 2	69 (dBA)	62 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 35
Plane of Window Level 3	68 (dBA)	62 (dBA)	Requirement for Air Conditioning	Type D	Minimum Window STC Rating of 34

Table B1

**Road Traffic Noise Levels and Mitigation Measures Summary**  
**4280 Howard Place Block B, Windsor, Ontario**

<b>Point of Reception</b>	<b>Road Sound Level Daytime (dBA)</b>	<b>Road Sound Level Nighttime (dBA)</b>	<b>Ventilation Requirements NPC 300</b>	<b>Warning Clauses From NPC 300</b>	<b>Special Building Components</b>
<b>North Façade</b>					
Plane of Window Level 1	62 (dBA)	55 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	62 (dBA)	55 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	62 (dBA)	55 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
<b>East Façade</b>					
Plane of Window Level 1	57 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	57 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	57 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
<b>South Façade</b>					
Plane of Window Level 1	63 (dBA)	57 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	63 (dBA)	57 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	63 (dBA)	57 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
<b>West Façade</b>					
Plane of Window Level 1	65 (dBA)	59 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	65 (dBA)	59 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	65 (dBA)	59 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code

Table B1

**Road Traffic Noise Levels and Mitigation Measures Summary**  
**4280 Howard Place Block C, Windsor, Ontario**

<b>Point of Reception</b>	<b>Road Sound Level Daytime (dBA)</b>	<b>Road Sound Level Nighttime (dBA)</b>	<b>Ventilation Requirements NPC 300</b>	<b>Warning Clauses From NPC 300</b>	<b>Special Building Components</b>
<b>North Façade</b>					
Plane of Window Level 1	61 (dBA)	55 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	61 (dBA)	55 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	61 (dBA)	55 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
<b>East Façade</b>					
Plane of Window Level 1	57 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	57 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	57 (dBA)	50 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
<b>South Façade</b>					
Plane of Window Level 1	63 (dBA)	57 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	63 (dBA)	57 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	63 (dBA)	57 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
<b>West Façade</b>					
Plane of Window Level 1	65 (dBA)	59 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 2	65 (dBA)	59 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
Plane of Window Level 3	65 (dBA)	59 (dBA)	Requirement for Air Conditioning	Type C	Compliance with Ontario Building Code
<b><u>Outdoor Living Area</u></b>					
OLA	65 (dBA)	N/A	N/A		N/A

## Joseph Sleiman

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**From:** Spagnuolo, Mike <mspagnuolo@citywindsor.ca>  
**Sent:** Wednesday, August 23, 2023 10:55 AM  
**To:** Joey Jraige; Joseph Sleiman; Amicarelli, Clare; Dhiman, Siddharth  
**Subject:** RE: Traffic Data for surrounding roadways 4280 Howard Avenue

Joey, here is the information I have;  
Howard Place north of Tuson Way 500 (2018)  
Howard Ave north of North Talbot 18,000 (2018)  
North Talbot East of Howard 8,900 (2012)  
Dougall Parkway Eastbound east of Howard ramps 12,000 (2019)  
Dougall Parkway to Southbound Howard off ramp 4,600 (2019)

### MIKE SPAGNUOLO | SIGNAL SYSTEMS ANALYST



Office Of The City Engineer  
1269 Mercer St | Windsor, ON | N8X 0A9  
(519) 255-6247 Ext 6061  
[www.citywindsor.ca](http://www.citywindsor.ca)

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**From:** Joey Jraige <joey@jjae.ca>  
**Sent:** August 23, 2023 8:53 AM  
**To:** Spagnuolo, Mike <mspagnuolo@citywindsor.ca>; Joseph Sleiman <Joseph@jjae.ca>; Amicarelli, Clare <CAmicarelli@citywindsor.ca>; Dhiman, Siddharth <SDhiman@citywindsor.ca>  
**Subject:** Re: Traffic Data for surrounding roadways 4280 Howard Avenue

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Mike,

The address is 4280 Howard Place

Regards,

Joey Jraige  
JJ Acoustic Engineering Ltd.  
226-346-6473  
[joey@jjae.ca](mailto:joey@jjae.ca)

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**From:** Spagnuolo, Mike <[mspagnuolo@citywindsor.ca](mailto:mspagnuolo@citywindsor.ca)>  
**Sent:** Wednesday, August 23, 2023 8:24:23 AM  
**To:** Joseph Sleiman <[Joseph@jjae.ca](mailto:Joseph@jjae.ca)>; Amicarelli, Clare <[CAmicarelli@citywindsor.ca](mailto:CAmicarelli@citywindsor.ca)>; Dhiman, Siddharth <[SDhiman@citywindsor.ca](mailto:SDhiman@citywindsor.ca)>  
**Cc:** Joey Jraige <[joey@jjae.ca](mailto:joey@jjae.ca)>  
**Subject:** RE: Traffic Data for surrounding roadways 4280 Howard Avenue



Filename: b1north.te            Time Period: Day/Night 16/8 hours  
Description: Building #1 North Facade Floor 1

