Environmental Noise Feasibility Study

Appleby Mall Residential Development

Proposed Residential Development
Appleby Line at New Street
City of Burlington

June 11, 2014
Project: 113-313

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TABLE OF CONTENTS

1.0 INTRODUCTION. 1

2.0 SITE AND AREA DESCRIPTION. 1

3.0 THE PROPOSED DEVELOPMENT. 1

4.0 NOISE SOURCES. 2
4.1 TRANSPORTATION NOISE SOURCES. 2
4.2 STATIONARY SOURCES. 2

5.0 ENVIRONMENTAL NOISE GUIDELINES. 2
5.1 MOE PUBLICATION NPC-300. 2
5.1.1 Transportation Noise Sources. 3
5.1.1.1 Architectural Elements. 3
5.1.1.2 Ventilation. 3
5.1.1.3 Outdoors. 3
5.1.2 Non-Impulse Stationary Noise Sources. 3
5.1.2.1 Sound Level Criteria. 4
5.1.2.2 Applicable Guideline Limits. 4
5.1.3 Impulse Stationary Noise Sources. 4

6.0 NOISE IMPACT ASSESSMENT. 5
6.1 TRANSPORTATION NOISE SOURCES. 5
6.2 STATIONARY NOISE SOURCES. 5
6.2.1 ACOUSTIC MODELLING. 5
6.2.2 RECEPTOR LOCATIONS. 6
6.2.3 AMBIENT SOUND LEVEL DUE TO ROAD TRAFFIC. 6
6.2.4 SOUND SOURCES. 6
6.2.5 RESULTS. 7
6.2.5.1 Non-Impulse Sound Exposures - Base Case. 7
6.2.5.2 Non-Impulse Sound Exposures - Emergency Generator. 7
6.2.5.3 Impulse Sound Exposures. 7

7.0 TRANSPORTATION SOURCE NOISE ABATEMENT REQUIREMENTS. 7
7.1 INDOORS. 8
7.1.1 Architectural Elements. 8
7.1.2 Ventilation Requirements. 8
7.2 OUTDOORS. 8
7.3 WARNING CLAUSES. 8

8.0 STATIONARY SOURCE NOISE ABATEMENT REQUIREMENTS. 9

9.0 CONCLUSIONS. 9

10.0 REFERENCES. 10

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TABLE OF CONTENTS (continued)

LIST OF TABLES

TABLE 1 EXISTING ROAD TRAFFIC DATA. 11

TABLE 2 PREDICTED UNMITIGATED SOUND EXPOSURES OUTDOORS TRANSPORTATION SOURCES. 12

TABLE 3 NON-IMPULSE SITE GENERATED SOUND EXPOSURE LEVELS UNMITIGATED - EXCLUDING GENERATOR. 13

TABLE 4 NON-IMPULSE SITE GENERATED SOUND EXPOSURE LEVELS UNMITIGATED - GENERATOR ONLY. 14

TABLE 5 IMPULSE SITE GENERATED SOUND EXPOSURE LEVELS UNMITIGATED - FORTINOS LOADING DOCK. 15

TABLE 6 MINIMUM NOISE ABATEMENT MEASURES. 16

TABLE 7 APPLEBY MALL ROOFTOP EQUIPMENT REQUIRED MITIGATION. 17

TABLE 8 NON-IMPULSE SITE GENERATED SOUND EXPOSURE LEVELS WITH MITIGATION 18

LIST OF TABLES

FIGURE 1 KEY PLAN

FIGURE 2A SITE PLAN

FIGURE 2B 2ND FLOOR AMENITY SPACE

FIGURE 3 NOISE SOURCE IDENTIFICATION

FIGURE 4 PREDICTED HOURLY NON-IMPULSE SOUND EXPOSURES - UNMITIGATED

FIGURE 5 PREDICTED HOURLY SOUND EXPOSURES - GENERATOR UNMITIGATED

FIGURE 6 PREDICTED HOURLY IMPULSE SOUND LEVELS - FORTINOS

FIGURE 7 PREDICTED HOURLY NON-IMPULSE SOUND EXPOSURES-WITH MITIGATION

LIST OF APPENDICES

APPENDIX A ROAD TRAFFIC DATA

APPENDIX B ENVIRONMENTAL NOISE GUIDELINES

APPENDIX C SAMPLE CALCULATION

APPENDIX D STATIONARY SOURCE ANALYSIS PARAMETERS

APPENDIX E DETAILS OF UNMITIGATED SOUND EXPOSURE CALCULATIONS

APPENDIX F ADDITIONAL FIGURES FOR UNMITIGATED IMPULSE SOURCES

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1.0 INTRODUCTION

Valcoustics Canada Ltd. (VCL) has been retained to prepare a Noise Feasability Study to assess the noise impact on the proposed residential development as part of the approvals process for the City of Burlington. Noise sources in the vicinity include both transportation noise sources (road traffic) and stationary noise sources (the existing mall). The sound exposures at the subject site have been predicted and compared to the applicable Ministry of the Environment (MOE) noise guideline limits. Where excesses above these guideline limits occur, noise mitigation measures have been recommended.

2.0 SITE AND AREA DESCRIPTION

The proposed project is the redevelopment of the lands at the northeast corner of the existing Appleby Mall, currently being used as customer parking for high-rise residential uses. The proposed residential development will be located along the northern perimeter. Specifically, the residential site is located at the southwest corner of Pinedale Avenue and Timber Lane and is surrounded by:

- The Fortinos food store and indoor renovated section of the existing Appleby Mall, with New Street beyond, to the south;
- Timber Lane, with existing 12-storey high-rise and two-storey townhouse residential dwellings beyond, to the east;
- Pinedale Avenue, with existing two-storey residential dwellings beyond, to the north; and
- Building F of the existing Appleby Mall, with Appleby Line beyond, to the west.

A Key Plan is included as Figure 1.

The analysis is based on the Site Plan prepared by SMV Architects, showing a latest revised date of October 11, 2013. Figure 2a shows the Site Plan in reduced form.

3.0 THE PROPOSED DEVELOPMENT

The proposed development consists of two new high-rise residential buildings, Building 1 and Building 2. The residential buildings will be situated along the northern perimeter of the existing

mall, on lands currently being used as customer parking. Building 1 is 15-storeys and Building 2 is 19-storeys. Each building will have commercial/retail uses at grade and residential above. There is a two-storey bridge structure connecting Buildings 1 and 2. The structure includes common indoor amenity space on the second level and common outdoor amenity space on the roof. At grade, the structure has arched vehicle entrances to the underground parking area of each building.

4.0 NOISE SOURCES

4.1 TRANSPORTATION NOISE SOURCES

The transportation noise sources with potential to impact the proposed development are road traffic on Appleby Line, Pinedale Avenue, Timber Lane and New Street. Traffic volumes on the other roadways in the vicinity are anticipated to be minor and no adverse noise impact is expected. Thus, noise impact from these roadways has not been considered further in the assessment.

For all roadways considered, existing 24-hour annual average daily traffic (AADT) turning movement counts (TMC) were provided by the City of Burlington (Appleby Line at Pinedale Avenue and New Street at Timber Lane). The TMC's obtained are applicable to the year 2011. A day/night split of 90%/10% was used to assess the day and nighttime scenarios. A growth rate of 2% compounded annually was applied to obtain the future design condition (year 2024) traffic volumes. An overall truck volume was provided with the data. However, the ratio of heavy trucks to medium trucks was not provided and was assumed to be at 60%/40%.

The traffic data is shown in Appendix A and summarized in Table 1.

4.2 STATIONARY SOURCES

The stationary source with the potential to cause adverse noise impact is the existing Appleby Mall, which consists of seven buildings. The buildings and current uses are:

- Building A - Beer Store;
- Building B - Rexall pharmacy;
- Buildings C, E and F - Multi-tenant retail buildings;
- Building D - LCBO; and
- The Fortinos food store which is connected to the existing/renovated mall (no Building Identifier provided).

The impact of both non-impulse and impulse generated sound from the stationary sources associated with the above mentioned commercial/retail buildings has been considered in this assessment.

5.0 ENVIRONMENTAL NOISE GUIDELINES

5.1 MOE PUBLICATION NPC-300

The applicable noise guidelines for new residential development are those in MOE Publication NPC-300, *"Environmental Noise Guideline, Stationary and Transportation Sources - Approval and Planning"*.

The newly released (October 21, 2013) MOE Publication NPC-300 noise guideline replaces four existing noise guidelines (Publications LU-131, NPC-205 and NPC-232, as well as Noise Assessment Criteria in Land Use Planning: Requirements, Procedures and Implementation) in Ontario.

NPC-300 addresses transportation sources as well as stationary sources of sound. The environmental noise guidelines of the MOE, as provided in Publication NPC-300, are discussed briefly below and summarized in Appendix B.

5.1.1 Transportation Noise Sources

5.1.1.1 Architectural Elements

In the daytime, the indoor criterion for road noise is $L_{eq\ Day}$ of 45 dBA for sensitive spaces such as living/dining rooms, dens and bedrooms. At night, the indoor criterion for road noise is $L_{eq\ Night}$ of 45 dBA for sensitive spaces such as living/dining rooms and dens and 40 dBA for bedrooms. The architectural design of the building envelope (walls, windows, etc.) must provide adequate sound isolation to achieve these indoor sound exposure limits, based on the applicable outdoor sound exposure at the facades.

5.1.1.2 Ventilation

In accordance with the MOE noise guideline for road traffic sources, if the daytime sound energy exposure, $L_{eq\ Day}^{(1)}$, at the exterior face of a noise sensitive window is greater than 65 dBA, means must be provided so that windows can be kept closed for noise control purposes and central air conditioning is required. For daytime sound exposures between 56 dBA and 65 dBA inclusive, there need only be the provision for adding air conditioning at a later date. A warning clause advising the occupant of the potential interference with some activities is also required. At nighttime, air conditioning would be required when the sound exposure exceeds 60 dBA ($L_{eq\ Night}^{(2)}$) at a noise sensitive window (provision for adding air conditioning is required when greater than 50 dBA).

5.1.1.3 Outdoors

For OLA's, the guideline is 55 dBA $L_{eq\ Day}$ (0700 to 2300 hours), with an excess not exceeding 5 dBA considered acceptable if it is technically not practicable to achieve the 55 dBA objective, providing warning clauses are registered on title. Note that for road traffic sources, a balcony is not considered an OLA, unless it is the only OLA for the occupant and it is:

- at least 4 m in depth;
- outside the building facade; and
- unenclosed.

5.1.2 Non-Impulse Stationary Noise Sources

Stationary sources are treated differently by the MOE guideline than transportation sources of noise such as road traffic and railways. Stationary source noise criteria used for noise impact assessment are dependent on the type of area and the ambient sound environment. The site and

area are Class 1 - Urban; i.e., an area where the ambient sound environment is dominated by "urban hum", primarily traffic noise. This is due to the proximity to the area road network.

5.1.2.1 Sound Level Criteria

MOE Publication NPC-300 states that the guideline limits shall be defined by the higher of the ambient sound level, due to road traffic noise, or the minimum exclusion limits for a Class 1 area of 50 dBA daytime (0700 to 1900 hours), 50 dBA evening (1900 to 2300 hours) and 45 dBA nighttime (2300 to 0700 hours). The limits apply at a noise sensitive plane of window (at all times) or at an outdoor point of reception in the daytime and evening only. There are no sound level limits for outdoor points of reception at night.

The MOE requires a "worst case" one-hour operating scenario be analysed. This would typically occur when the background ambient sound level is at a minimum and the noise generated from the stationary noise sources is at a maximum.

The guideline limits apply to the plane of window of habitable spaces such as living/dining/family rooms and sleep areas. No indoor sound exposure guidelines are provided for stationary sources.

For multi family buildings, as is the subject development, the assessment of outdoor noise impact is confined to the common amenity space.

The sound level limits contained in Publication NPC-300, do not apply to:

- car movements in parking lots; or
- the occasional movement of vehicles on the property such as infrequent delivery of goods to convenience stores, etc.

For emergency equipment, such as the emergency generator at Fortinos, NPC-300 states:

- the analysis should be done in absence of alL other sound sources on site; and
- the applicable limits are 5 dBA less stringent than those for the non-emergency equipment.

5.1.2.2 Applicable Guideline Limits

In this case, the ambient sound exposures, due to road traffic, at Buildings 1 and 2 are higher than the minimum exclusion limits at most locations in the daytime and evening. At night, the minimum exclusion limits have been used. Table 3 shows the applicable guideline limits. Section 6.2.3 details the ambient sound level calculation procedure.

5.1.3 Impulse Stationary Noise Sources

Impulsive sounds are a special category of sounds. Examples are banging of metal, punch presses, gunshots, etc. The "banging" sounds that occur when a truck is unloaded are also classified as impulsive.

Impulse sounds are measured and treated separately because of their special time characteristics. However, the same numerical sound level limits as indicated above apply. The assessment is done using the log mean average impulse sound level (L_{LM}). The L_{LM} descriptor is the energy

(logarithmic) average of the impulse sound levels. L_{LM} is inherently weighted to the higher values, unlike an arithmetic average, which would yield a much lower numerical result for a wide range of values.

The sound level limits noted above are for "frequent" impulses (at least 9 impulses in a 1-hour period).

6.0 NOISE IMPACT ASSESSMENT

6.1 TRANSPORTATION NOISE SOURCES

Using the road traffic data in Table 1, the sound energy exposures, in terms of $L_{eq\ Day}$ and $L_{eq\ Night}$, were determined using STAMSON V5.04 – ORNAMENT, the computerized road traffic noise prediction model of the MOE.

Daytime and nighttime sound exposures were predicted at the top floor of each building, 33.3 m for Building 1 and 46.8 m for Building 2. All private balconies or terraces are expected to be less than 4 m in depth. Therefore, as per NPC 300, the sound level limits do not apply to these areas. However, the common outdoor amenity space, atop the two storey connecting structure, would be subject to the sound level limits. The OLA receptor for this second storey area, was taken at 1.5 m above the top of the roof (9.0 m in height relative to grade).

The highest unmitigated daytime/nighttime sound exposures of 61 dBA/54 dBA are predicted to occur on the west facade of Building 1, facing toward Appleby Line. The unmitigated daytime sound exposure in the common amenity area (OLA) is predicted to be 59 dBA.

The predicted sound exposures at other locations on the site would be less due to the increased distance attenuation or inherent screening due to the orientations of the buildings.

Table 2 summarizes the unmitigated daytime and nighttime sound exposure predictions at sample locations on the site.

Appendix C shows a sample calculation.

6.2 STATIONARY NOISE SOURCES

6.2.1 ACOUSTIC MODELLING

A 3-D acoustic model of the existing Appleby Mall, as shown in Figures 3 to 6, was developed using CadnaA V4.4 environmental noise modelling software, which follows the protocol of the ISO Standard 9613.2, *"Acoustics – Attenuation of Sound During Propagation Outdoors"* , to determine the predicted sound exposures at each receptor location, accounting for distance attenuation, ground attenuation and the relevant screening by sound barriers, where present.

6.2.2 RECEPTOR LOCATIONS

A total of six (6) receptors were used in the analysis. The receptors are:

- R01, R02 and R03, representing exterior plane of window receptors at Building 1;

- R04, R05 and R06, representing exterior plane of window receptors at Building 2; and

- OPOR1, representing an outdoor point of reception at the common outdoor amenity area on the roof of the two storey connection building.

All receptor locations were assessed at top storey heights for all scenarios. R01 to R03 were taken at a height of 33.3 m for Building 1 and R04, R05 and R06 were taken at a height of 46.8 m for Building 2. The OPOR1 receptor was taken at 1.5 m above the top of the roof of the connection building (receptor height 9.0 m above grade).

Figures 3 to 6 show the location of the assessment receptors.

6.2.3 AMBIENT SOUND LEVEL DUE TO ROAD TRAFFIC

Minimum hourly traffic volumes for each roadway were derived from the existing (2011) 24-hour AADT's provided, by applying the ITE typical traffic distribution for well travelled roadways. According to this distribution the minimum hourly volumes would occur at:

- 1000 to 1100 in the daytime, where 3.5% of the 24 hour traffic volumes would occur;

- 2200 to 2300 in the evening, where 2.5% of the 24 hour traffic volume would occur; and

- 0400 to 0500 in the nighttime, where 0.2% of the 24 hour traffic volume would occur.

Using these minimum hourly volumes, the ambient background road traffic noise levels were calculated using STAMSON V5.04, the computerized road traffic noise prediction model of the MOE.

The predicted ambient sound levels at the receptor locations are shown in Table 3.

6.2.4 SOUND SOURCES

A site investigation and sound level measurements were done at the Fortinos food store on December 11, 2008. The sound sources include rooftop and grade level mechanical equipment, loading dock activities and the operation of an indoor 50 kW emergency generator (interfacing with the exterior via fresh air intake and exhaust openings and a combustion exhaust stack) all located on the roof. All sources have been included in the assessment.

For all other buildings the sound sources were modelled using manufacturer's sound level data (rooftop mechanical equipment) or VCL library sound data (truck activity).

The analysis parameters are shown and discussed in further detail in Appendix D. The sound sources are shown on Figure 3.

6.2.5 RESULTS

6.2.5.1 Non-Impulse Sound Exposures - Base Case

The predicted sound exposures in the base case scenario (i.e., from the existing conditions) exceed the applicable nighttime sound level limits at all receptors, except R03 where compliance is shown. For the daytime and evening scenarios, a minor 1 dBA sound level excess is predicted at R04 in the daytime and evening and at R02 in the evening only. At all other receptors the predicted sound exposures meet the applicable sound level limits.

The predicted nighttime sound level excesses are mostly due to the mechanical rooftop equipment at both the renovated mall, Building D and one unit at Building C.

Table 3 and Figure 4 show the predicted unmitigated non-impulse sound exposures at the receptors as well as the applicable guideline limits.

Appendix E shows details of the Base Case sound exposure calculations.

6.2.5.2 Non-Impulse Sound Exposures - Emergency Generator

The predicted sound exposures due to the operation of the Fortinos emergency generator are below the applicable sound level limits at all receptors.

Figure 5 and Table 4 show the unmitigated daytime hourly sound exposures at the assessment receptors, due to the operation of the Fortinos emergency generator.

6.2.5.3 Impulse Sound Exposures

The predicted impulse sound levels at all receptors are below the applicable sound level limits.

Table 5 and Figure 6 show the predicted impulse sound levels at the receptors due to the unloading of trucks at the renovated mall.

7.0 TRANSPORTATION SOURCE NOISE ABATEMENT REQUIREMENTS

The noise control measures can generally be classified into two categories which are interrelated, but which the designer can treat separately for the most part:

(a) Architectural elements to achieve acceptable indoor noise guidelines;

(b) Design features to protect the OLA's.

Transportation source noise abatement requirements are summarized on Figure 2a, 2b and in Table 6 along with the notes to Table 6.

7.1 INDOORS

7.1.1 Architectural Elements

The indoor noise exposure guidelines can be achieved by using appropriate construction for exterior walls, windows and doors. In determining the worst-case architectural requirements for the residential suites, wall and window areas were *assumed* to be 80% and 30% of the associated floor area, respectively, on the facades exposed directly or at an angle to the road traffic noise sources for both living/dining areas and sleeping quarters.

For both Buildings 1 and 2, exterior walls and windows meeting the minimum non-acoustical requirements of the Ontario Building Code, will be sufficient to meet the applicable indoor sound level limits. This is expected to be achieved with exterior walls meeting a minimum STC of 37 and windows meeting a minimum STC of 26.

The final sound isolation requirements should be reviewed when architectural plans are developed. This is typically required by the City at the time of building permit application.

7.1.2 Ventilation Requirements

Based on the daytime and nighttime sound exposures, Buildings 1 and 2 will require the provision for adding air conditioning by the occupant at a future date. However, for high-rise multi-family buildings this provision is not practical to implement. Thus, it is recommended that the minimum requirement be upgraded to mandatory air conditioning. However, it is expected that both buildings will be provided with air conditioning, regardless of the noise control requirements. This will meet the minimum requirement inherently.

7.2 OUTDOORS

The unmitigated daytime OLA sound exposure at the outdoor amenity space atop the connecting structure is predicted to be 59 dBA. This meets the upper 60 dBA MOE OLA criterion, provided warning clauses are registered on title. To meet the 55 dBA design objective, a 1.3 m high sound barrier/parapet wall along the complete perimeter of the connecting structure would be required. Typically a minimum 1.1 m high safety parapet would be provided for any outdoor areas above grade. Therefore the 1.3 m high parapet/sound barrier would be considered a minor upgrade and is recommended in order to meet the 55 dBA design objective.

The above sound barrier requirements were assessed based on flat topography. The sound barrier requirements should be checked once the grading plan becomes available.

The sound barriers must be of solid construction with no gaps, cracks or holes and must have a minimum surface weight of 20 kg/m². A variety of materials are available, including concrete, masonry, glass, wood, specialty composite materials, or a combination of the above.

7.3 WARNING CLAUSES

Where the sound exposure guidelines are exceeded, appropriate warning clauses should be registered on title to make future occupants aware of the potential noise situation. The required

warning clauses and the appropriate wording are given in Table 6 and in the notes to Table 6, respectively.

8.0 STATIONARY SOURCE NOISE ABATEMENT REQUIREMENTS

The sound level excesses are mostly due to the rooftop mechanical equipment on the renovated mall, Building D and the one larger unit on Building C. To meet the applicable sound level limits at the subject site, mitigation for some of these units is required. Table 7 shows the units that need mitigation as well as the anticipated overall required reductions (dBA). Accounting for this mitigation, the predicted sound levels at the site will meet the applicable sound level limits. The mitigated sound exposure levels are shown on Figure 7 and in Table 8.

The required attenuation could be achieved through a variety of methods including:

- at source mitigation techniques such as installing quieter fans or sound blankets on the compressors within the packaged HVAC units.

- replacing the existing rooftop units with quieter units; or

- using local rooftop acoustic screens around the units.

It is recommended that as part of the Site Plan approval application, a detailed study of the noise impacts from the existing mall, which includes sound measurements of the rooftop sources, be done. The measurement data can be used to refine the acoustical predictions and the mitigation requirements.

9.0 CONCLUSIONS

To meet the applicable sound level limits, mitigation is required both at the site and at the existing Appleby Mall. The mitigation measures are considered typical for a development site in proximity to urban collector or arterial roads or commercial developments. The residential site is considered feasible, acoustically.

In summary the results of this study are:

TRANSPORTATION SOURCES

- The minimum ventilation requirement for both buildings is the provision for adding air conditioning. However, for high-rise multi-family buildings this requirement is typically not practical to implement. Thus, the minimum requirement has been upgraded to mandatory air conditioning.

- Exterior wall and window construction meeting the minimum non-acoustical requirements of the OBC will be sufficient to meet the indoor sound level criteria of the MOE.

- A 1.3 m high sound barrier/parapet wall at the common outdoor amenity area is required to mitigate the daytime OLA sound exposures to 55 dBA.

- The transportation source mitigation requirements are shown in Table 6.

STATIONARY SOURCES

- The predicted impulse sound levels due to truck unloading and non-impulse sound levels due to the emergency generator at the Fortinos will be below the applicable noise guideline limits at both buildings.

- The unmitigated non-impulse sound exposure assessment indicates the potential for sound level excesses above the applicable sound level limits due to the rooftop equipment at the renovated mall, Building D and Building C.

- To achieve compliance at the proposed site, some of the rooftop units require mitigation. These units are identified in Table 7. Various methods are available that can be used to achieve these reductions. These methods are discussed briefly in Section 8.0.

- With the recommended noise mitigation measures listed in this report, the sound exposure levels at the subject site will comply with the noise guideline limits of the MOE.

- A detailed noise impact study should be done at the Site Plan approval stage.

10.0 REFERENCES

1. PC STAMSON 5.04, "Computer Program for Road Traffic Noise Assessment", Ontario Ministry of the Environment.

2. Environmental Noise Impact Assessment, Appleby Mall Redevelopment, Proposed Retail/Commercial Development, Appleby Line at New Street, City of Burlington", Valcoustics Canada Ltd., Project: 108-310, December 23, 2008.

3. "Environmental Noise Guideline, Stationary and Transportation Sources - Approval and Planning", Ministry of the Environment Publication NPC-300, August 2013.

4. Building Practice Note No. 56: "Controlling Sound Transmission into Buildings", by J. D. Quirt, Division of Building Research, National Council of Canada, September 1985.

5. "Road and Rail Noise: Effects on Housing", Canada Mortgage and Housing Corporation, Publication NHA 5156, 81/10.

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TABLE 1

EXISTING ROAD TRAFFIC DATA

Roadway	AADT[1]	Minimum Hourly Volumes[2]		% Trucks[3]		Speed Limit (kph)	% Grade
				Medium	Heavy		
Appleby Line	18 197	Day 1000-1100	637	1.1	1.7	50	–
		Evening 2200-2300	455				
		Night 0400-0500	36				
Timber Lane	3 790	Day 1000-1100	133	1.1	1.7	50	–
		Evening 2200-2300	95				
		Night 0400-0500	8				
New Street	17 155	Day 1000-1100	600	1.6	2.4	60	–
		Evening 2200-2300	429				
		Night 0400-0500	34				
Pinedale Avenue	6 818	Day 1000-1100	239	0.6	0.8	40	–
		Evening 2200-2300	170				
		Night 0400-0500	14				

Notes:

(1) 24-hour AADT provided by the City of Burlington.
(2) Minimum hourly volumes are based on the typical ITE traffic distribution for well travelled roadways.
(3) Overall truck volumes obtained from the City of Burlington were assumed to have a 60/40 heavy/medium split.

