# APPENDIX H

## Environmental Noise Impact Assessment

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Proposed Extractive Industry (Sand Quarry)
*"Ballina Sands Quarry"*
Newrybar Swamp Road, Lennox Heads
(Lot 32 DP1151612)

# ENVIRONMENTAL NOISE IMPACT ASSESSMENT

**Prepared For:**

Ballina Sands Pty Ltd
C/- Ardill Payne and Partners

**5 March 2013**
crgref: 10453a report rev.1

## 1.0 INTRODUCTION

This report is in response to a request by Ardill Payne and Partners on behalf of Ballina Sands Pty Ltd for an environmental noise impact assessment of a proposed sand quarry at Lennox Heads. The report responds to the Noise and Vibration Section of the Director General Requirements of The NSW Department of Environment, Climate Change and Water (DECC) dated 15th November 2012. Refer to Appendix A for an extract of the Director General Requirements document.

In undertaking the above, noise monitoring was conducted, and through modelling, predictions of potential noise emissions were produced. Based upon the predicted impact noise levels, recommendations regarding acoustic treatments and management principles have been specified.

## 2.0 SITE AND DEVELOPMENT DESCRIPTION

The subject site is described as Lot 32 DP1151612 and is currently used for cane farming. Refer to Appendix A of this report for the site location.

The proposal is to operate a sand quarry at the above mentioned parcel of land with the extraction of sand up to a maximum of 610,000$m^3$ over the life of the quarry at an annual rate of less than 80,000$m^3$. The life of the quarry is anticipated to be between 5 and 15 years. Refer to Appendix B of this report for quarry plans.

Activities will initially include the stripping of top soil for minor site filling and construction of onsite earth batters / mounds for noise and visual screening (construction activities). Extraction of sand (operational) will be undertaken by excavators and a front end loader and will be stockpiled and loaded into haulage trucks for dispatch to markets. Equipment which will be used (front end loader, dump trucks and excavators which are all new equipment) will include the following:

- Front end loader;
- Two excavators (worst case);
- Dump trucks;
- Water truck;
- Third party haulage trucks (truck and dog trailer);
- Site vehicles; and
- Mobile pumping equipment / generators.

Generally, there is only one excavator operating at a time. At exceptionally busy times two excavators could be used but this would be infrequently for short durations. Sand is dug out of the pit and stockpiled on a bench. Lime is then spread over the surface of the stockpile using the excavator bucket. Mixing occurs by either turning the stockpile over with an excavator or loading into dump truck (with excavator) for transport to another stockpile location on site. Then, testing is undertaken and additional lime is mixed as required to stockpiles. Once stockpiled and treated a loader is used to load onto road trucks.

Onsite activity has the potential to impact surrounding noise sensitive receivers. Such activities have been assessed to determine likely acoustic treatments, if required, to ensure the acceptable noise amenity can be achieved at the surrounding noise sensitive receivers.

Hours of operation will be between 7am and 6pm Monday to Friday and 8am to 1pm on Saturday. One to two onsite plant operators and a site foreman will be employed at the site. The office will primarily rely on solar power for supply of electricity to the office building. A backup generator may be used on occasion (for around 5 minutes per day).

The nearest receivers to the sand quarry (refer to Appendix A for the location of noise sensitive receivers) are as follows:

- Receiver R1: Dwelling to the east (approximately 80m away);
- Receiver R2: Dwellings to the east across Newrybar Swamp Rd (approximately 130m away);
- Receiver R3: Dwelling to the south (approximately 80m away);
- Receiver R4: Dwellings to the southwest (approximately 600m away);
- Receiver R5: Dwellings to the west (approximately 500m away); and
- Receiver R6: Dwellings to the northwest (approximately 600m away).

## 3.0 AMBIENT NOISE SURVEY

### 3.1 Instrumentation

The following equipment was used to record existing ambient background noise levels and existing sand quarry noise levels at the subject site locale:

- Rion NC 73 Calibrator;
- Rion NL 21 Environmental Noise Logger; and
- Rion 29E Octave Band Sound Level Meter.

All instrumentation used in this assessment hold current calibration certificate from a certified NATA calibration laboratory.

### 3.2 Unattended Measurement Methodology (Background Levels at Residential Receivers)

A logger was located at the western site boundary of No. 61 Glenross Drive, which is due west of the subject site and is a residential street with no through access and therefore has minimal road traffic. The location was chosen to minimise noise interference of the existing sand quarry operations directly to the north of the subject site. The microphone was in a free-field location approximately 1.2m above ground. Refer to Figure 2 in Appendix A for the logger location.

The logger was set to record noise statistics in 15 minute blocks continually between Monday 14/03/11 to Monday 21/03/11. All noise measurements were conducted generally in accordance with AS 1055:1997 – *"Acoustics-Description and measurement of environmental noise"*.

The operation of the sound level logging equipment was field calibrated before and after the measurement session and was found to be within 0.2dB of the reference signal.

Daily weather observations were obtained from the Bureau of Meteorology's website (http://www.bom.gov.au/) at the Ballina weather station, which is approximately 6km south of the subject site. Weather conditions during the noise monitoring period were generally fine with the exception of light rain periods on Sunday 20/03/2011 and Monday 21/03/02011, a temperature range between 16 and 28°C, relative humidity between 60 and 95% and average wind speeds generally at or below approximately 5m/s. Refer to Appendix C for daily weather observations.

Measurement data for Sunday 20/03/2011 and Monday 21/03/02011 have been excluded from the results as presented in Table 1 below. We also note that the proposed quarry will not operate on Sundays; hence ambient levels on Sundays would not need to be included for calculation of the Rating Background Levels.

### 3.3 Unattended Measurement Results

Table 1 below presents the ambient noise levels from the unattended logger location. Graphical presentation of the measured levels is presented in the Appendix C to this report.

| Background Noise Levels | Background Level $L_{A90}$ dB(A) | | | Ambient Level $L_{Aeq}$ dB(A) | | |
|---|---|---|---|---|---|---|
| | 7am-6pm | 6pm-10pm | 10pm-7am | 7am-6pm | 6pm-10pm | 10pm-7am |
| Monday 14/03/2011 | 38 | 44 | 38 | 55 | 51 | 43 |
| Tuesday 15/03/2011 | 36 | 41 | 38 | 56 | 46 | 44 |
| Wednesday 16/03/2011 | 37 | 39 | 39 | 57 | 47 | 44 |
| Thursday 17/03/2011 | 35 | 39 | 37 | 54 | 45 | 43 |
| Friday 18/03/2011 | 36 | 40 | 37 | 51 | 46 | 44 |
| Saturday 19/03/2011 | 36 | 38 | 37 | 50 | 48 | 45 |
| **Rating Background Levels** | **36** | **39** | **38** | **54** | **47** | **44** |

**Table 1:** Measured ambient noise levels at the unattended logger location.

### 3.4 Attended Measurement Methodology

Attended measurements were conducted of equipment used at the existing sand quarry directly north of the site, and ambient noise levels were conducted at the logger location on Monday 14/03/11 between 1am and 3pm and Tuesday 14/02/2012 between 11am and 2pm. Near field measurements of onsite equipment and background $L_{A90}$ measurements were conducted with a Rion 29E Octave Band Sound Level Meter over the octave band centre frequencies between 31.5 Hz to 8,000 Hz.

Measurements were conducted in *"A"* Weight, *"Fast"* Response with the microphone in a free-field location approximately 1.5m above ground and pointing towards the noise source. Measured levels were then converted to Linear Sound Power Levels for application in the adopted noise model (PEN3D). For the calculated sound power levels refer to Section 5 of this report.

Measurements were conducted generally in accordance with Australian Standard AS 1055:1997 – "*Acoustics-Description and measurement of environmental noise*". The operation of the sound level equipment was field calibrated before and after the measurement session, with no significant drift from the reference signal recorded.

Weather conditions during the survey periods were fine and clear with wind speeds less than 5m/s.

| Equipment | Distance To Source | SPL Hz Octave Band Centre Frequencies dB(A) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 31.5 | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | AP |
| HL760-7 Loader | 27m | 25 | 45 | 53 | 50 | 51 | 49 | 47 | 44 | 36 | **58** |
| JS220 LC Excavator | 6m | 33 | 55 | 64 | 65 | 71 | 68 | 67 | 66 | 63 | **76** |
| MT 31 Haul Truck | 5m | 30 | 51 | 56 | 54 | 60 | 61 | 60 | 56 | 52 | **66** |
| Truck on Haul Rd | 3m | 34 | 47 | 57 | 62 | 68 | 68 | 68 | 65 | 57 | **74** |
| Water Pump | 2m | 42 | 48 | 62 | 63 | 70 | 75 | 78 | 74 | 64 | **82** |
| Generator | 3m | 54 | 65 | 74 | 79 | 77 | 71 | 69 | 64 | 58 | **83** |
| | | | | | | | | | | | |
| Background $L_{A90}$ at logger location | | 11 | 19 | 28 | 28 | 27 | 29 | 26 | 24 | 24 | **37** |

**Table 2:** Attended measurement results.

From onsite observations at the logger location and surrounding noise sensitive receivers the ambient noise environment is comprised of distant road traffic noise along the Pacific Highway and Ross lane, intermittent insect and cicada noise and bird song. As noted earlier, the existing generator will not be the primary source of electricity supply to the site. The proposed site will primarily utilise solar power, with the generator only needed for around 5 minutes per day which approximates to around ½ an hour per week during peak demands requirements.

# 4.0 NOISE CRITERIA

## 4.1 Noise Criteria for Quarry Activity Noise

Quarry activity noise impacting the surround noise sensitive receivers is regulated by the *"NSW Industrial Noise Policy"*. The assessment procedure has the following components:

- Control of intrusive noise impacts – The limit criteria for this assessment is as follows: $L_{Aeq,\ 15\ min} \leq$ rating background level[1] + 5 dB;
    - Daytime (7am – 6pm Mon to Sat; 8am – 6pm Sun) (RBL + 5) dB(A) $L_{eq}$.
    - Evening (6pm – 10pm) (RBL + 5) dB(A) $L_{eq}$.
    - Night (the remaining periods) (RBL + 5) dB(A) $L_{eq}$.

- Maintaining noise level amenity for residential premises. This is achieved by ensuring that the proposal complies with the noise limit criteria set in Table 2.1 of the Policy. If we assume that the area is within a Rural Area given that the surrounding land is comprised of predominantly agricultural cane farming activities (as defined in the Policy), the following applies:

Recommended $L_{eq}$ noise levels from industrial noise sources

| Type of Receiver | Indicative Noise Amenity Area | Time of Day | Recommended $L_{eq}$ Noise Level, dB(A) *(see Note 8 in Section 2.2.1)* | |
|---|---|---|---|---|
| *(see Notes in Section 2.2.1)* | | | Acceptable *(See Note 11)* | Recommended Maximum *(See Note 11)* |
| Residence | Rural | Day | 50 | 55 |
| | | Evening | 45 | 50 |
| | | Night | 40 | 45 |
| | Suburban | Day | 55 | 60 |
| | | Evening | 45 | 50 |
| | | Night | 40 | 45 |
| | Urban | Day | 60 | 65 |
| | | Evening | 50 | 55 |
| | | Night | 45 | 50 |

**Table 3:** Amenity Criterion Prescribed in the New South Wales *"Industrial Noise Policy"*.

By considering the measured background noise levels presented in Table 1 of Section 3.3, we recommend the following noise limits for offsite commercial activities:

- Daytime (7 am – 6 pm Mon-Sat; 8 am – 6 pm Sun) 41 (RBL 36 + 5) dB(A) $L_{eq}$.