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 15.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Howard Ave (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 : 29.00 / 29.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 2: Dougal Pk Ea (day/night)

-----  
Car traffic volume : 14497/1611 veh/TimePeriod \*  
Medium truck volume : 305/34 veh/TimePeriod \*  
Heavy truck volume : 458/51 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 12000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Dougal Pk Ea (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 : 290.00 / 290.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Dougal Pk So (day/night)

-----  
Car traffic volume : 5557/617 veh/TimePeriod \*  
Medium truck volume : 117/13 veh/TimePeriod \*  
Heavy truck volume : 175/19 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 4600  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Dougal Pk So (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 : 300.00 / 300.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Results segment # 1: Howard Ave (day)

-----

Source height = 1.32 m

ROAD (0.00 + 62.83 + 0.00) = 62.83 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	68.71	0.00	- 2.86	- 3.01	0.00	0.00	0.00	62.83

Segment Leq : 62.83 dBA

Results segment # 2: Dougal Pk Ea (day)

Source height = 1.32 m

ROAD (0.00 + 55.56 + 0.00) = 55.56 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	68.42	0.00	-12.86	0.00	0.00	0.00	0.00	55.56

Segment Leq : 55.56 dBA

Results segment # 3: Dougal Pk So (day)

Source height = 1.32 m

ROAD (0.00 + 51.24 + 0.00) = 51.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	64.25	0.00	-13.01	0.00	0.00	0.00	0.00	51.24

Segment Leq : 51.24 dBA

Total Leq All Segments: 63.82 dBA

Results segment # 1: Howard Ave (night)

Source height = 1.32 m

ROAD (0.00 + 56.29 + 0.00) = 56.29 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	62.17	0.00	- 2.86	- 3.01	0.00	0.00	0.00	56.29

-----  
Segment Leq : 56.29 dBA

Results segment # 2: Dougal Pk Ea (night)  
-----

Source height = 1.32 m

ROAD (0.00 + 49.03 + 0.00) = 49.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	61.89	0.00	-12.86	0.00	0.00	0.00	0.00	49.03

-----

Segment Leq : 49.03 dBA

Results segment # 3: Dougal Pk So (night)  
-----

Source height = 1.31 m

ROAD (0.00 + 44.65 + 0.00) = 44.65 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	57.66	0.00	-13.01	0.00	0.00	0.00	0.00	44.65

-----

Segment Leq : 44.65 dBA

Total Leq All Segments: 57.28 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.82  
(NIGHT): 57.28

Filename: b1east.te                    Time Period: Day/Night 16/8 hours  
Description: Building #1 East Facade Floor 1

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 45.00 / 45.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 2: Dougal Pk Ea (day/night)

-----  
Car traffic volume : 14497/1611 veh/TimePeriod \*  
Medium truck volume : 305/34 veh/TimePeriod \*  
Heavy truck volume : 458/51 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 12000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Dougal Pk Ea (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 : 295.00 / 295.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Dougal Pk So (day/night)

-----  
Car traffic volume : 5557/617 veh/TimePeriod \*  
Medium truck volume : 117/13 veh/TimePeriod \*  
Heavy truck volume : 175/19 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 4600  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Dougal Pk So (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 : 305.00 / 305.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Results segment # 1: North Talbot (day)

-----

Source height = 1.32 m

ROAD (0.00 + 58.51 + 0.00) = 58.51 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.29	0.00	-4.77	-3.01	0.00	0.00	0.00	58.51

Segment Leq : 58.51 dBA

Results segment # 2: Dougal Pk Ea (day)

Source height = 1.32 m

ROAD (0.00 + 52.47 + 0.00) = 52.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	68.42	0.00	-12.94	-3.01	0.00	0.00	0.00	52.47

Segment Leq : 52.47 dBA

Results segment # 3: Dougal Pk So (day)

Source height = 1.32 m

ROAD (0.00 + 48.15 + 0.00) = 48.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	64.25	0.00	-13.08	-3.01	0.00	0.00	0.00	48.15

Segment Leq : 48.15 dBA

Total Leq All Segments: 59.78 dBA

Results segment # 1: North Talbot (night)

Source height = 1.32 m

ROAD (0.00 + 51.99 + 0.00) = 51.99 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	59.77	0.00	-4.77	-3.01	0.00	0.00	0.00	51.99

-----  
Segment Leq : 51.99 dBA

Results segment # 2: Dougal Pk Ea (night)  
-----

Source height = 1.32 m

ROAD (0.00 + 45.95 + 0.00) = 45.95 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.89	0.00	-12.94	- 3.01	0.00	0.00	0.00	45.95

-----

Segment Leq : 45.95 dBA

Results segment # 3: Dougal Pk So (night)  
-----

Source height = 1.31 m

ROAD (0.00 + 41.57 + 0.00) = 41.57 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	57.66	0.00	-13.08	- 3.01	0.00	0.00	0.00	41.57