TABLE 2

PREDICTED UNMITIGATED SOUND EXPOSURES OUTDOORS[(1)]
TRANSPORTATION SOURCES

Location[(1)]	Source	Distance (m)[(2)]	$L_{eq\ Day}$ (dBA)	$L_{eq\ Night}$ (dBA)
Building 1 North Facade, North West Corner	Appleby Line	105	55	49
	Pinedale Avenue	15	59	52
	TOTAL	-	**60**	**54**
Building 1 West Facade, North West Corner	Appleby Line	105	58	52
	Pinedale Avenue	15	56	49
	New Street	275	52	45
	TOTAL	**-**	**61**	**54**
Building 1 South Facade, South West Corner	Appleby Line	109	55	49
	New Street	254	57	50
	Timber	173	46	40
	TOTAL	**-**	**59**	**53**
Building 2 North Facade, North East Corner	Appleby Line	262	51	45
	Pinedale Avenue	16	59	52
	TOTAL	-	**59**	**53**
Building 2 East Facade, North East Corner	Timber Lane	19	57	51
	Pinedale Avenue	16	56	49
	New Street	275	52	45
	TOTAL	-	**60**	**54**
Building 2 South Facade, South East Corner	Appleby Line	266	51	45
	New Street	254	55	49
	Timber Lane	15	57	50
	TOTAL	-	**60**	**53**
OLA	Appleby Line	188	55	-
	Pinedale Avenue	25	46	-
	Timber Lane	93	48	-
	New Street	265	55	-
	TOTAL	**-**	**59**	**-**

Notes:

(1) See Figure 2. Daytime and nighttime sound exposures were calculated at either 33.3 m or 46.8 m above grade representing a top storey noise sensitive plane of window for Building 1 and 2 respectively. For the OLA the daytime sound exposures were calculated at a height of 9.0 m.

(2) Distance indicated is taken from the centreline of the noise source to the point of reception.

TABLE 3

NON-IMPULSE SITE GENERATED SOUND EXPOSURE LEVELS
UNMITIGATED - EXCLUDING GENERATOR

Receptor[1]	Predicted L_{eq} (1) Due to Site (dBA)					
	Daytime (dBA)	Guideline Limit (dBA)[2]	Evening (dBA)	Guideline Limit (dBA)[2]	Nighttime (dBA)	Guideline Limit (dBA)[3]
R01	54	59	54	57	49	45
R02	56	56	56	55	50	45
R03	50	52	49	51	43	45
R04	53	52	52	51	47	45
R05	55	57	53	55	47	45
R06	54	57	52	55	46	45
OPOR1	53	56	53	54	-	-

Notes:

(1) See Section 3.0 for receptor heights.
(2) Determined by prediction using road traffic data.
(3) MOE minimum exclusion limit.

TABLE 4

NON-IMPULSE SITE GENERATED SOUND EXPOSURE LEVELS UNMITIGATED - GENERATOR ONLY

Receptor[1]	Predicted L_{eq} (1) Due to Site (dBA)	
	Daytime (dBA)	Guideline Limit (dBA)[2]
R01	23	59
R02	32	56
R03	33	52
R04	34	52
R05	39	57
R06	39	57
OPOR1	35	56

Notes:

(1) See Section 3.0 for receptor heights.
(2) Determined by prediction using the road traffic data.
(3) MOE minimum exclusion limit.

TABLE 5

IMPULSE SITE GENERATED SOUND EXPOSURE LEVELS
UNMITIGATED - FORTINOS LOADING DOCK

Receptor[1]	Predicted L_{eq} (1) Due to Site (dBA)			
	Daytime (dBA)	Guideline Limit (dBA)[2]	Evening (dBA)	Guideline Limit (dBA)[2]
R01	21	59	21	57
R02	32	56	32	55
R03	34	52	34	51
R04	25	52	25	51
R05	46	57	46	55
R06	51	57	51	55
OPOR1	43	56	43	54

Notes:

(1) See Section 3.0 for receptor heights.
(2) Determined by prediction using the road traffic data.

TABLE 6

MINIMUM NOISE ABATEMENT MEASURES
TRANSPORTATION NOISE SOURCES

Location	Air Conditioning[1]	Exterior Wall[2]	Exterior Window[3]	Sound Barrier[4]	Warning Clauses[5]
Building 1	Mandatory	STC 37	STC 26	Minimum 1.3 m above roof	A + B + C
Building 2	Mandatory	STC 37	STC 26	Minimum 1.3 m above roof	A + B + C

Notes:

(1) The minimum requirement for both buildings is the provision for adding air conditioning. However, as this requirement is not practical for high-rise development, the requirement has been upgraded to mandatory air conditioning. The air conditioning systems should be designed to meet the noise control requirements in MOE Publication NPC-300.

(2) STC - Sound Transmission Class Rating (Reference ASTM-E413).

The requirements are based on assumed percentages of wall and window area to associated floor area and should be checked once building plans are finalized.

(3) STC - Sound Transmission Class Rating (Reference ASTM-E413). A sliding glass walkout door should be considered as a window and be included in the percentage of glazing.

The requirements are based on assumed percentages of wall and window area to associated floor area and should be checked once building plans are finalized.

(4) Sound barriers must be of solid construction with no gaps, cracks or holes and must have a minimum surface density of 20 kg/m². A variety of materials are available including wood, masonry, composites, plastics, earth berms, or a combination of materials. The required sound barrier should extend around the full perimeter of the common outdoor amenity area above the connecting structure between Building 1 and Building 2.

(5) Warning clauses to be registered on title and be included in Offers of Purchase and Sale for designated lots:

A. "Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic, may on occasions interfere with some activities of the dwelling occupants as the sound level may exceed the noise criteria of the Ministry of the Environment and/or the municipality."

B. "This dwelling 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 noise criteria of the municipality and the Ministry of the Environment.

C. "Purchasers/tenants are advised that due to the proximity of the existing commercial development, sound levels from this facility may at times be audible."

(6) Conventional ventilated attic roof construction meeting OBC requirements is satisfactory.

(7) All exterior doors shall be fully weatherstripped.

TABLE 7

APPLEBY MALL ROOFTOP EQUIPMENT REQUIRED MITIGATION

Building	Rooftop Equipment ID (1)	Tonnage	Unmitigated Sound Power Level (dBA)	Required Overall Mitigation (dBA)	Maximum Sound Power Level (dBA) with Mitigation
Renovated Mall	S_65	10	88	5	83
	S_66	10	88	5	83
	S_87	10	88	5	83
	S_89	8.5	88	5	83
	S_90	8.5	88	5	83
	S_95	20	92	7	85
	S_96	20	92	7	85
	S_97	25	94	7	87
C	S_98	20	92	5	87
D	S_92	12	89	5	84
	S_93	15	93	7	86
	S_94	15	93	7	86

Notes:

(1) See Figure 3 for unit location.
(2) Overall sound level reduction required (dBA) to meet applicable sound level limits at proposed site. See Section 8.0 of report for discussion on methods to achieve required reductions.

TABLE 8

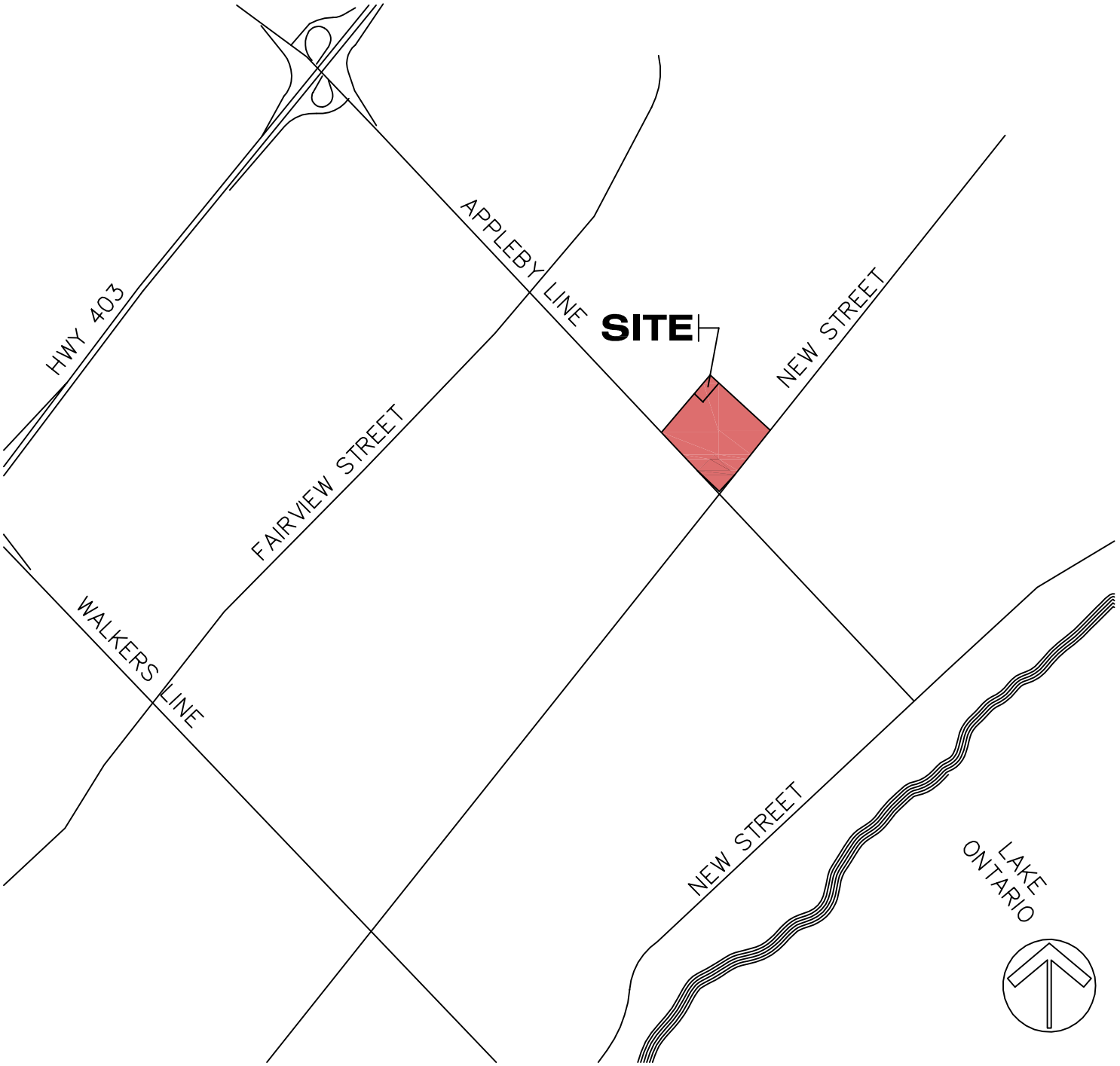
NON-IMPULSE SITE GENERATED SOUND EXPOSURE LEVELS

WITH MITIGATION (1)

Receptor(2)	Predicted L_{eq} (1) Due to Site (dBA)					
	Daytime (dBA)	Guideline Limit (dBA)(3)	Evening (dBA)	Guideline Limit (dBA)(3)	Nighttime (dBA)	Guideline Limit (dBA)(4)
R01	51	59	51	57	45	45
R02	55	56	54	55	45	45
R03	48	52	47	51	40	45
R04	52	52	51	51	44	45
R05	54	57	51	55	44	45
R06	54	57	50	55	43	45
OPOR1	51	56	51	54	-	-

Notes:

(1) With mitigation shown in Table 7.
(2) See Section 3.0 for receptor heights.
(3) Determined by prediction using the road traffic data.
(4) MOE minimum exclusion limit.

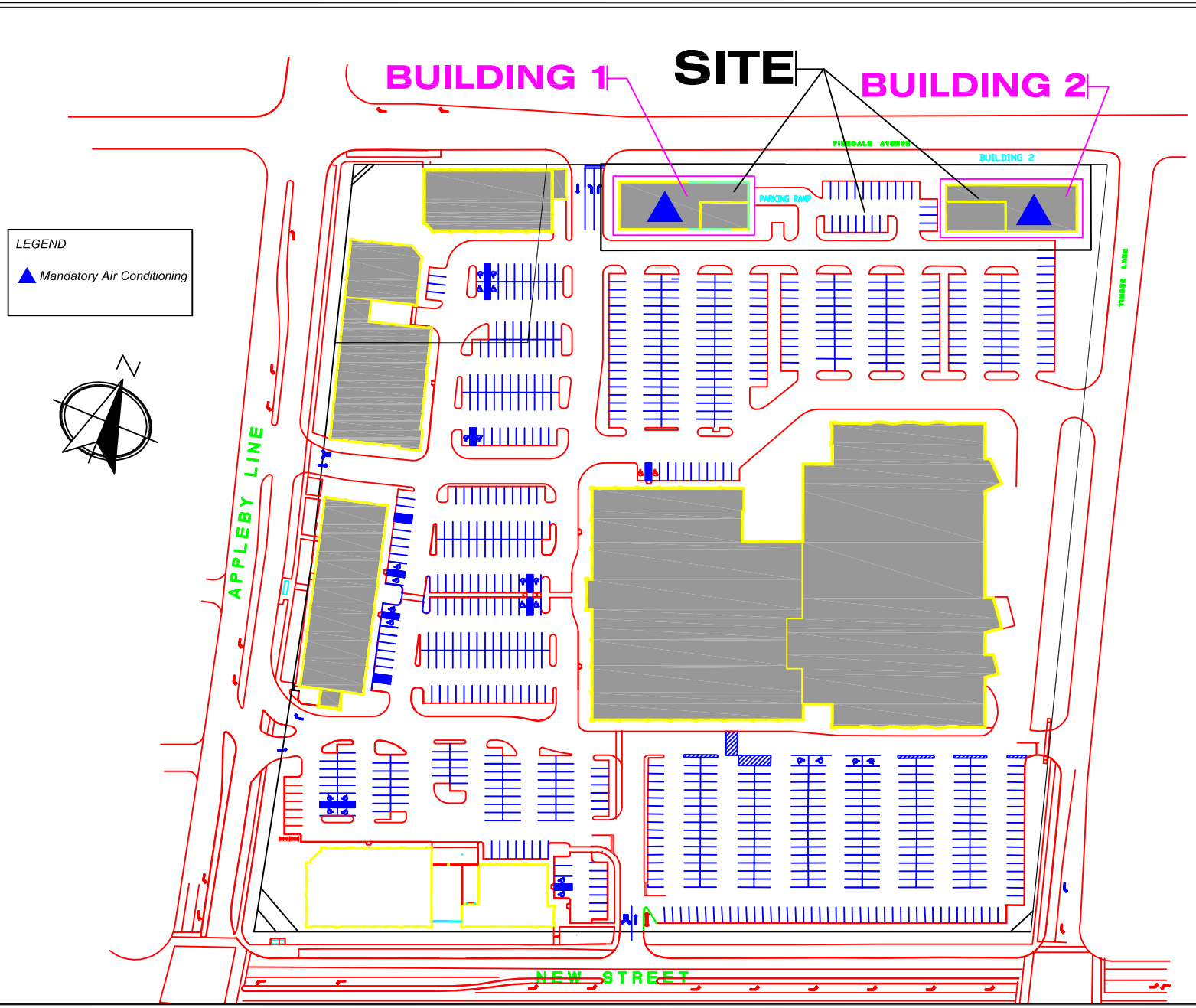


No.	Revision/Issue	Date

VALCOUSTICS Canada Ltd.

30 Wertheim Court, Unit 25
Richmond Hill, Ontario
Canada L4B 1B9
Tel: 905-764-5223
Fax: 905-764-6813
solutions@valcoustics.com

Title	Project No.	Date
Key Plan	113-313	June 11, 2014
Project Name	**Scale**	**Figure**
Appleby Mall Residential Development	N.T.S.	1



General Notes

BASE DRAWING BY
SMV Architects

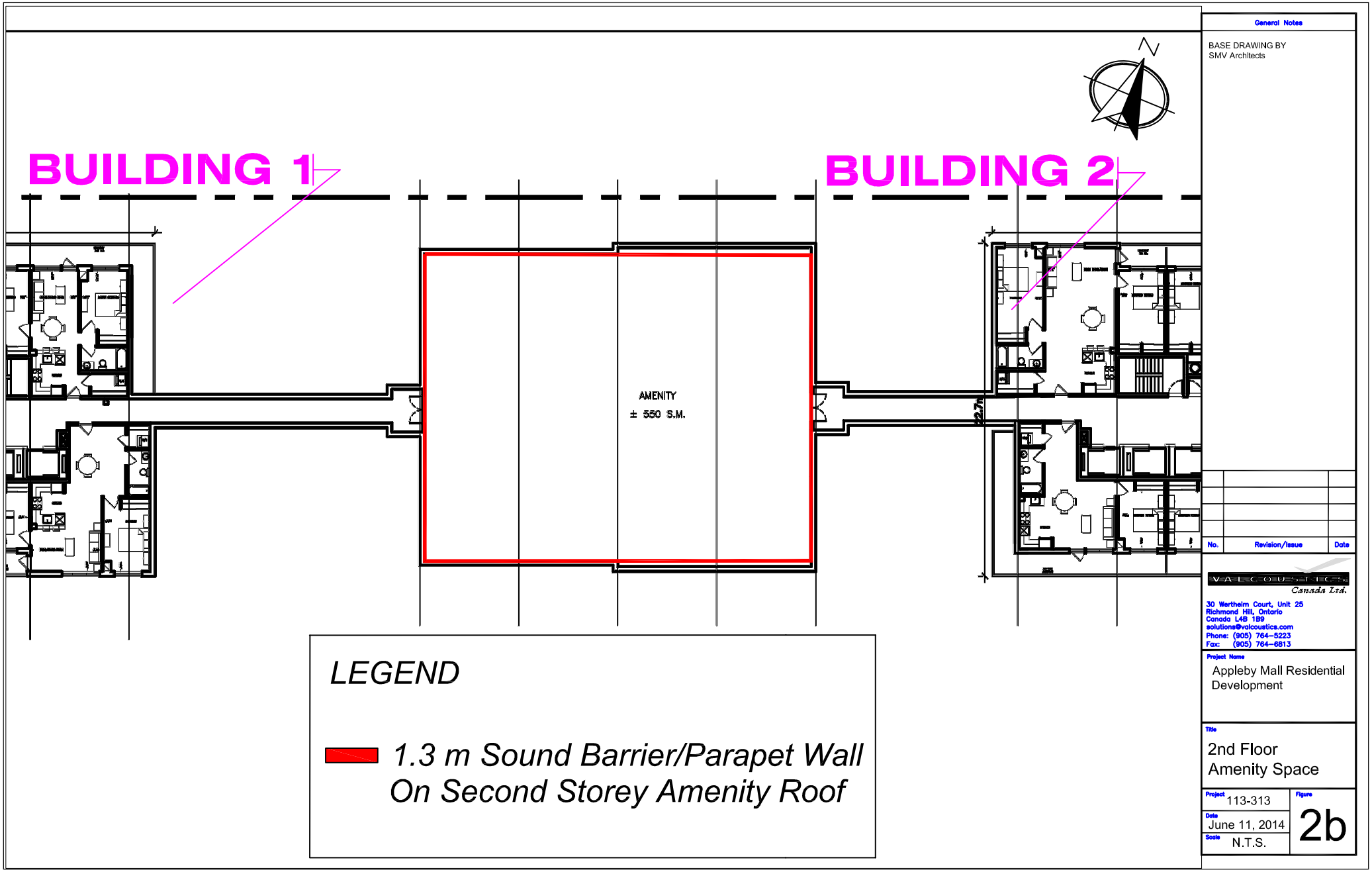
No.	Revision/Issue	Date

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Project Name
Appleby Mall Residential Development

Title
SITE PLAN

Project 113-313
Date June 11, 2014
Scale N.T.S.
Figure 2a



General Notes

BASE DRAWING BY
SMV Architects

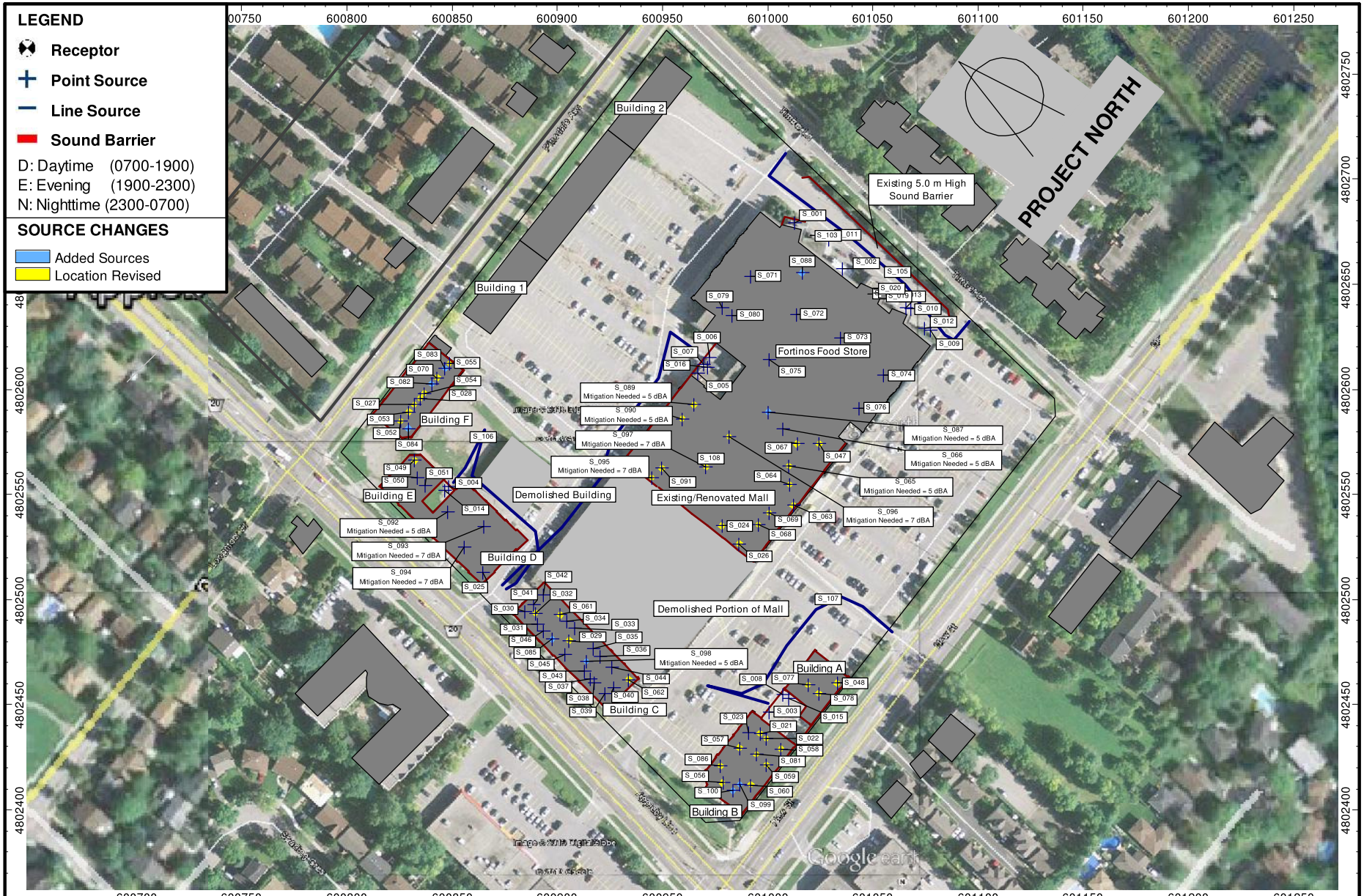
No.	Revision/Issue	Date

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Project Name
Appleby Mall Residential Development

Title
2nd Floor Amenity Space

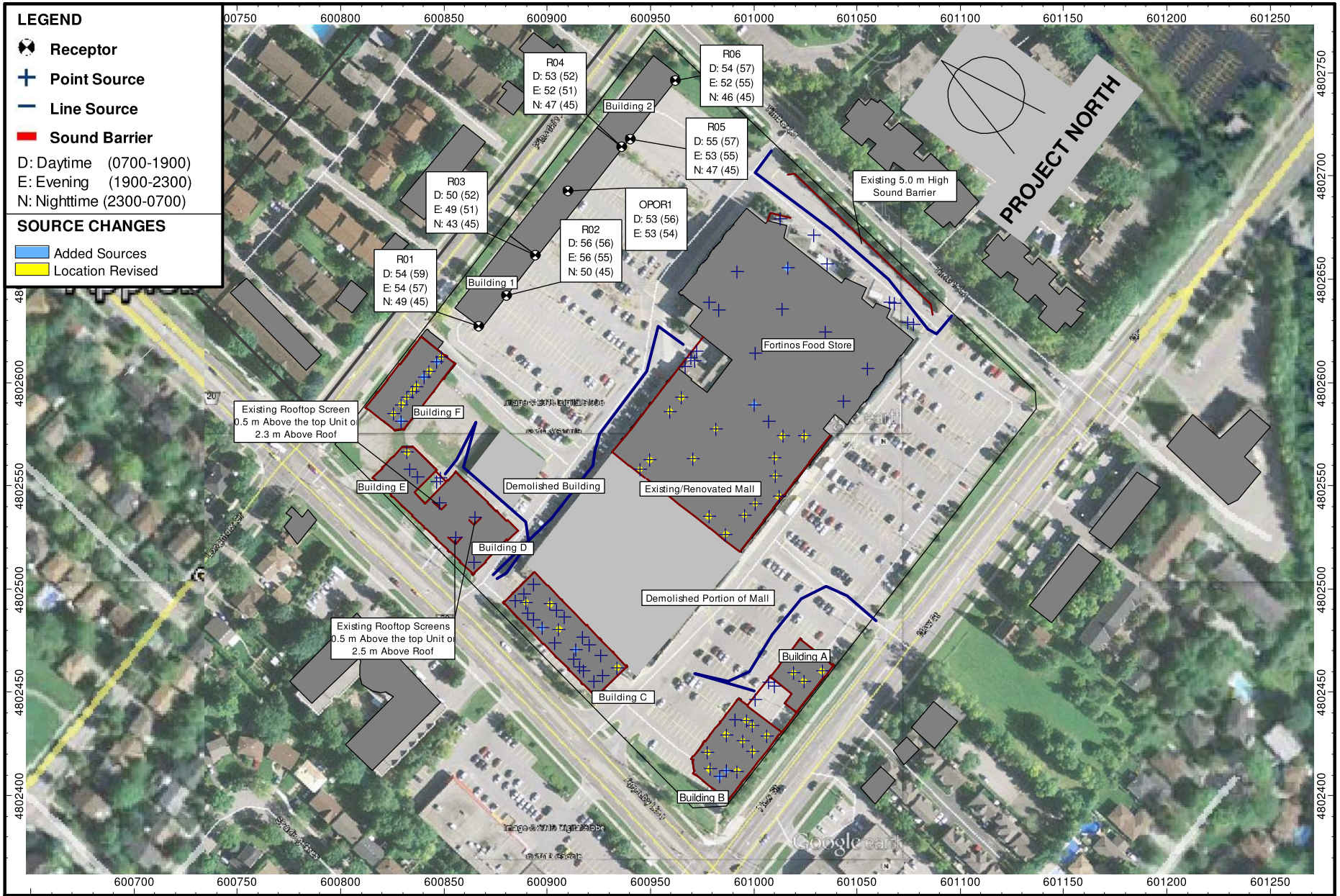
Project 113-313
Date June 11, 2014
Scale N.T.S.
Figure 2b