As hours of operation will be between 7am and 6pm Monday to Friday and 8am to 1pm on Saturday only the daytime criteria applies to the proposed sand quarry.

Hence, the evening, night-time and sleep disturbance noise criterion are not required to be addressed.

[1] The rating background level is the overall single figure background level representing each assessment period (day/evening/night over the whole monitoring period.

## 4.2 Noise Criteria for Vehicle Movements Generated by the Development

Assessment of potential noise impacts resulting from increased traffic noise on the existing road network is assessed in accordance with the "*NSW Road Noise Policy*" as presented below.

We note that Newrybar Swamp Road is classified as a Sub-arterial Road.

| Road category | Type of project/land use | Assessment criteria – dB(A) | |
|---|---|---|---|
| | | Day (7 a.m.–10 p.m.) | Night (10 p.m.–7 a.m.) |
| Freeway/ arterial/ sub-arterial roads | 1. Existing residences affected by noise from **new** freeway/arterial/sub-arterial road corridors | $L_{Aeq,\ (15\ hour)}$ 55 (external) | $L_{Aeq,\ (9\ hour)}$ 50 (external) |
| | 2. Existing residences affected by noise from **redevelopment** of existing freeway/arterial/sub-arterial roads<br>3. Existing residences affected by **additional traffic** on existing freeways/arterial/sub-arterial roads generated by land use developments | $L_{Aeq,\ (15\ hour)}$ 60 (external) | $L_{Aeq,\ (9\ hour)}$ 55 (external) |
| Local roads | 4. Existing residences affected by noise from **new** local road corridors<br>5. Existing residences affected by noise from **redevelopment** of existing local roads<br>6. Existing residences affected by **additional traffic** on existing local roads generated by land use developments | $L_{Aeq,\ (1\ hour)}$ 55 (external) | $L_{Aeq,\ (1\ hour)}$ 50 (external) |

**Table 4:** Noise limit criteria for road traffic noise.

## 4.3 Construction Noise Criteria

The New South Wales "*Interim Construction Noise Guideline*" provides the following guidance in relation to construction noise:

| Time of day | Management level $L_{Aeq\ (15\ min)}$ * | How to apply |
|---|---|---|
| **Recommended standard hours:**<br>Monday to Friday 7 am to 6 pm<br>Saturday 8 am to 1 pm<br>No work on Sundays or public holidays | Noise affected RBL + 10 dB | The noise affected level represents the point above which there may be some community reaction to noise.<br>• Where the predicted or measured $L_{Aeq\ (15\ min)}$ is greater than the noise affected level, the proponent should apply all feasible and reasonable work practices to meet the noise affected level.<br>• The proponent should also inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details. |
| | Highly noise affected 75 dB(A) | The highly noise affected level represents the point above which there may be strong community reaction to noise.<br>• Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account:<br>1. times identified by the community when they are less sensitive to noise (such as before and after school for works near schools, or mid-morning or mid-afternoon for works near residences<br>2. if the community is prepared to accept a longer period of construction in exchange for restrictions on construction times. |
| **Outside recommended standard hours** | Noise affected RBL + 5 dB | • A strong justification would typically be required for works outside the recommended standard hours.<br>• The proponent should apply all feasible and reasonable work practices to meet the noise affected level.<br>• Where all feasible and reasonable practices have been applied and noise is more than 5 dB(A) above the noise affected level, the proponent should negotiate with the community.<br>• For guidance on negotiating agreements see section 7.2.2. |

Due to the broad range of sensitivities that commercial or industrial land can have to noise from construction, the process of defining management levels is separated into three categories. The external noise levels should be assessed at the most-affected occupied point of the premises:

- industrial premises: external $L_{Aeq\ (15\ min)}$ 75 dB(A)
- offices, retail outlets: external $L_{Aeq\ (15\ min)}$ 70 dB(A)
- other businesses that may be very sensitive to noise, where the noise level is project specific as discussed below.

Based upon the criterion presented above and the measured background levels (refer to Section 3.3 of this report) the following levels apply to the construction phase:

| Receiver Type | Noise Limit Criterion $L_{Aeq}$ dB(A) |
|---|---|
| Surrounding Residential Dwellings | "noise affected" level 46 (Background RBL 36 + 10 dB(A)) |
| Surrounding Residential Dwellings | "highly noise affected" level 75 dB(A) |

**Table 5:** Construction activity noise limits.

It is also noted that Australian Standard AS 2436 – 1981 "*Guide to noise control on construction, maintenance and demolition sites*" provides extra guidance for management of on-site noise.

# 5.0 CALCULATIONS & RESULTS

## 5.1 Assumed Noise Source Levels

Noise source levels used in the assessment have been collected from attended measurements (refer to Section 3.3 of this report).

It is noted that a source height of 2.5m has been assumed for the onsite mobile plant with the exception of the water pump and electric generator which were incorporated into the model with a 1m source height. Measured "A" Weight sound pressure dB(A) levels have been converted into sound power dB (Linear) levels for use in the 3D noise model.

| Activity/Noise Source | Sound Power Level SWL | |
|---|---|---|
| | dB(A) | dB(Linear) |
| HL760-7 Loader (line source in noise model) | 95 | 110 |
| JS220 LC Excavator (point source for two plant in noise model) | 99 | 109 |
| MT 31 Haul Truck (line source in noise model) | 88 | 101 |
| Truck filled with sand leaving site (line source in noise model) | 91 | 97 |
| Water Pump (point source for one plant in noise model) | 95 | 98 |
| Generator (point source for one plant in noise model) | 100 | 112 |

**Table 6:** Typical noise source levels associated with the operation of a sand quarry.

From the measurement results and observations taken during measurements, the above equipment was not found to display any tonal, impulsive or low frequency noise characteristics during normal operations at the existing sand mine operation. Given the sand mine will operate during the daytime only, adjustments for intermittent noise do not need to be considered.

## 5.2 Modelled Quarry Activity Noise Impact Levels

### *5.2.1 Noise Prediction Model*

The PEN3D General Prediction Model (GPM) is based on the method contained in the book "Engineering Noise Control - Theory and Practice" by David Bies & Colin H Hansen of the Department of Mechanical Engineering, University Of Adelaide, Publisher Unwin Hyman 1988. Chapter 5.9 Pages 117 to 127 describes the model.

The basic equation adopted by the GPM is: $Lp = Lw - 20 \log10(r) - 10\log10(4\pi) + AE$

Where: Lp is the sound pressure level at an observer
Lw is the sound power level of the source
20 log10r - 10log10(4PI) is the Distance attenuation
AE is the excess attenuation factors and is determined as the sum of the contributions

Refer to Appendix C for a detailed explanation of the Pen3D model and the attenuation factors.

### 5.2.2 *Meteorology*

The following is a paraphrased extract from the *"NSW Industrial Noise Policy"*, Section 5.0:

> *"When wind near the ground increases its speed it can increase ambient noise levels by rustling foliage and creating turbulence when passing over or around structures. At higher wind speeds, the noise produced by wind will drown out noise from most industrial and transportation sources. A default wind speed of 3 m/s (at 10m height) is proposed for assessing noise impacts caused by gradient winds. This wind speed can noticeably increase noise received down-wind of a noise source, but may not increase ambient noise levels to the point where they mask noise from the source and make it unnoticeable. A 10m wind of 3m/s is also unlikely to be associated with near-surface winds of a strength able to cause increased ambient noise levels that would mask increased levels of noise from the source.*
>
> *Wind is considered to be a feature where source-to-receiver wind speeds (at 10m height) of 3 m/s or below occur for 30 per cent of the time or more in any assessment period (day, evening, night) in any season."*

Wind rose data for both 9am and 3pm was obtained from the Ballina weather station, which is approximately 6km south of the subject site (refer to Appendix C of this report for wind rose data sheets). The data indicates that monthly wind does not occur for greater then 30% at or below 3m/s (approximately 10 km/hr) in a source to receiver directional wind.

Further, as the quarry will only be operating during the daytime period, temperature inversions have not been assessed.

### 5.2.3 *Predicted Impact Levels*

Based upon the location of the proposed onsite activities in relation to surrounding noise sensitive dwellings, we predict the following façade corrected operational noise impact levels as presented in Table 7 below and over the page.

The predicted levels assume that the recommended treatments detailed in Section 6 are incorporated into the development. For PEN3D point source calculations at each receiver, impact levels from each piece of equipment and the locations of equipment used in the model refer to Appendix C.

**Operational Noise Impacts**

| Receiver Location | Noise Criterion dB(A) | Predicted Noise Impact Levels – (Calm Conditions) dB(A) |
|---|---|---|
| **Initial Pit Operations at North End of Site** | | |
| Receiver R1 Due East | 41 | 41 |
| Receivers R2 Due East Across Road | | 38 |
| Receiver R3 Due South | | 41 |
| Receivers R4 Due Southwest | | 33 |
| Receivers R5 Due West | | 36 |
| Receivers R6 Due Northwest | | 37 |
| **Pit Operations at Southeast Corner of Site Nearest Receivers 1 to 3** | | |
| Receiver R1 Due East | 41 | 41 |
| Receivers R2 Due East Across Road | | 38 |
| Receiver R3 Due South | | 40 |
| Receivers R4 Due Southwest | | 33 |
| Receivers R5 Due West | | 36 |
| Receivers R6 Due Northwest | | 37 |

**Table 7 (P9-10):** Predicted noise impact levels at surrounding noise sensitive dwellings.

**Operational Noise Impacts**

| Receiver Location | Noise Criterion dB(A) | Predicted Noise Impact Levels – (Calm Conditions) dB(A) |
|---|---|---|
| **Pit Operations at Southern Boundary Nearest Receiver 3** | | |
| Receiver R1 Due East | 41 | 41 |
| Receivers R2 Due East Across Road | | 39 |
| Receiver R3 Due South | | 41 |
| Receivers R4 Due Southwest | | 37 |
| Receivers R5 Due West | | 40 |
| Receivers R6 Due Northwest | | 39 |
| **Pit Operations at Northwest Corner of Site Nearest Receivers 5 and 6** | | |
| Receiver R1 Due East | 41 | 41 |
| Receivers R2 Due East Across Road | | 39 |
| Receiver R3 Due South | | 39 |
| Receivers R4 Due Southwest | | 37 |
| Receivers R5 Due West | | 41 |
| Receivers R6 Due Northwest | | 39 |
| **Pit Operations at Southwest Corner of Site Nearest Receivers 4 and 5** | | |
| Receiver R1 Due East | 41 | 41 |
| Receivers R2 Due East Across Road | | 38 |
| Receiver R3 Due South | | 41 |
| Receivers R4 Due Southwest | | 38 |
| Receivers R5 Due West | | 41 |
| Receivers R6 Due Northwest | | 39 |

**Table 7 (P9-10):** Predicted noise impact levels at surrounding noise sensitive dwellings.

For construction activities such as construction of the recommended earth batters / mounds and internal haul roads we have assumed that the two excavators, loader and haul trucks will be utilised. Based upon the location of onsite construction activities in relation to surrounding noise sensitive dwellings, we predict the following façade corrected noise impact levels as presented in Table 8. For PEN3D point source calculations refer to Appendix C of this report.