-----

Segment Leq : 41.57 dBA

Total Leq All Segments: 53.26 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 59.78  
(NIGHT): 53.26



Filename: b1south.te            Time Period: Day/Night 16/8 hours  
Description: Building #1 South Facade Floor 1

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 140.00 / 140.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 15.00  
 Medium Truck % of Total Volume : 2.00  
 Heavy Truck % of Total Volume : 3.00  
 Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Howard Ave (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 : 15.00 / 15.00 m  
 Receiver height : 2.00 / 2.00 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: North Talbot (day)

-----  
 Source height = 1.32 m

ROAD (0.00 + 56.59 + 0.00) = 56.59 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	66.29	0.00	- 9.70	0.00	0.00	0.00	0.00	56.59

-----

Segment Leq : 56.59 dBA

Results segment # 2: Howard Ave (day)

-----  
 Source height = 1.32 m

ROAD (0.00 + 65.70 + 0.00) = 65.70 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	68.71	0.00	0.00	- 3.01	0.00	0.00	0.00	65.70

-----

Segment Leq : 65.70 dBA

Total Leq All Segments: 66.20 dBA

Results segment # 1: North Talbot (night)

-----

Source height = 1.32 m

ROAD (0.00 + 50.07 + 0.00) = 50.07 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	59.77	0.00	- 9.70	0.00	0.00	0.00	0.00	50.07

Segment Leq : 50.07 dBA

Results segment # 2: Howard Ave (night)

Source height = 1.32 m

ROAD (0.00 + 59.16 + 0.00) = 59.16 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	62.17	0.00	0.00	- 3.01	0.00	0.00	0.00	59.16

Segment Leq : 59.16 dBA

Total Leq All Segments: 59.66 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 66.20  
(NIGHT): 59.66

Filename: b1west.te                    Time Period: Day/Night 16/8 hours  
Description: Building #1 West Facade Floor 1

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 152.00 / 152.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 15.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Howard Ave (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 : 15.00 / 15.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Dougal Pk Ea (day/night)

-----  
Car traffic volume : 14497/1611 veh/TimePeriod \*  
Medium truck volume : 305/34 veh/TimePeriod \*  
Heavy truck volume : 458/51 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 12000  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Dougal Pk Ea (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 : 295.00 / 295.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 4: Dougal Pk So (day/night)

-----  
Car traffic volume : 5557/617 veh/TimePeriod \*



-----  
Segment Leq : 68.71 dBA

Results segment # 3: Dougal Pk Ea (day)  
-----

Source height = 1.32 m

ROAD (0.00 + 52.47 + 0.00) = 52.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	68.42	0.00	-12.94	- 3.01	0.00	0.00	0.00	52.47

-----

Segment Leq : 52.47 dBA

Results segment # 4: Dougal Pk So (day)  
-----

Source height = 1.32 m

ROAD (0.00 + 48.15 + 0.00) = 48.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	64.25	0.00	-13.08	- 3.01	0.00	0.00	0.00	48.15

-----

Segment Leq : 48.15 dBA

Total Leq All Segments: 68.97 dBA

Results segment # 1: North Talbot (night)  
-----

Source height = 1.32 m

ROAD (0.00 + 46.70 + 0.00) = 46.70 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	59.77	0.00	-10.06	- 3.01	0.00	0.00	0.00	46.70

-----

Segment Leq : 46.70 dBA

Results segment # 2: Howard Ave (night)

-----  
Source height = 1.32 m

ROAD (0.00 + 62.17 + 0.00) = 62.17 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	62.17	0.00	0.00	0.00	0.00	0.00	0.00	62.17

-----

Segment Leq : 62.17 dBA

Results segment # 3: Dougal Pk Ea (night)

-----  
Source height = 1.32 m

ROAD (0.00 + 45.95 + 0.00) = 45.95 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	61.89	0.00	-12.94	- 3.01	0.00	0.00	0.00	45.95

-----

Segment Leq : 45.95 dBA

Results segment # 4: Dougal Pk So (night)

-----  
Source height = 1.31 m

ROAD (0.00 + 41.57 + 0.00) = 41.57 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	57.66	0.00	-13.08	- 3.01	0.00	0.00	0.00	41.57

-----

Segment Leq : 41.57 dBA

Total Leq All Segments: 62.43 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 68.97  
(NIGHT): 62.43



Filename: b2north.te            Time Period: Day/Night 16/8 hours  
Description: Building #2 North Facade Floor 1

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 15.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Howard Ave (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 : 60.00 / 60.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 2: Dougal Pk Ea (day/night)

-----  
Car traffic volume : 14497/1611 veh/TimePeriod \*  
Medium truck volume : 305/34 veh/TimePeriod \*  
Heavy truck volume : 458/51 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 12000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Dougal Pk Ea (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 : 290.00 / 290.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Dougal Pk So (day/night)

-----  
Car traffic volume : 5557/617 veh/TimePeriod \*  
Medium truck volume : 117/13 veh/TimePeriod \*  
Heavy truck volume : 175/19 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 4600  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Dougal Pk So (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 : 300.00 / 300.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Results segment # 1: Howard Ave (day)