VALCOUSTICS Canada Ltd. consulting acoustical engineers	Title: **Noise Source Identification**	Date: **June 11, 2014**	Figure: **3**
	Project Name: **Appleby Mall Residential Development**	Project No.: **113-313**	

J:\2013\113313\000\Analysis\Cadna\Appleby residential 2014-05-05.cna

Date Plotted: 11.06.14



VALCOUSTICS Canada Ltd. consulting acoustical engineers

Title
Predicted Hourly Non-Impulse Sound Exposures (dBA) - Unmitigated

Date
June 11, 2014

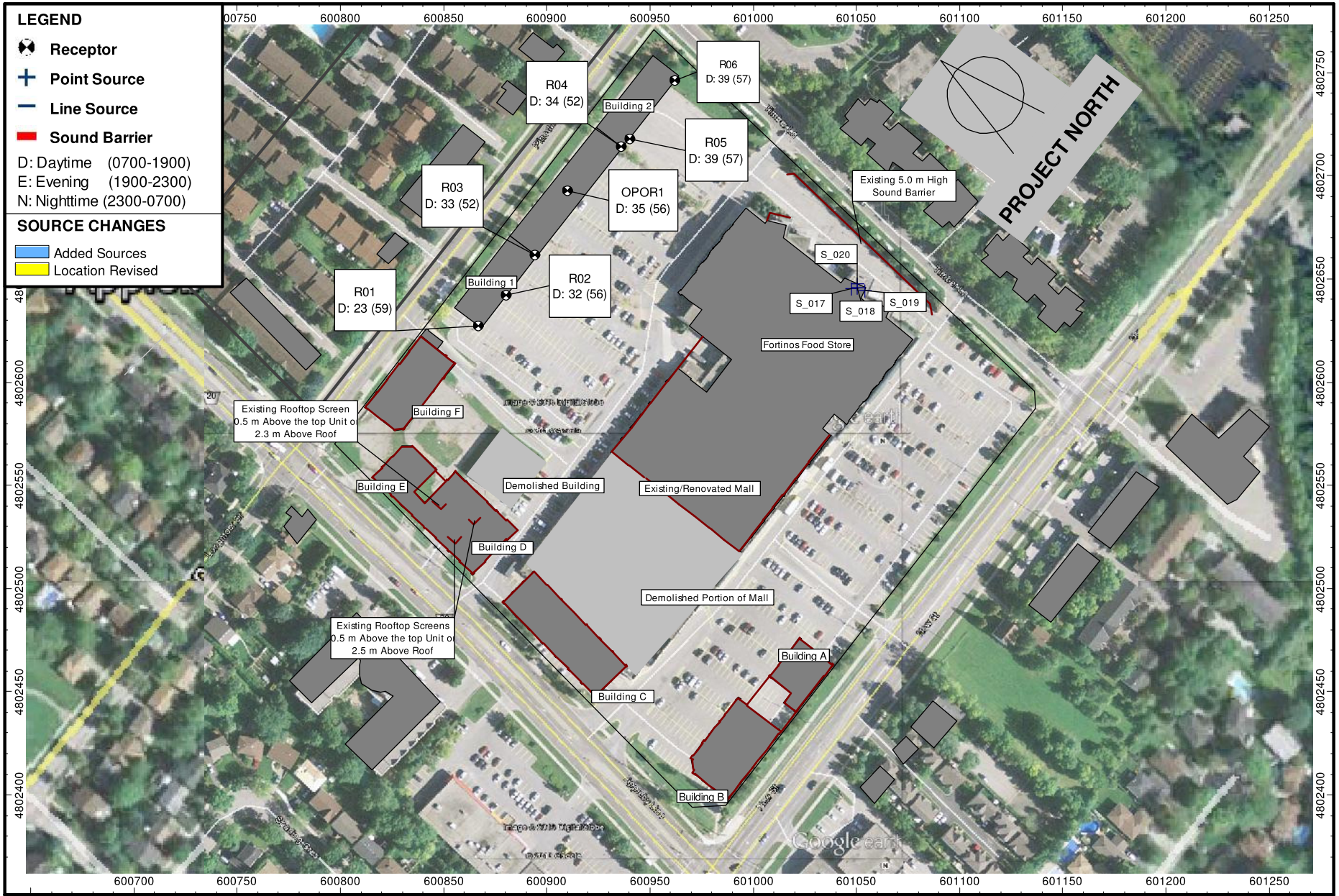
Figure
4

Project Name
Appleby Mall Residential Development

Project No.
113-313

J:\2013\113313\000\Analysis\Cadna\Appleby residential 2014-05-05.cna

Date Plotted: 11.06.14

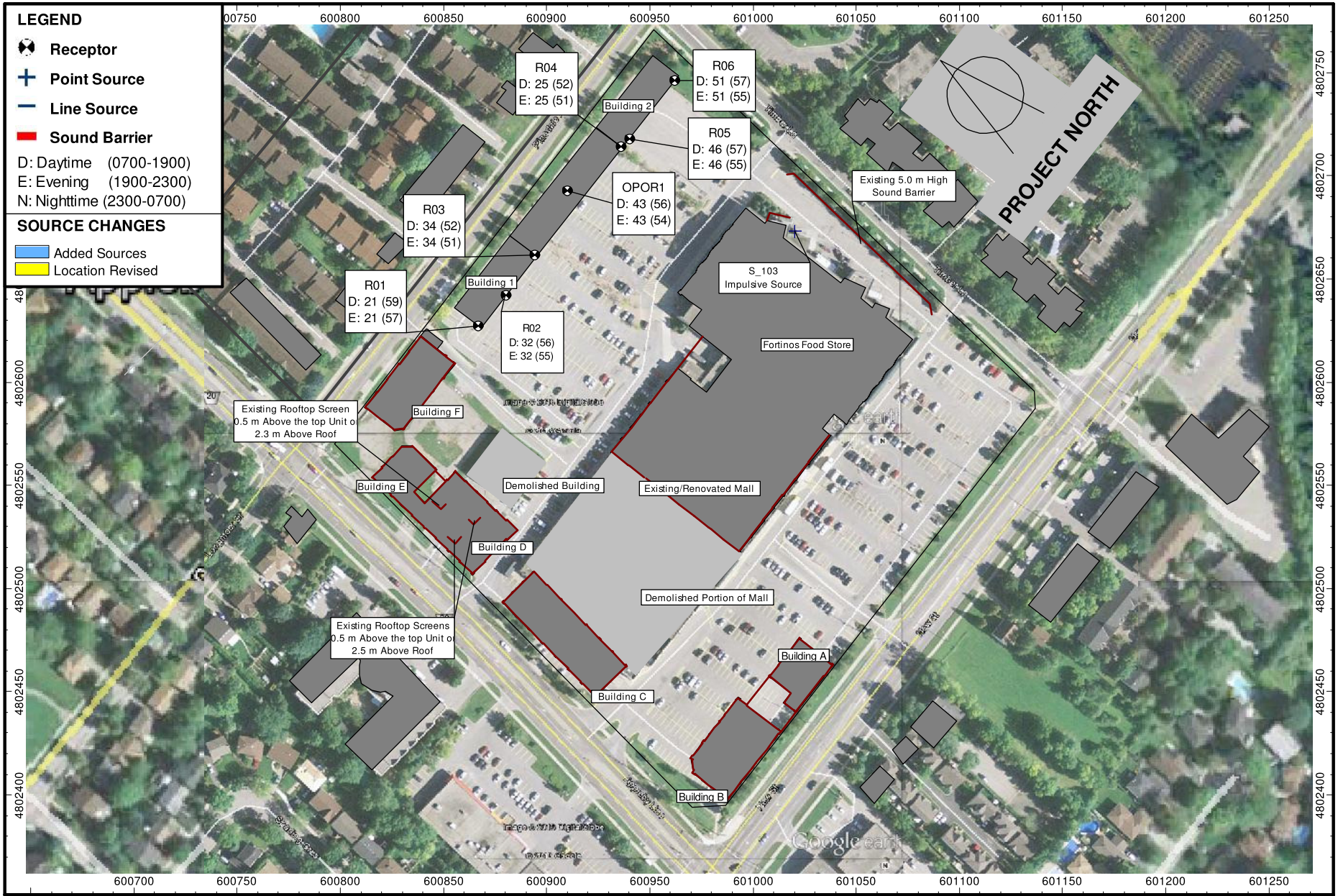


VALCOUSTICS Canada Ltd. consulting acoustical engineers

Title: **Predicted Hourly Sound Exposures (dBA) - Generator Unmitigated**	Date: **June 11, 2014**	Figure: **5**
Project Name: **Appleby Mall Residential Development**	Project No.: **113-313**	

J:\2013\113313\000\Analysis\Cadna\Appleby residential 2014-05-05.cna

Date Plotted: 11.06.14

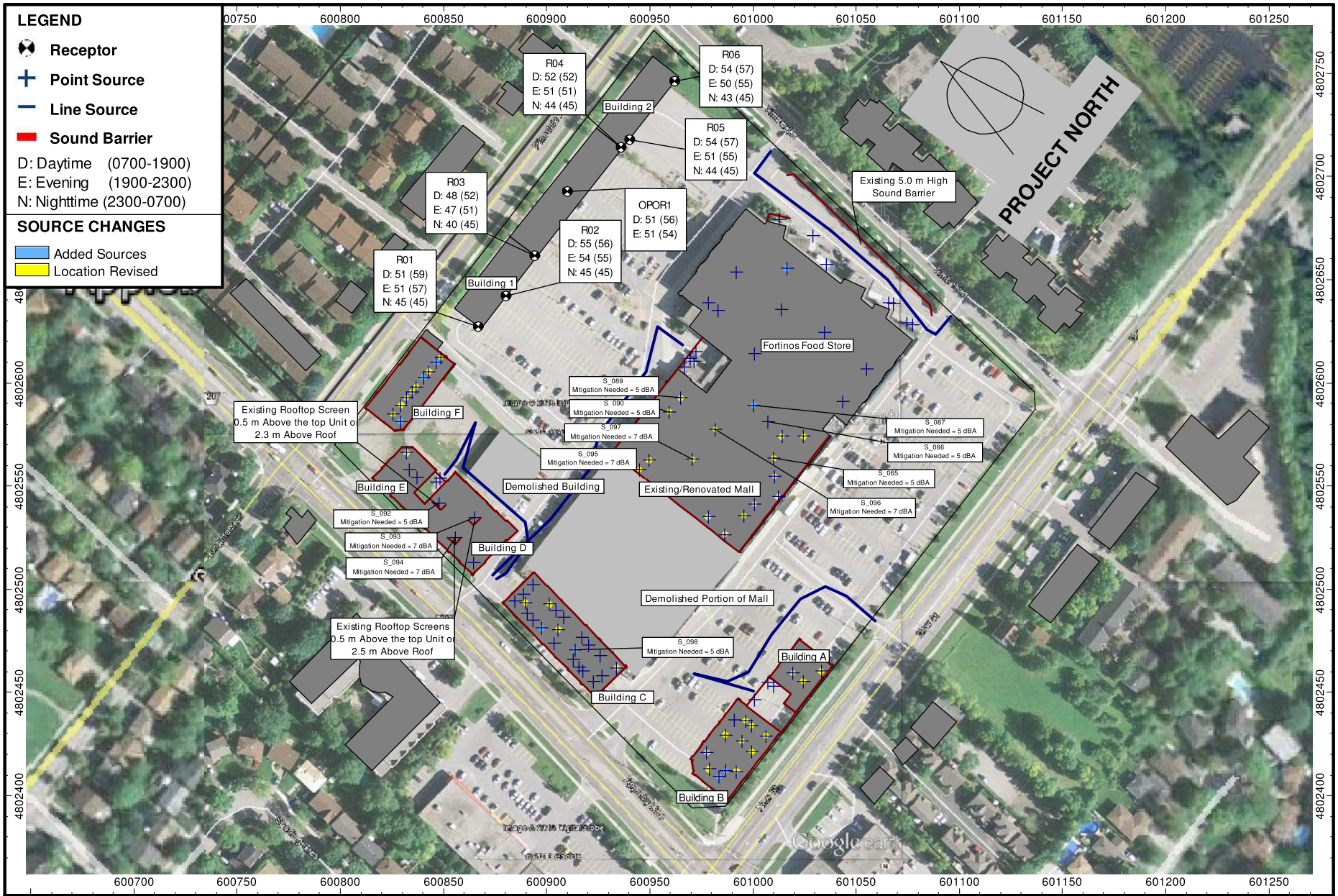


VALCOUSTICS Canada Ltd. consulting acoustical engineers

Title: **Predicted Hourly Impulsive Sound Levels (dBAI) - Fortinos**	Date: **June 11, 2014**	Figure: **6**
Project Name: **Appleby Mall Residential Development**	Project No.: **113-313**	

J:\2013\113313\000\Analysis\Cadna\Appleby residential 2014-05-05.cna

Date Plotted: 11.06.14



VALCOUSTICS Canada Ltd. consulting acoustical engineers

Title: **Predicted Hourly Non-Impulse Sound Exposures (dBA) - with Mitigation**	Date: **June 11, 2014**	Figure: **7**
Project Name: **Appleby Mall Residential Development**	Project No.: **113-313**	

J:\2013\113313\000\Analysis\Cadna\Appleby residential 2014-05-05.cna

Date Plotted: 11.06.14

APPENDIX A

ROAD TRAFFIC DATA

Appleby Line @ Pinedale Ave

Annual Average Daily Traffic Diagram

Total Factor = Monthly Factor(1.02) x Daily Factor(0.91) x 24 Hour Factor(1.85) = 1.717170

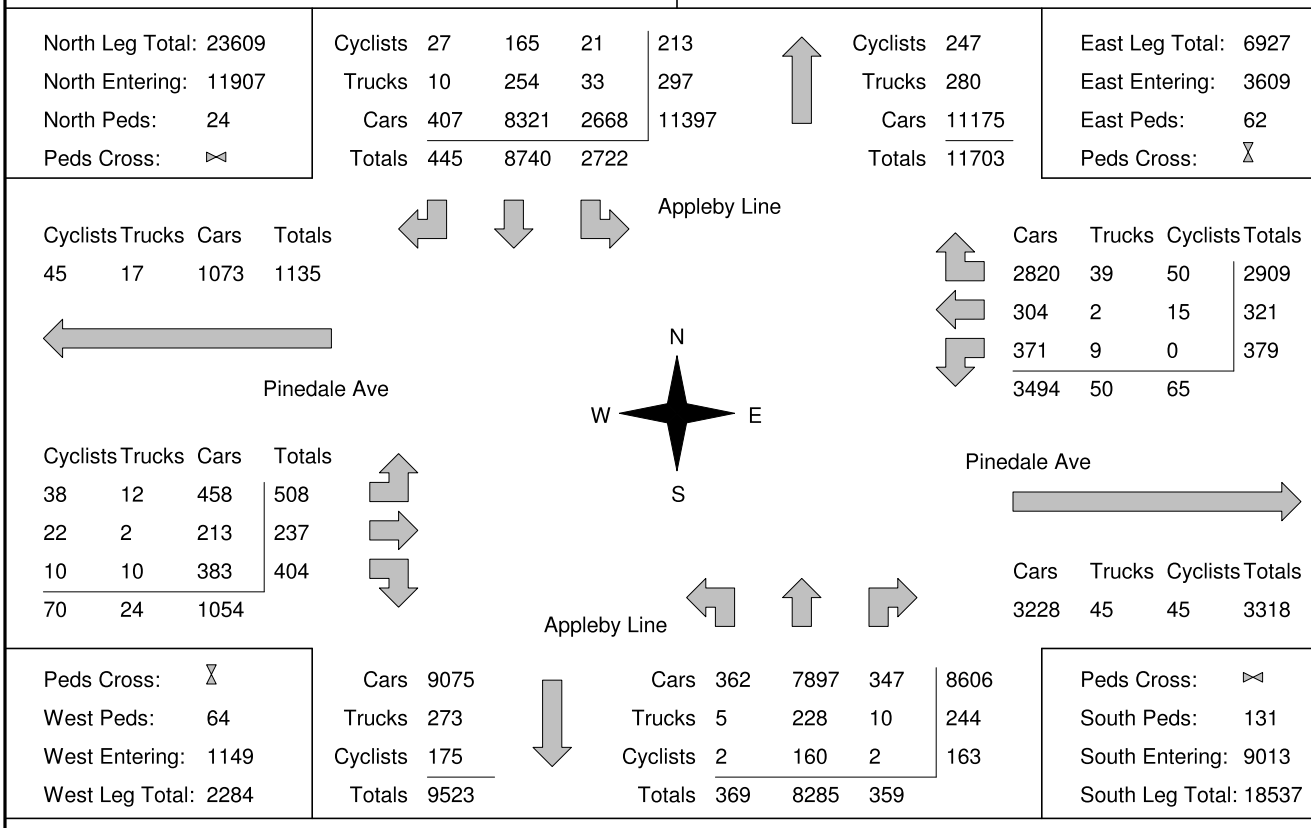
Municipality: Burlington
Site #: 0000200056
Intersection: Appleby Line & Pinedale Ave
TFR File #: 10
Count date: 1-Dec-2011

Weather conditions:
Sunny/Dry

Person(s) who counted:
Barb

**** Signalized Intersection ****

Major Road: Appleby Line runs N/S



Comments

New St @ Timber Lane

Annual Average Daily Traffic Diagram

Total Factor = Monthly Factor(0.93) x Daily Factor(0.94) x 24 Hour Factor(1.85) = 1.617270

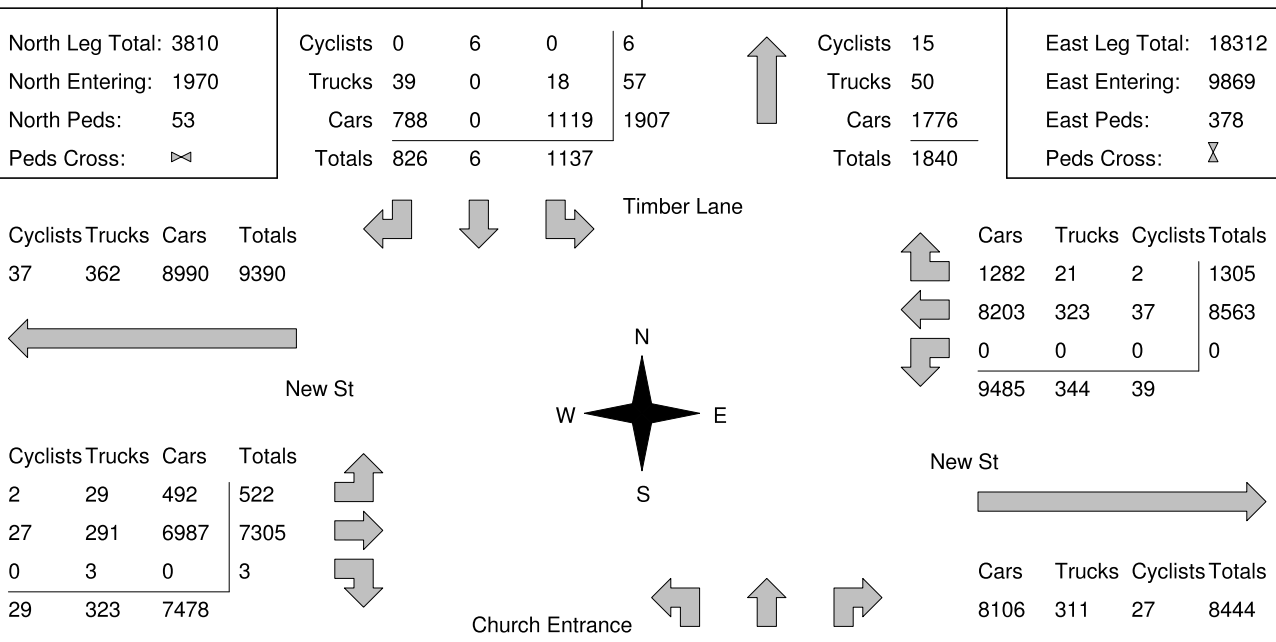
Municipality: Burlington
Site #: 2013720000
Intersection: New St & Timber Lane
TFR File #: 3
Count date: 4-May-2011

Weather conditions:
Sunny/Dry

Person(s) who counted:
Bruce

**** Signalized Intersection ****

Major Road: New St runs W/E



Comments

APPENDIX B

ENVIRONMENTAL NOISE GUIDELINES

APPENDIX B

ENVIRONMENTAL NOISE GUIDELINES

MINISTRY OF THE ENVIRONMENT (MOE)

Reference: MOE Publication NPC-300, October 2013: "Environmental Noise Guideline, Stationary and Transportation Source - Approval and Planning".

SPACE	SOURCE	TIME PERIOD	CRITERION
Living/dining, den areas of residences, hospitals, nursing homes, schools, daycare centres, etc.	Road Rail Aircraft	07:00 to 23:00 07:00 to 23:00 24-hour period	45 dBA 40 dBA NEF/NEP 5
Living/dining, den areas of residences, hospitals, nursing homes, etc. (except schools or daycare centres)	Road Rail Aircraft	23:00 to 07:00 23:00 to 07:00 24-hour period	45 dBA 40 dBA NEF/NEP 5
Sleeping quarters	Road Rail Aircraft	07:00 to 23:00 07:00 to 23:00 24-hour period	45 dBA 40 dBA NEF/NEP 0
Sleeping quarters	Road Rail Aircraft	23:00 to 07:00 23:00 to 07:00 24-hour period	40 dBA 35 dBA NEF/NEP 0
Outdoor Living Areas	Road and Rail	07:00 to 23:00	55 dBA up to 60 dBA allowed in some cases
Outdoor Point of Reception	Aircraft	24-hour period	NEF/NEP 30#
	Stationary Source		
	Class 1 Area	07:00 to 19:00(1)	50* dBA
		19:00 to 23:00(1)	50* dBA
	Class 2 Area	07:00 to 19:00(2)	50* dBA
		19:00 to 23:00(2)	45* dBA
	Class 3 Area	07:00 to 19:00(3)	45* dBA
		19:00 to 23:00(3)	40* dBA
	Class 4 Area	07:00 to 19:00(4)	55* dBA
		19:00 to 23:00(4)	55* dBA

...../cont'd

SPACE	SOURCE	TIME PERIOD	CRITERION
Plane of a Window of Noise Sensitive Spaces	Stationary Source		
	Class 1 Area	07:00 to 19:00(1)	50* dBA
		19:00 to 23:00(1)	50* dBA
		23:00 to 07:00(1)	45* dBA
	Class 2 Area	07:00 to 19:00(2)	50* dBA
		19:00 to 23:00(2)	50* dBA
		23:00 to 07:00(2)	45* dBA
	Class 3 Area	07:00 to 19:00(3)	45* dBA
		19:00 to 23:00(3)	45* dBA
		23:00 to 07:00(3)	40* dBA
	Class 4 Area	07:00 to 19:00(4)	60* dBA
		19:00 to 23:00(4)	60* dBA
		23:00 to 07:00(4)	55* dBA

\# may not apply to in-fill or re-development.
* or the minimum hourly background sound exposure $L_{eq}(1)$, due to road traffic, if higher.
(1) Class 1 Area : Urban
(2) Class 2 Area : Urban during day; rural-like evening and night
(3) Class 3 Area : Rural
(4) Class 4 Area: Subject to land use planning authority's approval

Reference: MOE Publication ISBN 0-7729-2804-5, 1987: "Environmental Noise Assessment in Land-Use Planning".

EXCESS ABOVE RECOMMENDED SOUND LEVEL LIMITS (dBA)	CHANGE IN SUBJECTIVE LOUDNESS ABOVE	MAGNITUDE OF THE NOISE PROBLEM	NOISE CONTROL MEASURES (OR ACTION TO BE TAKEN)
No excess (<55 dBA)	—	No expected noise problem	None
1 to 5 inclusive (56 to 60 dBA)	Noticeably louder	Slight noise impact	If no physical measures are taken, then prospective purchasers or tenants should be made aware by suitable warning clauses.
6 to 10 inclusive (61 - 65 dBA)	Almost twice as loud	Definite noise impact	Recommended.
11 to 15 inclusive (66 - 70 dBA)	Almost three times as loud	Serious noise impact	Strongly Recommended.
16 and over (>70 dBA)	Almost four times as loud	Very serious noise impact	Strongly Recommended (may be mandatory).

