Linksview Development Corporation

Environmental Noise and Vibration Feasibility Study
Collingwood, ON

SLR Project No: 209.30027.00000
March 2022

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ENVIRONMENTAL NOISE AND VIBRATION FEASIBILITY STUDY
Linksview Residential Subdivision
Collingwood, Ontario

SLR Project No: 209.30027.00000

Submitted by:
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March 24, 2022

This document has been prepared by SLR Canada. The material and data in this report were prepared under the supervision and direction of the undersigned.

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EXECUTIVE SUMMARY

SLR Consulting (Canada) Ltd. (SLR) was retained by Wyview Group to complete an Environmental Noise and Vibration Feasibility Study for the proposed development located at 780 Line 10 in the Town of Collingwood, Ontario.

This report was completed to assess potential noise and vibration impacts on the current subdivision plan of the proposed development.

Roadway noise from 10th Line and 6th Street were assessed for potential impacts on the development, summarized as follows:

- An assessment of transportation noise impacts was completed based on projected traffic volumes for the surrounding area, included in the Collingwood Transportation Study.
- Based on transportation façade sound levels, upgraded glazing is not required for the development.
- Noise impacts within the townhouse and single detached home rear yards are predicted to be within acceptable levels without the inclusion of physical noise mitigation measures.
- Should private amenity spaces be included with the apartment block design, physical noise mitigation measures may be required within 35 m of 10th Line. An assessment of outdoor amenity areas for the apartment block will be required, once building designs have been further developed.
- The Provision for AC + MECP Type C warning clause is recommended for the Apartment Building Block.
- An MECP Type A and/or Type B warning clause may be required, pending the final design, location and layouts of the outdoor amenity spaces.

Stationary noise impacts were predicted on the proposed development from the existing industries within the surrounding area, and summarized as follows:

- SLR-Novus completed a site visit on December 7 and 22, 2021 to the review existing stationary sources within surrounding area. No significant noise sources were identified during the site visit by SLR personnel.
- Stationary noise from the Ken Winters Construction Aggregate Pit were predicted to meet the MECP Class 2 exclusionary limits on the development lands, based on typical equipment in operation and anticipated compliance at the existing residential homes.
- An MECP Type E noise warning clause is recommended for the development, as the Ken Winters Aggregate Pit has the potential to be audible within the development lands.

Within the surrounding area, no significant sources of vibration (e.g. rail, auto parts heavy metal stamping) were identified to have the potential to impact the development. Therefore, a vibration study is not considered necessary and has not been completed.

Based on the results of our assessment, the proposed development is anticipated to be compatible with the surrounding land uses from a noise and vibration perspective. No adverse impacts from surrounding roadway noise, stationary noise and/or vibration are anticipated.

1. INTRODUCTION

SLR Consulting (Canada) Limited (SLR) was retained by Wyview Group to complete an Environmental Noise Feasibility Study for the proposed development located at 780 Line 10 in the Town of Collingwood, Ontario.

A Compatibility and Mitigation Study (2022 Compatibility Study), dated January, 2022, was completed for the development by SLR under a separate cover.

This report was completed to assess potential noise impacts on the current subdivision plan of the proposed development.

1.1 FOCUS OF THE REPORT

In accordance with Simcoe County requirements, this report examines the potential for:

- Impacts of the environment on the proposed development;
- Impacts of the proposed development on the environment; and
- Impacts of the proposed development on itself.

1.2 NATURE OF THE SUBJECT LANDS

The subject property is located on the west side of 10th Line, at 780 Line 10 in the town of Collingwood, Ontario. The current Concept Plan includes a combination of single detached homes, townhouses, an apartment block, a school, park space and a storm water management pond.

A copy of the Concept Plan is included in Appendix A.

1.3 NATURE OF THE SURROUNDINGS

Residential neighbourhoods are located to the north-west, and east of the development, with additional residential homes located along 6th Street to the south. A golf course is located on the adjacent lands to the north. The adjacent lands to the south include a community park and a Heritage Museum. The lands to the west are currently vacant.

A Commercial/Industrial building (Agnora, Sidelaunch Brewing Company, Southwinds Marine Boat repair shop, etc.) is located greater than 300 m to the north-east at the intersection of Mountain Road and 10th Line. Also located to the north-east is the Lafarge Collingwood Ready-Mix plant, approximately 900 m from the development site. On the lands adjacent to the Golf Course is the Ken Winters Aggregate Pit. Commercial/Retail/industrial lands are also located to the east beyond the residential neighbourhoods. No significant industries are located within a 1000 m radius of the development lands to the west and south.

The topography of the immediate surrounding area is essentially flat with minor variations. The exception is the Sand and Gravel Pit, which is understood to be partially excavated.

A context plan is shown in Figure 1.

PART 1: IMPACTS OF THE ENVIRONMENT ON THE DEVELOPMENT

In assessing potential impacts of the environment on the proposed development, the focus of this report is to assess the potential for:

- Roadway noise impacts on the development;
- Stationary noise impacts from the surrounding commercial and industries lands; and
- Stationary noise impacts from the proposed development mechanical equipment on the proposed development itself and surrounding sensitive receptors.

The level of noise from roadway and stationary noise was predicted, and this information has been used to identify façade, ventilation, and warning clause requirements.

2. TRANSPORTATION NOISE IMPACTS

2.1 TRANSPORTATION NOISE SOURCES

Transportation sources of interest with the potential to produce noise at the proposed development include roadway noise from 10th Line and 6th Street, and Mountain Road.

An assessment of Mountain Road was not included in the assessment, as the 600 m separation distance is outside of the STAMSON modelling software input range and the results are no longer considered accurate.

2.2 SURFACE TRANSPORTATION NOISE CRITERIA

2.2.1 MINISTRY OF ENVIRONMENT PUBLICATION NPC-300

Noise Sensitive Developments

Ministry of the Environment, Conservation and Parks (MECP) Publication NPC-300 provides sound level criteria for noise sensitive developments. The applicable portions of NPC-300 are Part C – Land Use Planning and the associated definitions outlined in Part A – Background. Tables 1 to 4 below summarizes the applicable surface transportation (road) criteria limits.

Location Specific Criteria

Table 1 summarizes criteria in terms of energy equivalent sound exposure (L_{eq}) levels for specific noise-sensitive locations. Both outdoor and indoor locations are identified, with the focus of outdoor areas being amenity spaces. Indoor criteria vary with sensitivity of the space. As a result, sleep areas have more stringent criteria than Living / Dining room space.

Outdoor Amenity Areas

Table 2 summarizes the noise mitigation requirements for communal outdoor amenity areas ("Outdoor Living Areas" or "OLAs"). For the assessment of outdoor sound levels, the surface transportation noise impact is determined by combining road and rail traffic sound levels. Whistle noise due to railway trains is not included in the determination of levels.

Table 1: MECP Publication NPC-300 Sound Level Criteria for Road and Rail Noise

Type of Space	Time Period	Equivalent Sound Exposure Level - L_{eq} (dBA)	Assessment Location
Outdoor Living Area (OLA)	Daytime (0700-2300h)	55	Outdoors [2]
Living / Dining Room	Daytime (0700-2300h)	45	Indoors [4]
	Night-time (2300-0700h)	45	Indoors [4]
Sleeping Quarters	Daytime (0700-2300h)	45	Indoors [4]
	Night-time (2300-0700h)	40	Indoors [4]

Notes: [1] Whistle noise is excluded for OLA noise assessments and included for Living / Dining Room and Sleeping Quarter assessments.
[2] Road and Rail noise impacts are to be combined for assessment of OLA impacts.
[3] An assessment of indoor noise levels is required only if the criteria in **Table 4** are exceeded.

Table 2: MECP Publication NPC-300 Outdoor Living Area Mitigation Requirements

Time Period	Equivalent Sound Level in Outdoor Living Area (dBA)	Ventilation Requirements
Daytime (0700-2300h)	≤ 55	• None
	55 to 60 incl.	• Noise barrier **OR** Warning Clause A
	> 60	• Noise barrier to reduce noise to 55 dBA **OR** • Noise barrier to reduce noise to 60 dBA and Warning Clause B

Ventilation and Warning Clauses

Table 3 summarizes requirements for ventilation where windows potentially would have to remain closed as a means of noise control. Despite implementation of ventilation measures where required, if sound exposure levels exceed the guideline limits in Tables 1, warning clauses advising future occupants of the potential excesses are required. Warning clauses also apply to OLAs.

Table 3: MECP Publication NPC-300 Ventilation & Warning Clause Requirements

Assessment Location	Time Period	Energy Equivalent Sound Exposure Level - L_{eq} (dBA)	Ventilation and Warning Clause Requirements [2]
Outdoor Living Area	Daytime (0700-2300h)	56 to 60 incl.	Type A Warning Clause
Plane of Window	Daytime (0700-2300h)	≤ 55	None
		56 to 65 incl.	Forced Air Heating /provision to add air conditioning + Type C Warning Clause
		> 65	Central Air Conditioning + Type D Warning Clause
	Night-time (2300-0700h)	51 to 60 incl.	Forced Air Heating/ provision to add air conditioning + Type C Warning Clause
		> 60	Central Air Conditioning + Type D Warning Clause

Notes: [1] Rail whistle noise is excluded.
[2] Road and Rail noise is combined for determining Ventilation and Warning Clause requirements.

Building Shell Requirements

Table 4 provides sound level thresholds which if exceeded, require the building shell and components (i.e., wall, windows) to be designed and selected accordingly to ensure that the **Table 1** indoor sound criteria are met

Table 4: MECP Publication NPC-300 Building Component Requirements

Assessment Location	Time Period	Energy Equivalent Sound Exposure Level - L_{eq} (dBA))		Component Requirements
		Road	Rail [1]	
Plane of Window	Daytime (0700-2300h)	> 65	> 60	Designed/ Selected to Meet Indoor Requirements [2]
	Night-time (2300-0700h)	> 60	> 55	

Notes: [1] Including whistle noise.
[2] Building component requirements are assessed separately for Road and Railway noise. The resultant sound isolation parameter is required to be combined to determine and overall acoustic parameter.

2.3 TRAFFIC DATA AND FUTURE PROJECTIONS

2.3.1 ROADWAY TRAFFIC DATA

Road traffic data for the surrounding roadways was obtained from the RJ Burnside Collingwood Transportation Study Update, dated August 2019, which was completed for the Town of Collingwood. Future traffic volumes for 2041 were applied in the study, with truck percentages calculated from the TMC data.

A copy of the traffic data used, and calculations can be found in Appendix B. The following table summarizes the road traffic volumes used in the analysis.

Table 5: Summary of Road Traffic Data Used in the Transportation Analysis

Roadway Link	Future Traffic Volumes (AADT)	% Day/ Night Volume Split		Commercial Traffic Breakdown [1]		Vehicle Speed (km/h)
		Daytime	Night-time	% Medium Trucks	% Heavy Trucks	
10th Line	14,860	90	10	3.1%	2.8%	50
6th Street	9,050	90	10	2.2%	0.5%	60/80

Notes: [1] Truck Percentages based on SLR Historical Traffic data.

2.4 PROJECTED SOUND LEVELS

Future road traffic sound levels at the proposed development were predicted using Cadna/A, a commercially available noise propagation modelling software. Roadways were modelled as line sources of sound, with sound emission rates calculated using the ORNAMENT algorithms, the road traffic noise model of the MECP. These predictions were validated and are equivalent to those made using the

MECP's ORNAMENT or STAMSON v5.04 road traffic noise models. As STAMSON does note readily include minor variations in topography, simplified STAMSON validation files are included in Appendix C.

The immediate surrounding topography is considered to be essentially flat, with minor variations. Topography for the site and surrounding lands was obtained through Ontario GeoHub, and applied in the noise modelling.

For areas where the intervening ground is considered primarily asphalt/concrete/water, such as the school/apartment and stormwater management pond, reflective ground was applied in the noise modelling. Otherwise, as the surrounding lands are primarily grass covered, absorptive ground was applied.

2.4.1 FAÇADE SOUND LEVELS

The predicted transportation sound levels for the development lands are shown in Figures 2a and 2b, for the daytime and night-time periods, respectively.

The predicted roadway noise levels range from 38 to 65 dBA during the daytime within the development. During the night-time, sound levels are predicted to range from 31 dBA to 60 dBA.

As the façade roadway sound levels are predicted to be at or below 65 dBA during the daytime and at or below 60 dBA during the night-time, an assessment of indoor sound levels is not required.

2.4.2 OUTDOOR AMENITY AREAS

The Outdoor Living Areas (OLA) of the proposed development would include rear-yards for each lot and/or townhouse block and private common amenity areas for the apartment block.

Roadway sound levels are predicted to be less than 55 dBA for all single detached dwelling lots and townhouse blocks. Therefore, physical noise mitigation measures are not required for these lots/blocks.

Roadway noise levels above 60 dBA are predicted within 35 m of 10th Line. Should private amenity spaces (common outdoor amenity areas and/or private balconies/terraces) be included with the apartment block design, physical noise mitigation measures may be required.

2.5 ACOUSTIC BARRIER REQUIREMENTS

As mentioned above, physical noise mitigation measures may be required within the apartment block if private common amenity areas and/or private terraces/balconies are located within 35 m of 10th Line.

Based on the predicted sound levels, the applicable guideline limits can be met with a combination of appropriate placement of the amenity spaces with screening from the apartment building, and/or the inclusion of acoustic barriers and warning clauses. In addition, MECP NPC-300 amenity area size requirements will need to be met as part of any acoustic barrier assessment.

Once preliminary plans are available for the apartment block, an assessment of noise control measures should be completed to confirm if noise control measures are required.

2.6 VENTILATION AND WARNING CLAUSE REQUIREMENTS

Where required, the Warning Clauses should be included in agreements registered on Title for the residential units and included in all agreements of purchase and sale or lease, and all rental agreements. Warning Clauses and ventilation requirements are summarized in Appendix D.

2.6.1 FAÇADE REQUIREMENTS

Based on the predicted façade noise levels, forced air heating with provisions for future installation of central air conditioning, and an MECP Type C warning clause, is recommended for all affected units with façade sound levels from road traffic that are between 56 and 65 dBA during the daytime, or between 51 and 60 dBA during night-time hours.