**Construction Noise Impacts**

| Receiver Location | Noise Criterion dB(A) | Predicted Noise Impact Levels – (Calm Conditions) dB(A) |
|---|---|---|
| **Construction Operations at Southeast Site Boundary without Earth Mounds** | | |
| Receiver R1 Due East | Noise Affected: 46<br>Highly Noise Affected: 75 | 55 |
| Receivers R2 Due East Across Road | | 48 |
| Receiver R3 Due South | | 54 |
| Receivers R4 Due Southwest | | 36 |
| Receivers R5 Due West | | 36 |
| Receivers R6 Due Northwest | | 35 |
| **Construction Operations along Southern Site Boundary without Earth Mounds** | | |
| Receiver R1 Due East | Noise Affected: 46<br>Highly Noise Affected: 75 | 53 |
| Receivers R2 Due East Across Road | | 48 |
| Receiver R3 Due South | | 56 |
| Receivers R4 Due Southwest | | 36 |
| Receivers R5 Due West | | 37 |
| Receivers R6 Due Northwest | | 35 |
| **Construction Operations at Northwest Site Boundary at Road and Stockpile Area** | | |
| Receiver R1 Due East | Noise Affected: 46<br>Highly Noise Affected: 75 | 39 |
| Receivers R2 Due East Across Road | | 37 |
| Receiver R3 Due South | | 40 |
| Receivers R4 Due Southwest | | 35 |
| Receivers R5 Due West | | 39 |
| Receivers R6 Due Northwest | | 40 |

**Table 8:** Predicted construction noise impact levels at surrounding noise sensitive dwellings.

## 5.3 Predicted Noise Impacts from Additional Traffic on the Existing Road Network

Haul trucks leaving the quarry will head south along Newrybar Swamp Road and then turn either left or right onto Ross Lane for access to the Coast Road (due east) or the Pacific Highway (due west). The haulage route will be the same as currently utilised by the existing quarry located directly to the north if the subject site.

Estimated maximum daily haulage is predicted to be 2,000$m^3$ per day (100 truckloads) or 200 movements per day (100 trucks entering and 100 leaving the site, which is equivalent to 18 vehicle movements per hour).

From counts provided by Ardill Payne and Partners Newrybar Swamp Road carries in the order of 610 vehicles per day with a peak hourly volume of approximately 86 vehicles. Ardill Payne and Partners indicate that a high number of vehicles using Newrybar Swamp Road would be haulage vehicles entering and leaving the existing sand quarries.

Road traffic noise modelling was conducted using PEN3D, which is based upon the "CoRTN" (Control of Road Traffic Noise) method produced by the UK Department of Transport 1988. To determine the $L_{Aeq\ 15hr}$ from the $L_{A10\ 18hr}$ we have assumed a minus 3 dB correction, which has been sourced from noise monitoring data collected from a similar road in NSW.

At the nearest noise sensitive receivers along Newrybar Swamp Road (i.e. Receiver R1, R2 and R3 – refer to Figure 2 of Appendix A for receiver locations), noise levels from the onsite haulage trucks traversing Newrybar Swamp Road are predicted to cause a rise of approximately 1.3 dB(A) to the existing $L_{Aeq\ 15hr}$ traffic noise from 56 to 57 dB(A) at R1, 50 to 51 dB(A) at R2 and 46 to 47 dB(A) at R3. For PEN3D calculation sheets refer to Appendix C of this report.

The predicted road traffic noise impacts are within the 60 dB(A) $L_{Aeq\ 15hr}$ noise criterion from the "*NSW Road Noise Policy*".

Further, it is unlikely that the proposal will increase heavy vehicle movements on Newrybar Swamp Road as the existing extractive industry directly to the north of the subject site is to cease all extraction and haulage prior to the start commencement of extraction and haulage from the proposed quarry.

## 6.0 RECOMMENDED ACOUSTIC TREATMENTS

To mitigate onsite activities impacting surrounding noise sensitive properties we recommended the following acoustic treatments and management principles:

- Unless otherwise approved in writing by the Administering Authority, the operating hours for the quarry should be confined to:
  - **Monday to Friday** **7am to 6pm**
  - **Saturdays** **8am to 1pm**

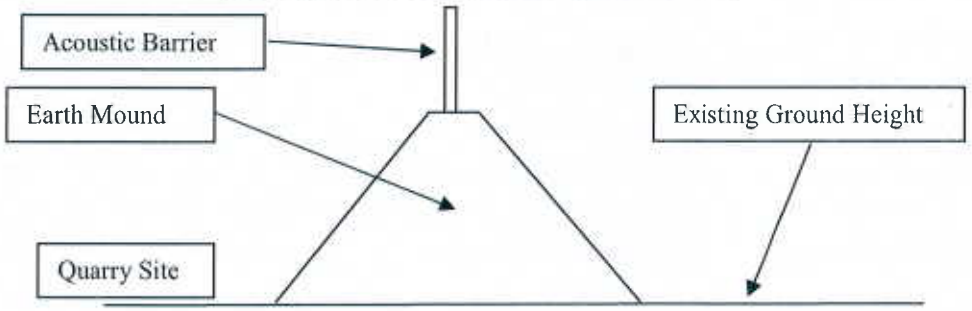
- For construction work outside the acoustic batters/barriers operating hours should be confined to:
  - **Monday to Friday** **7am to 6pm**
  - **Saturdays** **8am to 1pm**

- Extraction of sand should occur in a northwest to southeast direction so that the working face acts as an additional acoustic screen to the offsite dwelling noise sensitive receivers to the east and south (i.e. Receiver Numbers 1 and 3).

- Excavators and loaders when at the extraction area should remain in the extraction pit where possible so that the working face provides acoustic screening of equipment.

- Acoustic screens (i.e. barriers / earth mound or a combination of both) ranging from 2.5m to 3.5m in height are to be constructed at the locations as detailed in Sketch 1 in Appendix A of this report. A recommended typical barrier / earth mound cross section is a follows:

**Combination of acoustic barrier and earth berm**




- The onsite generator is likely to require a three sided solid walled and roofed enclosure, with the ventilation (open) side facing towards the north away from the nearest southern and eastern dwellings.

- Unnecessary use of equipment should be minimised such as using two excavators at the same time when the work could be completed by one excavator.

- Drivers be instructed to operate equipment in a manner that does not generate unnecessary noise, through avoiding excessive revving of motors, and avoidance of impact with solid objects.

- No alarm bells or paging systems should be used. Cordless telephones are a suitable substitute.
- All mechanical plant, machinery and trucks are to be fitted with exhaust controls that minimise noise pollution in accordance with current legislation and industry best practices.
- All engines including trucks are to be maintained and tuned to manufacturer's specifications so as to minimise exhaust emissions.
- When new technology or equipment is being considered, equipment with low noise emissions should be the preferred choice; and the new equipment must have best practice noise suppression controls incorporated or installed (i.e. quiet engines, enclosed engines, exhaust mufflers).
- Vehicles have a modified beeper installed (commonly termed a "croaker", as they sound similar to a frog croak).
- Fixed plant should be located as far as possible from offsite noise sensitive receivers (i.e. the nearest dwellings to the south and east).
- All onsite haulage / access roads be well maintained (no potholes) and levelled as required to minimise truck bounce as they move around the site. Drainage grating over trafficable areas be well secured to prevent rattling.
- Equipment speeds be limited to 20km/hr on the site and 40km/hr on the main entry access road.
- Provide neighbours with a contact number should any problem arise. In the unlikely event of a noise complaint, the complaint must be dealt with sensitively and respectfully, with the noise abated as soon as possible. A complaint register must also be completed and stored (refer to Appendix C for an example of a complaint register).
- Prior to earth mounds / batters being constructed the surrounding noise sensitive receivers should be contacted and informed of the anticipated duration (start and finish dates) and daytime hours when the earth mounds / batters are to be constructed.
- During construction activity, provide local residents with an indicative schedule of the works program, in particular, a clear notification of the times when new or noisy activities are to be conducted proximate to the residential premises. This notification should also include contact details of the 'responsible person' should residents wish to discuss the onsite activity.
- Where possible plant and equipment should work from the screened side of the earth mounds / batters (opposite side of batters to nearest receivers) once the earth mounds / batters start being erected so that partial or full screening or equipment is achieved.

A noise management plan (NMP) should be prepared by a suitable qualified and experienced noise consultant prior to any construction or operational works being undertaken at the site.

## 7.0 DISCUSSION

The proposal is to operate a sand quarry at the subject site (Lot 32 on DP1151612 ) with the extraction of sand up to a maximum of 610,000m$^3$ over the life of the quarry at an annual rate of less than 80,000m$^3$. The life of the quarry is anticipated to be between 5 and 15 years.

Activities will initially include the stripping of top soil for minor site filling and construction of onsite earth batters / mounds for noise and visual screening (construction activities). Extraction of sand (operational) will be undertaken by excavators and a front end loader and will be stockpiled and loaded into haulage trucks for dispatch to markets.

Onsite activity has the potential to impact surrounding noise sensitive receivers which are generally rural residential properties. The noise criterion is based upon measured background levels to determine the Rating Background Levels, and calculation of the *"Intrusive"* and *"Amenity"* Criterion outlined in the *"NSW Industrial Noise Policy"*.

For the offsite noise sensitive receivers to the south and east (Receivers 1 to 3), to mitigate onsite activity noise emissions (predicted to achieve the adopted noise criterion) we have recommended acoustic screens (i.e. barrier / earth batter), which can be constructed from a combination of earth batters and solid acoustic barriers. The buffer separation distance between the site and noise sensitive receivers to the southwest, west and northwest (Receivers 4 to 6) is predicted to provide sufficient noise mitigation to achieve the noise criterion without the need for acoustic treatments.

Road traffic noise levels from quarry haulage trucks are predicted to cause a rise of approximately 1.3 dB(A) to the existing $L_{Aeq\ 15hr}$ traffic noise from 56 to 57 dB(A) at the nearest dwelling along Newrybar Swamp Road. The predicted road traffic noise impacts are within the 60 dB(A) $L_{Aeq\ 15hr}$ noise criterion from the *"NSW Road Noise Policy"*. We also note that it is unlikely that the proposal will increase heavy vehicle movements on Newrybar Swamp Road as the existing extractive industry directly to the north of the subject site is to cease all extraction and haulage prior to the start commencement of extraction and haulage from the proposed quarry.