APPENDIX C

SAMPLE CALCULATION

```
STAMSON 5.04        NORMAL REPORT        Date: 11-06-2014 12:28:58
MINISTRY OF THE ENVIRONMENT / NOISE ASSESSMENT

Filename: b1_nw_wf.te          Time Period: Day/Night 16/8 hours
Description:       Building_1_West_Facade

Road data, segment # 1: Appleby (day/night)
-------------------------------------------
Car traffic volume  : 20593/2288  veh/TimePeriod  *
Medium truck volume :   233/26    veh/TimePeriod  *
Heavy truck volume  :   360/40    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):  18197
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  13.00
    Medium Truck % of Total Volume     :   1.10
    Heavy Truck  % of Total Volume     :   1.70
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 1: Appleby (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  : 105.00 / 105.00 m
Receiver height           :  33.30 / 33.30  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 2: Pinedale (day/night)
--------------------------------------------
Car traffic volume  :  7827/870   veh/TimePeriod  *
Medium truck volume :    48/5     veh/TimePeriod  *
Heavy truck volume  :    64/7     veh/TimePeriod  *
Posted speed limit  :    40 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):   6818
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  13.00
    Medium Truck % of Total Volume     :   0.60
    Heavy Truck  % of Total Volume     :   0.80
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 2: Pinedale (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  :  15.00 / 15.00  m
Receiver height           :  33.30 / 33.30  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Road data, segment # 3: New (day/night)
---------------------------------------
Car traffic volume  : 19174/2130  veh/TimePeriod  *
Medium truck volume :   320/36    veh/TimePeriod  *
Heavy truck volume  :   479/53    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):  17155
    Percentage of Annual Growth        :   2.00
    Number of Years of Growth          :  13.00
    Medium Truck % of Total Volume     :   1.60
    Heavy Truck  % of Total Volume     :   2.40
    Day (16 hrs) % of Total Volume     :  90.00

Data for Segment # 3: New (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  : 275.00 / 275.00 m
Receiver height           :  33.30 / 33.30  m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Appleby (day)
----------------------------------

Source height = 1.14 m

ROAD (0.00 + 58.29 + 0.00) = 58.29 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.00  66.74   0.00  -8.45   0.00   0.00   0.00   0.00  58.29
-------------------------------------------------------------------------------

Segment Leq : 58.29 dBA

Results segment # 2: Pinedale (day)
-----------------------------------

Source height = 0.95 m

ROAD (0.00 + 55.79 + 0.00) = 55.79 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90      0   0.00  58.80   0.00   0.00  -3.01   0.00   0.00   0.00  55.79
-------------------------------------------------------------------------------

Segment Leq : 55.79 dBA
```

```
Results segment # 3: New (day)
------------------------------

Source height = 1.24 m

ROAD (0.00 + 51.73 + 0.00) = 51.73 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  67.37   0.00 -12.63  -3.01   0.00   0.00   0.00  51.73
-------------------------------------------------------------------------------

Segment Leq : 51.73 dBA

Total Leq All Segments: 60.80 dBA

Results segment # 1: Appleby (night)
------------------------------------

Source height = 1.14 m

ROAD (0.00 + 51.76 + 0.00) = 51.76 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.00  60.21   0.00  -8.45   0.00   0.00   0.00   0.00  51.76
-------------------------------------------------------------------------------

Segment Leq : 51.76 dBA

Results segment # 2: Pinedale (night)
-------------------------------------

Source height = 0.94 m

ROAD (0.00 + 49.22 + 0.00) = 49.22 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90      0   0.00  52.23   0.00   0.00  -3.01   0.00   0.00   0.00  49.22
-------------------------------------------------------------------------------

Segment Leq : 49.22 dBA

Results segment # 3: New (night)
--------------------------------

Source height = 1.24 m

ROAD (0.00 + 45.19 + 0.00) = 45.19 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
     0     90   0.00  60.83   0.00 -12.63  -3.01   0.00   0.00   0.00  45.19
-------------------------------------------------------------------------------

Segment Leq : 45.19 dBA

Total Leq All Segments: 54.26 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 60.80
                           (NIGHT): 54.26
```

APPENDIX D

STATIONARY SOURCE ANALYSIS PARAMETERS

NOISE SOURCES

The noise source data is shown in Tables D1, D2 and D3.

MECHANICAL EQUIPMENT

The location of the rooftop equipment for all but the Fortinos food store were taken from the rooftop mechanical equipment layout drawings prepared by INVRO Engineering Systems Ltd. dated January 2009. However, based on recent aerial imagery (2013) for the site, the as-built locations for some of the rooftop units are different than those shown on the drawings. Thus, some of the mechanical unit locations were altered to be consistent with the aerial imagery. These moved units can be seen on Figure 3 shown with the yellow background. The aerial imagery also shows some additional rooftop units that were not shown on the drawings. To account for these units, additional sources were added. The size and sound emission data were assumed based on the aerial imagery (see below). These new units are shown with red backgrounds on Figure 3.

The mechanical units as shown on the INVRO drawings, or as identified at the Fortinos as part of the December 11, 2008 site visit, are:

- Building A – one 4 ton unit and two 12 ton units;
- Building B – one 2 ton unit, four 4 ton units, two 5 ton units and three 10 ton units;
- Building C – eleven 3 ton units, two 4 ton units, four 5 ton units and three 6 ton units;
- Building D – one 2 ton unit, one 12 ton unit and two 15 ton units;
- Building E – three 5 ton units and one 6 ton unit;
- Building F – one 3 ton unit, four 4 ton units, one 5 ton unit and two 6 ton units;
- Existing/Renovated Mall – one 2.5 ton unit, three 4 ton units, two 6 ton units, five 8.5 ton units, two 10 ton units, two 20 ton units and one 25 ton unit; and
- Fortinos – two cooling towers, an indoor emergency generator, an enclosed chiller at grade and eight rooftop units.

The drawings indicate all rooftop units will be Lennox brand. Manufacturer's sound power data was used in the analysis for these sources. At Fortinos, the rooftop units are Carrier brand. Manufacturer's sound power data was used to model these units.

The additional mechanical units and assumed sizes that have been added, based on the aerial imagery, are:

- Building B – two 15 ton HVAC units;
- Building C – one 4 ton HVAC unit and one 20 ton HVAC unit;
- Building F – one 4 ton HVAC unit, one 5 ton HVAC unit and one 6 ton HVAC unit;
- Existing/Renovated Mall – one 10 ton unit; and
- Fortinos – one rooftop air cooled condenser unit.

The tonnage assumed for these additional units is based on the size of the rooftop equipment relative to the known make and model of the adjacent units. This information should be updated if as-built drawings can be obtained.

All HVAC units, except those on the Fortinos, were modelled using source heights (top of unit above roof) as indicated in the manufacturers data assuming standard 0.61 m curb heights. This resulted in units up to 2 metres above the top of the roof. The heights of the rooftop and grade level mechanical equipment at Fortinos were measured during the site visit.

The MOE noise guidelines require the potential worst case noise impact be evaluated. To satisfy this and to be conservative, the daytime (0700-1900 hours) and evening (1900-2300 hours) scenarios assume all rooftop mechanical units could be on simultaneously with a 100% duty cycle, i.e., operating 60 minutes per hour. The nighttime (2300 to 0700 hours) scenario assumes a 50% duty cycle for the all HVAC units and a 100% duty cycle for the Fortinos condenser unit. The nighttime scenario is considered conservative as at this time the load on the cooling system would be reduced and most rooftop units would likely be shut off completely as most of the stores would be closed.

LOADING DOCK ACTIVITY - NON IMPULSE SOURCES

The following buildings have loading docks:

- Existing/Renovated Mall – shared loading bays for Home Hardware, Dollarama, restaurant and other retail units: three bays;
- Fortinos Food Store – three bays; and
- Buildings A, B and D – one bay each.

Except for at the Fortinos, the loading docks are located in between the buildings, face the interior side of mall development and have operable doors at the entryways. The loading docks are enclosed on all four sides and are open above. The entryway sound barriers which include the operable doors are approximately 6.25 m above grade.

The analysis is based on truck movements to the loading areas producing 75 dBA at 22 m (based on the MOE ORNAMENT prediction model for a heavy truck moving at 20 kph). A measured spectrum (from VCL measurement data) was then normalized to this overall level.

The truck movements considered are:

- three movements to and three movements from the renovated mall loading docks (6 movements total.

- three movements to and three movements from the Fortinos food store loading docks (6 movements total).

- one movement to and one movement from each of the loading docks at Buildings A, B and D (two movements total to each building).

It is understood that truck deliveries do not occur at night at any of the buildings at the Appleby Mall. Additionally, signage in the loading area at Fortinos indicates that trucks deliveries are not permitted to enter the facility outside of daytime hours (0700 to 1900). Trucks are also not permitted to idle during unloading. However, this would likely not include refrigerated trucks, which need to keep the engine running to power the refrigeration units. The refrigerated trucks would be expected to be running for the full hour during the unloading.

In addition to the Fortinos, refrigerated truck deliverers would be expected at the restaurant at the renovated mall, the beer store and the LCBO. At the other loading dock areas, refrigerated truck deliveries would not be expected. Refrigerated trailers would keep the refrigeration unit operational for the full hour during deliveries.

At all other loading dock locations, typically the non-refrigerated trucks would not keep their engines idling during unloading. However, to be conservative, 5 minutes of idling per truck was accounted for to include for any incidental idling that may occur during arrival or departure.

The analysis also includes a garbage compactor at the loading area of the Fortinos, which would typically operate for 10 minutes per hour. A sound power level of 88.5 dBA was used to model this source.

LOADING DOCK ACTIVITY - IMPULSE SOURCES

Impulsive sounds would be expected from the loading dock areas of the:

- Fortinos food store (daytime only);
- existing/renovated mall (daytime and evening);
- LCBO (daytime and evening);
- The Beer Store (daytime and evening); and
- Rexall pharmacy (daytime and evening).

At these locations typically the loading dock will have a dock leveller and the trucks will be unloaded using a small mechanical pump truck.

The analysis is based on sound level measurements and observations, made by VCL, of the loading dock activities at existing similar facilities.

The impulse analysis is done by energy averaging the impulsive sounds at a receptor location. This is different than the non-impulse analysis which accounts for a cumulative impact from all sources, i.e., the sound energy from each source is logarithmically added at a receptor location. The worst case impulse analysis occurs when trucks would be unloaded at the renovated mall loading docks. This is because these loading docks are closest to the proposed residential buildings. The impulse analysis from each of the individual loading docks was done separately and assessed. However, as the renovated mall impulse scenario is the worst case, only this scenario is presented. Compliance with the applicable sound level limits in this scenario, also results in compliance for the other impulse scenarios. For completeness, analysis figures for the other impulse scenarios are shown in Appendix F.

The source sound power level used for the unloading impulses was an L_{LM} of 100 dBAI.

EXISTING MITIGATION

The elevation drawings prepared by Scoler Lee + Associates Architects Inc. dated November 7, 2008 shows rooftop parapets for Buildings A, B, C, D, E and F at a height of 0.46 m high above the top of the respective roof. At the renovated mall the parapet height is 1.6 m to 3.4 m (above the top of the roof). The parapets were considered in the base case modelling scenario.

During the site visit done as part of this current assessment, on October 4, 2013, it was observed that there are partial loading dock enclosures at the existing mall, Building A/Building B and Building D/Building E, which surround the loading areas on all four sides (complete with operable roll up doors and open to the above). These partial enclosures are at an estimated minimum height of 6.25 m above grade. It is understood that the doors remain closed when trucks are present to control noise emissions. Note, the operable doors have sections that are constructed of a transparent material, presumably to allow visibility into the loading areas. For the purposes of this assessment, the operable doors, including the transparent sections, have been modelled as sound barriers, i.e., the material has been assumed to meet the minimum surface density requirement of 20 kg/m^2. This should be confirmed. The partial loading dock enclosures were considered in the base case modelling scenario.

The three rooftop HVAC units at Building D have acoustic screens on the south and west sides and privacy screens on the north and east sides. These screens are at a height of 0.5 m above the top of the roof, or approximately 2.3 m to 2.5 m high. The acoustic screens have been considered in the modelling, the privacy screens were not included.

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TABLE D1
POINT SOURCE TABLE

Source		Resultant PWL		Attenuation	Operating Time (mins/hour)			Height Above
Name	ID	dBA	Spectral ID	(dBA)	Day	Evening	Night	Roof/Grade (m)
S_001	Compactor	88.5	88.5		10	0	0	0.6
S_002	Condenser	87.2	CTs		60	60	60	5
S_003	DayTrk	99.5	vclHvyTrkI		5	5	0	2.4
S_004	DayTrk	99.5	vclHvyTrkI		5	5	0	2.4
S_005	DayTrk	99.5	vclHvyTrkI		5	5	0	2.4
S_006	DayTrk	99.5	vclHvyTrkI		5	5	0	2.4
S_007	DayTrk	99.5	vclHvyTrkI		5	5	0	2.4
S_008	DayTrk	99.5	vclHvyTrkI		5	5	0	2.4
S_009	DayTrk	99.5	vclHvyTrkI		5	5	0	2.4
S_010	DayTrk	99.5	vclHvyTrkI		5	5	0	2.4
S_011	DayTrk	99.5	vclHvyTrkI		5	0	0	2.4
S_012	FDayRefer1	101.6	VCLRefer		45	0	0	3.5
S_013	FDayRefer2	101.6	VCLRefer		45	0	0	3.5
S_014	FDayRefer3	101.6	VCLRefer		60	60	0	3.5
S_015	FDayRefer4	101.6	VCLRefer		60	60	0	3.5
S_016	FDayRefer5	101.6	VCLRefer		60	60	0	3.5
S_017	Gen	74.2	Gen2ndIn		60	0	0	1
S_018	Gen	83.5	GenCombEx		60	0	0	0.75
S_019	Gen	93.6	GenRoomEx		60	0	0	4
S_020	Gen	89.1	GenRoomIn		60	0	0	5
S_021	HVAC	88.3	L10Ton		60	60	30	1.8
S_022	HVAC	88.3	L10Ton		60	60	30	1.8
S_023	HVAC	88.3	L10Ton		60	60	30	1.8
S_024	HVAC	88.3	L8_5Ton		60	60	30	1.8
S_025	HVAC	79.4	L2Ton		60	60	30	1.5
S_026	HVAC	88.3	L8_5Ton		60	60	30	1.8
S_027	HVAC	73.2	L4Ton		60	60	30	1.6
S_028	HVAC	73.2	L3Ton		60	60	30	1.6
S_029	HVAC	73.2	L6Ton		60	60	30	1.8
S_030	HVAC	73.2	L3Ton		60	60	30	1.6
S_031	HVAC	73.2	L3Ton		60	60	30	1.6
S_032	HVAC	73.2	L3Ton		60	60	30	1.6
S_033	HVAC	73.2	L3Ton		60	60	30	1.6
S_034	HVAC	73.2	L3Ton		60	60	30	1.6
S_035	HVAC	73.2	L3Ton		60	60	30	1.6
S_036	HVAC	73.2	L3Ton		60	60	30	1.6
S_037	HVAC	73.2	L3Ton		60	60	30	1.6
S_038	HVAC	73.2	L3Ton		60	60	30	1.6
S_039	HVAC	73.2	L3Ton		60	60	30	1.6
S_040	HVAC	73.2	L3Ton		60	60	30	1.6
S_041	HVAC	73.2	L5Ton		60	60	30	1.8
S_042	HVAC	73.2	L5Ton		60	60	30	1.8
S_043	HVAC	73.2	L5Ton		60	60	30	1.8
S_044	HVAC	73.2	L5Ton		60	60	30	1.8
S_045	HVAC	73.2	L4Ton		60	60	30	1.6
S_046	HVAC	73.2	L4Ton		60	60	30	1.6
S_047	HVAC	73.2	L4Ton		60	60	30	1.6
S_048	HVAC	73.2	L4Ton		60	60	30	1.6
S_049	HVAC	73.2	L5Ton		60	60	30	1.8
S_050	HVAC	73.2	L5Ton		60	60	30	1.8
S_051	HVAC	73.2	L6Ton		60	60	30	1.8
S_052	HVAC	73.2	L4Ton		60	60	30	1.6
S_053	HVAC	73.2	L4Ton		60	60	30	1.6
S_054	HVAC	73.2	L6Ton		60	60	30	1.8
S_055	HVAC	73.2	L5Ton		60	60	30	1.8
S_056	HVAC	73.2	L5Ton		60	60	30	1.8
S_057	HVAC	73.2	L5Ton		60	60	30	1.8
S_058	HVAC	73.2	L4Ton		60	60	30	1.6
S_059	HVAC	73.2	L4Ton		60	60	30	1.6
S_060	HVAC	73.2	L4Ton		60	60	30	1.6
S_061	HVAC	73.2	L4Ton		60	60	30	1.6
S_062	HVAC	73.2	L4Ton		60	60	30	1.6
S_063	HVAC	88.3	L8_5Ton		60	60	30	1.8
S_064	HVAC	73.2	L6Ton		60	60	30	1.8
S_065	HVAC	88.3	L10Ton	5	60	60	30	1.8
S_066	HVAC	88.3	L10Ton	5	60	60	30	1.8
S_067	HVAC	73.2	L4Ton		60	60	30	1.6
S_068	HVAC	73.2	L6Ton		60	60	30	1.8
S_069	HVAC	73.2	L4Ton		60	60	30	1.6
S_070	HVAC	73.2	L6Ton		60	60	30	1.8
S_071	HVAC	79.4	C48TJE014		60	60	30	1.2
S_072	HVAC	74.1	C48TJE028		60	60	30	1.2
S_073	HVAC	74.1	C48TJE028		60	60	30	1.2
S_074	HVAC	79.4	C48TJE014		60	60	30	1.2
S_075	HVAC	69.2	C48TJE034		60	60	30	1.2
S_076	HVAC	79.4	C48TJE014		60	60	30	1.2
S_077	HVAC	89.2	L12Ton		60	60	30	1.8
S_078	HVAC	89.2	L12Ton		60	60	30	1.8
S_079	HVAC	77.2	C48SS_024		60	60	30	1
S_080	HVAC	79.4	C48TJE014		60	60	30	1
S_081	HVAC	79.4	L2Ton		60	60	30	1.8
S_082	HVAC	73.2	L6Ton		60	60	30	1.8
S_083	HVAC	73.2	L5Ton		60	60	30	1.8
S_084	HVAC	73.2	L4Ton		60	60	30	1.6
S_085	HVAC	73.2	L4Ton		60	60	30	1.6
S_086	HVAC	73.2	L4Ton		60	60	30	1.6
S_087	HVAC	83.3	L10Ton	5	60	60	30	1.8
S_088	HVAC	78.5	Condenser		60	60	30	1.6
S_089	HVAC	83.3	L8_5Ton	5	60	60	30	1.8
S_090	HVAC	83.3	L8_5Ton	5	60	60	30	1.8
S_091	HVAC	79.4	L2_5Ton		60	60	30	1.8
S_092	HVAC	84.2	L12Ton	5	60	60	30	1.8
S_093	HVAC	82.9	L15Ton	7	60	60	30	2
S_094	HVAC	82.9	L15Ton	7	60	60	30	2
S_095	HVAC	82	L20Ton	7	60	60	30	2
S_096	HVAC	82	L20Ton	7	60	60	30	2
S_097	HVAC	83.6	L25Ton	7	60	60	30	2
S_098	HVAC	87	L20Ton	5	60	60	30	2
S_099	HVAC	92.9	L15Ton		60	60	30	2
S_100	HVAC	92.9	L15Ton		60	60	30	2
S_101	Impulse_A	100.4	LOADING		60	60	0	2
S_102	Impulse_D	100.4	LOADING		60	60	0	2
S_103	Impulse_Fort	100.4	LOADING		60	60	0	2
S_104	Impulse_Mall	100.4	LOADING		60	60	0	2

Appleby Mall Residential Development
113-313

TABLE D2
LINE SOURCE TABLE

Source		Resultant PWL (dBA)		Line Source		Moving Point Source			Speed
Name	ID	Overall	Per m	Type	Spectral ID	Day	Evening	Night	(km/h)
S_105	FDayTrk	93.1	71.6	PWL-Pt	vclHvyTrkA	3	0	0	20
S_106	FDayTrk	90.8	69.8	PWL-Pt	vclHvyTrkA	2	2	0	20
S_107	FDayTrk	94.4	72.8	PWL-Pt	vclHvyTrkA	4	4	0	20
S_108	FDayTrk	96.7	74.6	PWL-Pt	vclHvyTrkA	6	6	0	20

J:\2013\113313\000\Reports\2014-05-05 Figures\[point source table.xlsx]Reference PWL

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TABLE D3
SOUND POWER SPECTRAL DATA

Source		Sound Power Level (dB) at Frequency (Hz)									Total		
Name	**Spectral ID**	**31.5**	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**dBA**	**dB**	**Source**
Carrier 48SS_024	C48SS_024	80	80.5	85.5	79.9	72.6	69.5	67.8	64.6	61.3	77.2	88.5	Measurements December 11, 2008
Carrier 48TJE014	C48TJE014	80	88.1	88.4	76	78	74	66.6	60.7	52.2	79.4	92	Measurements December 11, 2008
Carrier 48TJE028	C48TJE028	79.7	85.1	84.5	77	69.4	67.3	58.7	54.8	46.4	74.1	88.8	Measurements December 11, 2008
Carrier 48TJE034	C48TJE034	81.7	80.6	78.1	70.9	65.4	61.4	59.3	55.6	46.3	69.2	85.4	Measurements December 11, 2008
Generic Condenser Spectrum	Condenser	94	94	92	90	89	87	88	82	75	93.3	99.9	BBN 7.11.H - Table 7.7 Adj made to 100 dB PWL
Condenser_D	Condenser_D		96	92	88	87	83	78	72	67	88.3	98.4	Lennox LGA 120
Cooling Equipment	CTs	89.8	97.1	91.6	87.7	82.1	81.8	79.8	74.2	69.5	87.2	99.3	Measurements December 11, 2008
Generator Secondary Intake	Gen2ndIn	71.4	77.5	76.2	76.5	73.5	68	60.9	56.3	49.6	74.2	82.7	Measurements December 11, 2008
Generator Combustion Exhasut	GenCombEx	84.1	91.4	96.2	88.9	70	63.9	60.8	53.5	43.2	83.5	98.2	Measurements December 11, 2008
Generator Room Exhaust	GenRoomEx	85.8	86.9	90.5	90.8	89.2	88.6	87.3	82.8	77.5	93.6	97.4	Measurements December 11, 2008
Generator Room Intake	GenRoomIn	91.1	97.6	94	88.2	83.7	84.1	81.4	78	69.4	89.1	100	Measurements December 11, 2008
Lennox 10 Ton Unit	L10Ton	92	92	92	88	87	83	78	72	67	88.3	97.9	Manufacturers Data
Lennox 12 Ton Unit	L12Ton	93	93	93	89	88	84	78	73	67	89.2	98.9	Manufacturers Data
Lennox 15 Ton Unit	L15Ton	97	97	97	92	91	88	83	79	72	92.9	103	Manufacturers Data
Lennox 2.5 Ton Unit	L2_5Ton	81	81	81	80	75	74	71	67	69	79.4	87.5	Manufacturers Data Use Data For GCS16-024-036
Lennox 20 Ton Unit	L20Ton	94	94	94	91	90	87	83	79	72	92	100	Manufacturers Data
Lennox 25 Ton Unit	L25Ton	95	95	95	93	92	88	84	81	75	93.6	102	Manufacturers Data
Lennox 2 Ton Unit	L2Ton	81	81	81	80	75	74	71	67	69	79.4	87.5	Manufacturers Data GCS16-024-036
Lennox 3.5 Ton Unit	L3_5Ton	71	71	71	70	71	69	65	59	50	73.2	78.6	Manufacturers Data
Lennox 3 Ton Unit	L3Ton	71	71	71	70	71	69	65	59	50	73.2	78.6	Manufacturers Data
Lennox 4 Ton Unit	L4Ton	71	71	71	70	71	69	65	59	50	73.2	78.6	Manufacturers Data
Lennox 5 Ton Unit	L5Ton	71	71	71	70	71	69	65	59	50	73.2	78.6	Manufacturers Data
Lennox 6 Ton Unit	L6Ton	71	71	71	70	71	69	65	59	50	73.2	78.6	Manufacturers Data
Lennox 7.5 Ton Unit	L7_5Ton	92	92	92	88	87	83	78	72	67	88.3	97.9	Manufacturers Data
Lennox 8.5 Ton Unit	L8_5Ton	92	92	92	88	87	83	78	72	67	88.3	97.9	Manufacturers Data
Lennox120_10Tons	LennoxCHA16_120		92	90	88	81	82	77	71	66	86.2	95.5	Manufacturer Catalogue
LCBO Loading Noise	LOADING	99.8	103	104	101	98.5	93	91	90.4	84.8	100	109	Measured at Existing Facility July 6, 2007
Normal Voice	Normal			62	63	64	66	61	55	48	68.8	70.7	Handbook of Noise Control, Harris, Pg 14-2
Raised Voice	Raised			57	66	71	73	67	61	56	75.4	76.4	Handbook of Noise Control, Harris, Pg 14-2
RTU_A12ton	RTU_A12ton		63.7	69.9	72.5	78.2	81.1	77.3	73.3	66.8	84.2	84.8	Carrier48TM014
RTU_A15ton	RTU_A15ton		90.8	88.7	86.4	84.3	83.5	78.4	75.6	66.8	87.6	94.7	Carrier48TM016
RTU_A2ton	RTU_A2ton		56.8	75.8	72.4	72.9	74.8	75.4	71.3	69.1	80.5	82.1	Carrier48TM004
VCLcar	VCLcar	77.9	80.9	80.9	77.9	78.9	78.9	72.9	66.9	61.9	82	87.4	From VCL Measurement
vclHvyTrkarriving	vclHvyTrkA	102	98.2	97.3	91.3	95	97.2	102	106	104	110	111	MTO long truck at 20 kph
vclHvyTrkIdling	vclHvyTrkI	98.2	101	101	96.5	96.3	95.6	91.5	84.1	78	99.5	107	
VCLMediumTruck	VCLMediumTruck	89.6	86.1	85.2	79.2	82.9	85.1	89.7	93.6	92.2	97.7	98.6	MTO Medium truck at 20 kph
VCLRefer	VCLRefer	102	110	106	101	96.9	96.4	93.9	89.9	83	102	113	