An MECP Type C warning clause and Forced Air Heating with the Provision for Future Installation of Air Conditioning is required for the apartment block only. The warning clause requirements are summarized in Appendix D.

2.6.2 OUTDOOR AMENITY AREA REQUIREMENTS

Sound levels within the apartment block are predicted to range from 51 dBA to 65 dBA (refer Figures 2a). As mentioned above, physical noise mitigation measures may be required for outdoor amenity areas within the apartment block. Once preliminary plans are available for the apartment block, the outdoor amenity area mitigation requirements should be reviewed. Pending the results, an MECP Type A and/or a Type B warning clause may be required. The warning clause recommendations are summarized in Appendix D.

3. STATIONARY SOURCE NOISE IMPACTS

3.1 SITE VISIT AND AREA REVIEW

A review has been conducted for the potential impacts on the development from "stationary" noise sources in the surrounding area, based on site visits on December 7 and 22, 2021 and available aerial photography.

Based on 2022 Compatibility Study, the Lafarge Collingwood Ready-Mix plant and Sidelaunch Brewing Company are considered to be Class 2 Industries. The Agnora glass fabrication facility, Southwinds Marine Boat repair shop and Commercial/Retail buildings considered to be Class 1 industries. As these facilities are outside of the respective Class 2 and Class 1 industry influence areas of 300 m and 70 m respectively, stationary noise impacts are not anticipated. This is further supported by the site visit observations by SLR personnel and our experiences with typical noise sources for these types of facilities. In addition, the MECP NPC-300 guideline limits are expected to be met at closer or similar distance residential homes in the surrounding area. Therefore, an assessment of noise impacts from these facilities is not considered necessary and was not completed.

As the Ken Winters Construction Aggregate Pit (KWCAP) is adjacent to the development lands and understood to be active, a stationary noise assessment was completed for this facility only.

3.2 APPLICABLE GUIDELINES

The applicable guidelines for stationary noise impacts on noise sensitive land uses are provided in MECP Publication NPC-300. As indicated in NPC-300, the applicable noise limits at a point of reception are the higher of the existing ambient sound level due to road traffic or the exclusion limits set out in the guideline.

The acoustic environment surrounding the proposed development is considered a Class 2 area, due to the continuous roadway noise observed by SLR personnel.

As the ambient levels are not anticipated to be significant within the majority of the development lands, the MECP NPC-300 Class 2 exclusionary sound level limits were applied in this assessment. Table 1 summarize the Class 2 exclusionary limits from NPC-300 for continuous noise.

Table 6: Exclusion Limits for Continuous Stationary Noise

Location	Time of Day	Class 2 Area (L_{eq}-1hr, dBA)
Plane of Windows	7am to 7 pm	50
	7 pm to 11 pm	50
	11 pm to 7 am	45
Outdoor Points of Reception	7am to 7 pm	50
	7 pm to 11 pm	45
	11 pm to 7 am	n/a

Notes: [1] or minimum hourly L_{eq} of background noise, whichever is higher.

3.3 STATIONARY NOISE SOURCES

During the site visit by SLR personnel, no significant noise was observed within the surrounding area for the KWCAP.

The KWCAP is understood to be a Sand and Gravel Pit. On review of the available aerial photography, two (2) Loaders are observed to be in use and stockpiles are visible. Therefore, the following noise sources were included in the assessment of potential impacts:

- Two (2) Loaders;
- One (1) Portable Crusher/Screen + Excavator; and
- On-site trucks routes, based on 5 trucks/hr.

The locations of above noise sources are shown in Figure 3.

The above equipment was assumed to be in operation during the daytime period only, with no activity during the evening and night-time periods.

This assessment was completed assuming the NPC-300 guideline limits are met at the adjacent residential neighborhood. Sound power level data used in the analysis was completed based on historical sound level data on file at SLR for typical equipment for aggregate operations. A summary of the sound power levels used in the analysis are included in Appendix E.

3.4 STATIONARY NOISE MODELLING

Noise impact modelling was completed using Cadna/A, a software implementation of the ISO 9613 noise propagation algorithms. The model took into consideration the layout of a development; the location of the sources, consideration for absorptive (grassy lands, etc.) or reflective ground (water surfaces, asphalt, etc.), and ground topography.

The site and surrounding topography was included in the assessment, as the KWCAP has been partially excavated and is depressed by approximately 4 m in comparison to the surrounding lands. In addition, site and surroundings were observed to have minor variations in ground elevation. The site and surrounding topography was obtained through Ontario GeoHub and applied in the noise modelling.

As described in ISO 9613-2, ground factor values that represent the effect of ground absorption on sound levels range between 0 and 1. Absorptive ground was applied for the area surrounding. The exception is the KWCAP, in which the pond water was assessed as a reflective surface.

A sample modelling output file is included in Appendix F for KWCAP impacts at the closest outdoor point of reception of the adjacent residential neighbourhood.

3.5 STATIONARY NOISE IMPACTS

Predicted continuous noise levels from the KWCAP are shown in Figure 4, in which sound levels are predicted to be less than 50 dBA within the development lands. Therefore, the MECP NPC-300 guideline limits are considered to be met on the development lands for the operation of the KWCAP. No additional noise controls are required for the KWCAP stationary noise sources.

3.6 VENTILATION AND WARNING CLAUSE REQUIREMENTS

As KWCAP operations have the potential to be audible at times, a warning clause should be included in the Agreement of Purchase and Sale or Lease and in the relevant Development Agreements. An MECP NPC-300 Type E warning clause is recommended for the single detached homes and townhouse blocks within the development. See Appendix D for warning clause details.

4. VIBRATION SOURCE IMPACTS

A review was completed of the surrounding area for vibration sources. No railways are located within 1000 m of the development site. In addition, no significant industrial vibration sources (e.g. automotive parts heavy metal stamping) are located within the surrounding area.

Based on our review, no significant sources of vibration have the potential to impact the development. Therefore, a vibration study is not considered necessary and has not been completed.

PART 2: IMPACTS OF THE DEVELOPMENT ON ITSELF

5. STATIONARY SOURCE NOISE IMPACTS ON THE DEVELOPMENT ITSELF

Based on the current concept plan for the development, mechanical equipment from the school and apartment building have the potential to impact the development itself. At the time of this assessment, the school and apartment building have not been sufficiently designed, with placement still to be determined.

Noise impacts from the mechanical systems (make up air units, cooling units, parking garage vents and/or emergency generators, etc.) implemented as part of the proposed development (school and/or apartment building), should comply with the MECP Publication NPC-300 guideline limits. The potential impacts from the school and/or apartment building should be assessed as part of the building design. Based on the types of equipment anticipated, the applicable criteria can be met at all on-site noise sensitive buildings with the appropriate selection of mechanical equipment, by locating equipment with sufficient setback from noise sensitive locations, and by incorporating control measures (e.g., silencers) into the design.

If individual air conditioning systems are to be implemented for each residential units and townhouse blocks of the proposed site, the sound levels from each unit should meet MECP Publication NPC-216.

It is recommended that the mechanical systems be reviewed by an Acoustical as part of the development design.

PART 3: IMPACTS OF THE DEVELOPMENT ON SURROUNDING AREA

6. STATIONARY SOURCE NOISE IMPACTS ON SURROUNDING AREA

In terms of the noise environment of the area, it is expected that the project will have a negligible effect on the neighbouring properties.

The traffic related to the proposed development will be small relative to the projected traffic volumes within the area and is not of concern with respect to noise impact.

Other possible development noise sources with possible adverse impacts on the surrounding neighbourhood include the school and apartment block mechanical equipment (make up air units, cooling units, parking garage vents and/or emergency generators, etc.). This equipment is required to meet MECP Publication NPC-300 requirements at the worst-case off-site noise sensitive receptors.

Off-site impacts are not anticipated, given that the systems will be designed to ensure that the applicable noise guidelines are met at on-site receptors.

Regardless, potential impacts will be assessed as part of the final building design to ensure compliance. The criteria can be met at all surrounding and on-site receptors though the use of routine mitigation measures, including the appropriate selection of mechanical equipment, by locating equipment with sufficient setback from noise sensitive locations, and by incorporating control measures (e.g., silencers) into the design.

It is recommended that the mechanical systems be reviewed by an Acoustical as part of the development design.

7. CONCLUSION AND RECOMMENDATIONS

The potential for noise impacts on the proposed development have been assessed. Based on the results of our studies, the following conclusions have been reached:

7.1 TRANSPORTATION NOISE

- An assessment of transportation noise impacts from surrounding roadways has been completed based on projected traffic volumes for the surrounding area, completed as part of Collingwood Transportation Study.
- Based on transportation façade sound levels, upgraded glazing is not required for the development, as outlined in outlined in Section 2.4.1..
- Noise impacts within the townhouse and single detached home rear yards are predicted to be within acceptable levels without the inclusion of physical noise mitigation measures as outlined in Section 2.4.2.
- Should private amenity spaces be included with the apartment block design, physical noise mitigation measures may be required within 35 m of 10th Line. An assessment of outdoor amenity areas for the apartment block will be required, once building designs have been further developed.
- Warning Clauses should be included in agreements registered on Title for the residential units and included in agreements of purchase and sale/rental agreements, as follows and summarized in Appendix D.
    - MECP Type C warning clause, and Provision for AC are recommended for the apartment block, as outlined in Section 2.6.1..
    - An MECP Type A or Type B warning clause may be required for the apartment block, pending the design and location of the outdoor amenity areas.

7.2 STATIONARY NOISE

- SLR-Novus completed a site visit on December 7 and 22, 2021 to the review existing stationary sources within surrounding area. No significant noise sources were identified during the site visit by SLR personnel.
- Given the proximity of the KWCAP, a stationary noise assessment was completed for this facility, as outlined in Section 3.1.
- "Stationary" noise from the KWCAP was assessed against the MECP Class 2 exclusionary limits, as outlined in Section 3.2.
- The exclusionary Class 2 limits are predicted to be met on the development lands for the KWCAP noise sources. Noise mitigation measures are not required for the KWCAP facility, as outlined in Section 3.5.
- An MECP Type E noise warning clause is recommended, as outlined in Section 3.6. Warning clauses are included in Appendix D.

7.3 VIBRATION

- Based on the review of the study area, no significant sources of vibration (e.g. rail, heavy metal stamping) were identified within the surrounding area. Therefore, a vibration study is not considered necessary and has not been completed.

7.4 OVERALL ASSESSMENT

- Impacts of the environment on the proposed development can be adequately controlled without upgraded glazing, with the potential inclusion of noise barriers, appropriate ventilation requirements and warning clauses, without noise controls on surrounding stationary equipment, as outlined in Part 1 of this report.
- Impacts of the proposed development on itself are not anticipated and can be adequately controlled by following the design guidance outlined in Part 2 of this report.
- Impacts of the proposed development on the surroundings are expected to meet the applicable guideline limits and can be adequately controlled by following the design guidance outlined in Part 3 of this report.
- As the apartment block outdoor amenity areas have not been determined at the time of this assessment, the requirement for noise controls and warning clauses should be reviewed by an Acoustical Consultant as part of the development design.
- As the mechanical systems for the proposed development have not been developed at the time of this assessment, the acoustical design should be reviewed by an Acoustical Consultant as part of the development design.

8. REFERENCES

International Organization for Standardization, ISO 9613-2: *Acoustics – Attenuation of Sound During Propagation Outdoors Part 2: General Method of Calculation*, Geneva, Switzerland, 1996.

Ontario Ministry of the Environment, Conservation and Parks, 1989, Ontario Road Noise Analysis Method for Environment and Transportation (ORNAMENT).

Ontario Ministry of the Environment, Conservation and Parks, Publication NPC-300: *Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning*, 2013.

Ontario Ministry of the Environment, Conservation and Parks, 1996, STAMSON v5.03: Road, Rail and Rapid Transit Noise Prediction.

STATEMENT OF LIMITATIONS

This report has been prepared and the work referred to in this report has been undertaken by SLR Consulting (Canada) Ltd. (SLR) for Wyview Group, hereafter referred to as the "Client". It is intended for the sole and exclusive use of the Client. The report has been prepared in accordance with the Scope of Work and agreement between SLR and the Client. Other than by the Client and as set out herein, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted unless payment for the work has been made in full and express written permission has been obtained from SLR.

This report has been prepared in a manner generally accepted by professional consulting principles and practices for the same locality and under similar conditions. No other representations or warranties, expressed or implied, are made.

Opinions and recommendations contained in this report are based on conditions that existed at the time the services were performed and are intended only for the client, purposes, locations, time frames and project parameters as outlined in the Scope or Work and agreement between SLR and the Client. The data reported, findings, observations and conclusions expressed are limited by the Scope of Work. SLR is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. SLR does not warranty the accuracy of information provided by third party sources.