-----

Source height = 1.32 m

ROAD (0.00 + 59.68 + 0.00) = 59.68 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	68.71	0.00	- 6.02	- 3.01	0.00	0.00	0.00	59.68

Segment Leq : 59.68 dBA

Results segment # 2: Dougal Pk Ea (day)

Source height = 1.32 m

ROAD (0.00 + 55.56 + 0.00) = 55.56 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	68.42	0.00	-12.86	0.00	0.00	0.00	0.00	55.56

Segment Leq : 55.56 dBA

Results segment # 3: Dougal Pk So (day)

Source height = 1.32 m

ROAD (0.00 + 51.24 + 0.00) = 51.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	64.25	0.00	-13.01	0.00	0.00	0.00	0.00	51.24

Segment Leq : 51.24 dBA

Total Leq All Segments: 61.53 dBA

Results segment # 1: Howard Ave (night)

Source height = 1.32 m

ROAD (0.00 + 53.14 + 0.00) = 53.14 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	62.17	0.00	- 6.02	- 3.01	0.00	0.00	0.00	53.14

-----  
Segment Leq : 53.14 dBA

Results segment # 2: Dougal Pk Ea (night)  
-----

Source height = 1.32 m

ROAD (0.00 + 49.03 + 0.00) = 49.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	61.89	0.00	-12.86	0.00	0.00	0.00	0.00	49.03

-----

Segment Leq : 49.03 dBA

Results segment # 3: Dougal Pk So (night)  
-----

Source height = 1.31 m

ROAD (0.00 + 44.65 + 0.00) = 44.65 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	57.66	0.00	-13.01	0.00	0.00	0.00	0.00	44.65

-----

Segment Leq : 44.65 dBA

Total Leq All Segments: 54.99 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 61.53  
(NIGHT): 54.99

Filename: b2east.te                            Time Period: Day/Night 16/8 hours  
Description: Building #2 East Facade Floor 1

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 145.00 / 145.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 2: Dougal Pk Ea (day/night)

-----  
Car traffic volume : 14497/1611 veh/TimePeriod \*  
Medium truck volume : 305/34 veh/TimePeriod \*  
Heavy truck volume : 458/51 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 12000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Dougal Pk Ea (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 : 295.00 / 295.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Dougal Pk So (day/night)

-----  
Car traffic volume : 5557/617 veh/TimePeriod \*  
Medium truck volume : 117/13 veh/TimePeriod \*  
Heavy truck volume : 175/19 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 4600  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Dougal Pk So (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 : 305.00 / 305.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Results segment # 1: North Talbot (day)

-----

Source height = 1.32 m

ROAD (0.00 + 53.43 + 0.00) = 53.43 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.29	0.00	-9.85	-3.01	0.00	0.00	0.00	53.43

Segment Leq : 53.43 dBA

Results segment # 2: Dougal Pk Ea (day)

Source height = 1.32 m

ROAD (0.00 + 52.47 + 0.00) = 52.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	68.42	0.00	-12.94	-3.01	0.00	0.00	0.00	52.47

Segment Leq : 52.47 dBA

Results segment # 3: Dougal Pk So (day)

Source height = 1.32 m

ROAD (0.00 + 48.15 + 0.00) = 48.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	64.25	0.00	-13.08	-3.01	0.00	0.00	0.00	48.15

Segment Leq : 48.15 dBA

Total Leq All Segments: 56.65 dBA

Results segment # 1: North Talbot (night)

Source height = 1.32 m

ROAD (0.00 + 46.91 + 0.00) = 46.91 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	59.77	0.00	-9.85	-3.01	0.00	0.00	0.00	46.91

-----  
Segment Leq : 46.91 dBA

Results segment # 2: Dougal Pk Ea (night)  
-----

Source height = 1.32 m

ROAD (0.00 + 45.95 + 0.00) = 45.95 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.89	0.00	-12.94	- 3.01	0.00	0.00	0.00	45.95

-----

Segment Leq : 45.95 dBA

Results segment # 3: Dougal Pk So (night)  
-----

Source height = 1.31 m

ROAD (0.00 + 41.57 + 0.00) = 41.57 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	57.66	0.00	-13.08	- 3.01	0.00	0.00	0.00	41.57

-----

Segment Leq : 41.57 dBA

Total Leq All Segments: 50.12 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 56.65  
(NIGHT): 50.12



Filename: b2south.te            Time Period: Day/Night 16/8 hours  
Description: Building #2 South Facade Floor 1

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 146.00 / 146.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 15.00  
 Medium Truck % of Total Volume : 2.00  
 Heavy Truck % of Total Volume : 3.00  
 Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Howard Ave (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 : 34.00 / 34.00 m  
 Receiver height : 2.00 / 2.00 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: North Talbot (day)

-----  
 Source height = 1.32 m

ROAD (0.00 + 56.41 + 0.00) = 56.41 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	66.29	0.00	- 9.88	0.00	0.00	0.00	0.00	56.41