Further, the sand quarry will utilise new plant equipment including the excavators, loader and haul trucks which will assist in reduced noise emissions; and the office will primarily rely on solar electric rather than the use of the onsite generator.

Noise impacts from construction activities are predicted to be above *"Noise Affected"* criterion within the New South Wales *"Interim Construction Noise Guideline"*, which is not unlike any other construction site in Northern New South Wales. To minimise noise impacts we have recommended that such activities be undertaken during daytime hours between 7am to 6pm Monday to Friday and 8am to 1pm on Saturdays.

The key to managing noise impacts is to ensure that all practical steps are taken to minimise noise from the site. If the nearby noise sensitive receivers (i.e. residential dwellings) are aware that the quarry operators are mindful of noise impacting upon their residential premises, they will tend to be less annoyed than if they feel no regard is made as to their amenity.

As a final note, a noise management plan (NMP) should be prepared by a suitable qualified and experienced noise consultant prior to any construction or operational works being undertaken at the proposed quarry site.

## 8.0 CONCLUSIONS

This report is in response to a request by Ardill Payne and Partners on behalf of Ballina Sands Pty Ltd for an environmental noise impact assessment of a proposed sand quarry at Lennox Heads.

Overall, the site is suitable as a quarry, subject to the noise mitigation treatments and management principles detailed in Section 6 being integrated into the construction and normal operation of the facility.

Report Reviewed By:

**JAY CARTER** BSc
Director

Report Compiled by:

**Matthew Lopez** BEng
Consultant

**APPENDIX A**

Attachments, Subject Site Location, Surrounding Environs and Recommended Acoustic Screens

**Attachment 1 (P1 of 3):** Extract of the Director General Requirements from The NSW Department of Environment, Climate Change and Water (DECC) dated 15th November 2012.

## 3. Noise and vibration

Any residences that surround the proposed site could be subject to unacceptable noise impacts if not managed appropriately.
A Noise Impact Assessment (NIA) for the proposal must be conducted by an appropriately qualified acoustics consultant. The NIA must be conducted in accordance with the State Government's *Industrial Noise Policy* and address the potential impacts of the quarry operations on any nearby residents including the following:

***Describe baseline conditions***

- Determine the existing background ($L_{A90}$) and ambient ($L_{Aeq}$) noise levels in accordance with the *NSW Industrial Noise Policy*.
- Determine the existing road traffic noise levels in accordance with the *NSW Environmental Criteria for Road Traffic Noise*, where road traffic noise impacts may occur.
- The noise impact assessment report should provide details of all monitoring of existing ambient noise levels including:
  a) details of equipment used for the measurements
  b) a brief description of where the equipment was positioned
  c) a statement justifying the choice of monitoring sites, including the procedure used to choose the sites, having regards to the definition of 'noise sensitive locations(s)' and 'most affected locations(s)' described in Section 3.1.2 of the *NSW Industrial Noise Policy*
  d) details of the exact location of the monitoring site and a description of land uses in surrounding areas
  e) a description of the dominant and background noise sources at the site
  f) day, evening and night assessment background levels for each day o the monitoring period
  g) the final Rating Background Level (RBL) value
  h) graphs of the measured noise levels for each day should be provided
  i) a record of periods of affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data and a statement indicating the need for any re-monitoring under Step 1 in Section B1.3 of the *NSW Industrial Noise Policy*
  j) determination of $L_{Aeq}$ noise levels from existing industry.

***Assess impacts***

- Determine the project specific noise levels for the site. For each identified potentially affected receiver, this should include:
  a) determination of the intrusive criterion for each identified potentially affected receiver
  b) selection and justification of the appropriate amenity category for each identified potentially affected receiver
  c) determination of the amenity criterion for each receiver
  d) determination of the appropriate sleep disturbance limit.

**Attachment 1 (P2 of 3):** Extract of the Director General Requirements from The NSW Department of Environment, Climate Change and Water (DECC) dated 15th November 2012.

- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Where $L_{A1(1min)}$ noise levels from the site are less than 15 dB above the background $L_{A90}$ noise level, sleep disturbance impacts are unlikely. Where this is not the case, further analysis is required. Additional guidance is provided in Appendix B of the *NSW Environmental Criteria for Road Traffic Noise*.
- Determine expected noise level and noise character (e.g. tonality, impulsiveness, vibration, etc) likely to be generated from noise sources during:
    1. site establishment
    2. construction
    3. operational phases
    4. transport including traffic noise generated by the proposal
    5. other services.

*Note: The noise impact assessment report should include noise source data for each source in 1/1 or 1/3 octave band frequencies including methods for references used to determine noise source levels. Noise source levels and characteristics can be sourced from direct measurement of similar activities or from literature (if full references are provided).*

- Determine the noise levels likely to be received at the most sensitive locations (these may vary for different activities at each phase of the development). Potential impacts should be determined for any identified significant adverse meteorological conditions. Predicted noise levels under calm conditions may also aid in quantifying the extent of impact where this is not the most adverse condition.
- The noise impact assessment report should include:
    a) a plan showing the assumed location of each noise source for each prediction scenario
    b) a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site
    c) any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc
    d) methods used to predict noise impacts including identification of any noise models used. Where modelling approaches other than the use of the ENM or SoundPlan computer models are adopted, the approach should be appropriately justified and validated.
    e) an assessment of appropriate weather conditions for the noise predictions including reference to any weather data used to justify the assumed conditions.
    f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario under any identified significant adverse weather conditions as well as calm conditions where appropriate.
    g) for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived
    h) an assessment of the need to include modification factors as detailed in Section 4 of the *NSW Industrial Noise Policy*.
- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional mitigation measures.
- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
- Where relevant noise/vibration criteria cannot be met after application of all feasible and cost effective mitigation measures the residual level of noise impact needs to be quantified by identifying:
    a) locations where the noise level exceeds the criteria and extent of exceedance
    b) numbers of people (or areas) affected
    c) times when criteria will be exceeded
    d) likely impact on activities (speech, sleep, relaxation, listening, etc)
    e) change on ambient conditions
    f) the result of any community consultation or negotiated agreement.

**Attachment 1 (P3 of 3):** Extract of the Director General Requirements from The NSW Department of Environment, Climate Change and Water (DECC) dated 15th November 2012.

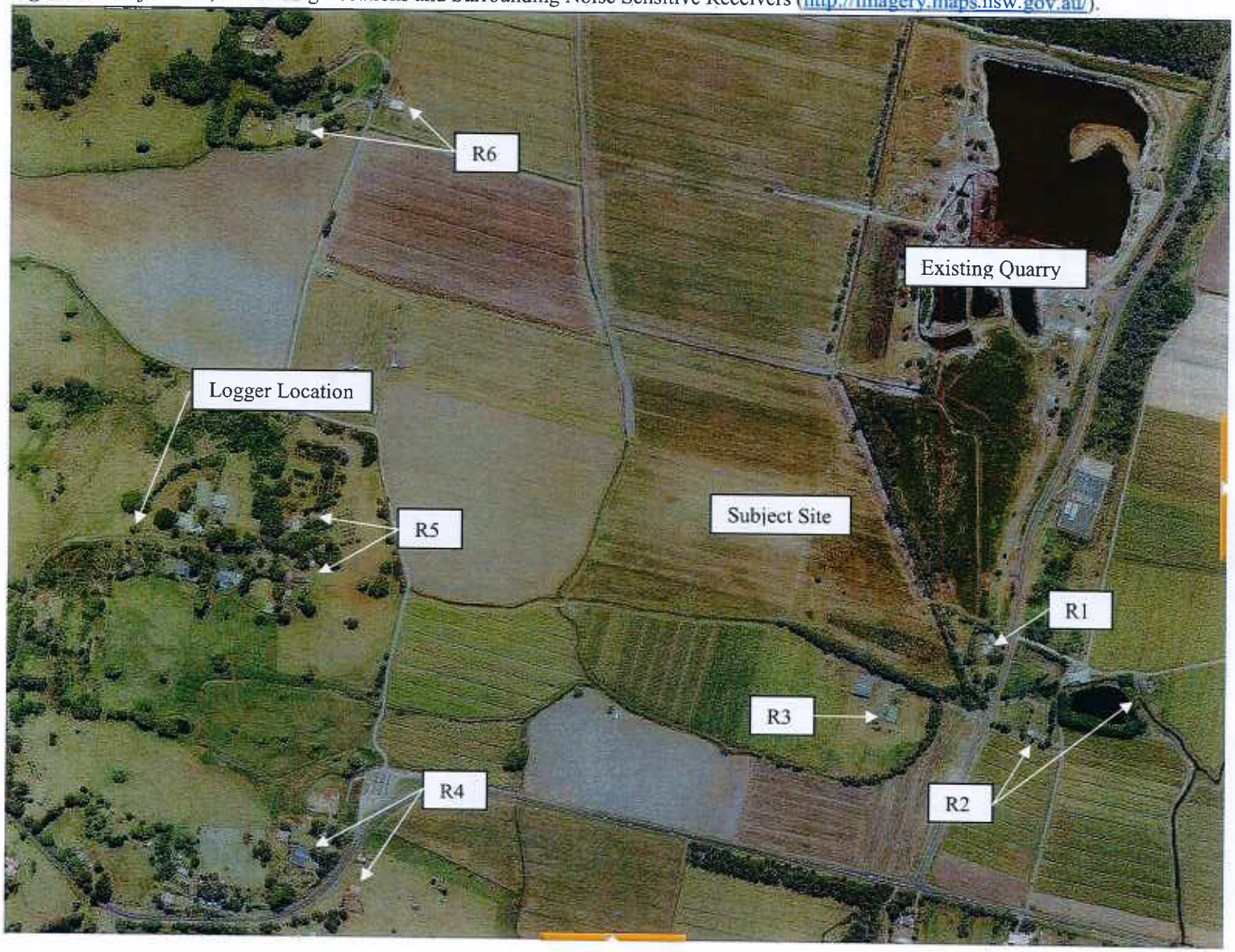
- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the EIS.
- Where blasting is intended an assessment in accordance with the *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration* (ANZECC, 1990) should be undertaken. The following details of the blast design should be included in the noise assessment:
  a) bench height, burden spacing, spacing burden ratio
  b) blast hole diameter, inclination and spacing
  c) type of explosive, maximum instantaneous charge, initiation, blast block size, blast frequency.