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FIGURES

Environmental Noise and Vibration Feasibility Study

Wyview Group

Linksview Subdivision

SLR Project No.: 209.30027.00000

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WYVIEW GROUP	True North	Scale: 1:20,000	METRES	SLR global environmental solutions
LINKSVIEW SUBDIVISION		Date: Mar 24, 2022 Rev 0.0	Figure No. 1	
CONTEXT PLAN		Project No. 209.30027.00000		

WYVIEW GROUP

LINKSVIEW SUBDIVISION

MODELLED ROADWAY NOISE LEVELS
DAYTIME

True North

Scale: 1:7,500 METRES

Date: Mar 24, 2022 Rev 0.0

Project No. 209.30027.00000

Figure No. **2a**

SLR global environmental solutions

WYVIEW GROUP

LINKSVIEW SUBDIVISION

MODELLED ROADWAY NOISE LEVELS
NIGHT-TIME

True North

Scale: 1:7,500 METRES

Date: Mar 24, 2022 Rev 0.0

Project No. 209.30027.00000

Figure No. **2b**

SLR global environmental solutions

WYVIEW GROUP

LINKSVIEW SUBDIVISION

STATIONARY NOISE SOURCE LOCATIONS

True North

Scale: 1:7,500 METRES

Date: Mar 24, 2022 Rev 0.0

Project No. 209.30027.00000

Figure No. **3**

SLR global environmental solutions

WYVIEW GROUP

LINKSVIEW SUBDIVISION

MODELLED STATIONARY NOISE LEVELS

True North

Scale: 1:7,500 METRES

Date: Mar 24, 2022 Rev 0.0

Project No. 209.30027.00000

Figure No. **4**

SLR global environmental solutions

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Appendix A

Development Drawings

Environmental Noise and Vibration Feasibility Study

Wyview Group

Linksview Subdivision

SLR Project No.: 209.30027.00000

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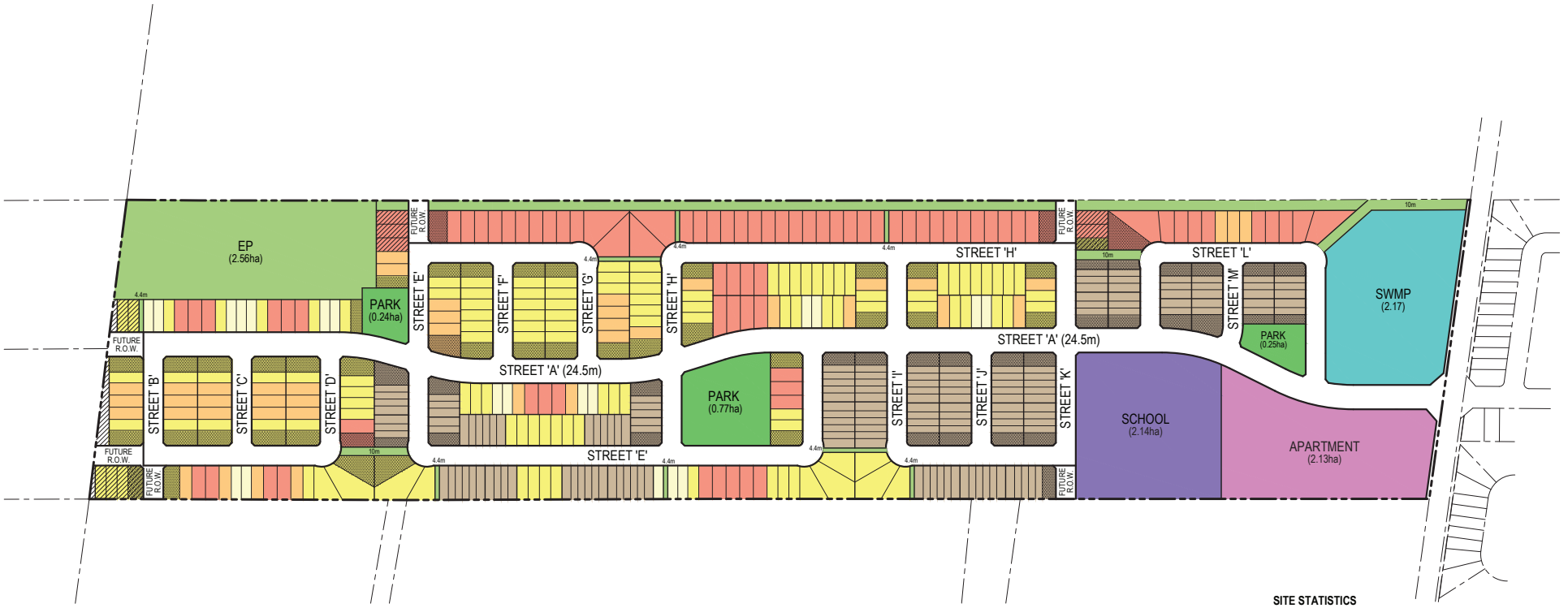
780 LINE 10, COLLINGWOOD

CONCEPT PLAN



SITE STATISTICS

45' (13.75m) Single Detached	FUTURE LOTS	89 Lots (Incl. 5 Future Lots)	18%
40' (12.25m) Single Detached		43 Lots	9%
36' (11.00m) Single Detached	FUTURE LOTS	157 Lots (Incl. 7 Future Lot)	31%
33' (10.10m) Single Detached		20 Lots	4%
23' (7.00m) Townhouse		187 Lots	38%
Priority Corner Lots with Enhanced Architectural Treatment		(Incl. 71 Priority Lots)	
TOTAL		496 Lots	100%

- Street Length 4,599m
- Site statistics are approximate and may be subject to change
- Concept Plans subject to detailed engineering review and review from approval authorities.
- Townhouses were given 0.2m of extra room on end units as per Architects request.

FOR DISCUSSION PURPOSES ONLY

DECEMBER 9, 2021

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Appendix B

Traffic Data and Calculations

Environmental Noise and Vibration Feasibility Study

Wyview Group

Linksview Subdivision

SLR Project No.: 209.30027.00000

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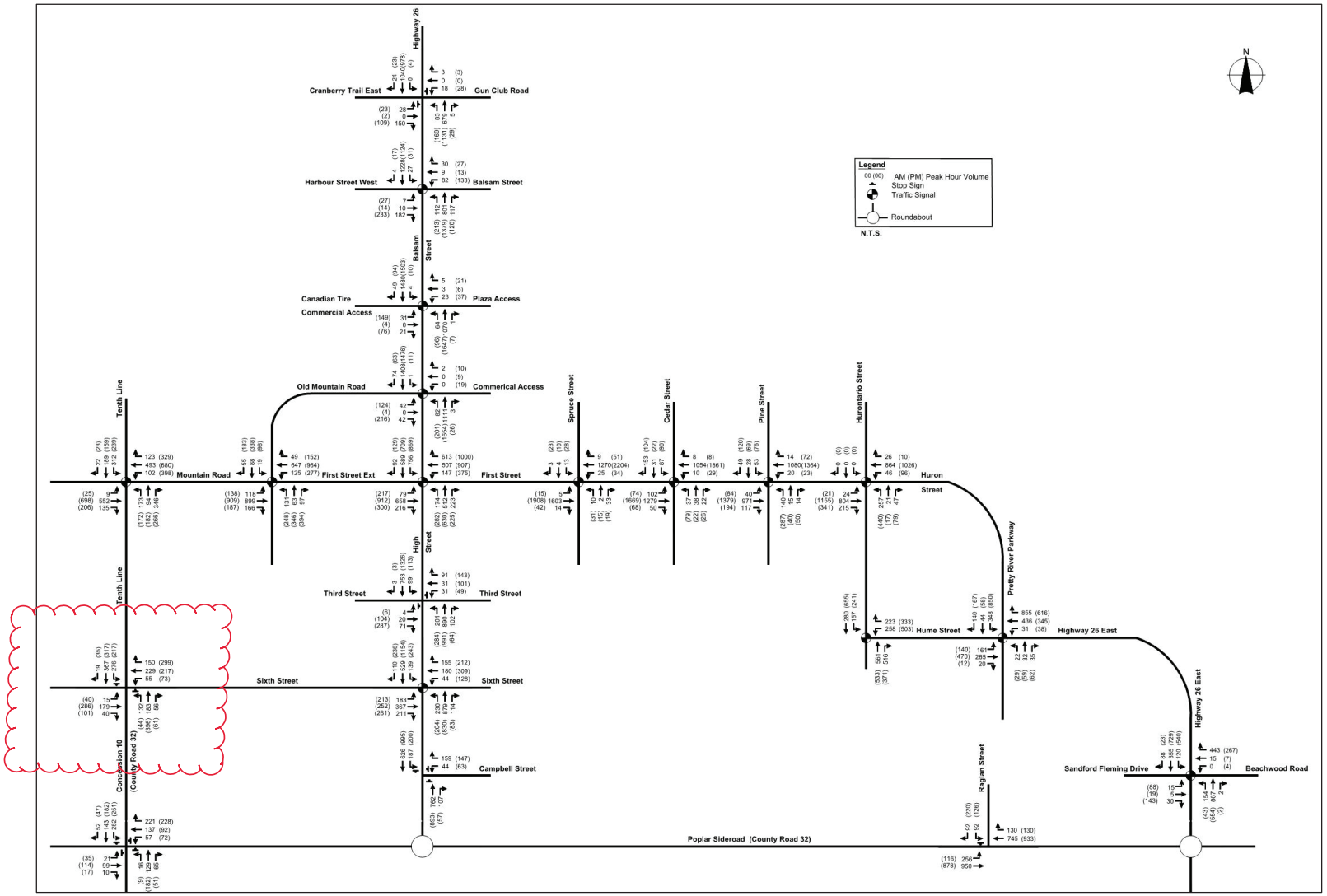
O R N A M E N T - Sound Power Emissions & Source Heights

Ontario Road Noise Analysis Method for Environment and Transportation

Road Segment ID	Roadway Name	Link Description	Speed (kph)	Period (h)	Auto	Med	Heavy	Road Gradient (%)	Cadna/A Ground Absorption G	PWL (dBA)	Source Height, s (m)
10th_avg_D	10th Line	Daytime Impacts	50	16	12,588	411	375	0	0.00	81.4	**1.3**
10th_avg_N		Nighttime Impacts	50	8	1,399	46	42	0	0.00	74.8	**1.3**
6th_60_avg_D	6th Street (60km/h zone)	Daytime Impacts	60	16	7,929	178	38	0	0.00	78.2	**0.8**
6th_60_avg_N		Nighttime Impacts	60	8	881	20	4	0	0.00	71.7	**0.8**
6th_80_avg_D	6th Street (80km/h zone)	Daytime Impacts	80	16	7,929	178	38	0	0.00	81.4	**0.8**
6th_80_avg_N		Nighttime Impacts	80	8	881	20	4	0	0.00	74.9	**0.8**

Figure 14: 2041 Total Traffic Volumes



Ontario Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 15:00:00
To: 18:00:00

One Hour Peak
From: 16:00:00
To: 17:00:00

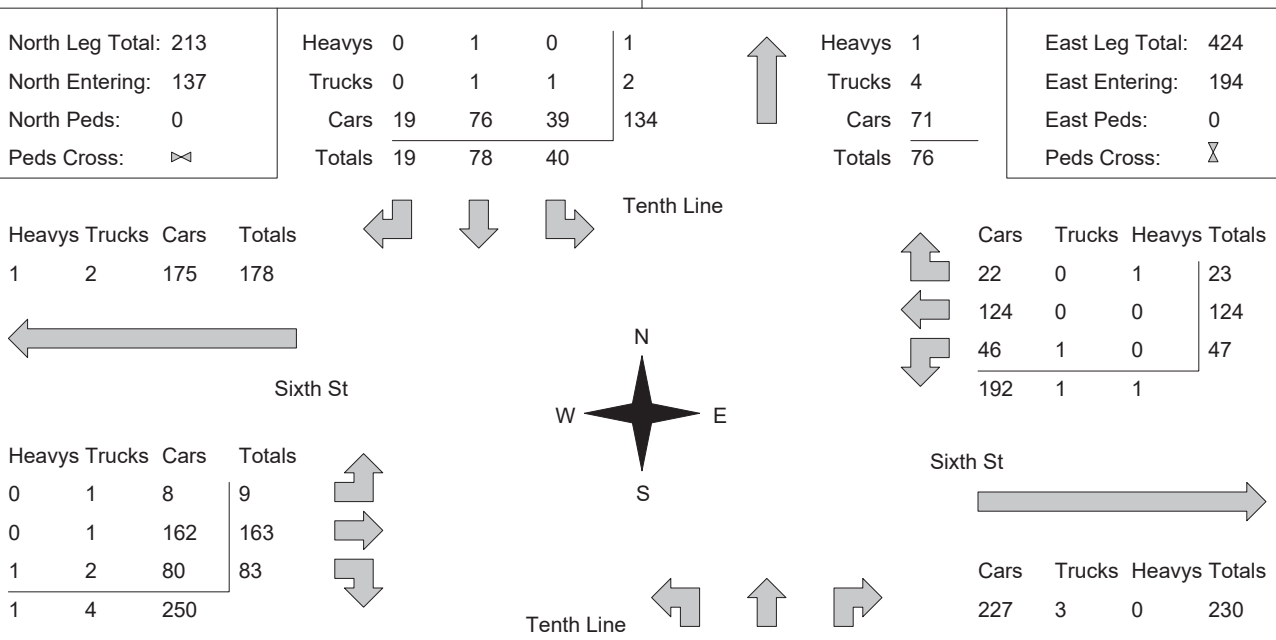
Municipality: Collingwood
Site #: 1842000018
Intersection: Sixth St & Tenth Line
TFR File #: 1
Count date: 12-Dec-18

Weather conditions:

Person(s) who counted:

**** Non-Signalized Intersection ****

Major Road: Sixth St runs W/E



Comments

Ontario Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

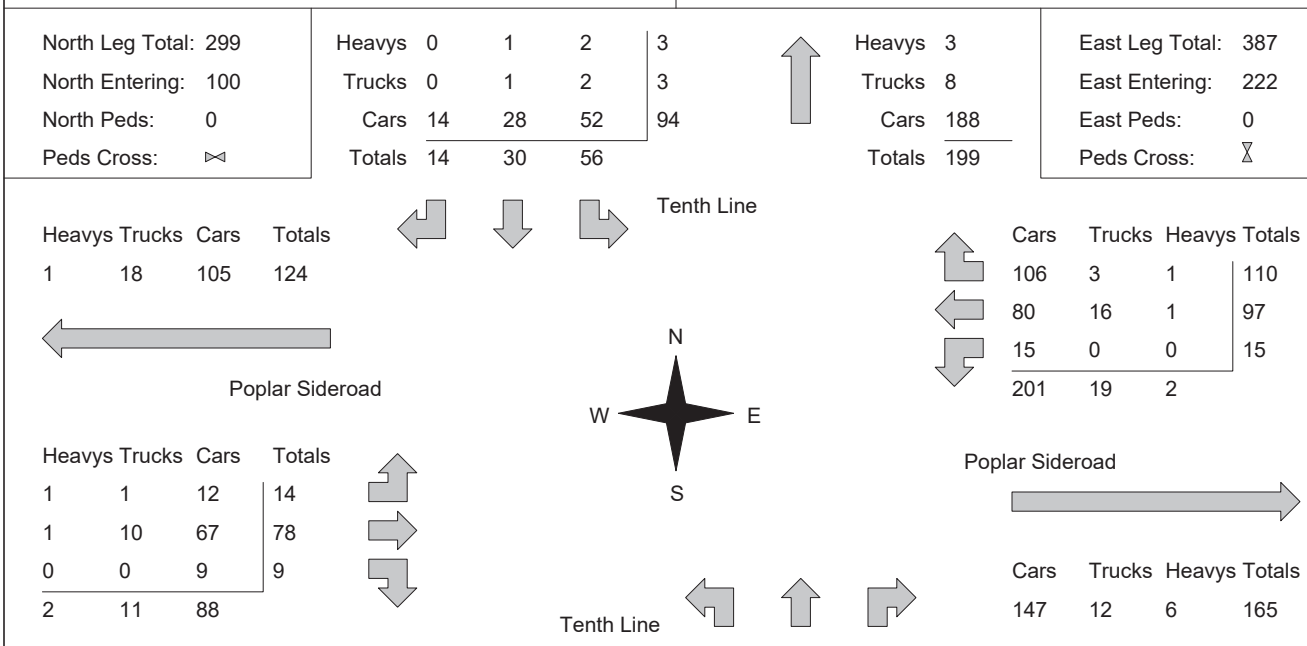
Municipality: Collingwood
Site #: 1842000019
Intersection: Poplar Sideroad & Tenth Line
TFR File #: 1
Count date: 12-Dec-18