-----

Segment Leq : 56.41 dBA

Results segment # 2: Howard Ave (day)

-----  
 Source height = 1.32 m

ROAD (0.00 + 62.14 + 0.00) = 62.14 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	68.71	0.00	- 3.55	- 3.01	0.00	0.00	0.00	62.14

-----

Segment Leq : 62.14 dBA

Total Leq All Segments: 63.17 dBA

Results segment # 1: North Talbot (night)

-----

Source height = 1.32 m

ROAD (0.00 + 49.89 + 0.00) = 49.89 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	59.77	0.00	- 9.88	0.00	0.00	0.00	0.00	49.89

Segment Leq : 49.89 dBA

Results segment # 2: Howard Ave (night)

Source height = 1.32 m

ROAD (0.00 + 55.60 + 0.00) = 55.60 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	62.17	0.00	- 3.55	- 3.01	0.00	0.00	0.00	55.60

Segment Leq : 55.60 dBA

Total Leq All Segments: 56.63 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.17  
(NIGHT): 56.63

Filename: b2west.te                            Time Period: Day/Night 16/8 hours  
Description: Building #2 West Facade Floor 1

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 160.00 / 160.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 15.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Howard Ave (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 : 39.00 / 39.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Dougal Pk Ea (day/night)

-----  
Car traffic volume : 14497/1611 veh/TimePeriod \*  
Medium truck volume : 305/34 veh/TimePeriod \*  
Heavy truck volume : 458/51 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 12000  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Dougal Pk Ea (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 : 295.00 / 295.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 4: Dougal Pk So (day/night)

-----  
Car traffic volume : 5557/617 veh/TimePeriod \*

Medium truck volume : 117/13 veh/TimePeriod \*  
 Heavy truck volume : 175/19 veh/TimePeriod \*  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 4600  
 Percentage of Annual Growth : 2.50  
 Number of Years of Growth : 14.00  
 Medium Truck % of Total Volume : 2.00  
 Heavy Truck % of Total Volume : 3.00  
 Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 4: Dougal Pk So (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 : 305.00 / 305.00 m  
 Receiver height : 2.00 / 2.00 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: North Talbot (day)

-----

Source height = 1.32 m

ROAD (0.00 + 53.00 + 0.00) = 53.00 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.29	0.00	-10.28	-3.01	0.00	0.00	0.00	53.00

-----

Segment Leq : 53.00 dBA

Results segment # 2: Howard Ave (day)

-----

Source height = 1.32 m

ROAD (0.00 + 64.56 + 0.00) = 64.56 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	90	0.00	68.71	0.00	-4.15	0.00	0.00	0.00	0.00	64.56

-----

-----  
Segment Leq : 64.56 dBA

Results segment # 3: Dougal Pk Ea (day)  
-----

Source height = 1.32 m

ROAD (0.00 + 52.47 + 0.00) = 52.47 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	68.42	0.00	-12.94	-3.01	0.00	0.00	0.00	52.47

-----

Segment Leq : 52.47 dBA

Results segment # 4: Dougal Pk So (day)  
-----

Source height = 1.32 m

ROAD (0.00 + 48.15 + 0.00) = 48.15 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	64.25	0.00	-13.08	-3.01	0.00	0.00	0.00	48.15

-----

Segment Leq : 48.15 dBA

Total Leq All Segments: 65.18 dBA

Results segment # 1: North Talbot (night)  
-----

Source height = 1.32 m

ROAD (0.00 + 46.48 + 0.00) = 46.48 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	59.77	0.00	-10.28	-3.01	0.00	0.00	0.00	46.48

-----

Segment Leq : 46.48 dBA

Results segment # 2: Howard Ave (night)

-----  
Source height = 1.32 m

ROAD (0.00 + 58.02 + 0.00) = 58.02 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	62.17	0.00	- 4.15	0.00	0.00	0.00	0.00	58.02

-----

Segment Leq : 58.02 dBA

Results segment # 3: Dougal Pk Ea (night)

-----  
Source height = 1.32 m

ROAD (0.00 + 45.95 + 0.00) = 45.95 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	61.89	0.00	-12.94	- 3.01	0.00	0.00	0.00	45.95

-----

Segment Leq : 45.95 dBA

Results segment # 4: Dougal Pk So (night)

-----  
Source height = 1.31 m

ROAD (0.00 + 41.57 + 0.00) = 41.57 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	57.66	0.00	-13.08	- 3.01	0.00	0.00	0.00	41.57

-----

Segment Leq : 41.57 dBA

Total Leq All Segments: 58.65 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 65.18  
(NIGHT): 58.65



Filename: b3north.te            Time Period: Day/Night 16/8 hours  
Description: Building #3 North Facade Floor 1

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 15.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: Howard Ave (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 : 60.00 / 60.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 2: Dougal Pk Ea (day/night)