***Describe management and mitigation measures***

- Determine the most appropriate noise mitigation measures and expected noise reduction including both noise controls and management of impacts for both construction and operational noise. This will include selecting quiet equipment and construction methods, noise barriers or acoustic screens, location of stockpiles, temporary offices, compounds and vehicle routes, scheduling of activities, etc.
- For traffic noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Also include, where necessary, a discussion of any potential problems associated with the proposed ameliorative measures, such as overshadowing effects from barriers. Appropriate ameliorative measures may include:
  a) use of alternative transportation modes, alternative routes, or other methods of avoiding the new road usage
  b) control of traffic (eg: limiting times of access or speed limitations)
  c) resurfacing of the road using a quiet surface
  d) use of (additional) noise barriers or bunds
  e) treatment of the façade to reduce internal noise levels buildings where the night-time criteria is a major concern
  f) more stringent limits for noise emission from vehicles (i.e. using specially designed 'quite' trucks and/or trucks to use air bag suspension
  g) driver education
  h) appropriate truck routes
  i) limit usage of exhaust breaks
  j) use of premium muffles on trucks
  k) reducing speed limits for trucks
  l) ongoing community liaison and monitoring of complaints
  m) phasing in the increased road use.

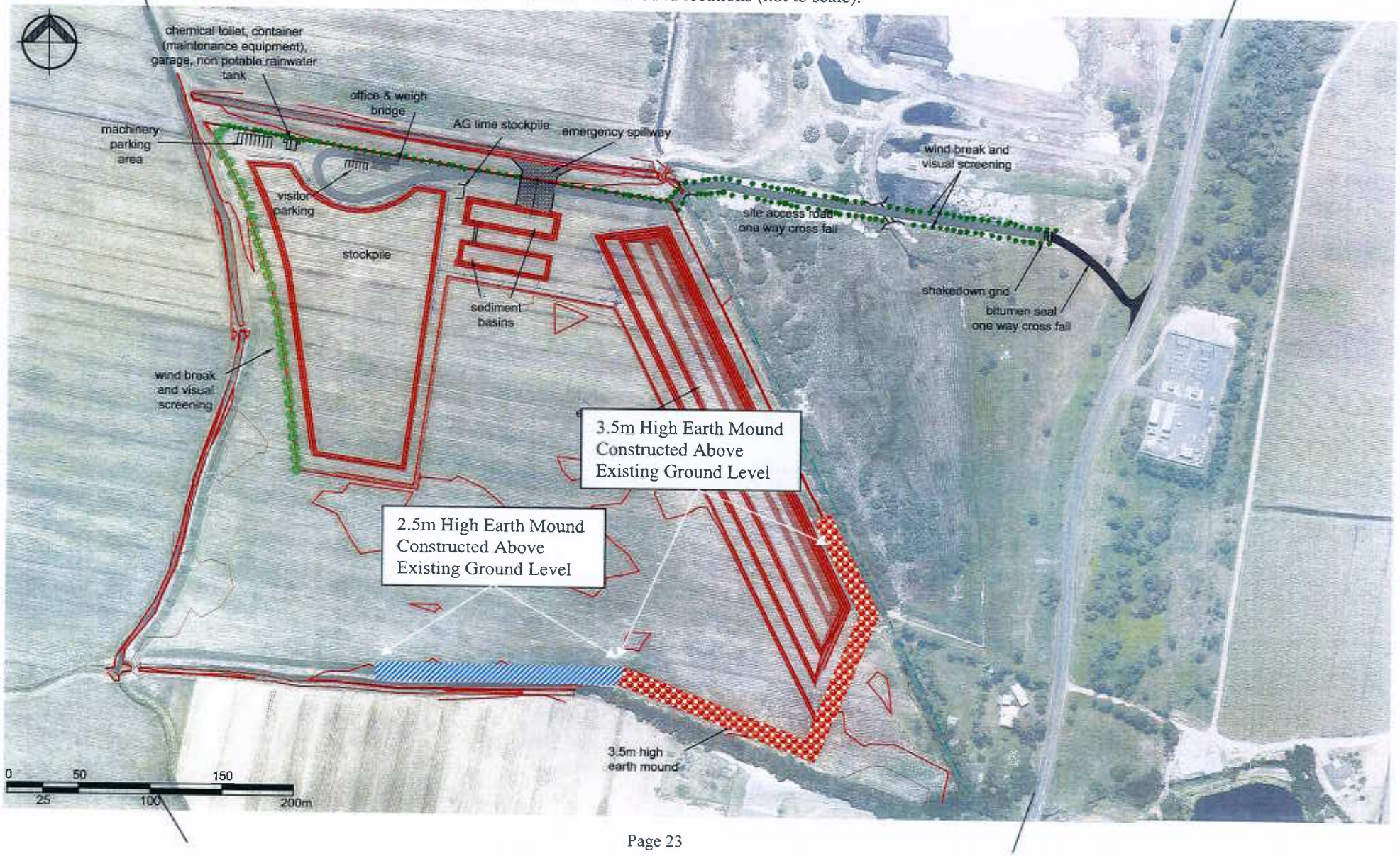
**Figure 1:** Subject Site Location (Google Maps).

**Figure 2:** Subject Site, Monitoring Locations and Surrounding Noise Sensitive Receivers (http://imagery.maps.nsw.gov.au/).



**Photograph 1:** Monitoring Location.

**Sketch 1:** Proposed quarry layout and recommended acoustic barrier / earth mound locations (not to scale).



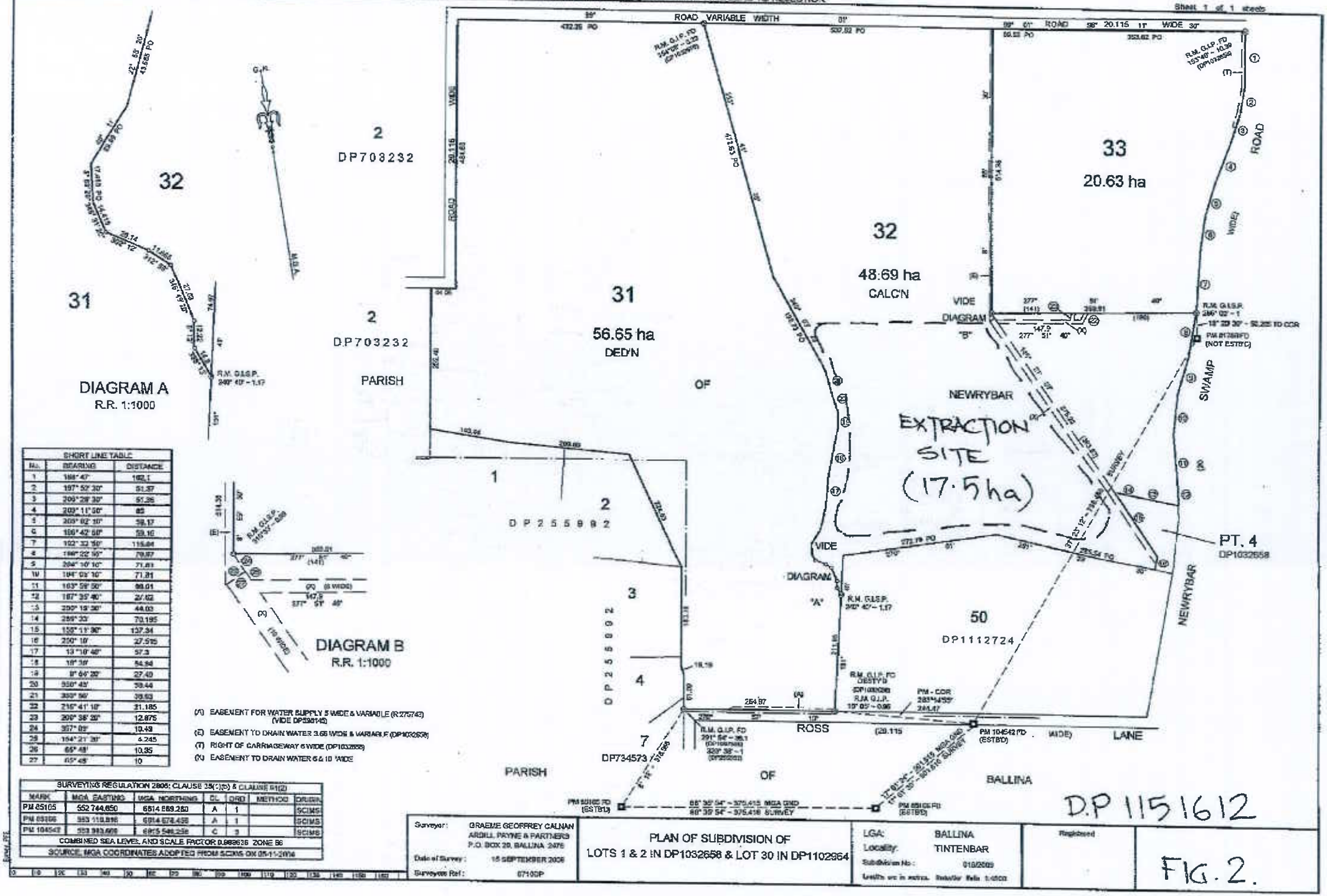
**APPENDIX B**

Development Plan

PLAN FORM 2 (A2)

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

Sheet 1 of 1 sheets




| SHORT LINE TABLE | | |
|---|---|---|
| No. | BEARING | DISTANCE |
| 1 | 188° 47' | 162.1 |
| 2 | 197° 52' 30" | 51.37 |
| 3 | 209° 28' 30" | 51.26 |
| 4 | 203° 11' 30" | 85 |
| 5 | 209° 02' 10" | 59.17 |
| 6 | 186° 42' 50" | 59.16 |
| 7 | 192° 32' 50" | 115.84 |
| 8 | 196° 22' 10" | 79.87 |
| 9 | 204° 10' 10" | 71.81 |
| 10 | 194° 05' 10" | 71.81 |
| 11 | 183° 59' 50" | 99.01 |
| 12 | 187° 35' 40" | 27.62 |
| 13 | 230° 13' 30" | 44.03 |
| 14 | 259° 30' | 70.195 |
| 15 | 159° 11' 30" | 137.34 |
| 16 | 250° 10' | 27.515 |
| 17 | 13° 10' 40" | 57.3 |
| 18 | 18° 30' | 54.94 |
| 19 | 8° 04' 20" | 27.40 |
| 20 | 356° 45' | 39.44 |
| 21 | 352° 56' | 39.53 |
| 22 | 216° 41' 10" | 31.185 |
| 23 | 206° 38' 20" | 12.875 |
| 24 | 307° 09' | 19.43 |
| 25 | 154° 21' 30" | 6.245 |
| 26 | 65° 48' | 10.35 |
| 27 | 65° 48' | 10 |