Weather conditions:

Person(s) who counted:

**** Non-Signalized Intersection ****

Major Road: Poplar Sideroad runs W/E



Comments

Appendix C

STAMSON Output Files

Environmental Noise and Vibration Feasibility Study

Wyview Group

Linksview Subdivision

SLR Project No.: 209.30027.00000

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WYVIEW GROUP	True North	Scale: 1:7,500	METRES	SLR global environmental solutions
LINKSVIEW SUBDIVISION		Date: Mar 24, 2022 Rev 0.0	Figure No. **C.1**	
COMPARISON OF CADNAA AND STAMSON		Project No. 209.30027.00000		

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STAMSON 5.0 NORMAL REPORT Date: 02-03-2022 14:36:45
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: loc1.te Time Period: 16 hours
Description: Location 1, 2nd floor, abs ground

Road data, segment # 1: 6th_60

Car traffic volume : 7929 veh/TimePeriod
Medium truck volume : 178 veh/TimePeriod
Heavy truck volume : 38 veh/TimePeriod
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: 6th_60

Angle1 Angle2 : -90.00 deg -72.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 320.00 m
Receiver height : 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: 6th_80

Car traffic volume : 7929 veh/TimePeriod
Medium truck volume : 178 veh/TimePeriod
Heavy truck volume : 38 veh/TimePeriod
Posted speed limit : 80 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: 6th_80

Angle1 Angle2 : -72.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 320.00 m
Receiver height : 4.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: 6th_60

Source height = 0.83 m

ROAD (0.00 + 27.02 + 0.00) = 27.02 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	-72	0.59	63.15	0.00	-21.13	-15.00	0.00	0.00	0.00	27.02

Segment Leq : 27.02 dBA

Results segment # 2: 6th_80

Source height = 0.83 m

ROAD (0.00 + 43.68 + 0.00) = 43.68 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-72	90	0.59	66.34	0.00	-21.13	-1.53	0.00	0.00	0.00	43.68

Segment Leq : 43.68 dBA

Total Leq All Segments: 43.77 dBA

TOTAL Leq FROM ALL SOURCES: 43.77

STAMSON 5.0 NORMAL REPORT Date: 02-03-2022 14:39:44
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: loc2.te Time Period: 16 hours
Description: Location 2, 1st floor, refl+abs ground

Road data, segment # 1: 6th_60

Car traffic volume : 7929 veh/TimePeriod
Medium truck volume : 178 veh/TimePeriod
Heavy truck volume : 38 veh/TimePeriod
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 1: 6th_60

Angle1 Angle2 : -90.00 deg 43.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 394.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: 6th_80

Car traffic volume : 7929 veh/TimePeriod
Medium truck volume : 178 veh/TimePeriod
Heavy truck volume : 38 veh/TimePeriod
Posted speed limit : 80 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 2: 6th_80

Angle1 Angle2 : 43.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 394.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 3: 10th_refl

Car traffic volume : 12588 veh/TimePeriod
Medium truck volume : 411 veh/TimePeriod
Heavy truck volume : 375 veh/TimePeriod
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 3: 10th_refl

Angle1 Angle2 : -90.00 deg 61.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 2 (Reflective ground surface)
Receiver source distance : 43.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 4: 10th_abs

Car traffic volume : 12588 veh/TimePeriod
Medium truck volume : 411 veh/TimePeriod
Heavy truck volume : 375 veh/TimePeriod
Posted speed limit : 50 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

Data for Segment # 4: 10th_abs

Angle1 Angle2 : 61.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 43.00 m
Receiver height : 1.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: 6th_60

Source height = 0.83 m

ROAD (0.00 + 37.24 + 0.00) = 37.24 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	43	0.66	63.15	0.00	-23.56	-2.35	0.00	0.00	0.00	37.24

Segment Leq : 37.24 dBA

Results segment # 2: 6th_80

Source height = 0.83 m

ROAD (0.00 + 34.03 + 0.00) = 34.03 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
43	90	0.66	66.34	0.00	-23.56	-8.75	0.00	0.00	0.00	34.03

Segment Leq : 34.03 dBA

Results segment # 3: 10th_refl

Source height = 1.29 m

ROAD (0.00 + 60.97 + 0.00) = 60.97 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
-90	61	0.00	66.30	0.00	-4.57	-0.76	0.00	0.00	0.00	60.97

Segment Leq : 60.97 dBA

Results segment # 4: 10th_abs

Source height = 1.29 m

ROAD (0.00 + 46.57 + 0.00) = 46.57 dBA

Angle1	Angle2	Alpha	RefLeq	P.Adj	D.Adj	F.Adj	W.Adj	H.Adj	B.Adj	SubLeq
61	90	0.66	66.30	0.00	-7.59	-12.14	0.00	0.00	0.00	46.57

Segment Leq : 46.57 dBA

Total Leq All Segments: 61.15 dBA

TOTAL Leq FROM ALL SOURCES: 61.15

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Appendix D

Ventilation and Warning Clause Summary

Environmental Noise and Vibration Feasibility Study

Wyview Group

Linksview Subdivision

SLR Project No.: 209.30027.00000

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Ventilation, Warning Clause and Barrier Summary

The following Warning Clauses are recommended for inclusion in agreements registered on Title for the residential units, and included in all agreements of purchase and sale or lease, and all rental agreements.

A summary of the Warning Clause and Ventilation Requirements is included in Table D.1 below

MECP Type A: "Purchasers/tenants are advised that sound levels, due to increasing road traffic, may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment."

MECP Type B: "Purchasers/tenants are advised that despite the inclusion of noise control features in the development, sound levels, due to increasing road traffic, may on occasions interfere with some activities of the dwelling occupants as the sound levels exceed the sound level limits of the Municipality and the Ministry of the Environment."

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

MECP Type E: " Purchasers/tenants are advised that due to the proximity of the adjacent industry, noise from the industry may at times be audible."

Table D.1: Summary of Ventilation and Warning Clause Requirements

Lot/Block	Barrier Required	Air Conditioning Requirement	Warning Clause
Apartment Block	Y [1]	Provision for AC [2]	Type A or Type B [1]; and Type C
Single Detached Homes, and Townhouse Blocks	N	n/a	Type E

Notes: [1] Barrier and Warning Clause Requirements are pending design and layout of the Apartment Block.
[2] AC = Central Air conditioning required, Provision for AC = forced air heating with a provision for installation of central air conditioning

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Appendix E

Stationary Source Data

Environmental Noise and Vibration Feasibility Study

Wyview Group

Linksview Subdivision

SLR Project No.: 209.30027.00000

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POINT SOURCES

Name	ID	Result. PWL			Operating Time			Directivity Pattern	Directivity Vector			Height
		Day (dBA)	Evening (dBA)	Night (dBA)	Day (min)	Special (min)	Night (min)		X	Y	Z	(m)
Ken Winters Construction Aggregate Pit - Loader	KWCAP_Loader1	103	103	103	60	0	0	(none)	0	0	1	2.0 m Relative to Ground
Ken Winters Construction Aggregate Pit - Loader	KWCAP_Loader2	103	103	103	60	0	0	(none)	0	0	1	2.0 m Relative to Ground
Ken Winters Construction Aggregate Pit - crusher/screen + excavator	KWCAP_screen+excavator	106	106	106	60	0	0	(none)	0	0	1	2.5 m Relative to Ground

LINE SOURCES

Name	ID	Result. PWL			Result. PWL'			Moving Pt. Src			
		Day (dBA)	Evening (dBA)	Night (dBA)	Day (dBA)	Evening (dBA)	Night (dBA)	Number Day	Number Evening	Number Night	Speed (km/h)
Truck Route (5trucks/hr = 10 passbys)	KWC_TrkRt	98	-13	-13	68	-42	-42	10	0	0	15

Appendix F

Stationary Source Output File

Environmental Noise and Vibration Feasibility Study

Wyview Group

Linksview Subdivision

SLR Project No.: 209.30027.00000

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WYVIEW GROUP	True North	Scale: 1:7,500	METRES	SLR global environmental solutions
LINKSVIEW SUBDIVISION		Date: Mar 24, 2022 Rev 0.0	Figure No. **E.1**	
CADNAA MODELLING OUTPUT FILE LOCATION		Project No. 209.30027.00000		

Receiver
Name: rear yard
ID: check_OPOR
X: 558317.67 m
Y: 4927000.70 m
Z: 209.50 m

Point Source, ISO 9613, Name: "Ken Winters Construction Aggregate Pit - screen", ID: "KWCAP_screen"

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
1	558144.56	4926907.96	207.29	0	D	A	106.0	0.0	0.0	0.0	0.0	56.9	1.7	-0.5	0.0	0.0	0.0	0.0	0.0	47.9
1	558144.56	4926907.96	207.29	0	N	A	106.0	0.0	-188.0	0.0	0.0	56.9	1.7	-0.5	0.0	0.0	0.0	0.0	0.0	-140.1
1	558144.56	4926907.96	207.29	0	E	A	106.0	0.0	-188.0	0.0	0.0	56.9	1.7	-0.5	0.0	0.0	0.0	0.0	0.0	-140.1

Point Source, ISO 9613, Name: "Ken Winters Construction Aggregate Pit - Loader", ID: "KWCAP_Loader1"

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
2	558149.52	4926893.17	207.00	0	D	A	103.0	0.0	0.0	0.0	0.0	57.0	0.7	1.9	0.0	0.0	0.0	0.0	0.0	43.4
2	558149.52	4926893.17	207.00	0	N	A	103.0	0.0	-188.0	0.0	0.0	57.0	0.7	1.9	0.0	0.0	0.0	0.0	0.0	-144.6
2	558149.52	4926893.17	207.00	0	E	A	103.0	0.0	-188.0	0.0	0.0	57.0	0.7	1.9	0.0	0.0	0.0	0.0	0.0	-144.6

Point Source, ISO 9613, Name: "Ken Winters Construction Aggregate Pit - Loader", ID: "KWCAP_Loader2"

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
3	558132.72	4926865.11	207.04	0	D	A	103.0	0.0	0.0	0.0	0.0	58.2	0.8	2.1	0.0	0.0	0.0	0.0	0.0	41.9
3	558132.72	4926865.11	207.04	0	N	A	103.0	0.0	-188.0	0.0	0.0	58.2	0.8	2.1	0.0	0.0	0.0	0.0	0.0	-146.1
3	558132.72	4926865.11	207.04	0	E	A	103.0	0.0	-188.0	0.0	0.0	58.2	0.8	2.1	0.0	0.0	0.0	0.0	0.0	-146.1

Line Source, ISO 9613, Name: "Truck Route (5trucks/hr = 10 passbys)", ID: "KWCAP_TrkRt"