APPENDIX E

DETAILS OF UNMITIGATED SOUND EXPOSURE CALCULATIONS

Partial Level Table (dBA) - Daytime (0700-1900 Hours)

Source			Partial Level Base Day						
Name	M.	ID	R05	R03	R02	R04	R01	OPOR1	R06
S_001		Compactor	25.3	12.9	10.1	9.9	0.4	14.8	34.9
S_002		Condenser	36.9	30.1	27.1	31.9	8.4	26.1	36.7
S_003		DayTrk	22.3	6.7	27.2	22.5	31.5	17.7	18.8
S_004		DayTrk	30.7	12.6	34.7	31.0	21.4	22.8	30.7
S_005		DayTrk	21.5	20.7	20.6	21.5	12.5	28.7	20.8
S_006		DayTrk	20.2	20.7	20.4	20.3	12.2	28.3	18.7
S_007		DayTrk	19.5	20.4	20.2	19.7	12.3	28.2	18.0
S_008		DayTrk	10.0	6.8	26.1	10.1	16.1	15.2	9.4
S_009		DayTrk	32.1	31.5	21.1	8.9	8.8	28.2	35.2
S_010		DayTrk	36.0	26.4	31.2	31.0	9.0	26.5	37.4
S_011		DayTrk	39.3	29.2	26.7	33.7	8.7	33.8	39.3
S_012		FDayRefer1	46.9	37.0	35.0	42.1	19.5	38.3	46.8
S_013		FDayRefer2	47.7	38.6	37.1	42.7	19.7	39.0	47.6
S_014		FDayRefer3	45.5	27.5	51.0	44.9	41.7	37.7	45.1
S_015		FDayRefer4	26.6	20.5	30.9	26.8	34.4	30.5	25.3
S_016		FDayRefer5	42.7	40.1	40.0	42.6	26.6	42.7	42.0
S_017	~	Gen							
S_018	~	Gen							
S_019	~	Gen							
S_020	~	Gen							
S_021		HVAC	30.1	23.5	32.0	30.2	32.2	30.7	29.3
S_022		HVAC	30.0	23.4	31.8	30.1	32.0	30.6	29.2
S_023		HVAC	30.1	23.4	32.1	30.2	32.3	30.8	29.3
S_024		HVAC	34.0	29.4	36.4	34.1	36.4	36.1	32.9
S_025		HVAC	23.0	13.6	27.9	23.2	29.1	24.7	21.7
S_026		HVAC	33.5	28.8	35.7	33.6	35.7	36.7	32.5
S_027		HVAC	7.2	4.3	17.5	4.9	30.2	3.8	1.3
S_028		HVAC	7.1	4.6	17.7	4.9	30.8	4.0	1.2
S_029		HVAC	16.4	7.0	20.1	16.6	20.7	17.7	15.2
S_030		HVAC	16.7	6.9	21.0	16.9	21.8	18.2	15.5
S_031		HVAC	16.6	6.8	20.6	16.8	21.4	18.0	15.3
S_032		HVAC	16.8	7.1	20.9	17.0	21.8	18.2	15.5
S_033		HVAC	16.6	7.4	20.4	16.8	21.0	17.9	15.4
S_034		HVAC	16.7	7.5	20.6	16.9	21.3	18.1	15.5
S_035		HVAC	16.3	7.2	19.7	16.4	20.3	17.5	15.1
S_036		HVAC	16.1	7.1	19.5	16.3	20.1	17.3	15.0
S_037		HVAC	15.7	6.4	19.0	15.9	19.6	16.9	14.6
S_038		HVAC	15.7	6.4	18.9	15.8	19.4	16.8	14.6
S_039		HVAC	15.5	6.3	18.6	15.6	19.1	16.6	14.4
S_040		HVAC	15.6	6.6	18.7	15.8	19.2	16.7	14.6
S_041		HVAC	16.9	7.2	21.2	17.1	22.0	18.4	15.6
S_042		HVAC	17.2	7.7	21.4	17.4	22.3	18.7	15.9
S_043		HVAC	15.8	6.5	19.2	16.0	19.8	17.0	14.7
S_044		HVAC	16.0	7.1	19.2	16.1	19.7	17.1	14.9
S_045		HVAC	16.1	6.6	19.7	16.3	20.4	17.4	15.0
S_046		HVAC	16.5	6.8	20.4	16.7	21.2	17.8	15.3
S_047		HVAC	19.7	22.1	20.3	19.8	12.1	21.8	18.9
S_048		HVAC	15.1	9.5	16.5	15.2	16.6	9.2	14.4
S_049		HVAC	18.7	7.4	25.3	19.0	27.4	16.9	17.1
S_050		HVAC	18.4	7.2	24.7	18.7	26.6	17.7	16.8
S_051		HVAC	18.4	7.3	24.6	18.6	26.4	18.1	16.8
S_052		HVAC	7.2	3.6	17.0	5.1	28.8	3.4	1.5
S_053		HVAC	7.2	4.0	17.3	5.0	29.6	3.7	1.4
S_054		HVAC	7.1	4.8	17.8	4.8	31.3	4.1	1.1
S_055		HVAC	6.3	6.2	18.3	4.4	34.6	4.7	0.2
S_056		HVAC	14.0	5.9	16.1	14.1	16.4	14.7	13.2
S_057		HVAC	14.5	6.8	16.5	14.6	16.8	15.2	13.7
S_058		HVAC	14.3	7.2	16.1	14.4	16.3	15.0	13.6
S_059		HVAC	14.1	6.7	16.0	14.2	16.2	14.8	13.4
S_060		HVAC	13.9	6.1	15.8	14.0	16.1	6.8	13.1
S_061		HVAC	16.8	7.5	20.8	17.0	21.5	18.2	15.6
S_062		HVAC	15.8	7.0	18.8	15.9	19.2	16.8	14.7
S_063		HVAC	34.0	30.3	35.3	34.0	29.9	35.3	33.0
S_064		HVAC	19.1	15.6	20.4	19.2	14.3	21.5	18.2
S_065		HVAC	29.8	26.3	31.0	29.9	24.6	32.1	28.9
S_066		HVAC	30.8	31.8	31.6	30.9	24.0	31.4	29.8
S_067		HVAC	20.0	20.9	20.8	20.1	13.0	20.5	19.0
S_068		HVAC	20.3	14.1	20.4	20.5	15.7	19.3	19.2
S_069		HVAC	18.7	14.7	22.2	18.8	15.4	19.5	17.7
S_070		HVAC	6.8	5.6	18.1	4.6	33.0	4.5	0.7
S_071		HVAC	31.9	31.0	29.8	31.9	17.9	32.0	30.7
S_072		HVAC	24.5	23.9	23.1	24.5	13.5	24.4	23.6
S_073		HVAC	22.9	22.4	21.8	22.9	12.8	22.7	22.4
S_074		HVAC	26.6	26.2	25.8	26.6	16.7	26.4	26.2
S_075		HVAC	18.6	19.1	18.6	18.7	9.6	19.1	17.5
S_076		HVAC	26.4	26.5	26.2	26.4	17.9	26.4	25.8
S_077		HVAC	31.5	26.0	33.1	31.6	33.2	27.9	30.8
S_078		HVAC	31.4	25.9	32.9	31.4	33.0	25.0	30.7
S_079		HVAC	29.0	29.5	28.6	29.2	17.4	29.9	27.4
S_080		HVAC	31.0	31.4	30.5	31.1	19.5	31.8	29.5
S_081		HVAC	20.1	13.1	22.1	20.2	22.3	20.8	19.4
S_082		HVAC	6.9	5.3	18.0	4.7	32.3	4.3	0.9

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Source			Partial Level Base Day						
Name	M.	ID	R05	R03	R02	R04	R01	OPOR1	R06
S_083		HVAC	6.5	6.0	18.3	4.5	34.0	4.6	0.5
S_084		HVAC	12.1	4.1	20.4	9.7	28.8	3.9	7.6
S_085		HVAC	16.3	6.7	20.2	16.5	20.9	17.7	15.2
S_086		HVAC	14.3	6.2	16.4	14.4	16.7	15.0	13.4
S_087		HVAC	31.4	32.5	32.3	31.5	24.1	32.8	30.3
S_088		HVAC	29.2	27.6	26.6	29.1	12.2	28.6	28.6
S_089		HVAC	32.3	29.8	34.8	32.5	27.2	33.7	30.7
S_090		HVAC	31.9	29.2	34.9	32.1	28.4	33.9	30.3
S_091		HVAC	26.1	21.4	29.8	26.3	29.8	27.9	24.6
S_092		HVAC	29.3	20.0	35.1	29.6	36.7	32.5	27.9
S_093		HVAC	31.0	22.0	36.5	31.2	37.9	32.9	29.5
S_094		HVAC	30.4	21.0	35.7	30.7	37.0	33.5	29.0
S_095		HVAC	31.9	26.8	35.7	32.1	35.9	29.7	30.4
S_096		HVAC	32.7	29.6	34.6	32.8	27.8	34.4	31.4
S_097		HVAC	33.5	29.8	36.1	33.7	31.0	35.0	32.2
S_098		HVAC	29.9	21.3	33.3	30.1	33.9	31.1	28.8
S_099		HVAC	33.9	26.6	35.8	34.0	36.1	34.5	33.1
S_100		HVAC	33.8	26.4	35.8	33.9	36.0	34.5	33.0
S_101	~	Impulse_A							
S_102	~	Impulse_D							
S_103	~	Impulse_Fort							
S_104	~	Impulse_Mall							
S_105		FDayTrk	40.7	38.2	36.5	32.1	12.8	38.3	41.0
S_106		FDayTrk	33.5	19.6	40.8	33.8	42.7	37.0	31.6
S_107		FDayTrk	33.0	22.8	35.0	33.1	35.1	27.4	32.0
S_108		FDayTrk	42.1	41.7	46.9	42.5	43.7	45.3	40.0
	~	Road_Pinedale							
	~	Road_Timber							
	~	Road_New							
	~	Road_appleby							

Partial Level Table (dBA) - Evening (1900-2300 Hours)

Source			Partial Level Base Eve						
Name	M.	ID	R05	R03	R02	R04	R01	OPOR1	R06
S_001		Compactor							
S_002		Condenser	36.9	30.1	27.1	31.9	8.4	26.1	36.7
S_003		DayTrk	22.3	6.7	27.2	22.5	31.5	17.7	18.8
S_004		DayTrk	30.7	12.6	34.7	31.0	21.4	22.8	30.7
S_005		DayTrk	21.5	20.7	20.6	21.5	12.5	28.7	20.8
S_006		DayTrk	20.2	20.7	20.4	20.3	12.2	28.3	18.7
S_007		DayTrk	19.5	20.4	20.2	19.7	12.3	28.2	18.0
S_008		DayTrk	10.0	6.8	26.1	10.1	16.1	15.2	9.4
S_009		DayTrk	32.1	31.5	21.1	8.9	8.8	28.2	35.2
S_010		DayTrk	36.0	26.4	31.2	31.0	9.0	26.5	37.4
S_011		DayTrk							
S_012		FDayRefer1							
S_013		FDayRefer2							
S_014		FDayRefer3	45.5	27.5	51.0	44.9	41.7	37.7	45.1
S_015		FDayRefer4	26.6	20.5	30.9	26.8	34.4	30.5	25.3
S_016		FDayRefer5	42.7	40.1	40.0	42.6	26.6	42.7	42.0
S_017	~	Gen							
S_018	~	Gen							
S_019	~	Gen							
S_020	~	Gen							
S_021		HVAC	30.1	23.5	32.0	30.2	32.2	30.7	29.3
S_022		HVAC	30.0	23.4	31.8	30.1	32.0	30.6	29.2
S_023		HVAC	30.1	23.4	32.1	30.2	32.3	30.8	29.3
S_024		HVAC	34.0	29.4	36.4	34.1	36.4	36.1	32.9
S_025		HVAC	23.0	13.6	27.9	23.2	29.1	24.7	21.7
S_026		HVAC	33.5	28.8	35.7	33.6	35.7	36.7	32.5
S_027		HVAC	7.2	4.3	17.5	4.9	30.2	3.8	1.3
S_028		HVAC	7.1	4.6	17.7	4.9	30.8	4.0	1.2
S_029		HVAC	16.4	7.0	20.1	16.6	20.7	17.7	15.2
S_030		HVAC	16.7	6.9	21.0	16.9	21.8	18.2	15.5
S_031		HVAC	16.6	6.8	20.6	16.8	21.4	18.0	15.3
S_032		HVAC	16.8	7.1	20.9	17.0	21.8	18.2	15.5
S_033		HVAC	16.6	7.4	20.4	16.8	21.0	17.9	15.4
S_034		HVAC	16.7	7.5	20.6	16.9	21.3	18.1	15.5
S_035		HVAC	16.3	7.2	19.7	16.4	20.3	17.5	15.1
S_036		HVAC	16.1	7.1	19.5	16.3	20.1	17.3	15.0
S_037		HVAC	15.7	6.4	19.0	15.9	19.6	16.9	14.6
S_038		HVAC	15.7	6.4	18.9	15.8	19.4	16.8	14.6
S_039		HVAC	15.5	6.3	18.6	15.6	19.1	16.6	14.4
S_040		HVAC	15.6	6.6	18.7	15.8	19.2	16.7	14.6
S_041		HVAC	16.9	7.2	21.2	17.1	22.0	18.4	15.6
S_042		HVAC	17.2	7.7	21.4	17.4	22.3	18.7	15.9
S_043		HVAC	15.8	6.5	19.2	16.0	19.8	17.0	14.7
S_044		HVAC	16.0	7.1	19.2	16.1	19.7	17.1	14.9
S_045		HVAC	16.1	6.6	19.7	16.3	20.4	17.4	15.0
S_046		HVAC	16.5	6.8	20.4	16.7	21.2	17.8	15.3
S_047		HVAC	19.7	22.1	20.3	19.8	12.1	21.8	18.9
S_048		HVAC	15.1	9.5	16.5	15.2	16.6	9.2	14.4
S_049		HVAC	18.7	7.4	25.3	19.0	27.4	16.9	17.1

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Source			Partial Level Base Eve						
Name	M.	ID	R05	R03	R02	R04	R01	OPOR1	R06
S_050		HVAC	18.4	7.2	24.7	18.7	26.6	17.7	16.8
S_051		HVAC	18.4	7.3	24.6	18.6	26.4	18.1	16.8
S_052		HVAC	7.2	3.6	17.0	5.1	28.8	3.4	1.5
S_053		HVAC	7.2	4.0	17.3	5.0	29.6	3.7	1.4
S_054		HVAC	7.1	4.8	17.8	4.8	31.3	4.1	1.1
S_055		HVAC	6.3	6.2	18.3	4.4	34.6	4.7	0.2
S_056		HVAC	14.0	5.9	16.1	14.1	16.4	14.7	13.2
S_057		HVAC	14.5	6.8	16.5	14.6	16.8	15.2	13.7
S_058		HVAC	14.3	7.2	16.1	14.4	16.3	15.0	13.6
S_059		HVAC	14.1	6.7	16.0	14.2	16.2	14.8	13.4
S_060		HVAC	13.9	6.1	15.8	14.0	16.1	6.8	13.1
S_061		HVAC	16.8	7.5	20.8	17.0	21.5	18.2	15.6
S_062		HVAC	15.8	7.0	18.8	15.9	19.2	16.8	14.7
S_063		HVAC	34.0	30.3	35.3	34.0	29.9	35.3	33.0
S_064		HVAC	19.1	15.6	20.4	19.2	14.3	21.5	18.2
S_065		HVAC	29.8	26.3	31.0	29.9	24.6	32.1	28.9
S_066		HVAC	30.8	31.8	31.6	30.9	24.0	31.4	29.8
S_067		HVAC	20.0	20.9	20.8	20.1	13.0	20.5	19.0
S_068		HVAC	20.3	14.1	20.4	20.5	15.7	19.3	19.2
S_069		HVAC	18.7	14.7	22.2	18.8	15.4	19.5	17.7
S_070		HVAC	6.8	5.6	18.1	4.6	33.0	4.5	0.7
S_071		HVAC	31.9	31.0	29.8	31.9	17.9	32.0	30.7
S_072		HVAC	24.5	23.9	23.1	24.5	13.5	24.4	23.6
S_073		HVAC	22.9	22.4	21.8	22.9	12.8	22.7	22.4
S_074		HVAC	26.6	26.2	25.8	26.6	16.7	26.4	26.2
S_075		HVAC	18.6	19.1	18.6	18.7	9.6	19.1	17.5
S_076		HVAC	26.4	26.5	26.2	26.4	17.9	26.4	25.8
S_077		HVAC	31.5	26.0	33.1	31.6	33.2	27.9	30.8
S_078		HVAC	31.4	25.9	32.9	31.4	33.0	25.0	30.7
S_079		HVAC	29.0	29.5	28.6	29.2	17.4	29.9	27.4
S_080		HVAC	31.0	31.4	30.5	31.1	19.5	31.8	29.5
S_081		HVAC	20.1	13.1	22.1	20.2	22.3	20.8	19.4
S_082		HVAC	6.9	5.3	18.0	4.7	32.3	4.3	0.9
S_083		HVAC	6.5	6.0	18.3	4.5	34.0	4.6	0.5
S_084		HVAC	12.1	4.1	20.4	9.7	28.8	3.9	7.6
S_085		HVAC	16.3	6.7	20.2	16.5	20.9	17.7	15.2
S_086		HVAC	14.3	6.2	16.4	14.4	16.7	15.0	13.4
S_087		HVAC	31.4	32.5	32.3	31.5	24.1	32.8	30.3
S_088		HVAC	29.2	27.6	26.6	29.1	12.2	28.6	28.6
S_089		HVAC	32.3	29.8	34.8	32.5	27.2	33.7	30.7
S_090		HVAC	31.9	29.2	34.9	32.1	28.4	33.9	30.3
S_091		HVAC	26.1	21.4	29.8	26.3	29.8	27.9	24.6
S_092		HVAC	29.3	20.0	35.1	29.6	36.7	32.5	27.9
S_093		HVAC	31.0	22.0	36.5	31.2	37.9	32.9	29.5
S_094		HVAC	30.4	21.0	35.7	30.7	37.0	33.5	29.0
S_095		HVAC	31.9	26.8	35.7	32.1	35.9	29.7	30.4
S_096		HVAC	32.7	29.6	34.6	32.8	27.8	34.4	31.4
S_097		HVAC	33.5	29.8	36.1	33.7	31.0	35.0	32.2
S_098		HVAC	29.9	21.3	33.3	30.1	33.9	31.1	28.8
S_099		HVAC	33.9	26.6	35.8	34.0	36.1	34.5	33.1
S_100		HVAC	33.8	26.4	35.8	33.9	36.0	34.5	33.0
S_101	~	Impulse_A							
S_102	~	Impulse_D							
S_103	~	Impulse_Fort							
S_104	~	Impulse_Mall							
S_105		FDayTrk	-64.1	-66.6	-68.2	-72.6		-66.4	-63.7
S_106		FDayTrk	33.5	19.6	40.8	33.8	42.7	37.0	31.6
S_107		FDayTrk	33.0	22.8	35.0	33.1	35.1	27.4	32.0
S_108		FDayTrk	42.1	41.7	46.9	42.5	43.7	45.3	40.0
	~	Road_Pinedale							
	~	Road_Timber							
	~	Road_New							
	~	Road_appleby							

Partial Level Table (dBA) - Nighttime (2300-0700 Hours)

Source			Partial Level Base Night						
Name	M.	ID	R05	R03	R02	R04	R01	OPOR1	R06
S_001		Compactor							
S_002		Condenser	36.9	30.1	27.1	31.9	8.4	26.1	36.7
S_003		DayTrk							
S_004		DayTrk							
S_005		DayTrk							
S_006		DayTrk							
S_007		DayTrk							
S_008		DayTrk							
S_009		DayTrk							
S_010		DayTrk							
S_011		DayTrk							
S_012		FDayRefer1							
S_013		FDayRefer2							
S_014		FDayRefer3							
S_015		FDayRefer4							
S_016		FDayRefer5							

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Source			Partial Level Base Night						
Name	M.	ID	R05	R03	R02	R04	R01	OPOR1	R06
S_017	~	Gen							
S_018	~	Gen							
S_019	~	Gen							
S_020	~	Gen							
S_021		HVAC	27.1	20.5	28.9	27.2	29.2	27.7	26.3
S_022		HVAC	27.0	20.4	28.8	27.1	29.0	27.6	26.2
S_023		HVAC	27.1	20.4	29.1	27.2	29.3	27.8	26.3
S_024		HVAC	31.0	26.4	33.4	31.1	33.4	33.1	29.8
S_025		HVAC	20.0	10.6	24.9	20.2	26.1	21.7	18.6
S_026		HVAC	30.5	25.8	32.7	30.6	32.7	33.7	29.5
S_027		HVAC	4.1	1.3	14.5	1.9	27.2	0.8	-1.7
S_028		HVAC	4.1	1.6	14.7	1.9	27.8	1.0	-1.8
S_029		HVAC	13.4	4.0	17.0	13.5	17.7	14.7	12.2
S_030		HVAC	13.7	3.9	18.0	13.9	18.8	15.2	12.5
S_031		HVAC	13.6	3.8	17.6	13.8	18.4	15.0	12.3
S_032		HVAC	13.8	4.0	17.9	14.0	18.8	15.2	12.5
S_033		HVAC	13.6	4.4	17.4	13.8	18.0	14.9	12.4
S_034		HVAC	13.7	4.5	17.6	13.9	18.3	15.1	12.5
S_035		HVAC	13.3	4.2	16.7	13.4	17.3	14.5	12.1
S_036		HVAC	13.1	4.1	16.5	13.3	17.0	14.3	12.0
S_037		HVAC	12.7	3.4	16.0	12.9	16.6	13.9	11.6
S_038		HVAC	12.6	3.4	15.9	12.8	16.4	13.8	11.6
S_039		HVAC	12.5	3.3	15.6	12.6	16.1	13.6	11.4
S_040		HVAC	12.6	3.6	15.7	12.8	16.2	13.7	11.6
S_041		HVAC	13.9	4.2	18.2	14.1	19.0	15.4	12.6
S_042		HVAC	14.1	4.7	18.4	14.3	19.3	15.6	12.8
S_043		HVAC	12.8	3.5	16.2	13.0	16.8	14.0	11.7
S_044		HVAC	13.0	4.1	16.1	13.1	16.7	14.1	11.9
S_045		HVAC	13.1	3.6	16.7	13.3	17.4	14.4	12.0
S_046		HVAC	13.5	3.8	17.4	13.6	18.2	14.8	12.2
S_047		HVAC	16.7	19.1	17.2	16.8	9.1	18.8	15.8
S_048		HVAC	12.1	6.4	13.5	12.2	13.6	6.2	11.4
S_049		HVAC	15.7	4.4	22.3	16.0	24.4	13.9	14.1
S_050		HVAC	15.4	4.2	21.7	15.7	23.6	14.7	13.8
S_051		HVAC	15.3	4.3	21.6	15.6	23.4	15.1	13.8
S_052		HVAC	4.2	0.6	14.0	2.1	25.8	0.4	-1.6
S_053		HVAC	4.2	1.0	14.3	2.0	26.6	0.6	-1.6
S_054		HVAC	4.1	1.8	14.8	1.8	28.3	1.1	-1.9
S_055		HVAC	3.3	3.2	15.2	1.3	31.6	1.6	-2.8
S_056		HVAC	11.0	2.9	13.1	11.1	13.4	11.7	10.2
S_057		HVAC	11.5	3.8	13.5	11.6	13.8	12.2	10.7
S_058		HVAC	11.3	4.2	13.1	11.4	13.3	11.9	10.6
S_059		HVAC	11.1	3.7	13.0	11.2	13.2	11.8	10.4
S_060		HVAC	10.9	3.1	12.8	11.0	13.1	3.8	10.1
S_061		HVAC	13.8	4.5	17.8	14.0	18.5	15.2	12.6
S_062		HVAC	12.7	4.0	15.7	12.9	16.2	13.8	11.7
S_063		HVAC	30.9	27.3	32.3	31.0	26.9	32.3	30.0
S_064		HVAC	16.1	12.6	17.4	16.2	11.3	18.5	15.2
S_065		HVAC	26.8	23.3	28.0	26.9	21.5	29.0	25.9
S_066		HVAC	27.8	28.7	28.6	27.9	21.0	28.4	26.7
S_067		HVAC	17.0	17.9	17.8	17.0	10.0	17.5	16.0
S_068		HVAC	17.3	11.1	17.4	17.4	12.7	16.3	16.2
S_069		HVAC	15.7	11.7	19.1	15.8	12.4	16.5	14.7
S_070		HVAC	3.7	2.6	15.1	1.6	29.9	1.4	-2.3
S_071		HVAC	28.9	28.0	26.8	28.9	14.8	29.0	27.7
S_072		HVAC	21.4	20.9	20.1	21.4	10.5	21.4	20.6
S_073		HVAC	19.9	19.4	18.8	19.9	9.8	19.7	19.4
S_074		HVAC	23.6	23.2	22.8	23.6	13.7	23.4	23.2
S_075		HVAC	15.6	16.1	15.6	15.7	6.6	16.1	14.5
S_076		HVAC	23.4	23.5	23.1	23.4	14.9	23.4	22.8
S_077		HVAC	28.5	23.0	30.1	28.6	30.2	24.9	27.8
S_078		HVAC	28.4	22.8	29.9	28.4	30.0	21.9	27.6
S_079		HVAC	26.0	26.5	25.5	26.1	14.4	26.9	24.4
S_080		HVAC	28.0	28.4	27.5	28.1	16.5	28.7	26.5
S_081		HVAC	17.1	10.1	19.1	17.2	19.3	17.8	16.4
S_082		HVAC	3.9	2.3	15.0	1.7	29.2	1.3	-2.1
S_083		HVAC	3.5	3.0	15.3	1.5	31.0	1.6	-2.5
S_084		HVAC	9.1	1.1	17.3	6.7	25.7	0.9	4.6
S_085		HVAC	13.3	3.7	17.1	13.5	17.9	14.7	12.1
S_086		HVAC	11.2	3.2	13.4	11.4	13.7	12.0	10.4
S_087		HVAC	28.4	29.4	29.3	28.5	21.1	29.8	27.3
S_088		HVAC	26.1	24.6	23.6	26.1	9.2	25.6	25.6
S_089		HVAC	29.3	26.8	31.8	29.5	24.2	30.7	27.7
S_090		HVAC	28.9	26.2	31.9	29.1	25.3	30.9	27.3
S_091		HVAC	23.1	18.4	26.7	23.3	26.8	24.9	21.6
S_092		HVAC	26.3	17.0	32.1	26.6	33.7	29.5	24.9
S_093		HVAC	28.0	19.0	33.5	28.2	34.8	29.9	26.5
S_094		HVAC	27.4	18.0	32.7	27.7	34.0	30.5	26.0
S_095		HVAC	28.9	23.8	32.7	29.1	32.9	26.7	27.4
S_096		HVAC	29.7	26.6	31.6	29.8	24.8	31.4	28.3
S_097		HVAC	30.5	26.7	33.1	30.7	28.0	31.9	29.2
S_098		HVAC	26.9	18.3	30.3	27.1	30.9	28.1	25.8
S_099		HVAC	30.8	23.6	32.8	30.9	33.1	31.5	30.1
S_100		HVAC	30.8	23.4	32.7	30.9	33.0	31.4	30.0
S_101	~	Impulse_A							