(A) EASEMENT FOR WATER SUPPLY 5 WIDE & VARIABLE (R 275743) (VIDE DP538145)
(E) EASEMENT TO DRAIN WATER 3.66 WIDE & VARIABLE (DP1032658)
(T) RIGHT OF CARRIAGEWAY 6 WIDE (DP1032658)
(X) EASEMENT TO DRAIN WATER 6 & 10 WIDE

| SURVEYING REGULATION 2006: CLAUSE 25(1)(b) & CLAUSE 81(2) | | | | | | |
|---|---|---|---|---|---|---|
| MARK | MGA EASTING | MGA NORTHING | CL | ORD | METHOD | ORIGIN |
| PM 85165 | 552 744.650 | 6514 869.280 | A | 1 | | SCIMS |
| PM 85166 | 553 119.896 | 6514 674.456 | A | 1 | | SCIMS |
| PM 104542 | 553 983.466 | 6515 548.256 | C | 3 | | SCIMS |
| COMBINED SEA LEVEL AND SCALE FACTOR 0.999636 ZONE 56 | | | | | | |
| SOURCE: MGA COORDINATES ADOPTED FROM SCIMS ON 05-11-2008 | | | | | | |

| | |
|---|---|
| Surveyor: | GRAEME GEOFFREY CALNAN ARDILL PAYNE & PARTNERS P.O. BOX 20, BALLINA 2478 |
| Date of Survey: | 15 SEPTEMBER 2008 |
| Surveyors Ref: | 07100P |

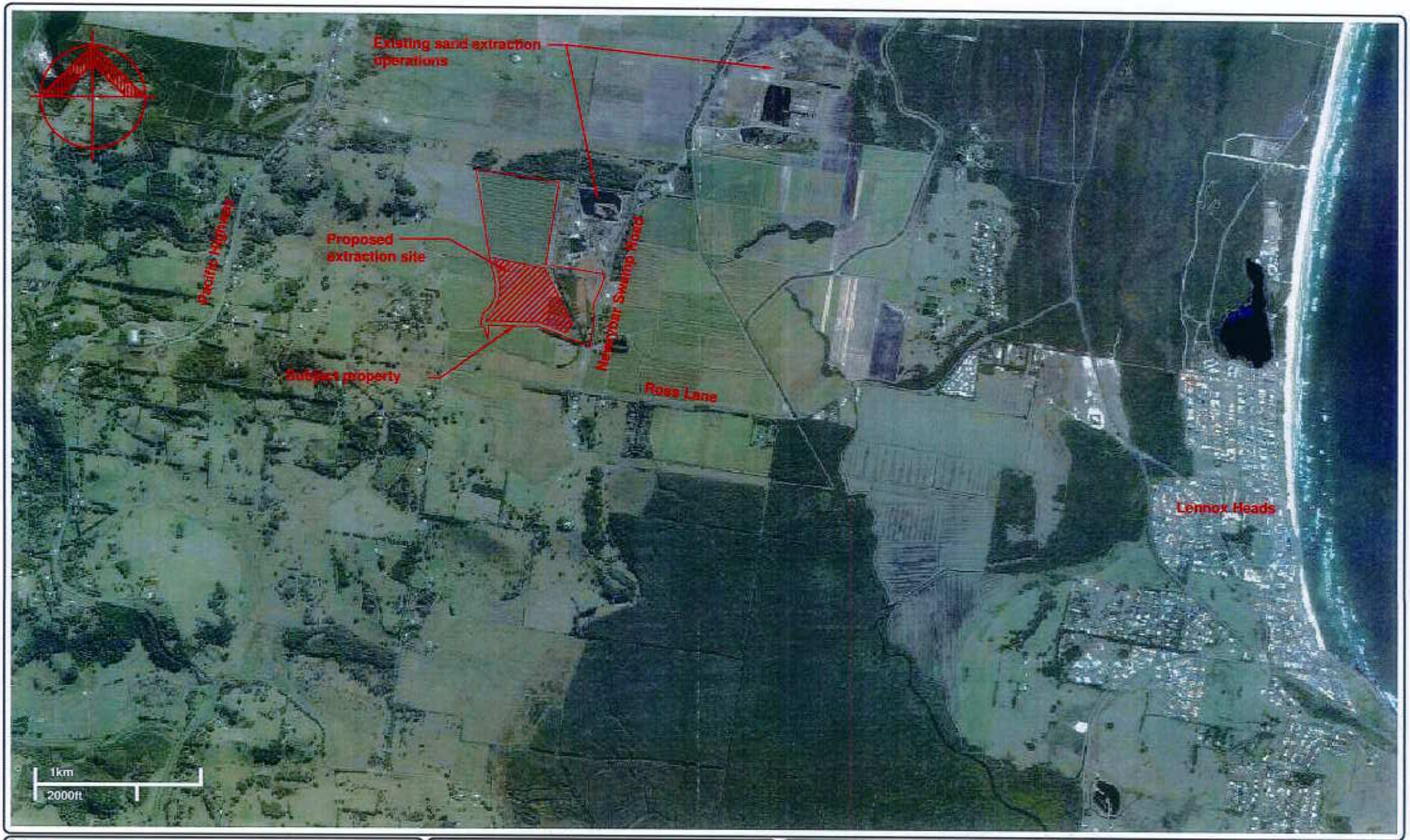
PLAN OF SUBDIVISION OF LOTS 1 & 2 IN DP1032658 & LOT 30 IN DP1102964

| | |
|---|---|
| LGA: | BALLINA |
| Locality: | TINTENBAR |
| Subdivision No: | 010/2009 |
| Lengths are in metres. | Reduction Ratio 1:4000 |

Registered

D.P 1151612

FIG. 2.




Project:

Client:

Title:

FIGURE 1 - SITE LOCALITY PLAN

Do not scale drawing. Use written dimensions only

**ARDILL PAYNE & PARTNERS**

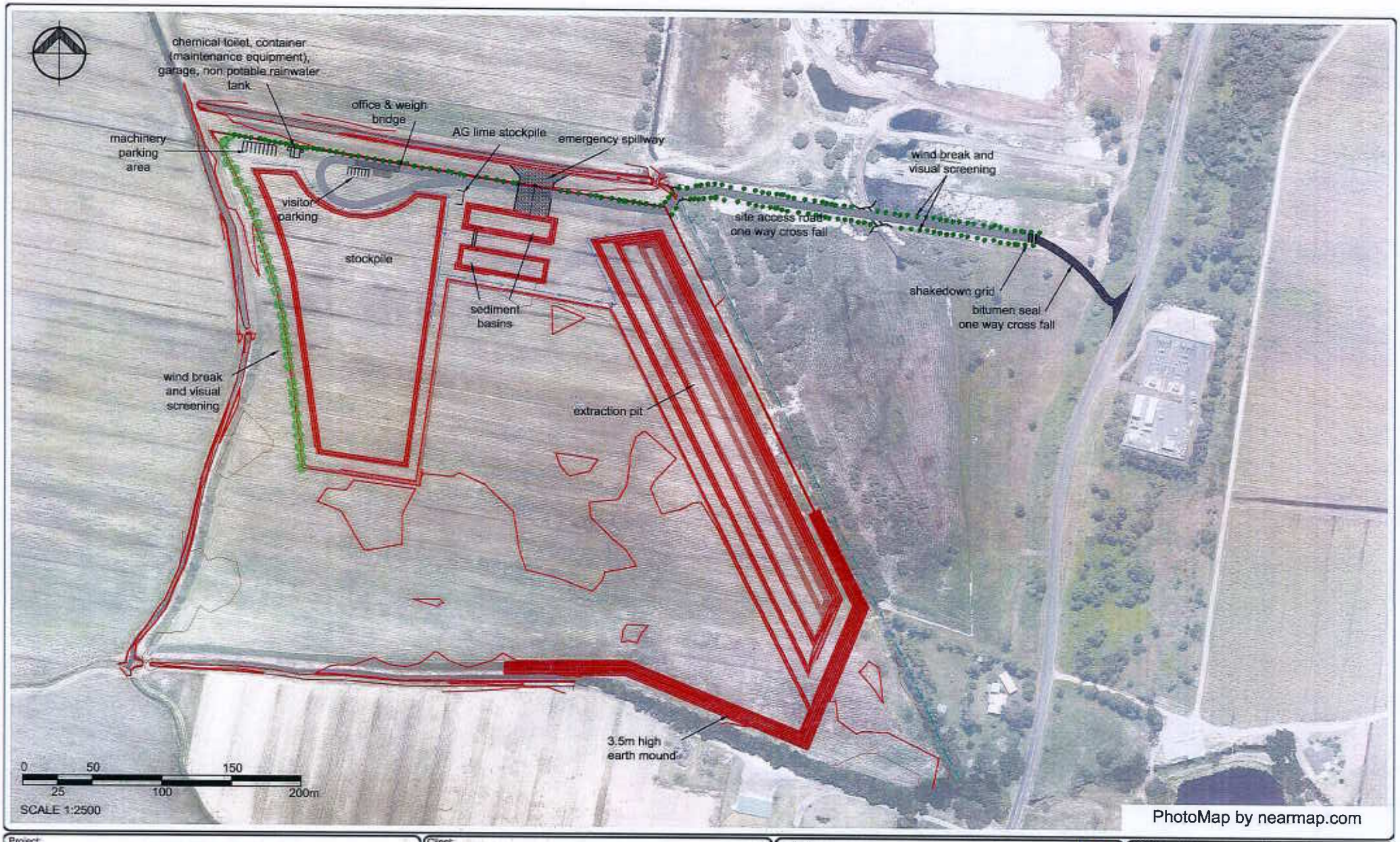
Consulting Civil & Structural Engineers Project Managers
Town Planners & Surveyors

79 Tamar Street
P.O. Box 20

Telephone: 02 6686 3280
Facsimile: 02 6686 7920
Email: info@ardillpayne.com.au

| | | | |
|---|---|---|---|
| Design | - | Scale at A3 | - |
| Drawn | RM | Datum | - |
| Date | 21-6-10 | Filename | Locality Plan - Fig 1 |
| Checked | | Approved | |
| Job No. | 6542 | Dwg. No. | FIG1 |
| | | Issue | |


EXISTING SAND PIT
approx plt site boundary
approx extent of excavation
approx btm of pit
NEW SAND PIT
NEWRYBAR SWA
ROSS LANE




Project:
Lot 32 DP 1151612
Newrybar Swamp Road
Lennox Head

Do not scale drawing. Use written dimensions only


Client: Ballina Sands

Title:
Proposed Extraction Plan
Stage 1

**ARDILL PAYNE & PARTNERS**
Consulting Civil & Structural Engineers Project Managers
Town Planners & Surveyors
79 Tamar Street
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Facsimile: 02 6686 7920
Email: info@ardillpayne.com.au
Website: www.ardillpayne.com.au

| | | | |
|---|---|---|---|
| Design | JF | Scale at A3 | 1:2500 |
| Drawn | RMcG | Datum | A.H.D |
| Date | 14.01.2013 | Filename | 6542 2nd PIT |
| Checked | | Approved | |
| Job No. | 6542 | Dwg. No. | FIG 1 |
| | | Issue | |