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
4	558258.73	4927304.45	206.25	0	D	A	67.7	17.7	0.0	0.0	0.0	60.8	1.4	3.8	0.0	0.0	0.0	0.0	0.0	19.4
4	558258.73	4927304.45	206.25	0	N	A	-42.3	17.7	0.0	0.0	0.0	60.8	1.4	3.8	0.0	0.0	0.0	0.0	0.0	-90.6
4	558258.73	4927304.45	206.25	0	E	A	-42.3	17.7	0.0	0.0	0.0	60.8	1.4	3.8	0.0	0.0	0.0	0.0	0.0	-90.6
5	558247.11	4927375.99	205.90	0	D	A	67.7	17.5	0.0	0.0	0.0	62.6	1.6	4.0	0.0	0.0	0.0	0.0	0.0	16.9
5	558247.11	4927375.99	205.90	0	N	A	-42.3	17.5	0.0	0.0	0.0	62.6	1.6	4.0	0.0	0.0	0.0	0.0	0.0	-93.1
5	558247.11	4927375.99	205.90	0	E	A	-42.3	17.5	0.0	0.0	0.0	62.6	1.6	4.0	0.0	0.0	0.0	0.0	0.0	-93.1
6	558224.47	4927216.21	206.90	0	D	A	67.7	13.4	0.0	0.0	0.0	58.4	1.1	3.6	0.0	0.0	0.0	0.0	0.0	18.0
6	558224.47	4927216.21	206.90	0	N	A	-42.3	13.4	0.0	0.0	0.0	58.4	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-92.0
6	558224.47	4927216.21	206.90	0	E	A	-42.3	13.4	0.0	0.0	0.0	58.4	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-92.0
7	558054.07	4927158.95	209.12	0	D	A	67.7	14.1	0.0	0.0	0.0	60.8	1.4	3.0	0.0	0.0	0.0	0.0	0.0	16.7
7	558054.07	4927158.95	209.12	0	N	A	-42.3	14.1	0.0	0.0	0.0	60.8	1.4	3.0	0.0	0.0	0.0	0.0	0.0	-93.3
7	558054.07	4927158.95	209.12	0	E	A	-42.3	14.1	0.0	0.0	0.0	60.8	1.4	3.0	0.0	0.0	0.0	0.0	0.0	-93.3
8	558244.76	4927223.25	206.90	0	D	A	67.7	11.9	0.0	0.0	0.0	58.4	1.1	3.6	0.0	0.0	0.0	0.0	0.0	16.6
8	558244.76	4927223.25	206.90	0	N	A	-42.3	11.9	0.0	0.0	0.0	58.4	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-93.4
8	558244.76	4927223.25	206.90	0	E	A	-42.3	11.9	0.0	0.0	0.0	58.4	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-93.4
9	558206.46	4927210.81	206.90	0	D	A	67.7	11.9	0.0	0.0	0.0	58.5	1.1	3.6	0.0	0.0	0.0	0.0	0.0	16.4
9	558206.46	4927210.81	206.90	0	N	A	-42.3	11.9	0.0	0.0	0.0	58.5	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-93.6
9	558206.46	4927210.81	206.90	0	E	A	-42.3	11.9	0.0	0.0	0.0	58.5	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-93.6
10	558239.32	4927423.95	205.90	0	D	A	67.7	16.1	0.0	0.0	0.0	63.7	1.8	4.1	0.0	0.0	0.0	0.0	0.0	14.2
10	558239.32	4927423.95	205.90	0	N	A	-42.3	16.1	0.0	0.0	0.0	63.7	1.8	4.1	0.0	0.0	0.0	0.0	0.0	-95.8
10	558239.32	4927423.95	205.90	0	E	A	-42.3	16.1	0.0	0.0	0.0	63.7	1.8	4.1	0.0	0.0	0.0	0.0	0.0	-95.8
11	558122.79	4927175.90	207.10	0	D	A	67.7	11.7	0.0	0.0	0.0	59.4	1.2	3.7	0.0	0.0	0.0	0.0	0.0	15.1
11	558122.79	4927175.90	207.10	0	N	A	-42.3	11.7	0.0	0.0	0.0	59.4	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-94.9
11	558122.79	4927175.90	207.10	0	E	A	-42.3	11.7	0.0	0.0	0.0	59.4	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-94.9
12	558170.15	4927197.03	207.13	0	D	A	67.7	11.1	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	15.3
12	558170.15	4927197.03	207.13	0	N	A	-42.3	11.1	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-94.7
12	558170.15	4927197.03	207.13	0	E	A	-42.3	11.1	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-94.7
13	558055.81	4926929.99	206.58	0	D	A	67.7	11.9	0.0	0.0	0.0	59.7	1.2	1.9	0.0	0.0	0.0	0.0	0.0	16.8
13	558055.81	4926929.99	206.58	0	N	A	-42.3	11.9	0.0	0.0	0.0	59.7	1.2	1.9	0.0	0.0	0.0	0.0	0.0	-93.2
13	558055.81	4926929.99	206.58	0	E	A	-42.3	11.9	0.0	0.0	0.0	59.7	1.2	1.9	0.0	0.0	0.0	0.0	0.0	-93.2
14	558264.35	4927268.50	206.69	0	D	A	67.7	11.6	0.0	0.0	0.0	59.7	1.2	3.7	0.0	0.0	0.0	0.0	0.0	14.6
14	558264.35	4927268.50	206.69	0	N	A	-42.3	11.6	0.0	0.0	0.0	59.7	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-95.4

Line Source, ISO 9613, Name: "Truck Route (5trucks/hr = 10 passbys)", ID: "KWCAP_TrkRt"

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
14	558264.35	4927268.50	206.69	0	E	A	-42.3	11.6	0.0	0.0	0.0	59.7	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-95.4
15	558187.81	4927205.22	206.90	0	D	A	67.7	10.6	0.0	0.0	0.0	58.7	1.1	3.6	0.0	0.0	0.0	0.0	0.0	14.9
15	558187.81	4927205.22	206.90	0	N	A	-42.3	10.6	0.0	0.0	0.0	58.7	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-95.1
15	558187.81	4927205.22	206.90	0	E	A	-42.3	10.6	0.0	0.0	0.0	58.7	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-95.1
16	558065.45	4926917.72	206.70	0	D	A	67.7	11.1	0.0	0.0	0.0	59.5	1.2	2.3	0.0	0.0	0.0	0.0	0.0	15.8
16	558065.45	4926917.72	206.70	0	N	A	-42.3	11.1	0.0	0.0	0.0	59.5	1.2	2.3	0.0	0.0	0.0	0.0	0.0	-94.2
16	558065.45	4926917.72	206.70	0	E	A	-42.3	11.1	0.0	0.0	0.0	59.5	1.2	2.3	0.0	0.0	0.0	0.0	0.0	-94.2
17	558259.54	4927236.49	206.90	0	D	A	67.7	9.7	0.0	0.0	0.0	58.7	1.1	3.6	0.0	0.0	0.0	0.0	0.0	13.9
17	558259.54	4927236.49	206.90	0	N	A	-42.3	9.7	0.0	0.0	0.0	58.7	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-96.1
17	558259.54	4927236.49	206.90	0	E	A	-42.3	9.7	0.0	0.0	0.0	58.7	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-96.1
18	558119.33	4926896.15	205.76	0	D	A	67.7	9.0	0.0	0.0	0.0	58.0	1.0	2.1	0.0	0.0	0.0	0.0	0.0	15.6
18	558119.33	4926896.15	205.76	0	N	A	-42.3	9.0	0.0	0.0	0.0	58.0	1.0	2.1	0.0	0.0	0.0	0.0	0.0	-94.4
18	558119.33	4926896.15	205.76	0	E	A	-42.3	9.0	0.0	0.0	0.0	58.0	1.0	2.1	0.0	0.0	0.0	0.0	0.0	-94.4
19	558034.58	4927152.82	208.71	0	D	A	67.7	11.8	0.0	0.0	0.0	61.1	1.4	2.7	0.0	0.0	0.0	0.0	0.0	14.3
19	558034.58	4927152.82	208.71	0	N	A	-42.3	11.8	0.0	0.0	0.0	61.1	1.4	2.7	0.0	0.0	0.0	0.0	0.0	-95.7
19	558034.58	4927152.82	208.71	0	E	A	-42.3	11.8	0.0	0.0	0.0	61.1	1.4	2.7	0.0	0.0	0.0	0.0	0.0	-95.7
20	558254.86	4927229.26	206.90	0	D	A	67.7	9.2	0.0	0.0	0.0	58.5	1.1	3.6	0.0	0.0	0.0	0.0	0.0	13.7
20	558254.86	4927229.26	206.90	0	N	A	-42.3	9.2	0.0	0.0	0.0	58.5	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-96.3
20	558254.86	4927229.26	206.90	0	E	A	-42.3	9.2	0.0	0.0	0.0	58.5	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-96.3
21	558112.79	4926900.24	205.68	0	D	A	67.7	8.8	0.0	0.0	0.0	58.2	1.1	2.0	0.0	0.0	0.0	0.0	0.0	15.3
21	558112.79	4926900.24	205.68	0	N	A	-42.3	8.8	0.0	0.0	0.0	58.2	1.1	2.0	0.0	0.0	0.0	0.0	0.0	-94.7
21	558112.79	4926900.24	205.68	0	E	A	-42.3	8.8	0.0	0.0	0.0	58.2	1.1	2.0	0.0	0.0	0.0	0.0	0.0	-94.7
22	558023.32	4926966.90	206.63	0	D	A	67.7	11.0	0.0	0.0	0.0	60.4	1.3	2.0	0.0	0.0	0.0	0.0	0.0	14.9
22	558023.32	4926966.90	206.63	0	N	A	-42.3	11.0	0.0	0.0	0.0	60.4	1.3	2.0	0.0	0.0	0.0	0.0	0.0	-95.1
22	558023.32	4926966.90	206.63	0	E	A	-42.3	11.0	0.0	0.0	0.0	60.4	1.3	2.0	0.0	0.0	0.0	0.0	0.0	-95.1
23	558013.82	4926975.50	206.82	0	D	A	67.7	11.2	0.0	0.0	0.0	60.7	1.4	2.1	0.0	0.0	0.0	0.0	0.0	14.8
23	558013.82	4926975.50	206.82	0	N	A	-42.3	11.2	0.0	0.0	0.0	60.7	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-95.2
23	558013.82	4926975.50	206.82	0	E	A	-42.3	11.2	0.0	0.0	0.0	60.7	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-95.2
24	558126.29	4926894.55	205.79	0	D	A	67.7	8.3	0.0	0.0	0.0	57.8	1.0	2.2	0.0	0.0	0.0	0.0	0.0	15.0
24	558126.29	4926894.55	205.79	0	N	A	-42.3	8.3	0.0	0.0	0.0	57.8	1.0	2.2	0.0	0.0	0.0	0.0	0.0	-95.0
24	558126.29	4926894.55	205.79	0	E	A	-42.3	8.3	0.0	0.0	0.0	57.8	1.0	2.2	0.0	0.0	0.0	0.0	0.0	-95.0
25	558077.05	4926903.37	206.42	0	D	A	67.7	9.7	0.0	0.0	0.0	59.3	1.2	2.4	0.0	0.0	0.0	0.0	0.0	14.6
25	558077.05	4926903.37	206.42	0	N	A	-42.3	9.7	0.0	0.0	0.0	59.3	1.2	2.4	0.0	0.0	0.0	0.0	0.0	-95.4
25	558077.05	4926903.37	206.42	0	E	A	-42.3	9.7	0.0	0.0	0.0	59.3	1.2	2.4	0.0	0.0	0.0	0.0	0.0	-95.4
26	558077.79	4927166.43	208.60	0	D	A	67.7	10.6	0.0	0.0	0.0	60.3	1.3	3.3	0.0	0.0	0.0	0.0	0.0	13.5
26	558077.79	4927166.43	208.60	0	N	A	-42.3	10.6	0.0	0.0	0.0	60.3	1.3	3.3	0.0	0.0	0.0	0.0	0.0	-96.5
26	558077.79	4927166.43	208.60	0	E	A	-42.3	10.6	0.0	0.0	0.0	60.3	1.3	3.3	0.0	0.0	0.0	0.0	0.0	-96.5
27	558231.68	4927470.93	206.17	0	D	A	67.7	14.5	0.0	0.0	0.0	64.6	2.0	4.2	0.0	0.0	0.0	0.0	0.0	11.4
27	558231.68	4927470.93	206.17	0	N	A	-42.3	14.5	0.0	0.0	0.0	64.6	2.0	4.2	0.0	0.0	0.0	0.0	0.0	-98.6
27	558231.68	4927470.93	206.17	0	E	A	-42.3	14.5	0.0	0.0	0.0	64.6	2.0	4.2	0.0	0.0	0.0	0.0	0.0	-98.6
28	557988.16	4927138.19	210.37	0	D	A	67.7	12.0	0.0	0.0	0.0	62.1	1.6	2.5	0.0	0.0	0.0	0.0	0.0	13.7
28	557988.16	4927138.19	210.37	0	N	A	-42.3	12.0	0.0	0.0	0.0	62.1	1.6	2.5	0.0	0.0	0.0	0.0	0.0	-96.3
28	557988.16	4927138.19	210.37	0	E	A	-42.3	12.0	0.0	0.0	0.0	62.1	1.6	2.5	0.0	0.0	0.0	0.0	0.0	-96.3
29	558162.15	4927190.77	207.31	0	D	A	67.7	8.8	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	12.9
29	558162.15	4927190.77	207.31	0	N	A	-42.3	8.8	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-97.1
29	558162.15	4927190.77	207.31	0	E	A	-42.3	8.8	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-97.1
30	558102.49	4927173.25	207.70	0	D	A	67.7	9.7	0.0	0.0	0.0	59.8	1.3	3.7	0.0	0.0	0.0	0.0	0.0	12.6
30	558102.49	4927173.25	207.70	0	N	A	-42.3	9.7	0.0	0.0	0.0	59.8	1.3	3.7	0.0	0.0	0.0	0.0	0.0	-97.4
30	558102.49	4927173.25	207.70	0	E	A	-42.3	9.7	0.0	0.0	0.0	59.8	1.3	3.7	0.0	0.0	0.0	0.0	0.0	-97.4
31	558111.26	4927174.59	207.41	0	D	A	67.7	9.3	0.0	0.0	0.0	59.6	1.2	3.7	0.0	0.0	0.0	0.0	0.0	12.5
31	558111.26	4927174.59	207.41	0	N	A	-42.3	9.3	0.0	0.0	0.0	59.6	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-97.5
31	558111.26	4927174.59	207.41	0	E	A	-42.3	9.3	0.0	0.0	0.0	59.6	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-97.5
32	557937.98	4927027.61	213.14	0	D	A	67.7	12.3	0.0	0.0	0.0	62.6	1.6	2.2	0.0	0.0	0.0	0.0	0.0	13.6
32	557937.98	4927027.61	213.14	0	N	A	-42.3	12.3	0.0	0.0	0.0	62.6	1.6	2.2	0.0	0.0	0.0	0.0	0.0	-96.4
32	557937.98	4927027.61	213.14	0	E	A	-42.3	12.3	0.0	0.0	0.0	62.6	1.6	2.2	0.0	0.0	0.0	0.0	0.0	-96.4
33	558099.43	4926901.64	205.67	0	D	A	67.7	8.2	0.0	0.0	0.0	58.6	1.1	2.2	0.0	0.0	0.0	0.0	0.0	14.0
33	558099.43	4926901.64	205.67	0	N	A	-42.3	8.2	0.0	0.0	0.0	58.6	1.1	2.2	0.0	0.0	0.0	0.0	0.0	-96.0
33	558099.43	4926901.64	205.67	0	E	A	-42.3	8.2	0.0	0.0	0.0	58.6	1.1	2.2	0.0	0.0	0.0	0.0	0.0	-96.0
34	558021.41	4927148.67	208.54	0	D	A	67.7	10.9	0.0	0.0	0.0	61.4	1.5	2.6	0.0	0.0	0.0	0.0	0.0	13.2
34	558021.41	4927148.67	208.54	0	N	A	-42.3	10.9	0.0	0.0	0.0	61.4	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-96.8
34	558021.41	4927148.67	208.54	0	E	A	-42.3	10.9	0.0	0.0	0.0	61.4	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-96.8
35	558143.59	4927179.28	206.52	0	D	A	67.7	8.5	0.0	0.0	0.0	58.9	1.1	3.7	0.0	0.0	0.0	0.0	0.0	12.5
35	558143.59	4927179.28	206.52	0	N	A	-42.3	8.5	0.0	0.0	0.0	58.9	1.1	3.7	0.0	0.0	0.0	0.0	0.0	-97.5