-----  
Car traffic volume : 14497/1611 veh/TimePeriod \*  
Medium truck volume : 305/34 veh/TimePeriod \*  
Heavy truck volume : 458/51 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 12000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Dougal Pk Ea (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 : 310.00 / 310.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Dougal Pk So (day/night)

-----  
Car traffic volume : 5557/617 veh/TimePeriod \*  
Medium truck volume : 117/13 veh/TimePeriod \*  
Heavy truck volume : 175/19 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 4600  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Dougal Pk So (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 : 320.00 / 320.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Results segment # 1: Howard Ave (day)

-----

Source height = 1.32 m

ROAD (0.00 + 59.68 + 0.00) = 59.68 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	68.71	0.00	- 6.02	- 3.01	0.00	0.00	0.00	59.68

Segment Leq : 59.68 dBA

Results segment # 2: Dougal Pk Ea (day)

Source height = 1.32 m

ROAD (0.00 + 55.27 + 0.00) = 55.27 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	68.42	0.00	-13.15	0.00	0.00	0.00	0.00	55.27

Segment Leq : 55.27 dBA

Results segment # 3: Dougal Pk So (day)

Source height = 1.32 m

ROAD (0.00 + 50.96 + 0.00) = 50.96 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	64.25	0.00	-13.29	0.00	0.00	0.00	0.00	50.96

Segment Leq : 50.96 dBA

Total Leq All Segments: 61.43 dBA

Results segment # 1: Howard Ave (night)

Source height = 1.32 m

ROAD (0.00 + 53.14 + 0.00) = 53.14 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	62.17	0.00	- 6.02	- 3.01	0.00	0.00	0.00	53.14

-----  
Segment Leq : 53.14 dBA

Results segment # 2: Dougal Pk Ea (night)  
-----

Source height = 1.32 m

ROAD (0.00 + 48.74 + 0.00) = 48.74 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	61.89	0.00	-13.15	0.00	0.00	0.00	0.00	48.74

-----

Segment Leq : 48.74 dBA

Results segment # 3: Dougal Pk So (night)  
-----

Source height = 1.31 m

ROAD (0.00 + 44.37 + 0.00) = 44.37 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	57.66	0.00	-13.29	0.00	0.00	0.00	0.00	44.37

-----

Segment Leq : 44.37 dBA

Total Leq All Segments: 54.89 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 61.43  
(NIGHT): 54.89

Filename: b3east.te                    Time Period: Day/Night 16/8 hours  
Description: Building #3 East Facade Floor 1

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 128.00 / 128.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 2: Dougal Pk Ea (day/night)

-----  
Car traffic volume : 14497/1611 veh/TimePeriod \*  
Medium truck volume : 305/34 veh/TimePeriod \*  
Heavy truck volume : 458/51 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 12000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Dougal Pk Ea (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 : 315.00 / 315.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Dougal Pk So (day/night)

-----  
Car traffic volume : 5557/617 veh/TimePeriod \*  
Medium truck volume : 117/13 veh/TimePeriod \*  
Heavy truck volume : 175/19 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 4600  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Dougal Pk So (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 : 325.00 / 325.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Results segment # 1: North Talbot (day)

-----

Source height = 1.32 m

ROAD (0.00 + 53.97 + 0.00) = 53.97 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.29	0.00	-9.31	-3.01	0.00	0.00	0.00	53.97

Segment Leq : 53.97 dBA

Results segment # 2: Dougal Pk Ea (day)

Source height = 1.32 m

ROAD (0.00 + 52.19 + 0.00) = 52.19 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	68.42	0.00	-13.22	-3.01	0.00	0.00	0.00	52.19

Segment Leq : 52.19 dBA

Results segment # 3: Dougal Pk So (day)

Source height = 1.32 m

ROAD (0.00 + 47.88 + 0.00) = 47.88 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	0	0.00	64.25	0.00	-13.36	-3.01	0.00	0.00	0.00	47.88

Segment Leq : 47.88 dBA

Total Leq All Segments: 56.78 dBA

Results segment # 1: North Talbot (night)

Source height = 1.32 m

ROAD (0.00 + 47.45 + 0.00) = 47.45 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	59.77	0.00	-9.31	-3.01	0.00	0.00	0.00	47.45

-----  
Segment Leq : 47.45 dBA

Results segment # 2: Dougal Pk Ea (night)  
-----

Source height = 1.32 m

ROAD (0.00 + 45.66 + 0.00) = 45.66 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	61.89	0.00	-13.22	- 3.01	0.00	0.00	0.00	45.66

-----

Segment Leq : 45.66 dBA

Results segment # 3: Dougal Pk So (night)  
-----

Source height = 1.31 m

ROAD (0.00 + 41.29 + 0.00) = 41.29 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	0	0.00	57.66	0.00	-13.36	- 3.01	0.00	0.00	0.00	41.29

-----

Segment Leq : 41.29 dBA

Total Leq All Segments: 50.25 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 56.78  
(NIGHT): 50.25



Filename: b3south.te            Time Period: Day/Night 16/8 hours  
Description: Building #3 South Facade Floor 1