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Source			Partial Level Base Night						
Name	M.	ID	R05	R03	R02	R04	R01	OPOR1	R06
S_102	~	Impulse_D							
S_103	~	Impulse_Fort							
S_104	~	Impulse_Mall							
S_105		FDayTrk	-64.1	-66.6	-68.2	-72.6		-66.4	-63.7
S_106		FDayTrk	-69.5	-83.4	-62.2	-69.2	-60.4	-66.0	-71.4
S_107		FDayTrk	-73.1	-83.2	-71.0	-73.0	-70.9	-78.6	-74.0
S_108		FDayTrk	-65.7	-66.0	-60.9	-65.2	-64.1	-62.5	-67.8
	~	Road_Pinedale							
	~	Road_Timber							
	~	Road_New							
	~	Road_appleby							

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Configuration	
Parameter	Value
General	
Country	International
Max. Error (dB)	0.00
Max. Search Radius (m)	2000.00
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (m)	1000.00
Min. Length of Section (m)	1.00
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	60.00
Reference Time Night (min)	60.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	0.00
Night-time Penalty (dB)	0.00
DTM	
Standard Height (m)	0.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	2
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rvcr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°C)	10
rel. Humidity (%)	70
Ground Absorption G	0.00
Wind Speed for Dir. (m/s)	3.0
Roads (RLS-90)	
Strictly acc. to RLS-90	
Railways (Schall 03)	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (???)	
Strictly acc. to AzB	

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Receiver
Name: R02
ID: R02
X: 600880.25
Y: 4802641.85
Z: 33.30

Point Source, ISO 9613, Name: "S_001", ID: "Compactor"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601012.61	4802679.12	0.60	0	500	80.7	-88.0	0.0	0.0	54.0	0.3	-3.0	0.0	0.0	19.4	0.0	-0.0	10.1	-88.0

Point Source, ISO 9613, Name: "S_002", ID: "Condenser"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601035.48	4802657.28	5.00	0	0	87.2	87.2	0.0	0.0	55.0	0.9	-3.0	0.0	0.0	7.3	-0.0	-0.0	27.1	27.1

Point Source, ISO 9613, Name: "S_003", ID: "DayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601000.86	4802446.53	2.40	0	0	88.7	-88.0	0.0	0.0	58.3	1.1	-3.0	0.0	0.0	21.1	-0.0	-0.0	11.3	-88.0
2	601000.86	4802446.53	2.40	2	0	88.2	-88.0	0.0	0.0	59.7	1.4	-3.0	0.0	0.0	0.0	-0.0	3.0	27.1	-88.0

Point Source, ISO 9613, Name: "S_004", ID: "DayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600848.10	4802553.60	2.40	0	0	88.7	-88.0	0.0	0.0	50.9	0.5	-3.0	0.0	0.0	21.0	-0.0	-0.0	19.3	-88.0
2	600848.10	4802553.60	2.40	2	0	88.5	-88.0	0.0	0.0	52.9	0.7	-3.0	0.0	0.0	0.0	-0.0	4.0	33.9	-88.0
3	600848.10	4802553.60	2.40	2	0	88.5	-88.0	0.0	0.0	53.0	0.7	-3.0	0.0	0.0	7.8	-0.0	4.0	26.1	-88.0

Point Source, ISO 9613, Name: "S_005", ID: "DayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600966.63	4802607.71	2.40	0	0	88.7	-88.0	0.0	0.0	50.8	0.5	-3.0	0.0	0.0	19.8	-0.0	-0.0	20.6	-88.0

Point Source, ISO 9613, Name: "S_006", ID: "DayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600972.44	4802615.11	2.40	0	0	88.7	-88.0	0.0	0.0	51.1	0.5	-3.0	0.0	0.0	19.7	-0.0	-0.0	20.4	-88.0

Point Source, ISO 9613, Name: "S_007", ID: "DayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600969.50	4802611.81	2.40	0	0	88.7	-88.0	0.0	0.0	50.9	0.5	-3.0	0.0	0.0	20.1	-0.0	-0.0	20.2	-88.0

Point Source, ISO 9613, Name: "S_008", ID: "DayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601007.25	4802454.65	2.40	0	0	88.7	-88.0	0.0	0.0	58.2	1.1	-3.0	0.0	0.0	21.0	-0.0	-0.0	11.5	-88.0
2	601007.25	4802454.65	2.40	2	0	86.9	-88.0	0.0	0.0	59.8	1.7	-3.0	0.0	0.0	0.0	-0.0	3.0	25.4	-88.0
3	601007.25	4802454.65	2.40	2	0	86.9	-88.0	0.0	0.0	59.8	1.7	-3.0	0.0	0.0	8.1	-0.0	3.0	17.2	-88.0

Point Source, ISO 9613, Name: "S_009", ID: "DayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601077.13	4802627.99	2.40	0	0	88.7	-88.0	0.0	0.0	57.0	1.0	-3.0	0.0	0.0	12.6	-0.0	-0.0	21.1	-88.0

Point Source, ISO 9613, Name: "S_010", ID: "DayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601067.90	4802638.22	2.40	0	0	88.7	-88.0	0.0	0.0	56.6	0.9	-3.0	0.0	0.0	13.5	-0.0	-0.0	20.7	-88.0
2	601067.90	4802638.22	2.40	1	0	88.2	-88.0	0.0	0.0	57.3	1.1	-3.0	0.0	0.0	0.0	-0.0	2.0	30.8	-88.0

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Point Source, ISO 9613, Name: "S_011", ID: "DayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601028.99	4802671.17	2.40	0	0	88.7	-88.0	0.0	0.0	54.8	0.8	-3.0	0.0	0.0	9.4	-0.0	-0.0	26.7	-88.0

Point Source, ISO 9613, Name: "S_012", ID: "FDayRefer1"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601074.50	4802628.87	3.50	0	0	100.3	-88.0	0.0	0.0	56.9	1.1	-3.0	0.0	0.0	10.4	-0.0	-0.0	35.0	-88.0

Point Source, ISO 9613, Name: "S_013", ID: "FDayRefer2"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601065.50	4802638.66	3.50	0	0	100.3	-88.0	0.0	0.0	56.5	1.1	-3.0	0.0	0.0	8.7	-0.0	-0.0	37.1	-88.0

Point Source, ISO 9613, Name: "S_014", ID: "FDayRefer3"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600846.62	4802551.80	3.50	0	0	101.6	-88.0	0.0	0.0	51.1	0.6	-3.0	0.0	0.0	14.1	-0.0	-0.0	38.8	-88.0
2	600846.62	4802551.80	3.50	1	0	101.2	-88.0	0.0	0.0	52.6	0.8	-3.0	0.0	0.0	0.0	-0.0	2.0	48.7	-88.0
3	600846.62	4802551.80	3.50	2	0	101.2	-88.0	0.0	0.0	52.8	0.8	-3.0	0.0	0.0	0.0	-0.0	4.0	46.5	-88.0

Point Source, ISO 9613, Name: "S_015", ID: "FDayRefer4"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601009.83	4802452.78	3.50	0	0	101.6	-88.0	0.0	0.0	58.3	1.3	-3.0	0.0	0.0	14.2	-0.0	-0.0	30.9	-88.0

Point Source, ISO 9613, Name: "S_016", ID: "FDayRefer5"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600971.50	4802610.47	3.50	0	0	101.6	-88.0	0.0	0.0	51.1	0.6	-3.0	0.0	0.0	12.9	-0.0	-0.0	40.0	-88.0

Point Source, ISO 9613, Name: "S_021", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600996.29	4802436.34	10.76	0	0	88.3	85.3	0.0	0.0	58.5	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	31.9	28.9

Point Source, ISO 9613, Name: "S_022", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600999.42	4802434.07	10.76	0	0	88.3	85.3	0.0	0.0	58.6	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	31.8	28.8

Point Source, ISO 9613, Name: "S_023", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600990.83	4802436.54	10.76	0	0	88.3	85.3	0.0	0.0	58.4	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	32.1	29.1

Point Source, ISO 9613, Name: "S_024", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600978.28	4802535.07	8.05	0	0	88.3	85.3	0.0	0.0	54.3	0.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	36.4	33.4

Point Source, ISO 9613, Name: "S_025", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600864.68	4802512.99	7.75	0	0	79.4	76.4	0.0	0.0	53.4	1.0	-3.0	0.0	0.0	0.0	-0.0	-0.0	27.9	24.9

Point Source, ISO 9613, Name: "S_026", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600986.26	4802526.60	8.05	0	0	88.3	85.3	0.0	0.0	55.0	0.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	35.7	32.7

Point Source, ISO 9613, Name: "S_027", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600832.17	4802592.73	9.63	0	0	73.2	70.2	0.0	0.0	48.2	0.4	-3.0	0.0	0.0	10.1	-0.0	-0.0	17.5	14.5
2	600832.17	4802592.73	9.63	1	0	73.1	70.1	0.0	0.0	59.0	1.2	-3.0	0.0	0.0	28.0	-0.0	2.0	-14.1	-17.1

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Point Source, ISO 9613, Name: "S_028", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600834.80	4802595.84	9.63	0	0	73.2	70.2	0.0	0.0	47.8	0.4	-3.0	0.0	0.0	10.4	-0.0	-0.0	17.7	14.7
2	600834.80	4802595.84	9.63	1	0	73.1	70.1	0.0	0.0	58.9	1.2	-3.0	0.0	0.0	28.0	-0.0	2.0	-13.9	-16.9

Point Source, ISO 9613, Name: "S_029", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600905.53	4802480.57	11.05	0	0	73.2	70.2	0.0	0.0	55.3	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.1	17.1

Point Source, ISO 9613, Name: "S_030", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600884.52	4802494.17	10.85	0	0	73.2	70.2	0.0	0.0	54.5	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	21.0	18.0

Point Source, ISO 9613, Name: "S_031", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600890.46	4802488.42	10.85	0	0	73.2	70.2	0.0	0.0	54.8	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.6	17.6

Point Source, ISO 9613, Name: "S_032", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600889.63	4802493.63	10.85	0	0	73.2	70.2	0.0	0.0	54.5	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.9	17.9

Point Source, ISO 9613, Name: "S_033", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600908.21	4802486.58	10.85	0	0	73.2	70.2	0.0	0.0	55.0	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.4	17.4

Point Source, ISO 9613, Name: "S_034", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600904.57	4802489.89	10.85	0	0	73.2	70.2	0.0	0.0	54.8	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.6	17.6

Point Source, ISO 9613, Name: "S_035", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600917.27	4802476.68	10.85	0	0	73.2	70.2	0.0	0.0	55.6	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	19.7	16.7

Point Source, ISO 9613, Name: "S_036", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600920.43	4802472.95	10.85	0	0	73.2	70.2	0.0	0.0	55.9	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	19.5	16.5

Point Source, ISO 9613, Name: "S_037", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600915.50	4802462.49	10.85	0	0	73.2	70.2	0.0	0.0	56.3	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	19.0	16.0

Point Source, ISO 9613, Name: "S_038", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600917.71	4802460.26	10.85	0	0	73.2	70.2	0.0	0.0	56.4	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	18.9	15.9

Point Source, ISO 9613, Name: "S_039", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600922.85	4802455.13	10.85	0	0	73.2	70.2	0.0	0.0	56.7	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	18.6	15.6

Point Source, ISO 9613, Name: "S_040", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600926.85	4802458.28	10.85	0	0	73.2	70.2	0.0	0.0	56.6	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	18.7	15.7

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Point Source, ISO 9613, Name: "S_041", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600888.83	4802497.63	11.05	0	0	73.2	70.2	0.0	0.0	54.3	0.7	-3.0	0.0	0.0	0.0	-0.0	-0.0	21.2	18.2

Point Source, ISO 9613, Name: "S_042", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600893.55	4802502.16	11.05	0	0	73.2	70.2	0.0	0.0	54.0	0.7	-3.0	0.0	0.0	0.0	-0.0	-0.0	21.4	18.4

Point Source, ISO 9613, Name: "S_043", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600912.72	4802465.76	11.05	0	0	73.2	70.2	0.0	0.0	56.1	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	19.2	16.2

Point Source, ISO 9613, Name: "S_044", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600925.94	4802467.76	11.05	0	0	73.2	70.2	0.0	0.0	56.2	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	19.2	16.1

Point Source, ISO 9613, Name: "S_045", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600903.79	4802474.08	10.85	0	0	73.2	70.2	0.0	0.0	55.6	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	19.7	16.7

Point Source, ISO 9613, Name: "S_046", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600893.24	4802485.20	10.85	0	0	73.2	70.2	0.0	0.0	55.0	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.4	17.4

Point Source, ISO 9613, Name: "S_047", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601024.41	4802574.21	7.85	0	0	73.2	70.2	0.0	0.0	55.1	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.3	17.3

Point Source, ISO 9613, Name: "S_048", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601033.11	4802460.28	8.56	0	0	73.2	70.2	0.0	0.0	58.5	1.1	-3.0	0.0	0.0	0.0	-0.0	-0.0	16.5	13.5

Point Source, ISO 9613, Name: "S_049", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600832.25	4802566.25	8.05	0	0	73.2	70.2	0.0	0.0	50.4	0.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	25.4	22.3

Point Source, ISO 9613, Name: "S_050", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600833.26	4802557.75	8.05	0	0	73.2	70.2	0.0	0.0	51.0	0.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	24.7	21.7

Point Source, ISO 9613, Name: "S_051", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600837.01	4802554.35	8.05	0	0	73.2	70.2	0.0	0.0	51.1	0.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	24.6	21.6

Point Source, ISO 9613, Name: "S_052", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600825.67	4802584.85	9.63	0	0	73.2	70.2	0.0	0.0	49.3	0.4	-3.0	0.0	0.0	9.4	-0.0	-0.0	17.0	14.0
2	600825.67	4802584.85	9.63	1	0	73.1	70.1	0.0	0.0	59.4	1.2	-3.0	0.0	0.0	27.9	-0.0	2.0	-14.4	-17.4

Point Source, ISO 9613, Name: "S_053", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600829.37	4802589.27	9.63	0	0	73.2	70.2	0.0	0.0	48.7	0.4	-3.0	0.0	0.0	9.8	-0.0	-0.0	17.3	14.3
2	600829.37	4802589.27	9.63	1	0	73.1	70.1	0.0	0.0	59.2	1.2	-3.0	0.0	0.0	27.9	-0.0	2.0	-14.2	-17.2

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Point Source, ISO 9613, Name: "S_054", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600836.65	4802598.10	9.83	0	0	73.2	70.2	0.0	0.0	47.4	0.4	-3.0	0.0	0.0	10.6	-0.0	-0.0	17.8	14.8
2	600836.65	4802598.10	9.83	1	0	73.1	70.1	0.0	0.0	58.8	1.2	-3.0	0.0	0.0	28.0	-0.0	2.0	-13.8	-16.8

Point Source, ISO 9613, Name: "S_055", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600848.64	4802612.44	9.83	0	0	73.2	70.2	0.0	0.0	44.8	0.3	-3.0	0.0	0.0	12.9	-0.0	-0.0	18.3	15.2
2	600848.64	4802612.44	9.83	1	0	73.1	70.1	0.0	0.0	58.1	1.1	-3.0	0.0	0.0	28.0	-0.0	2.0	-13.1	-16.1

Point Source, ISO 9613, Name: "S_056", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600978.66	4802413.13	10.76	0	0	73.2	70.2	0.0	0.0	59.0	1.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	16.1	13.1

Point Source, ISO 9613, Name: "S_057", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600986.61	4802429.39	10.76	0	0	73.2	70.2	0.0	0.0	58.6	1.1	-3.0	0.0	0.0	0.0	-0.0	-0.0	16.5	13.5

Point Source, ISO 9613, Name: "S_058", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601006.33	4802428.98	10.56	0	0	73.2	70.2	0.0	0.0	58.9	1.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	16.1	13.1

Point Source, ISO 9613, Name: "S_059", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600999.53	4802421.25	10.56	0	0	73.2	70.2	0.0	0.0	59.0	1.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	16.0	13.0

Point Source, ISO 9613, Name: "S_060", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600991.90	4802411.86	10.56	0	0	73.2	70.2	0.0	0.0	59.2	1.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	15.8	12.8

Point Source, ISO 9613, Name: "S_061", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600901.47	4802492.79	10.85	0	0	73.2	70.2	0.0	0.0	54.6	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.8	17.8

Point Source, ISO 9613, Name: "S_062", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600933.99	4802462.00	10.85	0	0	73.2	70.2	0.0	0.0	56.5	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	18.8	15.8

Point Source, ISO 9613, Name: "S_063", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601012.19	4802544.86	8.05	0	0	88.3	85.3	0.0	0.0	55.4	0.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	35.3	32.3

Point Source, ISO 9613, Name: "S_064", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601010.48	4802554.92	8.05	0	0	73.2	70.2	0.0	0.0	55.0	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.4	17.4

Point Source, ISO 9613, Name: "S_065", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601010.17	4802563.38	8.05	0	0	83.3	80.3	0.0	0.0	54.7	0.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	31.0	28.0

Point Source, ISO 9613, Name: "S_066", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601007.36	4802581.14	8.05	0	0	83.3	80.3	0.0	0.0	54.1	0.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	31.6	28.6

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Point Source, ISO 9613, Name: "S_067", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601014.02	4802574.23	7.85	0	0	73.2	70.2	0.0	0.0	54.6	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.8	17.8

Point Source, ISO 9613, Name: "S_068", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600995.70	4802535.90	8.05	0	0	73.2	70.2	0.0	0.0	55.0	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.4	17.4

Point Source, ISO 9613, Name: "S_069", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601000.51	4802541.40	7.85	0	0	73.2	70.2	0.0	0.0	55.0	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.4	17.4
2	601000.51	4802541.40	7.85	1	0	73.1	70.1	0.0	0.0	55.9	0.9	-3.0	0.0	0.0	0.0	-0.0	2.0	17.4	14.4

Point Source, ISO 9613, Name: "S_070", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600842.86	4802605.59	9.83	0	0	73.2	70.2	0.0	0.0	46.1	0.3	-3.0	0.0	0.0	11.6	-0.0	-0.0	18.1	15.1
2	600842.86	4802605.59	9.83	1	0	73.1	70.1	0.0	0.0	58.4	1.1	-3.0	0.0	0.0	28.0	-0.0	2.0	-13.4	-16.4

Point Source, ISO 9613, Name: "S_071", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600991.75	4802653.89	7.45	0	0	79.4	76.4	0.0	0.0	52.2	0.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	29.8	26.8

Point Source, ISO 9613, Name: "S_072", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601013.56	4802635.76	7.45	0	0	74.1	71.1	0.0	0.0	53.7	0.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	23.1	20.1

Point Source, ISO 9613, Name: "S_073", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601034.40	4802624.41	7.45	0	0	74.1	71.1	0.0	0.0	54.9	0.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	21.8	18.8

Point Source, ISO 9613, Name: "S_074", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601055.26	4802606.70	7.45	0	0	79.4	76.4	0.0	0.0	56.1	0.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	25.8	22.8

Point Source, ISO 9613, Name: "S_075", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601000.82	4802613.99	7.45	0	0	69.2	66.1	0.0	0.0	53.0	0.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	18.6	15.6

Point Source, ISO 9613, Name: "S_076", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601043.30	4802591.03	7.45	0	0	79.4	76.4	0.0	0.0	55.8	0.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	26.2	23.2

Point Source, ISO 9613, Name: "S_077", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601019.34	4802459.39	8.76	0	0	89.2	86.2	0.0	0.0	58.3	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	33.1	30.1

Point Source, ISO 9613, Name: "S_078", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601024.24	4802455.44	8.76	0	0	89.2	86.2	0.0	0.0	58.5	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	32.9	29.9

Point Source, ISO 9613, Name: "S_079", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600978.42	4802638.71	7.25	0	0	77.2	74.2	0.0	0.0	51.1	0.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	28.6	25.5

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Point Source, ISO 9613, Name: "S_080", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600983.15	4802635.26	7.25	0	0	79.4	76.4	0.0	0.0	51.5	0.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	30.6	27.5

Point Source, ISO 9613, Name: "S_081", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600994.71	4802426.52	10.76	0	0	79.4	76.4	0.0	0.0	58.8	1.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	22.1	19.1

Point Source, ISO 9613, Name: "S_082", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600840.28	4802602.49	9.83	0	0	73.2	70.2	0.0	0.0	46.7	0.3	-3.0	0.0	0.0	11.2	-0.0	-0.0	18.0	15.0
2	600840.28	4802602.49	9.83	1	0	73.1	70.1	0.0	0.0	58.6	1.1	-3.0	0.0	0.0	28.0	-0.0	2.0	-13.6	-16.6

Point Source, ISO 9613, Name: "S_083", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600846.62	4802609.99	9.83	0	0	73.2	70.2	0.0	0.0	45.3	0.3	-3.0	0.0	0.0	12.3	-0.0	-0.0	18.3	15.3
2	600846.62	4802609.99	9.83	1	0	73.1	70.1	0.0	0.0	58.2	1.1	-3.0	0.0	0.0	28.0	-0.0	2.0	-13.2	-16.2

Point Source, ISO 9613, Name: "S_084", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600829.14	4802581.44	9.63	0	0	73.2	70.2	0.0	0.0	49.3	0.4	-3.0	0.0	0.0	6.1	-0.0	-0.0	20.4	17.3
2	600829.14	4802581.44	9.63	1	0	73.1	70.1	0.0	0.0	59.4	1.2	-3.0	0.0	0.0	27.9	-0.0	2.0	-14.4	-17.4

Point Source, ISO 9613, Name: "S_085", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600897.60	4802481.20	10.85	0	0	73.2	70.2	0.0	0.0	55.3	0.8	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.2	17.1

Point Source, ISO 9613, Name: "S_086", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600977.46	4802421.13	10.56	0	0	73.2	70.2	0.0	0.0	58.7	1.1	-3.0	0.0	0.0	0.0	-0.0	-0.0	16.4	13.4

Point Source, ISO 9613, Name: "S_087", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601000.25	4802589.32	8.05	0	0	83.3	80.3	0.0	0.0	53.5	0.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	32.3	29.3

Point Source, ISO 9613, Name: "S_088", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601016.37	4802655.33	7.85	0	0	78.5	75.5	0.0	0.0	53.9	1.1	-3.0	0.0	0.0	0.0	-0.0	-0.0	26.6	23.6

Point Source, ISO 9613, Name: "S_089", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600965.13	4802592.62	8.05	0	0	83.3	80.3	0.0	0.0	51.1	0.4	-3.0	0.0	0.0	0.0	-0.0	-0.0	34.8	31.8

Point Source, ISO 9613, Name: "S_090", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600959.37	4802586.07	8.05	0	0	83.3	80.3	0.0	0.0	51.0	0.4	-3.0	0.0	0.0	0.0	-0.0	-0.0	34.9	31.9

Point Source, ISO 9613, Name: "S_091", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600949.77	4802562.39	8.05	0	0	79.4	76.4	0.0	0.0	51.7	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	29.8	26.8

Point Source, ISO 9613, Name: "S_092", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600847.89	4802541.95	8.05	0	0	84.2	81.2	0.0	0.0	51.7	0.4	-3.0	0.0	0.0	0.0	-0.0	-0.0	35.1	32.1

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Point Source, ISO 9613, Name: "S_093", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600865.07	4802534.79	8.25	0	0	85.9	82.9	0.0	0.0	51.9	0.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	36.5	33.5

Point Source, ISO 9613, Name: "S_094", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600855.97	4802525.22	8.25	0	0	85.9	82.9	0.0	0.0	52.7	0.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	35.7	32.7