Line Source, ISO 9613, Name: "Truck Route (5trucks/hr = 10 passbys)", ID: "KWCAP_TrkRt"

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
35	558143.59	4927179.28	206.52	0	E	A	-42.3	8.5	0.0	0.0	0.0	58.9	1.1	3.7	0.0	0.0	0.0	0.0	0.0	-97.5
36	558092.33	4927171.01	208.05	0	D	A	67.7	9.5	0.0	0.0	0.0	60.0	1.3	3.6	0.0	0.0	0.0	0.0	0.0	12.3
36	558092.33	4927171.01	208.05	0	N	A	-42.3	9.5	0.0	0.0	0.0	60.0	1.3	3.6	0.0	0.0	0.0	0.0	0.0	-97.7
36	558092.33	4927171.01	208.05	0	E	A	-42.3	9.5	0.0	0.0	0.0	60.0	1.3	3.6	0.0	0.0	0.0	0.0	0.0	-97.7
37	558071.68	4926909.78	206.55	0	D	A	67.7	8.7	0.0	0.0	0.0	59.4	1.2	2.4	0.0	0.0	0.0	0.0	0.0	13.5
37	558071.68	4926909.78	206.55	0	N	A	-42.3	8.7	0.0	0.0	0.0	59.4	1.2	2.4	0.0	0.0	0.0	0.0	0.0	-96.5
37	558071.68	4926909.78	206.55	0	E	A	-42.3	8.7	0.0	0.0	0.0	59.4	1.2	2.4	0.0	0.0	0.0	0.0	0.0	-96.5
38	558048.61	4926939.27	206.14	0	D	A	67.7	9.1	0.0	0.0	0.0	59.8	1.3	1.9	0.0	0.0	0.0	0.0	0.0	13.9
38	558048.61	4926939.27	206.14	0	N	A	-42.3	9.1	0.0	0.0	0.0	59.8	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-96.1
38	558048.61	4926939.27	206.14	0	E	A	-42.3	9.1	0.0	0.0	0.0	59.8	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-96.1
39	558133.39	4927176.89	206.68	0	D	A	67.7	8.2	0.0	0.0	0.0	59.1	1.2	3.7	0.0	0.0	0.0	0.0	0.0	12.0
39	558133.39	4927176.89	206.68	0	N	A	-42.3	8.2	0.0	0.0	0.0	59.1	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-98.0
39	558133.39	4927176.89	206.68	0	E	A	-42.3	8.2	0.0	0.0	0.0	59.1	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-98.0
40	558196.15	4927207.72	206.90	0	D	A	67.7	7.7	0.0	0.0	0.0	58.6	1.1	3.6	0.0	0.0	0.0	0.0	0.0	12.1
40	558196.15	4927207.72	206.90	0	N	A	-42.3	7.7	0.0	0.0	0.0	58.6	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-97.9
40	558196.15	4927207.72	206.90	0	E	A	-42.3	7.7	0.0	0.0	0.0	58.6	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-97.9
41	557972.12	4927133.14	211.06	0	D	A	67.7	11.2	0.0	0.0	0.0	62.4	1.6	2.4	0.0	0.0	0.0	0.0	0.0	12.5
41	557972.12	4927133.14	211.06	0	N	A	-42.3	11.2	0.0	0.0	0.0	62.4	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-97.5
41	557972.12	4927133.14	211.06	0	E	A	-42.3	11.2	0.0	0.0	0.0	62.4	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-97.5
42	558155.72	4927184.75	207.05	0	D	A	67.7	7.7	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	11.9
42	558155.72	4927184.75	207.05	0	N	A	-42.3	7.7	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-98.1
42	558155.72	4927184.75	207.05	0	E	A	-42.3	7.7	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-98.1
43	558178.24	4927201.69	206.95	0	D	A	67.7	7.6	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	11.8
43	558178.24	4927201.69	206.95	0	N	A	-42.3	7.6	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-98.2
43	558178.24	4927201.69	206.95	0	E	A	-42.3	7.6	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-98.2
44	558252.48	4927342.87	205.90	0	D	A	67.7	10.4	0.0	0.0	0.0	61.8	1.5	3.9	0.0	0.0	0.0	0.0	0.0	10.9
44	558252.48	4927342.87	205.90	0	N	A	-42.3	10.4	0.0	0.0	0.0	61.8	1.5	3.9	0.0	0.0	0.0	0.0	0.0	-99.1
44	558252.48	4927342.87	205.90	0	E	A	-42.3	10.4	0.0	0.0	0.0	61.8	1.5	3.9	0.0	0.0	0.0	0.0	0.0	-99.1
45	558262.72	4927245.41	206.90	0	D	A	67.7	7.6	0.0	0.0	0.0	59.0	1.2	3.7	0.0	0.0	0.0	0.0	0.0	11.5
45	558262.72	4927245.41	206.90	0	N	A	-42.3	7.6	0.0	0.0	0.0	59.0	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-98.5
45	558262.72	4927245.41	206.90	0	E	A	-42.3	7.6	0.0	0.0	0.0	59.0	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-98.5
46	558002.85	4926982.68	207.53	0	D	A	67.7	9.5	0.0	0.0	0.0	61.0	1.4	2.1	0.0	0.0	0.0	0.0	0.0	12.7
46	558002.85	4926982.68	207.53	0	N	A	-42.3	9.5	0.0	0.0	0.0	61.0	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-97.3
46	558002.85	4926982.68	207.53	0	E	A	-42.3	9.5	0.0	0.0	0.0	61.0	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-97.3
47	558149.45	4927181.42	206.69	0	D	A	67.7	7.3	0.0	0.0	0.0	58.9	1.1	3.6	0.0	0.0	0.0	0.0	0.0	11.4
47	558149.45	4927181.42	206.69	0	N	A	-42.3	7.3	0.0	0.0	0.0	58.9	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-98.6
47	558149.45	4927181.42	206.69	0	E	A	-42.3	7.3	0.0	0.0	0.0	58.9	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-98.6
48	558094.01	4926899.49	205.72	0	D	A	67.7	7.1	0.0	0.0	0.0	58.8	1.1	2.3	0.0	0.0	0.0	0.0	0.0	12.6
48	558094.01	4926899.49	205.72	0	N	A	-42.3	7.1	0.0	0.0	0.0	58.8	1.1	2.3	0.0	0.0	0.0	0.0	0.0	-97.4
48	558094.01	4926899.49	205.72	0	E	A	-42.3	7.1	0.0	0.0	0.0	58.8	1.1	2.3	0.0	0.0	0.0	0.0	0.0	-97.4
49	557966.35	4926995.72	211.25	0	D	A	67.7	10.0	0.0	0.0	0.0	61.9	1.5	2.3	0.0	0.0	0.0	0.0	0.0	12.0
49	557966.35	4926995.72	211.25	0	N	A	-42.3	10.0	0.0	0.0	0.0	61.9	1.5	2.3	0.0	0.0	0.0	0.0	0.0	-98.0
49	557966.35	4926995.72	211.25	0	E	A	-42.3	10.0	0.0	0.0	0.0	61.9	1.5	2.3	0.0	0.0	0.0	0.0	0.0	-98.0
50	557933.27	4927060.82	213.12	0	D	A	67.7	10.9	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	12.0
50	557933.27	4927060.82	213.12	0	N	A	-42.3	10.9	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	-98.0
50	557933.27	4927060.82	213.12	0	E	A	-42.3	10.9	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	-98.0
51	558107.90	4926903.01	205.63	0	D	A	67.7	6.0	0.0	0.0	0.0	58.3	1.1	2.1	0.0	0.0	0.0	0.0	0.0	12.2
51	558107.90	4926903.01	205.63	0	N	A	-42.3	6.0	0.0	0.0	0.0	58.3	1.1	2.1	0.0	0.0	0.0	0.0	0.0	-97.8
51	558107.90	4926903.01	205.63	0	E	A	-42.3	6.0	0.0	0.0	0.0	58.3	1.1	2.1	0.0	0.0	0.0	0.0	0.0	-97.8
52	557992.61	4926987.25	208.54	0	D	A	67.7	8.9	0.0	0.0	0.0	61.2	1.4	2.1	0.0	0.0	0.0	0.0	0.0	11.8
52	557992.61	4926987.25	208.54	0	N	A	-42.3	8.9	0.0	0.0	0.0	61.2	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-98.2
52	557992.61	4926987.25	208.54	0	E	A	-42.3	8.9	0.0	0.0	0.0	61.2	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-98.2
53	558041.21	4926948.53	205.63	0	D	A	67.7	7.6	0.0	0.0	0.0	60.0	1.3	1.9	0.0	0.0	0.0	0.0	0.0	12.2
53	558041.21	4926948.53	205.63	0	N	A	-42.3	7.6	0.0	0.0	0.0	60.0	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-97.8
53	558041.21	4926948.53	205.63	0	E	A	-42.3	7.6	0.0	0.0	0.0	60.0	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-97.8
54	557934.84	4927044.31	213.31	0	D	A	67.7	10.3	0.0	0.0	0.0	62.7	1.7	2.3	0.0	0.0	0.0	0.0	0.0	11.4
54	557934.84	4927044.31	213.31	0	N	A	-42.3	10.3	0.0	0.0	0.0	62.7	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-98.6
54	557934.84	4927044.31	213.31	0	E	A	-42.3	10.3	0.0	0.0	0.0	62.7	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-98.6
55	558069.30	4927163.75	209.12	0	D	A	67.7	8.0	0.0	0.0	0.0	60.5	1.3	3.2	0.0	0.0	0.0	0.0	0.0	10.7
55	558069.30	4927163.75	209.12	0	N	A	-42.3	8.0	0.0	0.0	0.0	60.5	1.3	3.2	0.0	0.0	0.0	0.0	0.0	-99.3
55	558069.30	4927163.75	209.12	0	E	A	-42.3	8.0	0.0	0.0	0.0	60.5	1.3	3.2	0.0	0.0	0.0	0.0	0.0	-99.3
56	558033.89	4926956.20	205.74	0	D	A	67.7	7.6	0.0	0.0	0.0	60.2	1.3	1.9	0.0	0.0	0.0	0.0	0.0	12.0
56	558033.89	4926956.20	205.74	0	N	A	-42.3	7.6	0.0	0.0	0.0	60.2	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-98.0

Line Source, ISO 9613, Name: "Truck Route (5trucks/hr = 10 passbys)", ID: "KWCAP_TrkRt"

Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
56	558033.89	4926956.20	205.74	0	E	A	-42.3	7.6	0.0	0.0	0.0	60.2	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-98.0
57	557934.53	4927074.27	212.44	0	D	A	67.7	10.3	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	11.4
57	557934.53	4927074.27	212.44	0	N	A	-42.3	10.3	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	-98.6
57	557934.53	4927074.27	212.44	0	E	A	-42.3	10.3	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	-98.6
58	558265.04	4927258.95	206.81	0	D	A	67.7	6.8	0.0	0.0	0.0	59.4	1.2	3.7	0.0	0.0	0.0	0.0	0.0	10.2
58	558265.04	4927258.95	206.81	0	N	A	-42.3	6.8	0.0	0.0	0.0	59.4	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-99.8
58	558265.04	4927258.95	206.81	0	E	A	-42.3	6.8	0.0	0.0	0.0	59.4	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-99.8
59	557974.78	4926993.21	210.43	0	D	A	67.7	8.9	0.0	0.0	0.0	61.7	1.5	2.2	0.0	0.0	0.0	0.0	0.0	11.2
59	557974.78	4926993.21	210.43	0	N	A	-42.3	8.9	0.0	0.0	0.0	61.7	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-98.8
59	557974.78	4926993.21	210.43	0	E	A	-42.3	8.9	0.0	0.0	0.0	61.7	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-98.8
60	557961.90	4927128.58	211.18	0	D	A	67.7	9.7	0.0	0.0	0.0	62.6	1.6	2.4	0.0	0.0	0.0	0.0	0.0	10.9
60	557961.90	4927128.58	211.18	0	N	A	-42.3	9.7	0.0	0.0	0.0	62.6	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-99.1
60	557961.90	4927128.58	211.18	0	E	A	-42.3	9.7	0.0	0.0	0.0	62.6	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-99.1
61	558044.69	4926944.46	205.80	0	D	A	67.7	6.9	0.0	0.0	0.0	59.9	1.3	1.9	0.0	0.0	0.0	0.0	0.0	11.6
61	558044.69	4926944.46	205.80	0	N	A	-42.3	6.9	0.0	0.0	0.0	59.9	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-98.4
61	558044.69	4926944.46	205.80	0	E	A	-42.3	6.9	0.0	0.0	0.0	59.9	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-98.4
62	558104.21	4926903.09	205.63	0	D	A	67.7	5.4	0.0	0.0	0.0	58.4	1.1	2.2	0.0	0.0	0.0	0.0	0.0	11.5
62	558104.21	4926903.09	205.63	0	N	A	-42.3	5.4	0.0	0.0	0.0	58.4	1.1	2.2	0.0	0.0	0.0	0.0	0.0	-98.5
62	558104.21	4926903.09	205.63	0	E	A	-42.3	5.4	0.0	0.0	0.0	58.4	1.1	2.2	0.0	0.0	0.0	0.0	0.0	-98.5
63	558234.98	4927450.65	205.90	0	D	A	67.7	11.1	0.0	0.0	0.0	64.2	1.9	4.2	0.0	0.0	0.0	0.0	0.0	8.5
63	558234.98	4927450.65	205.90	0	N	A	-42.3	11.1	0.0	0.0	0.0	64.2	1.9	4.2	0.0	0.0	0.0	0.0	0.0	-101.5
63	558234.98	4927450.65	205.90	0	E	A	-42.3	11.1	0.0	0.0	0.0	64.2	1.9	4.2	0.0	0.0	0.0	0.0	0.0	-101.5
64	557948.74	4927114.47	210.74	0	D	A	67.7	9.7	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	10.7
64	557948.74	4927114.47	210.74	0	N	A	-42.3	9.7	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-99.3
64	557948.74	4927114.47	210.74	0	E	A	-42.3	9.7	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-99.3
65	558085.68	4927168.91	208.24	0	D	A	67.7	7.0	0.0	0.0	0.0	60.1	1.3	3.4	0.0	0.0	0.0	0.0	0.0	9.9
65	558085.68	4927168.91	208.24	0	N	A	-42.3	7.0	0.0	0.0	0.0	60.1	1.3	3.4	0.0	0.0	0.0	0.0	0.0	-100.1
65	558085.68	4927168.91	208.24	0	E	A	-42.3	7.0	0.0	0.0	0.0	60.1	1.3	3.4	0.0	0.0	0.0	0.0	0.0	-100.1
66	558037.55	4926952.37	205.56	0	D	A	67.7	6.8	0.0	0.0	0.0	60.1	1.3	1.9	0.0	0.0	0.0	0.0	0.0	11.3
66	558037.55	4926952.37	205.56	0	N	A	-42.3	6.8	0.0	0.0	0.0	60.1	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-98.7
66	558037.55	4926952.37	205.56	0	E	A	-42.3	6.8	0.0	0.0	0.0	60.1	1.3	1.9	0.0	0.0	0.0	0.0	0.0	-98.7
67	558138.47	4927177.65	206.45	0	D	A	67.7	5.6	0.0	0.0	0.0	59.0	1.2	3.7	0.0	0.0	0.0	0.0	0.0	9.5
67	558138.47	4927177.65	206.45	0	N	A	-42.3	5.6	0.0	0.0	0.0	59.0	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-100.5
67	558138.47	4927177.65	206.45	0	E	A	-42.3	5.6	0.0	0.0	0.0	59.0	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-100.5
68	557955.80	4926998.87	212.20	0	D	A	67.7	8.7	0.0	0.0	0.0	62.2	1.6	2.3	0.0	0.0	0.0	0.0	0.0	10.4
68	557955.80	4926998.87	212.20	0	N	A	-42.3	8.7	0.0	0.0	0.0	62.2	1.6	2.3	0.0	0.0	0.0	0.0	0.0	-99.6
68	557955.80	4926998.87	212.20	0	E	A	-42.3	8.7	0.0	0.0	0.0	62.2	1.6	2.3	0.0	0.0	0.0	0.0	0.0	-99.6
69	557941.41	4927099.36	211.13	0	D	A	67.7	9.3	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	10.3
69	557941.41	4927099.36	211.13	0	N	A	-42.3	9.3	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	-99.7
69	557941.41	4927099.36	211.13	0	E	A	-42.3	9.3	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	-99.7
70	558083.57	4926898.44	206.07	0	D	A	67.7	5.6	0.0	0.0	0.0	59.1	1.2	2.4	0.0	0.0	0.0	0.0	0.0	10.6
70	558083.57	4926898.44	206.07	0	N	A	-42.3	5.6	0.0	0.0	0.0	59.1	1.2	2.4	0.0	0.0	0.0	0.0	0.0	-99.4
70	558083.57	4926898.44	206.07	0	E	A	-42.3	5.6	0.0	0.0	0.0	59.1	1.2	2.4	0.0	0.0	0.0	0.0	0.0	-99.4
71	557938.54	4927091.48	211.58	0	D	A	67.7	9.2	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	10.3
71	557938.54	4927091.48	211.58	0	N	A	-42.3	9.2	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	-99.7
71	557938.54	4927091.48	211.58	0	E	A	-42.3	9.2	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	-99.7
72	558030.35	4926959.92	206.22	0	D	A	67.7	6.6	0.0	0.0	0.0	60.3	1.3	2.0	0.0	0.0	0.0	0.0	0.0	10.8
72	558030.35	4926959.92	206.22	0	N	A	-42.3	6.6	0.0	0.0	0.0	60.3	1.3	2.0	0.0	0.0	0.0	0.0	0.0	-99.2
72	558030.35	4926959.92	206.22	0	E	A	-42.3	6.6	0.0	0.0	0.0	60.3	1.3	2.0	0.0	0.0	0.0	0.0	0.0	-99.2
73	558088.38	4926898.14	205.82	0	D	A	67.7	5.3	0.0	0.0	0.0	59.0	1.2	2.3	0.0	0.0	0.0	0.0	0.0	10.6
73	558088.38	4926898.14	205.82	0	N	A	-42.3	5.3	0.0	0.0	0.0	59.0	1.2	2.3	0.0	0.0	0.0	0.0	0.0	-99.4
73	558088.38	4926898.14	205.82	0	E	A	-42.3	5.3	0.0	0.0	0.0	59.0	1.2	2.3	0.0	0.0	0.0	0.0	0.0	-99.4
74	557986.32	4926989.57	209.16	0	D	A	67.7	7.6	0.0	0.0	0.0	61.4	1.5	2.2	0.0	0.0	0.0	0.0	0.0	10.3
74	557986.32	4926989.57	209.16	0	N	A	-42.3	7.6	0.0	0.0	0.0	61.4	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-99.7
74	557986.32	4926989.57	209.16	0	E	A	-42.3	7.6	0.0	0.0	0.0	61.4	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-99.7
75	558008.01	4927144.44	209.11	0	D	A	67.7	7.9	0.0	0.0	0.0	61.7	1.5	2.6	0.0	0.0	0.0	0.0	0.0	9.8
75	558008.01	4927144.44	209.11	0	N	A	-42.3	7.9	0.0	0.0	0.0	61.7	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-100.2
75	558008.01	4927144.44	209.11	0	E	A	-42.3	7.9	0.0	0.0	0.0	61.7	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-100.2
76	558236.30	4927219.77	206.90	0	D	A	67.7	4.3	0.0	0.0	0.0	58.4	1.1	3.6	0.0	0.0	0.0	0.0	0.0	9.0
76	558236.30	4927219.77	206.90	0	N	A	-42.3	4.3	0.0	0.0	0.0	58.4	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-101.0
76	558236.30	4927219.77	206.90	0	E	A	-42.3	4.3	0.0	0.0	0.0	58.4	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-101.0
77	557945.27	4927004.77	213.06	0	D	A	67.7	8.2	0.0	0.0	0.0	62.4	1.6	2.4	0.0	0.0	0.0	0.0	0.0	9.5
77	557945.27	4927004.77	213.06	0	N	A	-42.3	8.2	0.0	0.0	0.0	62.4	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-100.5

Line Source, ISO 9613, Name: "Truck Route (5trucks/hr = 10 passbys)", ID: "KWCAP_TrkRt"																					
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
77	557945.27	4927004.77	213.06	0	E	A	-42.3	8.2	0.0	0.0	0.0	62.4	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-100.5
78	558264.14	4927250.93	206.87	0	D	A	67.7	4.9	0.0	0.0	0.0	59.2	1.2	3.7	0.0	0.0	0.0	0.0	0.0	8.6
78	558264.14	4927250.93	206.87	0	N	A	-42.3	4.9	0.0	0.0	0.0	59.2	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-101.4
78	558264.14	4927250.93	206.87	0	E	A	-42.3	4.9	0.0	0.0	0.0	59.2	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-101.4
79	558002.63	4927142.75	209.35	0	D	A	67.7	7.2	0.0	0.0	0.0	61.8	1.5	2.6	0.0	0.0	0.0	0.0	0.0	9.0
79	558002.63	4927142.75	209.35	0	N	A	-42.3	7.2	0.0	0.0	0.0	61.8	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-101.0
79	558002.63	4927142.75	209.35	0	E	A	-42.3	7.2	0.0	0.0	0.0	61.8	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-101.0
80	558264.62	4927255.20	206.85	0	D	A	67.7	4.4	0.0	0.0	0.0	59.3	1.2	3.7	0.0	0.0	0.0	0.0	0.0	7.9
80	558264.62	4927255.20	206.85	0	N	A	-42.3	4.4	0.0	0.0	0.0	59.3	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-102.1
80	558264.62	4927255.20	206.85	0	E	A	-42.3	4.4	0.0	0.0	0.0	59.3	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-102.1
81	557949.81	4927001.07	212.72	0	D	A	67.7	7.3	0.0	0.0	0.0	62.3	1.6	2.4	0.0	0.0	0.0	0.0	0.0	8.8
81	557949.81	4927001.07	212.72	0	N	A	-42.3	7.3	0.0	0.0	0.0	62.3	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-101.2
81	557949.81	4927001.07	212.72	0	E	A	-42.3	7.3	0.0	0.0	0.0	62.3	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-101.2
82	557997.95	4927141.27	209.65	0	D	A	67.7	6.7	0.0	0.0	0.0	61.9	1.5	2.5	0.0	0.0	0.0	0.0	0.0	8.5
82	557997.95	4927141.27	209.65	0	N	A	-42.3	6.7	0.0	0.0	0.0	61.9	1.5	2.5	0.0	0.0	0.0	0.0	0.0	-101.5
82	557997.95	4927141.27	209.65	0	E	A	-42.3	6.7	0.0	0.0	0.0	61.9	1.5	2.5	0.0	0.0	0.0	0.0	0.0	-101.5
83	557942.32	4927009.80	213.15	0	D	A	67.7	7.2	0.0	0.0	0.0	62.5	1.6	2.4	0.0	0.0	0.0	0.0	0.0	8.4
83	557942.32	4927009.80	213.15	0	N	A	-42.3	7.2	0.0	0.0	0.0	62.5	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-101.6
83	557942.32	4927009.80	213.15	0	E	A	-42.3	7.2	0.0	0.0	0.0	62.5	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-101.6
84	558253.71	4927335.31	205.90	0	D	A	67.7	6.3	0.0	0.0	0.0	61.6	1.5	3.9	0.0	0.0	0.0	0.0	0.0	7.0
84	558253.71	4927335.31	205.90	0	N	A	-42.3	6.3	0.0	0.0	0.0	61.6	1.5	3.9	0.0	0.0	0.0	0.0	0.0	-103.0
84	558253.71	4927335.31	205.90	0	E	A	-42.3	6.3	0.0	0.0	0.0	61.6	1.5	3.9	0.0	0.0	0.0	0.0	0.0	-103.0
85	557981.66	4926991.16	209.63	0	D	A	67.7	6.1	0.0	0.0	0.0	61.5	1.5	2.2	0.0	0.0	0.0	0.0	0.0	8.7
85	557981.66	4926991.16	209.63	0	N	A	-42.3	6.1	0.0	0.0	0.0	61.5	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-101.3
85	557981.66	4926991.16	209.63	0	E	A	-42.3	6.1	0.0	0.0	0.0	61.5	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-101.3
86	558158.91	4927187.15	207.29	0	D	A	67.7	3.4	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	7.5
86	558158.91	4927187.15	207.29	0	N	A	-42.3	3.4	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-102.5
86	558158.91	4927187.15	207.29	0	E	A	-42.3	3.4	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-102.5
87	558228.77	4927488.90	206.49	0	D	A	67.7	9.2	0.0	0.0	0.0	64.9	2.0	4.3	0.0	0.0	0.0	0.0	0.0	5.7
87	558228.77	4927488.90	206.49	0	N	A	-42.3	9.2	0.0	0.0	0.0	64.9	2.0	4.3	0.0	0.0	0.0	0.0	0.0	-104.3
87	558228.77	4927488.90	206.49	0	E	A	-42.3	9.2	0.0	0.0	0.0	64.9	2.0	4.3	0.0	0.0	0.0	0.0	0.0	-104.3
88	557933.52	4927052.10	213.36	0	D	A	67.7	7.1	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	8.2
88	557933.52	4927052.10	213.36	0	N	A	-42.3	7.1	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	-101.8
88	557933.52	4927052.10	213.36	0	E	A	-42.3	7.1	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	-101.8
89	558261.57	4927241.75	206.90	0	D	A	67.7	2.9	0.0	0.0	0.0	58.9	1.1	3.6	0.0	0.0	0.0	0.0	0.0	7.0
89	558261.57	4927241.75	206.90	0	N	A	-42.3	2.9	0.0	0.0	0.0	58.9	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-103.0
89	558261.57	4927241.75	206.90	0	E	A	-42.3	2.9	0.0	0.0	0.0	58.9	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-103.0
90	557936.01	4927081.87	211.98	0	D	A	67.7	6.8	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	7.9
90	557936.01	4927081.87	211.98	0	N	A	-42.3	6.8	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	-102.1
90	557936.01	4927081.87	211.98	0	E	A	-42.3	6.8	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	-102.1
91	557940.15	4927017.10	213.09	0	D	A	67.7	6.4	0.0	0.0	0.0	62.5	1.6	2.3	0.0	0.0	0.0	0.0	0.0	7.6
91	557940.15	4927017.10	213.09	0	N	A	-42.3	6.4	0.0	0.0	0.0	62.5	1.6	2.3	0.0	0.0	0.0	0.0	0.0	-102.4
91	557940.15	4927017.10	213.09	0	E	A	-42.3	6.4	0.0	0.0	0.0	62.5	1.6	2.3	0.0	0.0	0.0	0.0	0.0	-102.4
92	557997.54	4926985.27	208.04	0	D	A	67.7	4.8	0.0	0.0	0.0	61.1	1.4	2.1	0.0	0.0	0.0	0.0	0.0	7.9
92	557997.54	4926985.27	208.04	0	N	A	-42.3	4.8	0.0	0.0	0.0	61.1	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-102.1
92	557997.54	4926985.27	208.04	0	E	A	-42.3	4.8	0.0	0.0	0.0	61.1	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-102.1
93	558081.03	4926899.51	206.24	0	D	A	67.7	2.9	0.0	0.0	0.0	59.2	1.2	2.4	0.0	0.0	0.0	0.0	0.0	7.8
93	558081.03	4926899.51	206.24	0	N	A	-42.3	2.9	0.0	0.0	0.0	59.2	1.2	2.4	0.0	0.0	0.0	0.0	0.0	-102.2
93	558081.03	4926899.51	206.24	0	E	A	-42.3	2.9	0.0	0.0	0.0	59.2	1.2	2.4	0.0	0.0	0.0	0.0	0.0	-102.2
94	558181.59	4927203.23	206.90	0	D	A	67.7	2.1	0.0	0.0	0.0	58.7	1.1	3.6	0.0	0.0	0.0	0.0	0.0	6.3
94	558181.59	4927203.23	206.90	0	N	A	-42.3	2.1	0.0	0.0	0.0	58.7	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-103.7
94	558181.59	4927203.23	206.90	0	E	A	-42.3	2.1	0.0	0.0	0.0	58.7	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-103.7
95	557956.58	4927124.63	211.05	0	D	A	67.7	5.9	0.0	0.0	0.0	62.6	1.6	2.4	0.0	0.0	0.0	0.0	0.0	6.9
95	557956.58	4927124.63	211.05	0	N	A	-42.3	5.9	0.0	0.0	0.0	62.6	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-103.1
95	557956.58	4927124.63	211.05	0	E	A	-42.3	5.9	0.0	0.0	0.0	62.6	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-103.1
96	558090.86	4926898.45	205.74	0	D	A	67.7	2.1	0.0	0.0	0.0	58.9	1.1	2.3	0.0	0.0	0.0	0.0	0.0	7.4
96	558090.86	4926898.45	205.74	0	N	A	-42.3	2.1	0.0	0.0	0.0	58.9	1.1	2.3	0.0	0.0	0.0	0.0	0.0	-102.6
96	558090.86	4926898.45	205.74	0	E	A	-42.3	2.1	0.0	0.0	0.0	58.9	1.1	2.3	0.0	0.0	0.0	0.0	0.0	-102.6
97	558152.62	4927182.75	206.85	0	D	A	67.7	1.8	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	6.0
97	558152.62	4927182.75	206.85	0	N	A	-42.3	1.8	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-104.0
97	558152.62	4927182.75	206.85	0	E	A	-42.3	1.8	0.0	0.0	0.0	58.8	1.1	3.6	0.0	0.0	0.0	0.0	0.0	-104.0
98	558012.22	4927145.77	208.81	0	D	A	67.7	4.4	0.0	0.0	0.0	61.6	1.5	2.6	0.0	0.0	0.0	0.0	0.0	6.5
98	558012.22	4927145.77	208.81	0	N	A	-42.3	4.4	0.0	0.0	0.0	61.6	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-103.5