## APPENDIX C

Results and Calculations / Predictions

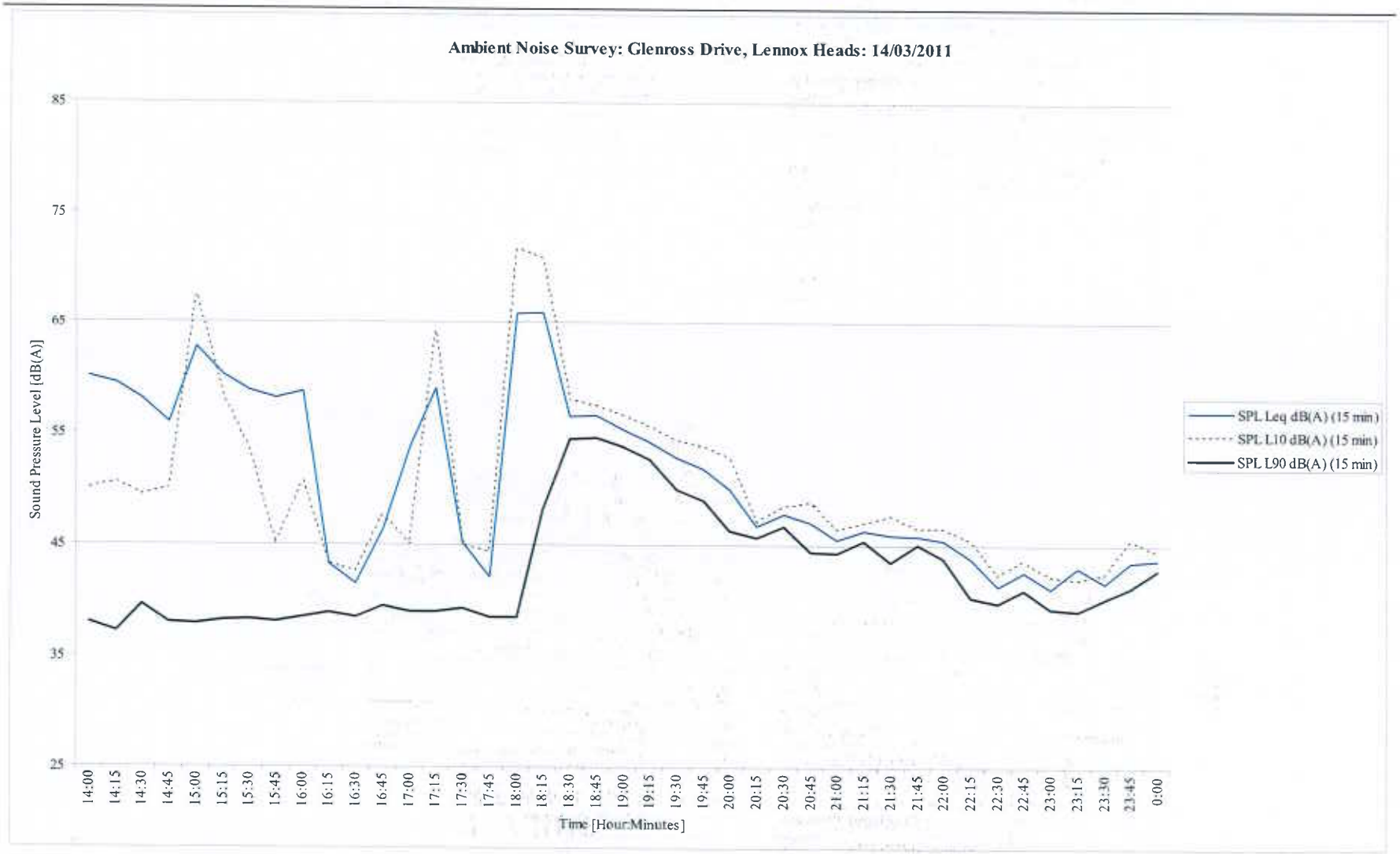
# Ballina, New South Wales
## March 2011 Daily Weather Observations

Observations from Ballina Airport.

Australian Government
Bureau of Meteorology

| Date | Day | Temps | | Rain | Evap | Sun | Max wind gust | | | 9am | | | | | | 3pm | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Min | Max | | | | Dirn | Spd | Time | Temp | RH | Cld | Dirn | Spd | MSLP | Temp | RH | Cld | Dirn | Spd | MSLP |
| | | °C | °C | mm | mm | hours | | km/h | local | °C | % | eighths | | km/h | hPa | °C | % | eighths | | km/h | hPa |
| 1 | Tu | 19.5 | 33.4 | 0 | | | S | 54 | 21:54 | 26.4 | 74 | | N | 2 | 1009.6 | 32.8 | 57 | | NNE | 20 | 1007.4 |
| 2 | We | 22.1 | 28.8 | 6.4 | | | SE | 31 | 23:11 | 24.0 | 89 | | SW | 11 | 1013.9 | 27.5 | 76 | | SSE | 17 | 1012.1 |
| 3 | Th | 22.6 | 30.9 | 7.2 | | | WNW | 37 | 18:08 | 23.7 | 89 | | | Calm | 1010.7 | 29.2 | 74 | | NE | 17 | 1008.6 |
| 4 | Fr | 22.0 | 28.0 | 5.8 | | | N | 26 | 14:07 | 23.0 | 96 | | | Calm | 1011.8 | 27.4 | 65 | | N | 15 | 1009.6 |
| 5 | Sa | 21.3 | 26.5 | 8.4 | | | SSE | 65 | 15:14 | 22.9 | 95 | | SE | 9 | 1015.3 | 23.1 | 80 | | SE | 33 | 1016.4 |
| 6 | Su | 19.7 | 26.9 | 9.0 | | | SSE | 50 | 13:33 | 22.4 | 70 | | S | 28 | 1022.2 | 21.9 | 70 | | SE | 20 | 1022.0 |
| 7 | Mo | 19.2 | 26.5 | 8.2 | | | SE | 44 | 06:08 | 23.0 | 65 | | ESE | 24 | 1021.2 | 25.1 | 60 | | SSE | 19 | 1020.1 |
| 8 | Tu | 16.9 | 27.3 | 8.4 | | | ESE | 37 | 23:35 | 21.0 | 86 | | | Calm | 1019.5 | 26.3 | 59 | | ENE | 20 | 1017.5 |
| 9 | We | 16.4 | 26.3 | 0.4 | | | NE | 31 | 14:36 | 20.9 | 84 | | WSW | 13 | 1018.7 | 24.8 | 61 | | ENE | 17 | 1016.3 |
| 10 | Th | 17.9 | 28.2 | 0 | | | ENE | 35 | 14:52 | 24.1 | 71 | | NNW | 6 | 1016.1 | 26.5 | 64 | | NE | 20 | 1013.9 |
| 11 | Fr | 19.0 | 27.9 | 3.0 | | | NE | 30 | 11:43 | 23.9 | 83 | | NNW | 7 | 1016.9 | 24.9 | 74 | | NE | 15 | 1016.6 |
| 12 | Sa | 19.2 | 28.2 | 0 | | | NE | 37 | 14:40 | 24.2 | 79 | | S | 9 | 1020.9 | 26.9 | 64 | | NE | 22 | 1019.9 |
| 13 | Su | 19.2 | 27.9 | 5.6 | | | E | 37 | 11:13 | 23.1 | 88 | | SW | 7 | 1022.8 | 25.7 | 73 | | ENE | 22 | 1020.3 |
| 14 | Mo | 19.2 | 27.7 | 4.2 | | | ESE | 28 | 13:30 | 22.9 | 91 | | WNW | 7 | 1021.2 | 27.1 | 64 | | ENE | 17 | 1018.7 |
| 15 | Tu | 16.8 | 28.0 | 0 | | | E | 30 | 14:15 | 22.1 | 89 | | WSW | 9 | 1019.7 | 26.6 | 62 | | SE | 17 | 1017.6 |
| 16 | We | 16.3 | 28.4 | 0 | | | ENE | 31 | 15:53 | 22.8 | 83 | | W | 9 | 1018.2 | 26.9 | 67 | | NE | 22 | 1015.8 |
| 17 | Th | 18.3 | 27.8 | 0 | | | NE | 28 | 14:45 | 22.8 | 92 | | | Calm | 1018.7 | 25.8 | 76 | | NE | 19 | 1016.2 |
| 18 | Fr | 20.4 | 27.9 | 2.0 | | | NNW | 28 | 13:27 | 21.5 | 94 | | | Calm | 1014.9 | 25.7 | 72 | | NNW | 15 | 1011.9 |
| 19 | Sa | 20.9 | 24.1 | 1.0 | | | SSE | 20 | 17:03 | 22.2 | 95 | | | Calm | 1012.9 | 23.7 | 79 | | ESE | 7 | 1009.8 |
| 20 | Su | 20.4 | 24.0 | 22.4 | | | E | 28 | 10:58 | 22.0 | 97 | | WSW | 7 | 1009.1 | 22.9 | 87 | | S | 13 | 1006.7 |
| 21 | Mo | 21.7 | 28.0 | 26.4 | | | S | 28 | 15:21 | 22.7 | 94 | | SW | 13 | 1005.6 | 27.2 | 80 | | SSW | 15 | 1003.1 |
| 22 | Tu | 21.2 | | 0 | | | | | | 24.7 | 94 | | | Calm | 1002.6 | | | | | | |
| Statistics for the first 22 days of March 2011 | | | | | | | | | | | | | | | | | | | | | |
| | Mean | 19.6 | 27.7 | | | | | | | 23.0 | 86 | | | 7 | 1015.6 | 26.1 | 69 | | | 18 | 1014.3 |
| | Lowest | 16.3 | 24.0 | | | | | | | 20.9 | 65 | | | Calm | 1002.6 | 21.9 | 57 | | ESE | 7 | 1003.1 |
| | Highest | 22.6 | 33.4 | 26.4 | | | SSE | 65 | | 26.4 | 97 | | S | 28 | 1022.8 | 32.8 | 87 | | SE | 33 | 1022.0 |
| | Total | | | 118.4 | | | | | | | | | | | | | | | | | |

Observations were drawn from Ballina Airport AWS (station 058198)
The closest station with sunshine and evaporation observations is at Alstonville, about 10 km to the west.