Point Source, ISO 9613, Name: "S_095", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600944.99	4802558.08	8.25	0	0	85.0	82.0	0.0	0.0	51.7	0.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	35.7	32.7

Point Source, ISO 9613, Name: "S_096", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600981.76	4802577.30	8.25	0	0	85.0	82.0	0.0	0.0	52.8	0.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	34.6	31.6

Point Source, ISO 9613, Name: "S_097", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600970.69	4802563.02	8.25	0	0	86.6	83.5	0.0	0.0	52.8	0.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	36.1	33.1

Point Source, ISO 9613, Name: "S_098", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600914.02	4802470.70	11.25	0	0	87.0	84.0	0.0	0.0	55.9	0.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	33.3	30.3

Point Source, ISO 9613, Name: "S_099", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600986.59	4802412.09	10.96	0	0	92.9	89.9	0.0	0.0	59.1	1.0	-3.0	0.0	0.0	0.0	-0.0	-0.0	35.8	32.8

Point Source, ISO 9613, Name: "S_100", ID: "HVAC"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600983.56	4802409.31	10.96	0	0	92.9	89.9	0.0	0.0	59.1	1.0	-3.0	0.0	0.0	0.0	-0.0	-0.0	35.8	32.7

Line Source, ISO 9613, Name: "S_105", ID: "FDayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	601004.04	4802699.12	2.40	0	0	80.7	-24.0	0.0	0.0	53.9	4.0	-3.0	0.0	0.0	0.0	-0.0	-0.0	25.8	-79.0
2	601010.93	4802693.87	2.40	0	0	81.1	-23.6	0.0	0.0	54.2	4.1	-3.0	0.0	0.0	0.0	-0.0	-0.0	25.9	-78.9
3	601017.95	4802688.52	2.40	0	0	80.9	-23.9	0.0	0.0	54.4	4.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	25.3	-79.5
4	601023.04	4802684.65	2.40	0	0	77.8	-27.0	0.0	0.0	54.6	4.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	21.9	-82.9
5	601025.59	4802682.70	2.40	0	0	75.0	-29.7	0.0	0.0	54.8	4.3	-3.0	0.0	0.0	4.1	-0.0	-0.0	14.9	-89.9
6	601030.45	4802679.00	2.40	0	0	81.5	-23.2	0.0	0.0	55.0	4.3	-3.0	0.0	0.0	8.2	-0.0	-0.0	17.0	-87.7
7	601036.03	4802674.75	2.40	0	0	77.6	-27.1	0.0	0.0	55.2	4.4	-3.0	0.0	0.0	0.0	-0.0	-0.0	21.0	-83.8
8	601051.56	4802661.75	2.40	0	0	87.2	-17.6	0.0	0.0	55.9	4.7	-3.0	0.0	0.0	0.0	-0.0	-0.0	29.7	-75.1
9	601072.11	4802641.48	2.40	0	0	84.9	-19.9	0.0	0.0	56.8	5.0	-3.0	0.0	0.0	8.1	-0.0	-0.0	18.1	-86.7
10	601081.60	4802629.30	2.40	0	0	81.2	-23.5	0.0	0.0	57.2	5.1	-3.0	0.0	0.0	9.9	-0.0	-0.0	12.0	-92.8
11	601004.59	4802707.03	2.40	0	0	82.8	-22.0	0.0	0.0	54.1	4.1	-3.0	0.0	0.0	0.0	-0.0	-0.0	27.6	-77.2
12	601091.68	4802627.25	2.40	0	0	72.4	-32.4	0.0	0.0	57.6	5.3	-3.0	0.0	0.0	4.9	-0.0	-0.0	7.5	-97.2
13	601094.07	4802629.90	2.40	0	0	79.3	-25.5	0.0	0.0	57.7	5.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	19.2	-85.5
14	601086.59	4802624.59	2.40	0	0	78.3	-26.5	0.0	0.0	57.4	5.2	-3.0	0.0	0.0	10.8	-0.0	-0.0	7.8	-96.9
15	601090.00	4802625.17	2.40	0	0	77.7	-27.0	0.0	0.0	57.5	5.3	-3.0	0.0	0.0	7.5	-0.0	-0.0	10.4	-94.3
16	601019.19	4802687.58	2.40	1	0	80.9	-23.9	0.0	0.0	55.5	4.5	-3.0	0.0	0.0	0.0	-0.0	2.0	21.9	-82.9
17	601026.08	4802682.33	2.40	1	0	81.0	-23.8	0.0	0.0	55.6	4.6	-3.0	0.0	0.0	0.0	-0.0	2.0	21.8	-83.0
18	601030.13	4802679.24	2.40	1	0	73.0	-31.7	0.0	0.0	55.7	4.6	-3.0	0.0	0.0	0.0	-0.0	2.0	13.7	-91.1
19	601032.69	4802677.29	2.40	1	0	78.5	-26.2	0.0	0.0	55.8	4.6	-3.0	0.0	0.0	0.0	-0.0	2.0	19.1	-85.6
20	601036.16	4802674.65	2.40	1	0	77.3	-27.5	0.0	0.0	55.9	4.7	-3.0	0.0	0.0	0.0	-0.0	2.0	17.7	-87.0
21	601052.02	4802661.36	2.40	1	0	76.5	-28.2	0.0	0.0	57.3	8.3	-3.0	0.0	0.0	0.0	-0.0	2.0	12.0	-92.8
22	601051.56	4802661.75	2.40	1	0	87.2	-17.6	0.0	0.0	56.3	4.8	-3.0	0.0	0.0	0.0	-0.0	2.0	27.0	-77.8
23	601074.97	4802637.81	2.40	1	0	86.4	-18.3	0.0	0.0	57.3	5.3	-3.0	0.0	0.0	0.0	-0.0	2.0	24.9	-79.9
24	601079.37	4802632.17	2.40	1	0	79.0	-25.7	0.0	0.0	57.7	5.4	-3.0	0.0	0.0	0.0	-0.0	2.0	17.0	-87.8

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Line Source, ISO 9613, Name: "S_105", ID: "FDayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
25	601085.56	4802625.09	2.40	1	0	75.4	-29.4	0.0	0.0	57.9	5.5	-3.0	0.0	0.0	0.0	-0.0	2.0	13.1	-91.7
26	601093.68	4802629.46	2.40	2	0	78.6	-26.2	0.0	0.0	60.2	11.1	-3.0	0.0	0.0	0.0	-0.0	4.0	6.3	-98.5

Line Source, ISO 9613, Name: "S_106", ID: "FDayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600862.63	4802569.71	2.40	0	0	83.4	-19.6	0.0	0.0	49.1	2.7	-3.0	0.0	0.0	0.0	-0.0	-0.0	34.6	-68.4
2	600874.50	4802545.65	2.40	0	0	85.8	-17.2	0.0	0.0	51.1	3.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	34.5	-68.5
3	600860.91	4802571.63	2.40	0	0	82.9	-20.1	0.0	0.0	49.0	2.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	34.3	-68.7
4	600882.20	4802510.32	2.40	0	0	77.5	-25.5	0.0	0.0	53.6	3.9	-3.0	0.0	0.0	9.2	-0.0	-0.0	13.8	-89.2
5	600884.44	4802513.44	2.40	0	0	72.1	-30.9	0.0	0.0	53.4	3.8	-3.0	0.0	0.0	9.0	-0.0	-0.0	8.9	-94.1
6	600885.67	4802515.16	2.40	0	0	73.8	-29.2	0.0	0.0	53.3	3.8	-3.0	0.0	0.0	7.0	-0.0	-0.0	12.7	-90.3
7	600888.80	4802519.52	2.40	0	0	78.9	-24.1	0.0	0.0	53.0	3.7	-3.0	0.0	0.0	0.0	-0.0	-0.0	25.2	-77.8
8	600854.71	4802560.87	2.40	0	0	76.2	-26.8	0.0	0.0	50.1	2.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	26.2	-76.8
9	600851.94	4802557.49	2.40	0	0	76.2	-26.8	0.0	0.0	50.5	3.0	-3.0	0.0	0.0	0.0	-0.0	-0.0	25.7	-77.3
10	600890.33	4802527.72	2.40	0	0	79.7	-23.3	0.0	0.0	52.5	3.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	26.7	-76.3
11	600878.08	4802506.57	2.40	0	0	77.2	-25.8	0.0	0.0	53.8	4.0	-3.0	0.0	0.0	8.7	-0.0	-0.0	13.7	-89.3
12	600859.74	4802559.45	2.40	1	0	71.5	-31.5	0.0	0.0	51.8	3.4	-3.0	0.0	0.0	0.0	-0.0	2.0	17.3	-85.7
13	600888.96	4802533.02	2.40	1	0	71.1	-31.9	0.0	0.0	52.6	3.6	-3.0	0.0	0.0	0.0	-0.0	2.0	15.9	-87.1
14	600888.33	4802533.57	2.40	1	0	64.8	-38.2	0.0	0.0	52.6	3.6	-3.0	0.0	0.0	0.0	-0.0	2.0	9.6	-93.4
15	600887.60	4802534.20	2.40	1	0	74.2	-28.8	0.0	0.0	52.6	3.6	-3.0	0.0	0.0	0.0	-0.0	2.0	19.0	-84.0
16	600885.18	4802536.32	2.40	1	0	75.4	-27.6	0.0	0.0	52.4	3.5	-3.0	0.0	0.0	0.0	-0.0	2.0	20.4	-82.6
17	600883.17	4802538.08	2.40	1	0	64.5	-38.5	0.0	0.0	52.3	13.5	-3.0	0.0	0.0	0.0	-0.0	2.0	-0.3	-103.3
18	600880.39	4802540.51	2.40	1	0	77.8	-25.2	0.0	0.0	52.1	3.4	-3.0	0.0	0.0	0.0	-0.0	2.0	23.3	-79.7
19	600877.37	4802543.15	2.40	1	0	64.5	-38.6	0.0	0.0	51.9	12.9	-3.0	0.0	0.0	0.0	-0.0	2.0	0.6	-102.4
20	600874.61	4802545.56	2.40	1	0	77.8	-25.2	0.0	0.0	51.7	3.3	-3.0	0.0	0.0	0.0	-0.0	2.0	23.7	-79.3
21	600871.63	4802548.17	2.40	1	0	64.4	-38.6	0.0	0.0	51.5	12.4	-3.0	0.0	0.0	0.0	-0.0	2.0	1.5	-101.5
22	600868.88	4802550.57	2.40	1	0	77.8	-25.3	0.0	0.0	51.3	3.2	-3.0	0.0	0.0	0.0	-0.0	2.0	24.2	-78.8
23	600865.94	4802553.14	2.40	1	0	69.5	-33.5	0.0	0.0	51.1	4.7	-3.0	0.0	0.0	0.0	-0.0	2.0	14.7	-88.3
24	600863.21	4802555.52	2.40	1	0	77.7	-25.3	0.0	0.0	51.0	3.1	-3.0	0.0	0.0	0.0	-0.0	2.0	24.6	-78.5
25	600860.31	4802558.06	2.40	1	0	69.4	-33.6	0.0	0.0	50.8	4.5	-3.0	0.0	0.0	0.0	-0.0	2.0	15.1	-87.9
26	600860.37	4802558.01	2.40	1	0	63.1	-39.9	0.0	0.0	50.8	11.5	-3.0	0.0	0.0	23.0	-0.0	2.0	-21.2	-124.2
27	600863.27	4802555.47	2.40	1	0	77.9	-25.1	0.0	0.0	51.0	3.1	-3.0	0.0	0.0	19.9	-0.0	2.0	4.8	-98.2
28	600866.01	4802553.08	2.40	1	0	63.1	-39.9	0.0	0.0	51.2	11.9	-3.0	0.0	0.0	23.0	-0.0	2.0	-21.9	-125.0
29	600868.96	4802550.50	2.40	1	0	78.0	-25.0	0.0	0.0	51.4	3.3	-3.0	0.0	0.0	19.0	-0.0	2.0	5.3	-97.7
30	600871.71	4802548.10	2.40	1	0	63.2	-39.8	0.0	0.0	51.5	12.4	-3.0	0.0	0.0	23.0	-0.0	2.0	-22.8	-125.8
31	600874.69	4802545.49	2.40	1	0	78.0	-25.0	0.0	0.0	51.8	3.3	-3.0	0.0	0.0	18.0	-0.0	2.0	5.9	-97.1
32	600880.48	4802540.43	2.40	1	0	78.1	-24.9	0.0	0.0	52.1	3.5	-3.0	0.0	0.0	17.0	-0.0	2.0	6.5	-96.5
33	600887.70	4802534.12	2.40	1	0	74.8	-28.2	0.0	0.0	52.6	3.6	-3.0	0.0	0.0	15.7	-0.0	2.0	3.8	-99.2
34	600885.14	4802536.36	2.40	1	0	75.4	-27.6	0.0	0.0	52.4	3.6	-3.0	0.0	0.0	16.2	-0.0	2.0	4.2	-98.8
35	600889.07	4802532.92	2.40	1	0	63.4	-39.6	0.0	0.0	52.6	14.1	-3.0	0.0	0.0	21.9	-0.0	2.0	-24.3	-127.3
36	600888.56	4802533.37	2.40	1	0	58.1	-44.9	0.0	0.0	52.6	14.1	-3.0	0.0	0.0	22.1	-0.0	2.0	-29.6	-132.6
37	600856.25	4802562.86	2.40	1	0	61.6	-41.4	0.0	0.0	51.5	12.4	-3.0	0.0	0.0	0.0	-0.0	2.0	-1.3	-104.3
38	600880.87	4802508.47	2.40	1	0	71.2	-31.8	0.0	0.0	54.5	4.2	-3.0	0.0	0.0	0.0	-0.0	2.0	13.5	-89.6
39	600880.88	4802508.49	2.40	1	0	71.4	-31.6	0.0	0.0	54.6	4.2	-3.0	0.0	0.0	21.2	-0.0	2.0	-7.7	-110.7
40	600855.53	4802561.88	2.40	1	0	65.7	-37.3	0.0	0.0	51.4	12.3	-3.0	0.0	0.0	0.0	-0.0	2.0	3.0	-100.0
41	600852.61	4802558.31	2.40	1	0	77.9	-25.1	0.0	0.0	51.3	3.2	-3.0	0.0	0.0	0.0	-0.0	2.0	24.4	-78.6
42	600889.95	4802529.84	2.40	1	0	74.5	-28.5	0.0	0.0	52.7	3.6	-3.0	0.0	0.0	0.0	-0.0	2.0	19.2	-83.8
43	600889.58	4802531.94	2.40	1	0	70.9	-32.1	0.0	0.0	52.7	3.6	-3.0	0.0	0.0	0.0	-0.0	2.0	15.6	-87.4
44	600889.48	4802532.48	2.40	1	0	55.9	-47.1	0.0	0.0	52.7	14.2	-3.0	0.0	0.0	22.0	-0.0	2.0	-32.0	-135.0
45	600889.94	4802529.89	2.40	1	0	74.7	-28.4	0.0	0.0	52.7	3.6	-3.0	0.0	0.0	20.0	-0.0	2.0	-0.7	-103.7
46	600889.59	4802531.90	2.40	1	0	69.9	-33.2	0.0	0.0	52.7	3.6	-3.0	0.0	0.0	17.5	-0.0	2.0	-3.0	-106.0
47	600878.08	4802506.57	2.40	1	0	77.1	-25.9	0.0	0.0	54.7	4.3	-3.0	0.0	0.0	0.0	-0.0	2.0	19.2	-83.8
48	600878.08	4802506.57	2.40	1	0	77.1	-25.9	0.0	0.0	54.7	4.3	-3.0	0.0	0.0	20.8	-0.0	2.0	-1.6	-104.6
49	600851.83	4802557.35	2.40	2	0	70.6	-32.4	0.0	0.0	51.4	3.6	-3.0	0.0	0.0	0.0	-0.0	4.0	14.6	-88.4
50	600850.99	4802556.32	2.40	2	0	70.8	-32.3	0.0	0.0	51.3	3.6	-3.0	0.0	0.0	0.0	-0.0	4.0	14.9	-88.1
51	600851.57	4802557.03	2.40	2	0	74.7	-28.3	0.0	0.0	51.4	3.3	-3.0	0.0	0.0	16.7	-0.0	4.0	2.3	-100.7
52	600855.67	4802562.05	2.40	2	0	70.7	-32.3	0.0	0.0	51.8	3.7	-3.0	0.0	0.0	0.0	-0.0	4.0	14.1	-88.9
53	600854.83	4802561.02	2.40	2	0	70.7	-32.4	0.0	0.0	51.8	3.7	-3.0	0.0	0.0	0.0	-0.0	4.0	14.2	-88.8

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Line Source, ISO 9613, Name: "S_107", ID: "FDayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600981.57	4802456.16	2.40	0	0	86.0	-20.0	0.0	0.0	57.6	5.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	26.1	-79.9
2	600995.83	4802451.99	2.40	0	0	82.3	-23.7	0.0	0.0	58.0	5.5	-3.0	0.0	0.0	0.0	-0.0	-0.0	21.8	-84.2
3	601022.19	4802494.47	2.40	0	0	75.7	-30.3	0.0	0.0	57.3	5.2	-3.0	0.0	0.0	7.3	-0.0	-0.0	8.9	-97.2
4	601020.17	4802491.95	2.40	0	0	79.4	-26.7	0.0	0.0	57.3	5.2	-3.0	0.0	0.0	6.5	-0.0	-0.0	13.3	-92.7
5	601018.24	4802489.55	2.40	0	0	74.9	-31.1	0.0	0.0	57.3	5.2	-3.0	0.0	0.0	3.7	-0.0	-0.0	11.7	-94.3
6	601016.98	4802487.98	2.40	0	0	76.6	-29.4	0.0	0.0	57.4	5.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	17.0	-89.0
7	601015.30	4802485.90	2.40	0	0	77.5	-28.5	0.0	0.0	57.4	5.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	17.9	-88.1
8	601013.42	4802483.57	2.40	0	0	77.6	-28.4	0.0	0.0	57.4	5.2	-3.0	0.0	0.0	0.0	-0.0	-0.0	18.0	-88.0
9	601011.28	4802480.90	2.40	0	0	78.6	-27.4	0.0	0.0	57.4	5.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	18.9	-87.1
10	601009.49	4802478.67	2.40	0	0	75.7	-30.4	0.0	0.0	57.5	5.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	16.0	-90.1
11	601008.24	4802476.88	2.40	0	0	76.7	-29.3	0.0	0.0	57.5	5.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	16.9	-89.1
12	601006.13	4802473.46	2.40	0	0	80.3	-25.7	0.0	0.0	57.5	5.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.4	-85.6
13	601002.63	4802467.79	2.40	0	0	81.7	-24.3	0.0	0.0	57.6	5.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	21.7	-84.3
14	601000.21	4802463.87	2.40	0	0	74.5	-31.5	0.0	0.0	57.7	5.4	-3.0	0.0	0.0	0.0	-0.0	-0.0	14.4	-91.6
15	600998.80	4802461.58	2.40	0	0	78.7	-27.3	0.0	0.0	57.8	5.4	-3.0	0.0	0.0	0.0	-0.0	-0.0	18.6	-87.4
16	600979.60	4802457.29	2.40	0	0	85.0	-21.1	0.0	0.0	57.5	5.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	25.2	-80.9
17	601052.20	4802490.54	2.40	0	0	85.5	-20.5	0.0	0.0	58.3	5.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	24.7	-81.4
18	601031.66	4802499.70	2.40	0	0	81.8	-24.2	0.0	0.0	57.4	5.3	-3.0	0.0	0.0	7.8	-0.0	-0.0	14.4	-91.6
19	601027.17	4802497.43	2.40	0	0	75.9	-30.1	0.0	0.0	57.4	5.2	-3.0	0.0	0.0	7.8	-0.0	-0.0	8.5	-97.5
20	601024.53	4802496.10	2.40	0	0	78.7	-27.3	0.0	0.0	57.3	5.2	-3.0	0.0	0.0	7.8	-0.0	-0.0	11.3	-94.7
21	601044.58	4802497.00	2.40	0	0	74.0	-32.0	0.0	0.0	57.9	5.4	-3.0	0.0	0.0	0.0	-0.0	-0.0	13.7	-92.3
22	601041.25	4802498.61	2.40	0	0	80.6	-25.4	0.0	0.0	57.8	5.4	-3.0	0.0	0.0	0.0	-0.0	-0.0	20.5	-85.5
23	601037.49	4802500.42	2.40	0	0	76.4	-29.6	0.0	0.0	57.6	5.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	16.5	-89.6
24	601035.85	4802501.21	2.40	0	0	74.1	-31.9	0.0	0.0	57.5	5.3	-3.0	0.0	0.0	7.8	-0.0	-0.0	6.5	-99.5
25	600992.70	4802457.71	2.40	0	0	83.2	-22.8	0.0	0.0	57.8	5.4	-3.0	0.0	0.0	0.0	-0.0	-0.0	23.1	-82.9
26	600974.25	4802458.30	2.40	1	0	79.9	-26.1	0.0	0.0	58.1	6.3	-3.0	0.0	0.0	0.0	-0.0	2.0	16.6	-89.5
27	600974.34	4802458.27	2.40	1	0	80.1	-26.0	0.0	0.0	58.1	6.3	-3.0	0.0	0.0	7.8	-0.0	2.0	8.9	-97.1
28	600978.97	4802456.92	2.40	1	0	78.4	-27.6	0.0	0.0	58.3	6.4	-3.0	0.0	0.0	0.0	-0.0	2.0	14.7	-91.3
29	600973.69	4802458.46	2.40	1	0	79.2	-26.8	0.0	0.0	59.3	6.0	-3.0	0.0	0.0	0.0	-0.0	2.0	14.9	-91.1
30	600977.88	4802457.24	2.40	1	0	79.1	-26.9	0.0	0.0	59.1	6.0	-3.0	0.0	0.0	0.0	-0.0	2.0	15.1	-91.0
31	600981.74	4802456.11	2.40	1	0	78.5	-27.5	0.0	0.0	59.0	5.9	-3.0	0.0	0.0	0.0	-0.0	2.0	14.6	-91.4
32	600984.19	4802455.39	2.40	1	0	74.1	-31.9	0.0	0.0	58.9	5.9	-3.0	0.0	0.0	0.0	-0.0	2.0	10.4	-95.6
33	600986.64	4802454.68	2.40	1	0	78.5	-27.5	0.0	0.0	58.8	5.8	-3.0	0.0	0.0	0.0	-0.0	2.0	14.9	-91.2
34	600994.25	4802452.45	2.40	1	0	83.6	-22.4	0.0	0.0	58.5	5.7	-3.0	0.0	0.0	0.0	-0.0	2.0	20.4	-85.6
35	601010.18	4802479.53	2.40	1	0	77.6	-28.4	0.0	0.0	58.4	5.6	-3.0	0.0	0.0	17.1	-0.0	2.0	-2.5	-108.5
36	601009.06	4802478.13	2.40	1	0	70.1	-35.9	0.0	0.0	58.4	5.6	-3.0	0.0	0.0	17.1	-0.0	2.0	-9.9	-116.0
37	601011.47	4802481.13	2.40	1	0	67.2	-38.8	0.0	0.0	58.3	27.1	-3.0	0.0	0.0	0.0	-0.0	2.0	-17.2	-123.3
38	601010.16	4802479.50	2.40	1	0	77.3	-28.7	0.0	0.0	58.3	5.6	-3.0	0.0	0.0	0.0	-0.0	2.0	14.3	-91.7
39	601009.08	4802478.16	2.40	1	0	70.6	-35.4	0.0	0.0	58.4	5.6	-3.0	0.0	0.0	0.0	-0.0	2.0	7.6	-98.4
40	601001.82	4802466.47	2.40	1	0	74.2	-31.8	0.0	0.0	58.4	5.7	-3.0	0.0	0.0	18.2	-0.0	2.0	-7.0	-113.1
41	601000.16	4802463.79	2.40	1	0	79.7	-26.3	0.0	0.0	58.5	5.7	-3.0	0.0	0.0	18.4	-0.0	2.0	-1.9	-107.9
42	601007.93	4802476.37	2.40	1	0	78.4	-27.6	0.0	0.0	58.4	5.6	-3.0	0.0	0.0	17.2	-0.0	2.0	-1.8	-107.8
43	601006.83	4802474.58	2.40	1	0	70.4	-35.6	0.0	0.0	58.4	5.6	-3.0	0.0	0.0	17.4	-0.0	2.0	-10.0	-116.0
44	601005.59	4802472.58	2.40	1	0	79.0	-27.1	0.0	0.0	58.4	5.7	-3.0	0.0	0.0	17.6	-0.0	2.0	-1.7	-107.7
45	601003.59	4802469.34	2.40	1	0	78.2	-27.8	0.0	0.0	58.4	5.7	-3.0	0.0	0.0	17.9	-0.0	2.0	-2.7	-108.8
46	601001.81	4802466.46	2.40	1	0	73.6	-32.4	0.0	0.0	58.4	5.7	-3.0	0.0	0.0	0.0	-0.0	2.0	10.5	-95.5
47	601000.23	4802463.90	2.40	1	0	79.6	-26.4	0.0	0.0	58.4	5.7	-3.0	0.0	0.0	0.0	-0.0	2.0	16.5	-89.5
48	600998.69	4802461.40	2.40	1	0	67.1	-38.9	0.0	0.0	58.5	27.6	-3.0	0.0	0.0	0.0	-0.0	2.0	-18.0	-124.0
49	601007.95	4802476.40	2.40	1	0	78.3	-27.7	0.0	0.0	58.4	5.6	-3.0	0.0	0.0	0.0	-0.0	2.0	15.3	-90.7
50	601006.85	4802474.63	2.40	1	0	70.7	-35.4	0.0	0.0	58.4	5.6	-3.0	0.0	0.0	0.0	-0.0	2.0	7.6	-98.4
51	601005.62	4802472.63	2.40	1	0	78.9	-27.1	0.0	0.0	58.4	5.6	-3.0	0.0	0.0	0.0	-0.0	2.0	15.9	-90.2
52	601003.66	4802469.45	2.40	1	0	78.1	-27.9	0.0	0.0	58.4	5.7	-3.0	0.0	0.0	0.0	-0.0	2.0	15.0	-91.0
53	601002.47	4802467.53	2.40	1	0	67.1	-38.9	0.0	0.0	58.4	27.4	-3.0	0.0	0.0	0.0	-0.0	2.0	-17.8	-123.8
54	600998.04	4802460.36	2.40	1	0	73.0	-33.0	0.0	0.0	58.5	5.7	-3.0	0.0	0.0	0.0	-0.0	2.0	9.9	-96.1
55	600978.32	4802457.58	2.40	1	0	77.9	-28.1	0.0	0.0	58.2	6.4	-3.0	0.0	0.0	0.0	-0.0	2.0	14.3	-91.7
56	600974.09	4802458.52	2.40	1	0	79.6	-26.4	0.0	0.0	58.1	6.3	-3.0	0.0	0.0	7.8	-0.0	2.0	8.5	-97.5
57	600974.02	4802458.54	2.40	1	0	79.5	-26.6	0.0	0.0	58.1	6.3	-3.0	0.0	0.0	0.0	-0.0	2.0	16.1	-89.9
58	600986.55	4802455.75	2.40	1	0	76.2	-29.8	0.0	0.0	58.8	5.8	-3.0	0.0	0.0	0.0	-0.0	2.0	12.6	-93.4
59	600982.91	4802456.56	2.40	1	0	80.0	-26.0	0.0	0.0	58.9	5.9	-3.0	0.0	0.0	0.0	-0.0	2.0	16.2	-89.9
60	600979.05	4802457.42	2.40	1	0	77.0	-29.0	0.0	0.0	59.1	6.0	-3.0	0.0	0.0	0.0	-0.0	2.0	13.0	-93.0
61	600976.88	4802457.90	2.40	1	0	75.3	-30.7	0.0	0.0	59.1	6.0	-3.0	0.0	0.0	0.0	-0.0	2.0	11.2	-94.8
62	600973.79	4802458.59	2.40	1	0	79.4	-26.7	0.0	0.0	59.3	6.0	-3.0	0.0	0.0	0.0	-0.0	2.0	15.1	-91.0
63	600997.20	4802459.66	2.40	1	0	73.7	-32.3	0.0	0.0	58.5	5.7	-3.0	0.0	0.0	0.0	-0.0	2.0	10.5	-95.5