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 130.00 / 130.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 15.00  
 Medium Truck % of Total Volume : 2.00  
 Heavy Truck % of Total Volume : 3.00  
 Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Howard Ave (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 : 34.00 / 34.00 m  
 Receiver height : 2.00 / 2.00 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: North Talbot (day)

-----  
 Source height = 1.32 m

ROAD (0.00 + 56.92 + 0.00) = 56.92 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	66.29	0.00	- 9.38	0.00	0.00	0.00	0.00	56.92

-----

Segment Leq : 56.92 dBA

Results segment # 2: Howard Ave (day)

-----  
 Source height = 1.32 m

ROAD (0.00 + 62.14 + 0.00) = 62.14 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	68.71	0.00	- 3.55	- 3.01	0.00	0.00	0.00	62.14

-----

Segment Leq : 62.14 dBA

Total Leq All Segments: 63.28 dBA

Results segment # 1: North Talbot (night)

-----

Source height = 1.32 m

ROAD (0.00 + 50.39 + 0.00) = 50.39 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	59.77	0.00	- 9.38	0.00	0.00	0.00	0.00	50.39

Segment Leq : 50.39 dBA

Results segment # 2: Howard Ave (night)

Source height = 1.32 m

ROAD (0.00 + 55.60 + 0.00) = 55.60 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	62.17	0.00	- 3.55	- 3.01	0.00	0.00	0.00	55.60

Segment Leq : 55.60 dBA

Total Leq All Segments: 56.74 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 63.28  
(NIGHT): 56.74

Filename: b3west.te                    Time Period: Day/Night 16/8 hours  
Description: Building #3 West Facade Floor 1

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 142.00 / 142.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 15.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Howard Ave (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 : 39.00 / 39.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 3: Dougal Pk Ea (day/night)

-----  
Car traffic volume : 14497/1611 veh/TimePeriod \*  
Medium truck volume : 305/34 veh/TimePeriod \*  
Heavy truck volume : 458/51 veh/TimePeriod \*  
Posted speed limit : 60 km/h  
Road gradient : 0 %  
Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 12000  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 14.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 3: Dougal Pk Ea (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 : 315.00 / 315.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

Road data, segment # 4: Dougal Pk So (day/night)

-----  
Car traffic volume : 5557/617 veh/TimePeriod \*

Medium truck volume : 117/13 veh/TimePeriod \*  
 Heavy truck volume : 175/19 veh/TimePeriod \*  
 Posted speed limit : 60 km/h  
 Road gradient : 0 %  
 Road pavement : 1 (Typical asphalt or concrete)

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

24 hr Traffic Volume (AADT or SADT): 4600  
 Percentage of Annual Growth : 2.50  
 Number of Years of Growth : 14.00  
 Medium Truck % of Total Volume : 2.00  
 Heavy Truck % of Total Volume : 3.00  
 Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 4: Dougal Pk So (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 : 325.00 / 325.00 m  
 Receiver height : 2.00 / 2.00 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: North Talbot (day)

-----

Source height = 1.32 m

ROAD (0.00 + 53.52 + 0.00) = 53.52 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	66.29	0.00	- 9.76	- 3.01	0.00	0.00	0.00	53.52

-----

Segment Leq : 53.52 dBA

Results segment # 2: Howard Ave (day)

-----

Source height = 1.32 m

ROAD (0.00 + 64.56 + 0.00) = 64.56 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	68.71	0.00	- 4.15	0.00	0.00	0.00	0.00	64.56

-----  
Segment Leq : 64.56 dBA

Results segment # 3: Dougal Pk Ea (day)  
-----

Source height = 1.32 m

ROAD (0.00 + 52.19 + 0.00) = 52.19 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	68.42	0.00	-13.22	- 3.01	0.00	0.00	0.00	52.19

-----

Segment Leq : 52.19 dBA

Results segment # 4: Dougal Pk So (day)  
-----

Source height = 1.32 m

ROAD (0.00 + 47.88 + 0.00) = 47.88 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	64.25	0.00	-13.36	- 3.01	0.00	0.00	0.00	47.88

-----

Segment Leq : 47.88 dBA

Total Leq All Segments: 65.20 dBA

Results segment # 1: North Talbot (night)  
-----

Source height = 1.32 m

ROAD (0.00 + 47.00 + 0.00) = 47.00 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	59.77	0.00	- 9.76	- 3.01	0.00	0.00	0.00	47.00

-----

Segment Leq : 47.00 dBA

Results segment # 2: Howard Ave (night)

-----  
Source height = 1.32 m

ROAD (0.00 + 58.02 + 0.00) = 58.02 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	62.17	0.00	- 4.15	0.00	0.00	0.00	0.00	58.02

-----

Segment Leq : 58.02 dBA

Results segment # 3: Dougal Pk Ea (night)

-----  
Source height = 1.32 m

ROAD (0.00 + 45.66 + 0.00) = 45.66 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	61.89	0.00	-13.22	- 3.01	0.00	0.00	0.00	45.66