Line Source, ISO 9613, Name: "Truck Route (5trucks/hr = 10 passbys)", ID: "KWCAP_TrkRt"																					
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
98	558012.22	4927145.77	208.81	0	E	A	-42.3	4.4	0.0	0.0	0.0	61.6	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-103.5
99	558007.82	4926980.26	207.05	0	D	A	67.7	3.6	0.0	0.0	0.0	60.8	1.4	2.1	0.0	0.0	0.0	0.0	0.0	7.0
99	558007.82	4926980.26	207.05	0	N	A	-42.3	3.6	0.0	0.0	0.0	60.8	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-103.0
99	558007.82	4926980.26	207.05	0	E	A	-42.3	3.6	0.0	0.0	0.0	60.8	1.4	2.1	0.0	0.0	0.0	0.0	0.0	-103.0
100	558085.96	4926897.84	205.94	0	D	A	67.7	1.7	0.0	0.0	0.0	59.1	1.2	2.3	0.0	0.0	0.0	0.0	0.0	6.9
100	558085.96	4926897.84	205.94	0	N	A	-42.3	1.7	0.0	0.0	0.0	59.1	1.2	2.3	0.0	0.0	0.0	0.0	0.0	-103.1
100	558085.96	4926897.84	205.94	0	E	A	-42.3	1.7	0.0	0.0	0.0	59.1	1.2	2.3	0.0	0.0	0.0	0.0	0.0	-103.1
101	557936.79	4927085.89	211.85	0	D	A	67.7	5.3	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	6.4
101	557936.79	4927085.89	211.85	0	N	A	-42.3	5.3	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	-103.6
101	557936.79	4927085.89	211.85	0	E	A	-42.3	5.3	0.0	0.0	0.0	62.8	1.7	2.1	0.0	0.0	0.0	0.0	0.0	-103.6
102	557944.76	4927107.68	210.64	0	D	A	67.7	5.0	0.0	0.0	0.0	62.8	1.7	2.3	0.0	0.0	0.0	0.0	0.0	6.0
102	557944.76	4927107.68	210.64	0	N	A	-42.3	5.0	0.0	0.0	0.0	62.8	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-104.0
102	557944.76	4927107.68	210.64	0	E	A	-42.3	5.0	0.0	0.0	0.0	62.8	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-104.0
103	557935.99	4927037.52	213.24	0	D	A	67.7	4.9	0.0	0.0	0.0	62.7	1.7	2.3	0.0	0.0	0.0	0.0	0.0	6.0
103	557935.99	4927037.52	213.24	0	N	A	-42.3	4.9	0.0	0.0	0.0	62.7	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-104.0
103	557935.99	4927037.52	213.24	0	E	A	-42.3	4.9	0.0	0.0	0.0	62.7	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-104.0
104	557943.41	4927104.82	210.82	0	D	A	67.7	5.0	0.0	0.0	0.0	62.8	1.7	2.3	0.0	0.0	0.0	0.0	0.0	6.0
104	557943.41	4927104.82	210.82	0	N	A	-42.3	5.0	0.0	0.0	0.0	62.8	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-104.0
104	557943.41	4927104.82	210.82	0	E	A	-42.3	5.0	0.0	0.0	0.0	62.8	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-104.0
105	558061.04	4926923.32	206.80	0	D	A	67.7	1.8	0.0	0.0	0.0	59.6	1.2	2.1	0.0	0.0	0.0	0.0	0.0	6.6
105	558061.04	4926923.32	206.80	0	N	A	-42.3	1.8	0.0	0.0	0.0	59.6	1.2	2.1	0.0	0.0	0.0	0.0	0.0	-103.4
105	558061.04	4926923.32	206.80	0	E	A	-42.3	1.8	0.0	0.0	0.0	59.6	1.2	2.1	0.0	0.0	0.0	0.0	0.0	-103.4
106	558264.39	4927253.15	206.85	0	D	A	67.7	1.4	0.0	0.0	0.0	59.2	1.2	3.7	0.0	0.0	0.0	0.0	0.0	5.0
106	558264.39	4927253.15	206.85	0	N	A	-42.3	1.4	0.0	0.0	0.0	59.2	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-105.0
106	558264.39	4927253.15	206.85	0	E	A	-42.3	1.4	0.0	0.0	0.0	59.2	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-105.0
107	558263.78	4927248.77	206.89	0	D	A	67.7	1.2	0.0	0.0	0.0	59.1	1.2	3.7	0.0	0.0	0.0	0.0	0.0	5.0
107	558263.78	4927248.77	206.89	0	N	A	-42.3	1.2	0.0	0.0	0.0	59.1	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-105.0
107	558263.78	4927248.77	206.89	0	E	A	-42.3	1.2	0.0	0.0	0.0	59.1	1.2	3.7	0.0	0.0	0.0	0.0	0.0	-105.0
108	557941.04	4927013.62	213.13	0	D	A	67.7	4.5	0.0	0.0	0.0	62.5	1.6	2.4	0.0	0.0	0.0	0.0	0.0	5.7
108	557941.04	4927013.62	213.13	0	N	A	-42.3	4.5	0.0	0.0	0.0	62.5	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-104.3
108	557941.04	4927013.62	213.13	0	E	A	-42.3	4.5	0.0	0.0	0.0	62.5	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-104.3
109	557960.49	4926997.47	211.75	0	D	A	67.7	3.7	0.0	0.0	0.0	62.1	1.6	2.3	0.0	0.0	0.0	0.0	0.0	5.5
109	557960.49	4926997.47	211.75	0	N	A	-42.3	3.7	0.0	0.0	0.0	62.1	1.6	2.3	0.0	0.0	0.0	0.0	0.0	-104.5
109	557960.49	4926997.47	211.75	0	E	A	-42.3	3.7	0.0	0.0	0.0	62.1	1.6	2.3	0.0	0.0	0.0	0.0	0.0	-104.5
110	558014.52	4927146.49	208.64	0	D	A	67.7	3.2	0.0	0.0	0.0	61.5	1.5	2.6	0.0	0.0	0.0	0.0	0.0	5.2
110	558014.52	4927146.49	208.64	0	N	A	-42.3	3.2	0.0	0.0	0.0	61.5	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-104.8
110	558014.52	4927146.49	208.64	0	E	A	-42.3	3.2	0.0	0.0	0.0	61.5	1.5	2.6	0.0	0.0	0.0	0.0	0.0	-104.8
111	558097.26	4927172.45	207.92	0	D	A	67.7	1.3	0.0	0.0	0.0	59.9	1.3	3.7	0.0	0.0	0.0	0.0	0.0	4.1
111	558097.26	4927172.45	207.92	0	N	A	-42.3	1.3	0.0	0.0	0.0	59.9	1.3	3.7	0.0	0.0	0.0	0.0	0.0	-105.9
111	558097.26	4927172.45	207.92	0	E	A	-42.3	1.3	0.0	0.0	0.0	59.9	1.3	3.7	0.0	0.0	0.0	0.0	0.0	-105.9
112	557979.48	4927135.45	210.87	0	D	A	67.7	3.6	0.0	0.0	0.0	62.2	1.6	2.4	0.0	0.0	0.0	0.0	0.0	5.1
112	557979.48	4927135.45	210.87	0	N	A	-42.3	3.6	0.0	0.0	0.0	62.2	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-104.9
112	557979.48	4927135.45	210.87	0	E	A	-42.3	3.6	0.0	0.0	0.0	62.2	1.6	2.4	0.0	0.0	0.0	0.0	0.0	-104.9
113	558028.32	4926962.05	206.54	0	D	A	67.7	1.4	0.0	0.0	0.0	60.3	1.3	2.0	0.0	0.0	0.0	0.0	0.0	5.6
113	558028.32	4926962.05	206.54	0	N	A	-42.3	1.4	0.0	0.0	0.0	60.3	1.3	2.0	0.0	0.0	0.0	0.0	0.0	-104.4
113	558028.32	4926962.05	206.54	0	E	A	-42.3	1.4	0.0	0.0	0.0	60.3	1.3	2.0	0.0	0.0	0.0	0.0	0.0	-104.4
114	557952.74	4927120.75	210.94	0	D	A	67.7	3.4	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	4.4
114	557952.74	4927120.75	210.94	0	N	A	-42.3	3.4	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-105.6
114	557952.74	4927120.75	210.94	0	E	A	-42.3	3.4	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-105.6
115	557933.48	4927068.02	212.86	0	D	A	67.7	3.0	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	4.0
115	557933.48	4927068.02	212.86	0	N	A	-42.3	3.0	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	-106.0
115	557933.48	4927068.02	212.86	0	E	A	-42.3	3.0	0.0	0.0	0.0	62.8	1.7	2.2	0.0	0.0	0.0	0.0	0.0	-106.0
116	557951.54	4927119.25	210.93	0	D	A	67.7	2.2	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	3.2
116	557951.54	4927119.25	210.93	0	N	A	-42.3	2.2	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-106.8
116	557951.54	4927119.25	210.93	0	E	A	-42.3	2.2	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-106.8
117	557954.67	4927122.70	210.95	0	D	A	67.7	1.9	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	2.9
117	557954.67	4927122.70	210.95	0	N	A	-42.3	1.9	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-107.1
117	557954.67	4927122.70	210.95	0	E	A	-42.3	1.9	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-107.1
118	557945.96	4927109.73	210.55	0	D	A	67.7	2.0	0.0	0.0	0.0	62.8	1.7	2.3	0.0	0.0	0.0	0.0	0.0	2.9
118	557945.96	4927109.73	210.55	0	N	A	-42.3	2.0	0.0	0.0	0.0	62.8	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-107.1
118	557945.96	4927109.73	210.55	0	E	A	-42.3	2.0	0.0	0.0	0.0	62.8	1.7	2.3	0.0	0.0	0.0	0.0	0.0	-107.1
119	557978.83	4926992.00	209.93	0	D	A	67.7	-1.1	0.0	0.0	0.0	61.6	1.5	2.2	0.0	0.0	0.0	0.0	0.0	1.3
119	557978.83	4926992.00	209.93	0	N	A	-42.3	-1.1	0.0	0.0	0.0	61.6	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-108.7

Line Source, ISO 9613, Name: "Truck Route (5trucks/hr = 10 passbys)", ID: "KWCAP_TrkRt"																				
Nr.	X	Y	Z	Refl.	DEN	Freq.	Lw	l/a	Optime	K0	Di	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	Lr
	(m)	(m)	(m)			(Hz)	dB(A)	dB	dB	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)
119	557978.83	4926992.00	209.93	0	E	A	-42.3	-1.1	0.0	0.0	0.0	61.6	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-108.7
120	557953.83	4927121.85	210.93	0	D	A	67.7	-0.6	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	0.4
120	557953.83	4927121.85	210.93	0	N	A	-42.3	-0.6	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-109.6
120	557953.83	4927121.85	210.93	0	E	A	-42.3	-0.6	0.0	0.0	0.0	62.7	1.7	2.4	0.0	0.0	0.0	0.0	0.0	-109.6
121	557979.45	4926991.82	209.87	0	D	A	67.7	-2.7	0.0	0.0	0.0	61.6	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-0.3
121	557979.45	4926991.82	209.87	0	N	A	-42.3	-2.7	0.0	0.0	0.0	61.6	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-110.3
121	557979.45	4926991.82	209.87	0	E	A	-42.3	-2.7	0.0	0.0	0.0	61.6	1.5	2.2	0.0	0.0	0.0	0.0	0.0	-110.3

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