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Line Source, ISO 9613, Name: "S_107", ID: "FDayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
64	600995.64	4802458.99	2.40	1	0	76.1	-29.9	0.0	0.0	58.5	5.7	-3.0	0.0	0.0	0.0	-0.0	2.0	12.9	-93.2
65	600993.28	4802457.96	2.40	1	0	77.6	-28.4	0.0	0.0	58.6	5.7	-3.0	0.0	0.0	0.0	-0.0	2.0	14.3	-91.8
66	600989.76	4802456.43	2.40	1	0	79.5	-26.6	0.0	0.0	58.7	5.8	-3.0	0.0	0.0	0.0	-0.0	2.0	16.0	-90.0
67	600991.44	4802453.27	2.40	2	0	66.6	-39.4	0.0	0.0	58.7	28.4	-3.0	0.0	0.0	0.0	-0.0	4.0	-21.5	-127.6
68	600992.32	4802453.01	2.40	2	0	65.0	-41.0	0.0	0.0	58.7	28.4	-3.0	0.0	0.0	0.0	-0.0	4.0	-23.1	-129.1
69	600990.65	4802453.50	2.40	2	0	74.1	-32.0	0.0	0.0	58.7	9.6	-3.0	0.0	0.0	0.0	-0.0	4.0	4.7	-101.3
70	600989.71	4802456.41	2.40	2	0	67.2	-38.8	0.0	0.0	58.8	28.8	-3.0	0.0	0.0	0.0	-0.0	4.0	-21.5	-127.5
71	600989.21	4802456.19	2.40	2	0	72.7	-33.4	0.0	0.0	58.8	9.7	-3.0	0.0	0.0	0.0	-0.0	4.0	3.1	-102.9

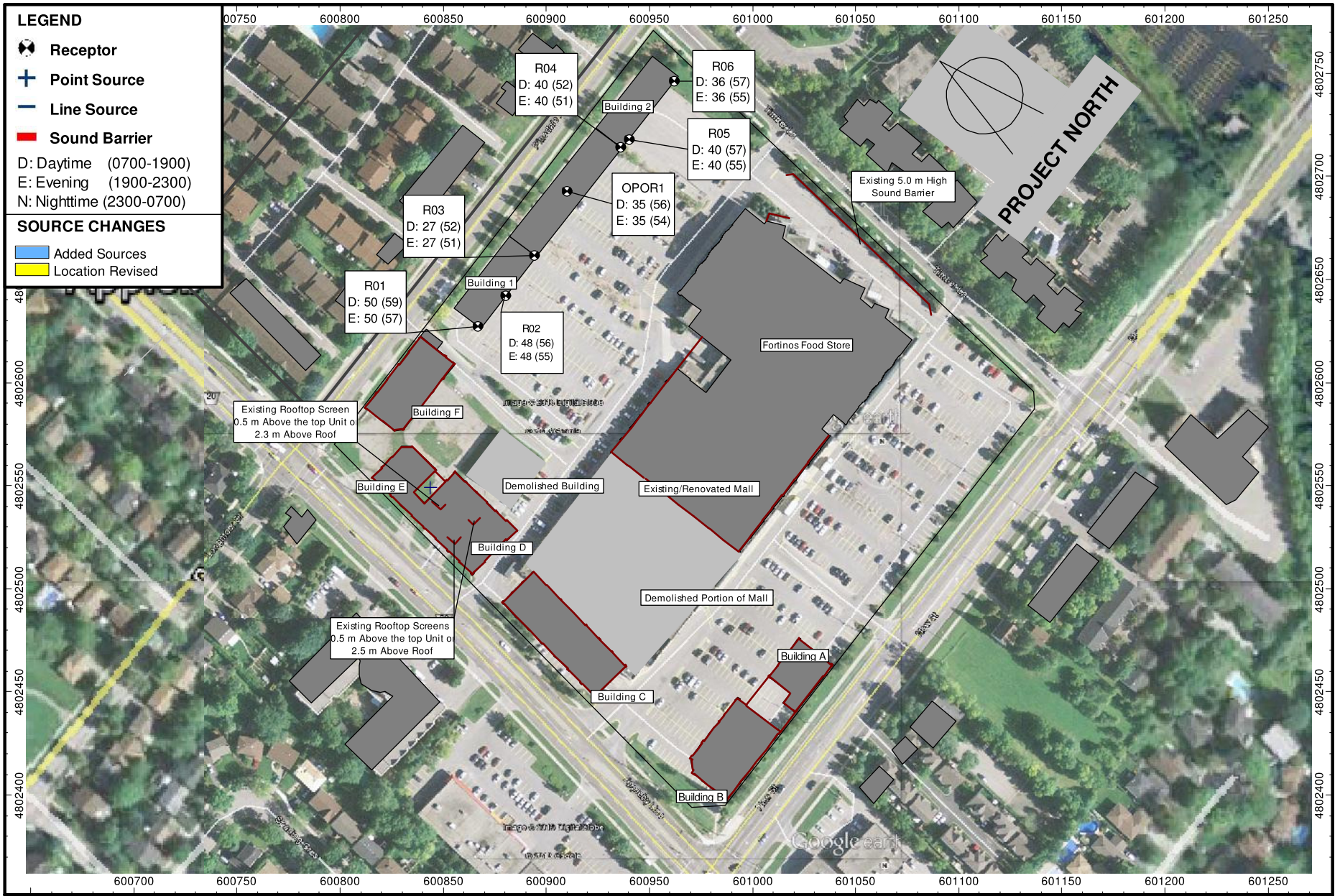
Line Source, ISO 9613, Name: "S_108", ID: "FDayTrk"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	600936.93	4802590.26	2.40	0	0	90.4	-17.4	0.0	0.0	49.3	2.7	-3.0	0.0	0.0	0.0	-0.0	-0.0	41.3	-66.5
2	600950.98	4802616.37	2.40	0	0	88.1	-19.7	0.0	0.0	49.2	2.7	-3.0	0.0	0.0	0.0	-0.0	-0.0	39.2	-68.6
3	600912.34	4802547.05	2.40	0	0	89.7	-18.1	0.0	0.0	51.4	3.3	-3.0	0.0	0.0	0.0	-0.0	-0.0	38.0	-69.7
4	600878.06	4802510.69	2.40	0	0	85.0	-22.7	0.0	0.0	53.6	3.9	-3.0	0.0	0.0	13.9	-0.0	-0.0	16.7	-91.1
5	600882.66	4802515.16	2.40	0	0	76.9	-30.9	0.0	0.0	53.3	3.8	-3.0	0.0	0.0	13.6	-0.0	-0.0	9.2	-98.6
6	600884.78	4802517.22	2.40	0	0	80.8	-27.0	0.0	0.0	53.2	3.8	-3.0	0.0	0.0	10.9	-0.0	-0.0	16.0	-91.8
7	600894.27	4802526.45	2.40	0	0	88.0	-19.7	0.0	0.0	52.6	3.6	-3.0	0.0	0.0	0.0	-0.0	-0.0	34.9	-72.9
8	600954.25	4802626.87	2.40	0	0	76.6	-31.2	0.0	0.0	49.2	2.7	-3.0	0.0	0.0	0.0	-0.0	-0.0	27.7	-80.1
9	600960.42	4802622.27	2.40	0	0	86.0	-21.8	0.0	0.0	49.9	2.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	36.2	-71.6
10	600924.39	4802570.90	2.40	0	0	84.0	-23.8	0.0	0.0	50.0	2.9	-3.0	0.0	0.0	0.0	-0.0	-0.0	34.1	-73.7
11	600922.83	4802563.28	2.40	0	0	82.9	-24.9	0.0	0.0	50.5	3.0	-3.0	0.0	0.0	0.0	-0.0	-0.0	32.4	-75.4
12	600925.83	4802575.53	2.40	1	0	74.7	-33.1	0.0	0.0	51.4	3.3	-3.0	0.0	0.0	0.0	-0.0	2.0	21.0	-86.7
13	600926.36	4802576.23	2.40	1	0	73.2	-34.6	0.0	0.0	51.4	3.3	-3.0	0.0	0.0	0.0	-0.0	2.0	19.5	-88.3
14	600927.01	4802577.10	2.40	1	0	69.2	-38.6	0.0	0.0	51.3	12.1	-3.0	0.0	0.0	0.0	-0.0	2.0	6.8	-101.0
15	600929.41	4802580.28	2.40	1	0	82.9	-24.9	0.0	0.0	51.3	3.2	-3.0	0.0	0.0	0.0	-0.0	2.0	29.3	-78.5
16	600931.87	4802583.54	2.40	1	0	69.2	-38.5	0.0	0.0	51.2	12.0	-3.0	0.0	0.0	0.0	-0.0	2.0	7.0	-100.8
17	600934.53	4802587.07	2.40	1	0	82.4	-25.4	0.0	0.0	51.2	3.2	-3.0	0.0	0.0	0.0	-0.0	2.0	28.9	-78.8
18	600936.69	4802589.93	2.40	1	0	68.3	-39.5	0.0	0.0	51.2	11.9	-3.0	0.0	0.0	0.0	-0.0	2.0	6.2	-101.6
19	600937.09	4802590.47	2.40	1	0	62.1	-45.7	0.0	0.0	51.2	11.9	-3.0	0.0	0.0	0.0	-0.0	2.0	0.0	-107.7
20	600939.20	4802593.27	2.40	1	0	82.9	-24.9	0.0	0.0	51.2	3.2	-3.0	0.0	0.0	0.0	-0.0	2.0	29.5	-78.3
21	600941.64	4802596.50	2.40	1	0	69.1	-38.7	0.0	0.0	51.2	11.9	-3.0	0.0	0.0	0.0	-0.0	2.0	7.0	-100.8
22	600942.04	4802597.03	2.40	1	0	55.3	-52.5	0.0	0.0	51.2	11.9	-3.0	0.0	0.0	0.0	-0.0	2.0	-6.8	-114.6
23	600945.20	4802601.23	2.40	1	0	84.7	-23.0	0.0	0.0	51.3	3.2	-3.0	0.0	0.0	0.0	-0.0	2.0	31.3	-76.5
24	600928.66	4802579.28	2.40	1	0	84.7	-23.0	0.0	0.0	51.4	3.2	-3.0	0.0	0.0	9.1	-0.0	2.0	22.1	-85.7
25	600931.80	4802583.45	2.40	1	0	56.7	-51.1	0.0	0.0	51.3	3.2	-3.0	0.0	0.0	9.5	-0.0	2.0	-6.3	-114.1
26	600934.09	4802586.48	2.40	1	0	83.4	-24.4	0.0	0.0	51.3	3.2	-3.0	0.0	0.0	8.9	-0.0	2.0	21.0	-86.7
27	600945.22	4802601.26	2.40	1	0	84.7	-23.1	0.0	0.0	51.3	3.2	-3.0	0.0	0.0	8.3	-0.0	2.0	22.9	-84.9
28	600941.95	4802596.91	2.40	1	0	68.5	-39.3	0.0	0.0	51.2	12.0	-3.0	0.0	0.0	10.5	-0.0	2.0	-4.3	-112.1
29	600936.97	4802590.31	2.40	1	0	68.2	-39.6	0.0	0.0	51.2	12.0	-3.0	0.0	0.0	11.2	-0.0	2.0	-5.3	-113.0
30	600939.18	4802593.24	2.40	1	0	83.1	-24.6	0.0	0.0	51.2	3.2	-3.0	0.0	0.0	8.6	-0.0	2.0	21.1	-86.7
31	600948.72	4802606.95	2.40	1	0	79.6	-28.2	0.0	0.0	51.4	3.3	-3.0	0.0	0.0	0.0	-0.0	2.0	26.0	-81.8
32	600948.74	4802607.05	2.40	1	0	79.9	-27.9	0.0	0.0	51.4	3.3	-3.0	0.0	0.0	7.8	-0.0	2.0	18.4	-89.4
33	600949.24	4802609.13	2.40	1	0	74.1	-33.7	0.0	0.0	51.5	3.3	-3.0	0.0	0.0	0.0	-0.0	2.0	20.3	-87.5
34	600949.66	4802610.87	2.40	1	0	70.7	-37.1	0.0	0.0	51.6	12.5	-3.0	0.0	0.0	0.0	-0.0	2.0	7.6	-100.2
35	600949.88	4802611.79	2.40	1	0	53.7	-54.0	0.0	0.0	51.6	12.6	-3.0	0.0	0.0	0.0	-0.0	2.0	-9.4	-117.2
36	600950.05	4802612.50	2.40	1	0	78.8	-29.0	0.0	0.0	51.6	3.3	-3.0	0.0	0.0	0.0	-0.0	2.0	24.8	-83.0
37	600951.31	4802617.75	2.40	1	0	83.7	-24.1	0.0	0.0	51.9	3.4	-3.0	0.0	0.0	0.0	-0.0	2.0	29.4	-78.4
38	600897.72	4802529.80	2.40	1	0	81.0	-26.8	0.0	0.0	53.2	3.8	-3.0	0.0	0.0	0.0	-0.0	2.0	25.0	-82.8
39	600897.81	4802529.88	2.40	1	0	81.1	-26.7	0.0	0.0	53.2	3.9	-3.0	0.0	0.0	8.4	-0.0	2.0	16.6	-91.2
40	600900.03	4802532.05	2.40	1	0	76.5	-31.3	0.0	0.0	53.4	3.9	-3.0	0.0	0.0	0.0	-0.0	2.0	20.2	-87.6
41	600875.48	4802508.18	2.40	1	0	80.4	-27.4	0.0	0.0	54.8	4.4	-3.0	0.0	0.0	0.0	-0.0	2.0	22.2	-85.6
42	600875.50	4802508.20	2.40	1	0	80.5	-27.3	0.0	0.0	54.8	4.4	-3.0	0.0	0.0	18.8	-0.0	2.0	3.4	-104.3
43	600963.07	4802620.30	2.40	1	0	83.1	-24.7	0.0	0.0	51.5	3.3	-3.0	0.0	0.0	0.0	-0.0	2.0	29.3	-78.5
44	600923.96	4802569.30	2.40	1	0	68.9	-38.8	0.0	0.0	51.3	12.1	-3.0	0.0	0.0	0.0	-0.0	2.0	6.5	-101.3
45	600924.81	4802572.47	2.40	1	0	82.0	-25.8	0.0	0.0	51.4	3.3	-3.0	0.0	0.0	0.0	-0.0	2.0	28.3	-79.5
46	600924.28	4802570.49	2.40	1	0	79.3	-28.4	0.0	0.0	51.4	3.2	-3.0	0.0	0.0	12.9	-0.0	2.0	12.8	-95.0
47	600925.09	4802573.53	2.40	1	0	79.7	-28.0	0.0	0.0	51.4	3.3	-3.0	0.0	0.0	10.4	-0.0	2.0	15.7	-92.1

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APPENDIX F

ADDITIONAL FIGURES FOR UNMITIGATED IMPULSE SOURCES

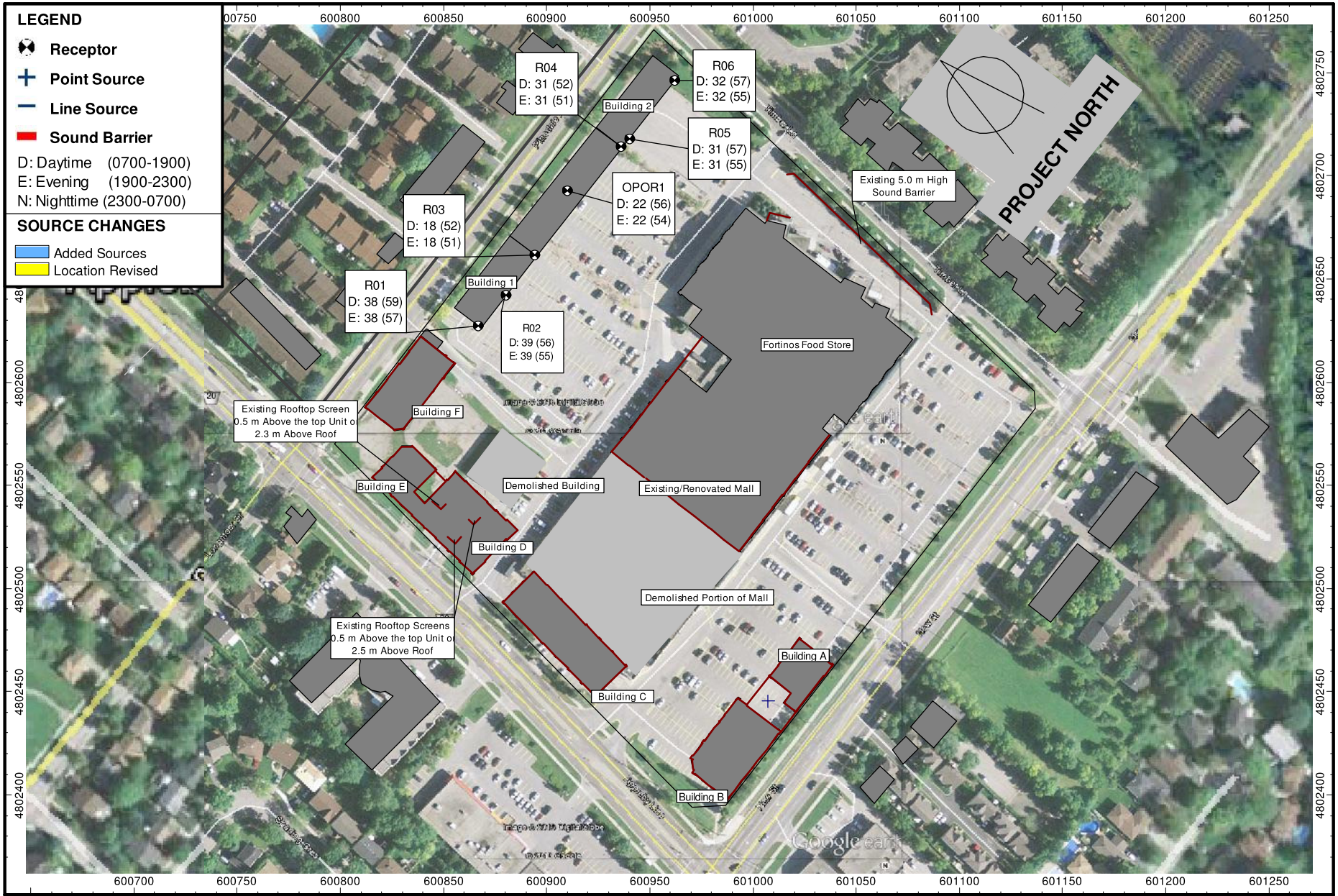


VALCOUSTICS Canada Ltd. consulting acoustical engineers

Title: **Predicted Hourly Impulsive Sound Levels (dBAI) - from Building D**	Date: **June 11, 2014**	Figure: **F-1**
Project Name: **Appleby Mall Residential Development**	Project No.: **113-313**	

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Date Plotted: 11.06.14



VALCOUSTICS Canada Ltd. consulting acoustical engineers

Title
Predicted Hourly Impulsive Sound Levels (dBAI) - from Building A

Date
June 11, 2014

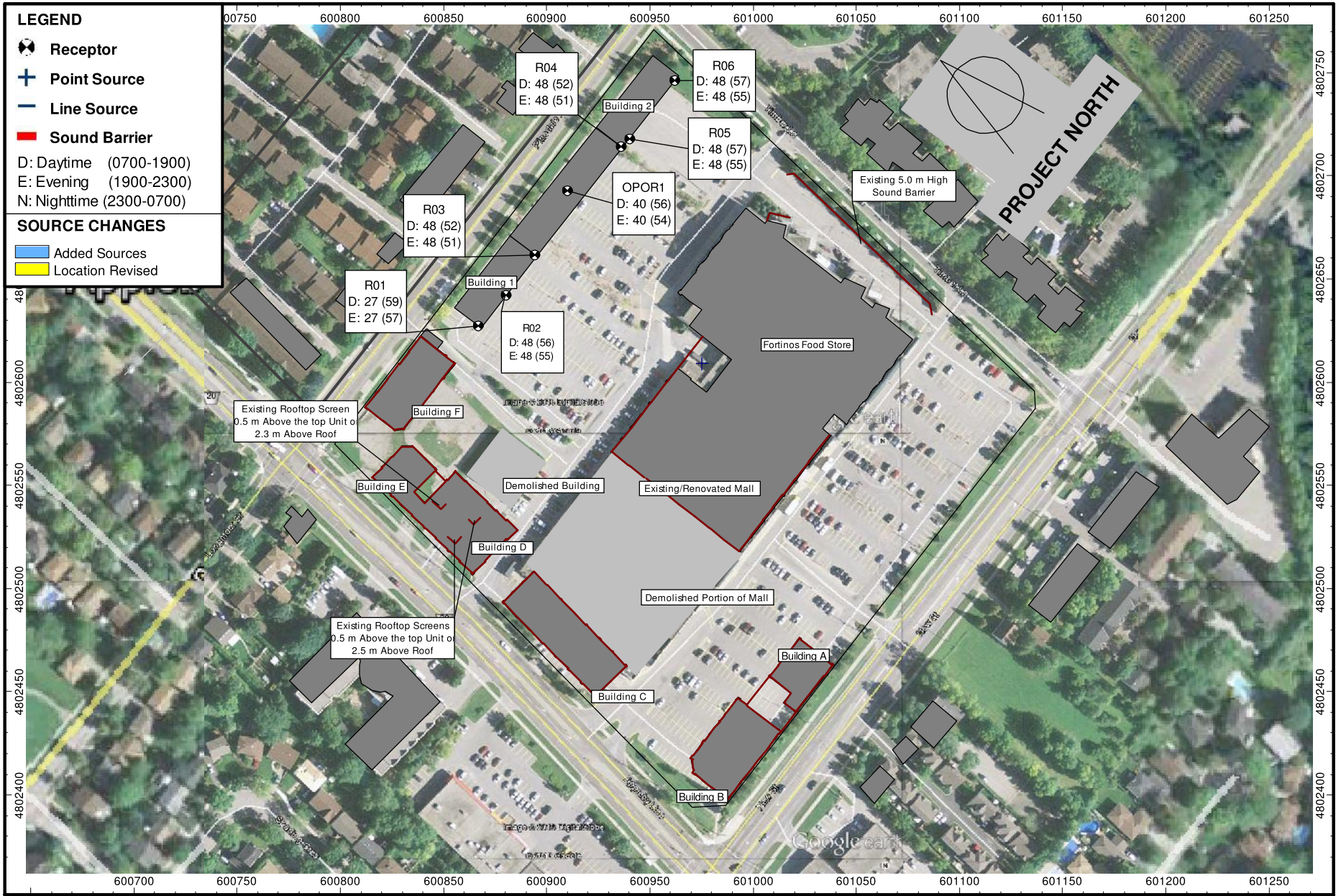
Figure
F-2

Project Name
Appleby Mall Residential Development

Project No.
113-313

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Date Plotted: 11.06.14



VALCOUSTICS Canada Ltd. consulting acoustical engineers

Title: **Predicted Hourly Impulsive Sound Levels (dBAI) - From Exisiting/Renovated Mall**	Date: **June 11, 2014**	Figure: **F-3**
Project Name: **Appleby Mall Residential Development**	Project No.: **113-313**	

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Date Plotted: 11.06.14