-----

Segment Leq : 45.66 dBA

Results segment # 4: Dougal Pk So (night)

-----  
Source height = 1.31 m

ROAD (0.00 + 41.29 + 0.00) = 41.29 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
0	90	0.00	57.66	0.00	-13.36	- 3.01	0.00	0.00	0.00	41.29

-----

Segment Leq : 41.29 dBA

Total Leq All Segments: 58.66 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 65.20  
(NIGHT): 58.66



Filename: ola.te                            Time Period: Day/Night 16/8 hours  
Description: Outdoor Living Area

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

-----  
Car traffic volume : 12781/1420 veh/TimePeriod \*  
Medium truck volume : 269/30 veh/TimePeriod \*  
Heavy truck volume : 404/45 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): 8900  
Percentage of Annual Growth : 2.50  
Number of Years of Growth : 21.00  
Medium Truck % of Total Volume : 2.00  
Heavy Truck % of Total Volume : 3.00  
Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 1: North Talbot (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 : 120.00 / 120.00 m  
Receiver height : 2.00 / 2.00 m  
Topography : 1 (Flat/gentle slope; no barrier)  
Reference angle : 0.00

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

-----  
Car traffic volume : 22289/2477 veh/TimePeriod \*  
Medium truck volume : 469/52 veh/TimePeriod \*  
Heavy truck volume : 704/78 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): 18000  
Percentage of Annual Growth : 2.50

Number of Years of Growth : 15.00  
 Medium Truck % of Total Volume : 2.00  
 Heavy Truck % of Total Volume : 3.00  
 Day (16 hrs) % of Total Volume : 90.00

Data for Segment # 2: Howard Ave (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 : 42.00 / 42.00 m  
 Receiver height : 2.00 / 2.00 m  
 Topography : 1 (Flat/gentle slope; no barrier)  
 Reference angle : 0.00

Results segment # 1: North Talbot (day)

-----  
 Source height = 1.32 m

ROAD (0.00 + 57.26 + 0.00) = 57.26 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	66.29	0.00	- 9.03	0.00	0.00	0.00	0.00	57.26

-----

Segment Leq : 57.26 dBA

Results segment # 2: Howard Ave (day)

-----  
 Source height = 1.32 m

ROAD (0.00 + 64.24 + 0.00) = 64.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	68.71	0.00	- 4.47	0.00	0.00	0.00	0.00	64.24

-----

Segment Leq : 64.24 dBA

Total Leq All Segments: 65.03 dBA

Results segment # 1: North Talbot (night)

-----

Source height = 1.32 m

ROAD (0.00 + 50.74 + 0.00) = 50.74 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	59.77	0.00	- 9.03	0.00	0.00	0.00	0.00	50.74

Segment Leq : 50.74 dBA

Results segment # 2: Howard Ave (night)

Source height = 1.32 m

ROAD (0.00 + 57.70 + 0.00) = 57.70 dBA

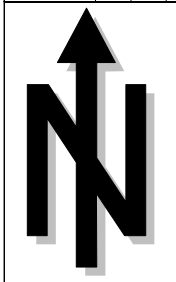
Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
- 90	90	0.00	62.17	0.00	- 4.47	0.00	0.00	0.00	0.00	57.70

Segment Leq : 57.70 dBA

Total Leq All Segments: 58.50 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 65.03  
(NIGHT): 58.50

# ATTACHMENT C



- > -99.0 dB
- > 35.0 dB
- > 40.0 dB
- > 45.0 dB
- > 50.0 dB
- > 55.0 dB
- > 60.0 dB
- > 65.0 dB
- > 70.0 dB
- > 75.0 dB
- > 80.0 dB
- > 85.0 dB



- + Point Source
- ⊕ Building
- ⊕ Building Evaluation

STATIONARY NOISE IMPACT  
4280 HOWARD PLACE, WINDSOR, ONTARIO

FIGURE 1  
NOISE IMPACT FROM NEIGHBORING BUILDINGS TO SITE

# ATTACHMENT D

**Table D1**  
**Stationary Noise Impact Source Data**  
**4280 Howard Place, Windsor, Ontario**

Noise Source Description	Cadna ID	Total SWL	Data Source or	Height Absolute	Above Roof	x	y
		(dBA)	Representative Data	(m)	(m)		
Small HVAC	Small_HVAC	81.9	Small_HVAC	6.5	1.5	17335337.8	4679056
Small HVAC	Small_HVAC	81.9	Small_HVAC	6.5	1.5	17335336.4	4679051
Small HVAC	Small_HVAC	81.9	Small_HVAC	6.5	1.5	17335338.3	4679047
Small HVAC	Small_HVAC	81.9	Small_HVAC	9.5	1.5	17335328.9	4679019
Small HVAC	Small_HVAC	81.9	Small_HVAC	9.5	1.5	17335332.7	4679015
Small HVAC	Small_HVAC	81.9	Small_HVAC	9.5	1.5	17335337.5	4679013