Ambient Noise Survey: Glenross Drive, Lennox Heads: 14/03/2011
Sound Pressure Level [dB(A)]
85
75
65
55
45
35
25
14:00
14:15
14:30
14:45
15:00
15:15
15:30
15:45
16:00
16:15
16:30
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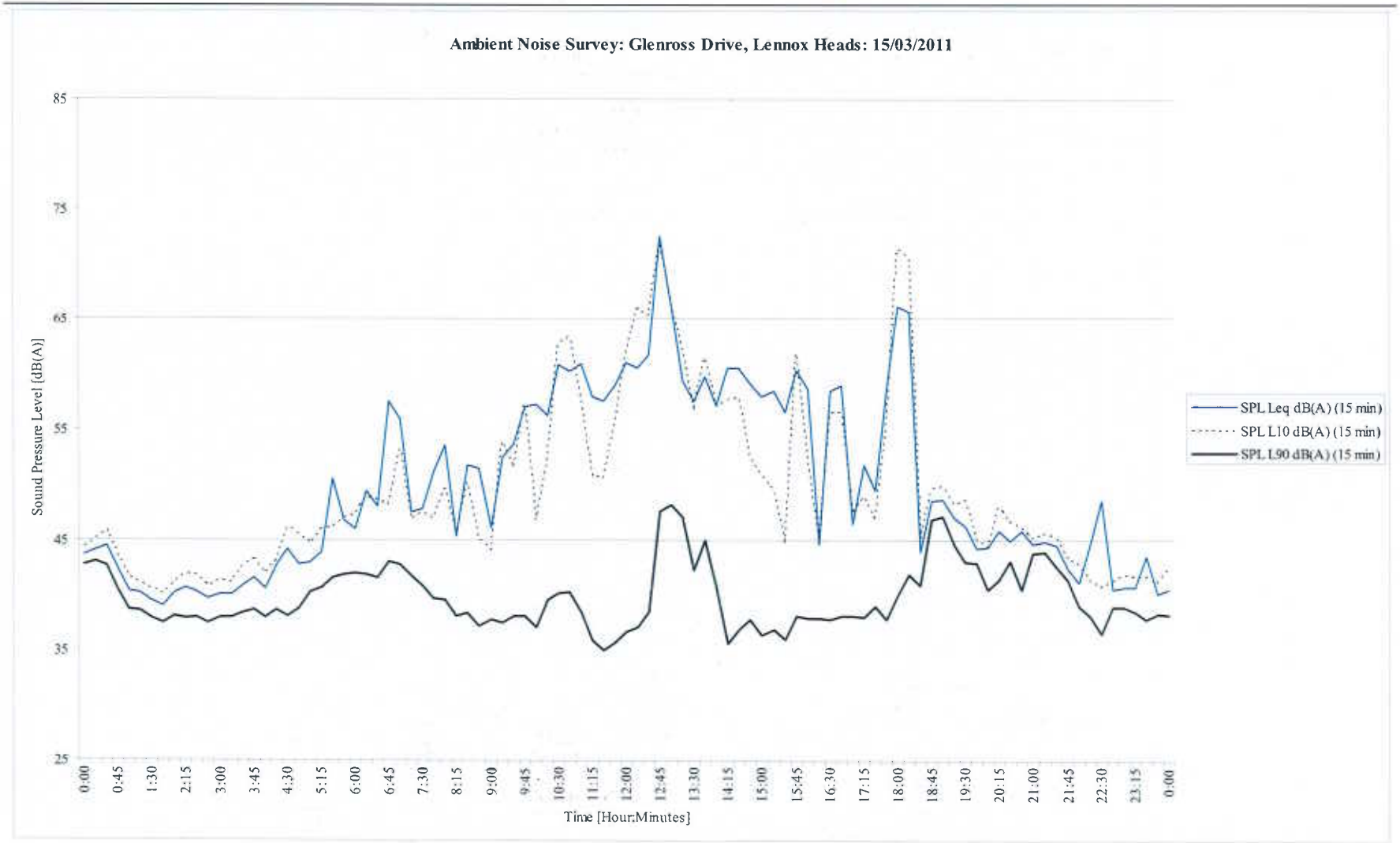
22:00
22:15
22:30
22:45
23:00
23:15
23:30
23:45
0:00
Time [Hour:Minutes]
SPL Leq dB(A) (15 min)
SPL L10 dB(A) (15 min)
SPL L90 dB(A) (15 min)


Ambient Noise Survey: Glenross Drive, Lennox Heads: 15/03/2011
Sound Pressure Level [dB(A)]
85
75
65
55
45
35
25
0:00
0:45
1:30
2:15
3:00
3:45
4:30
5:15
6:00
6:45
7:30
8:15
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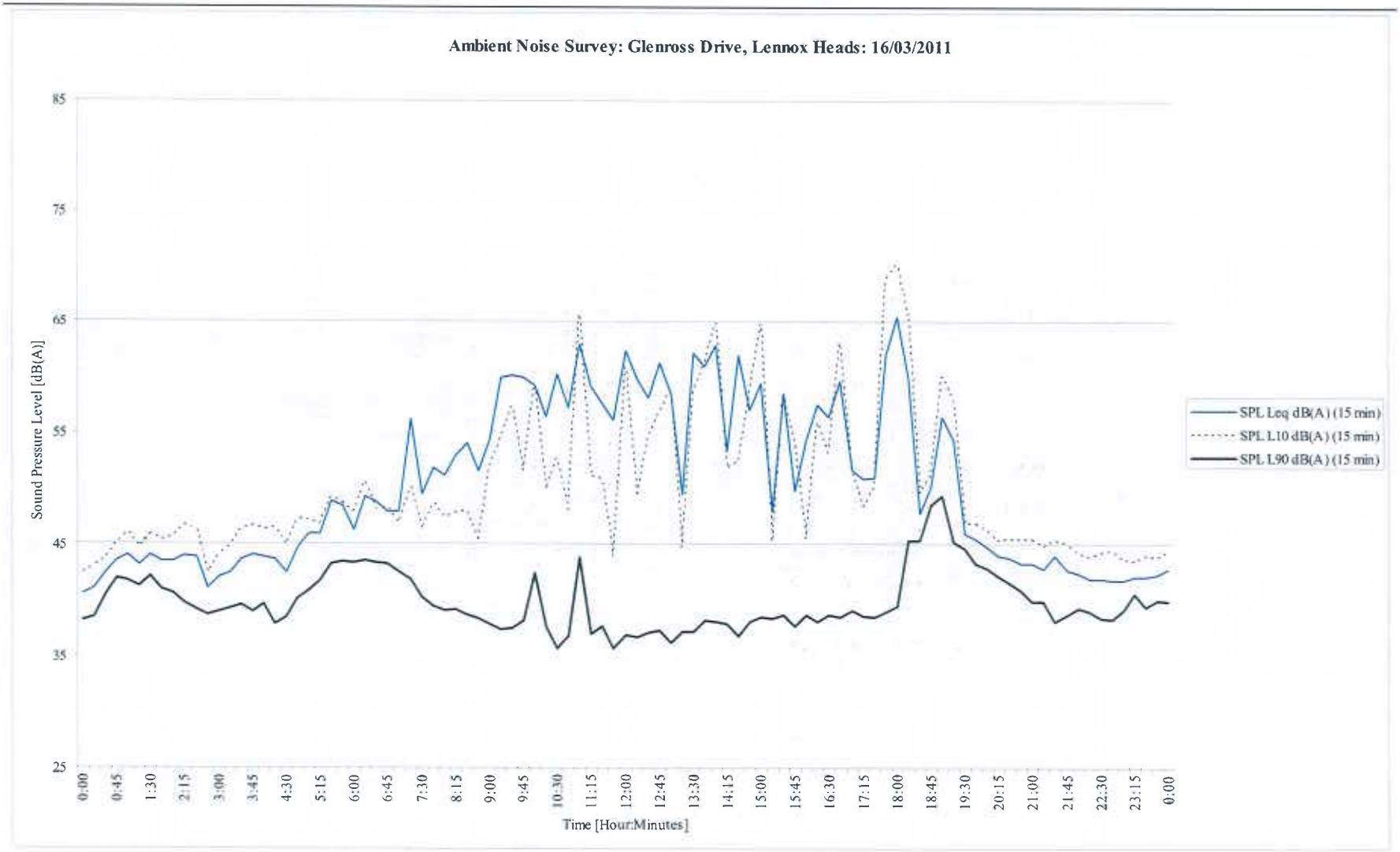
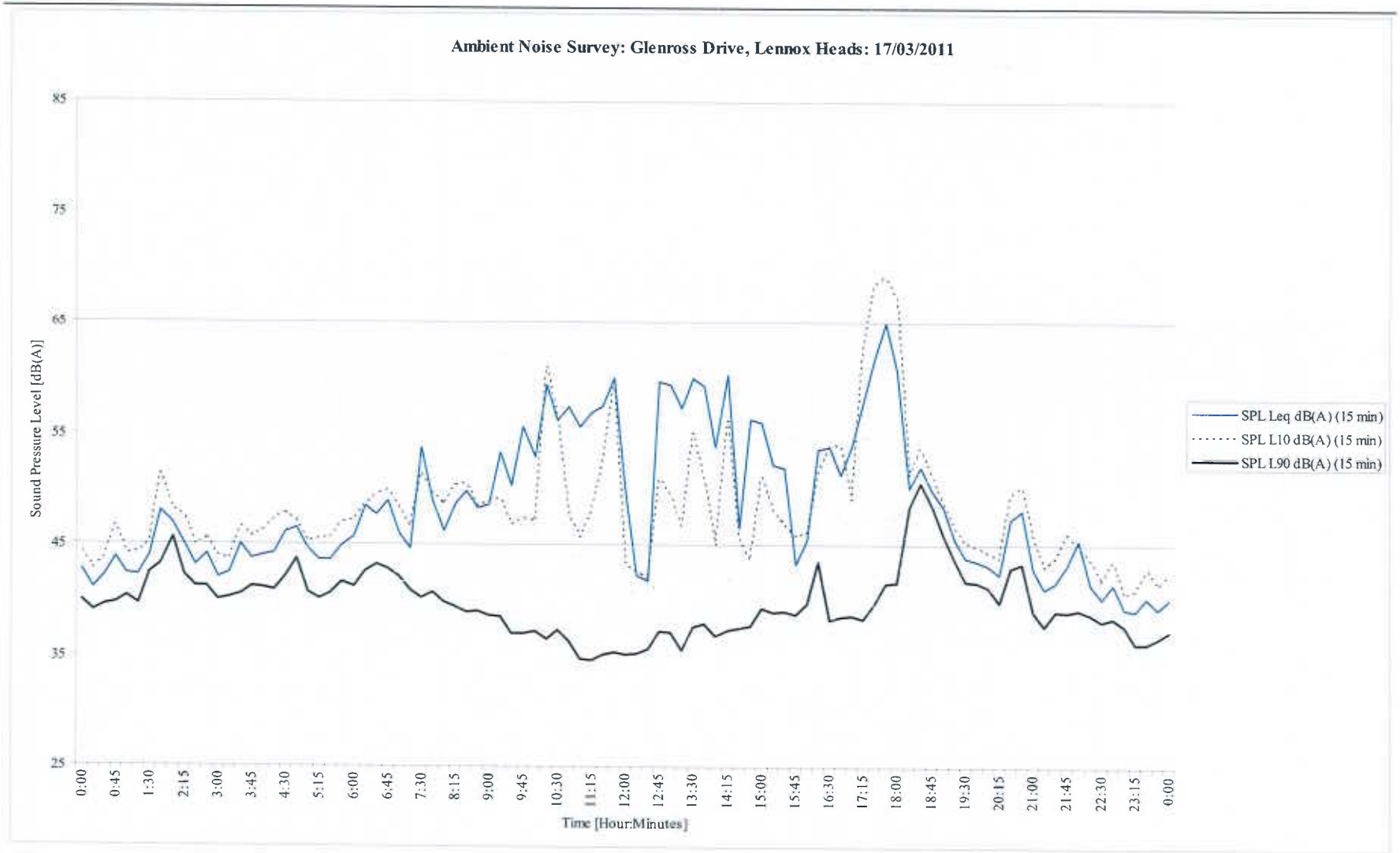
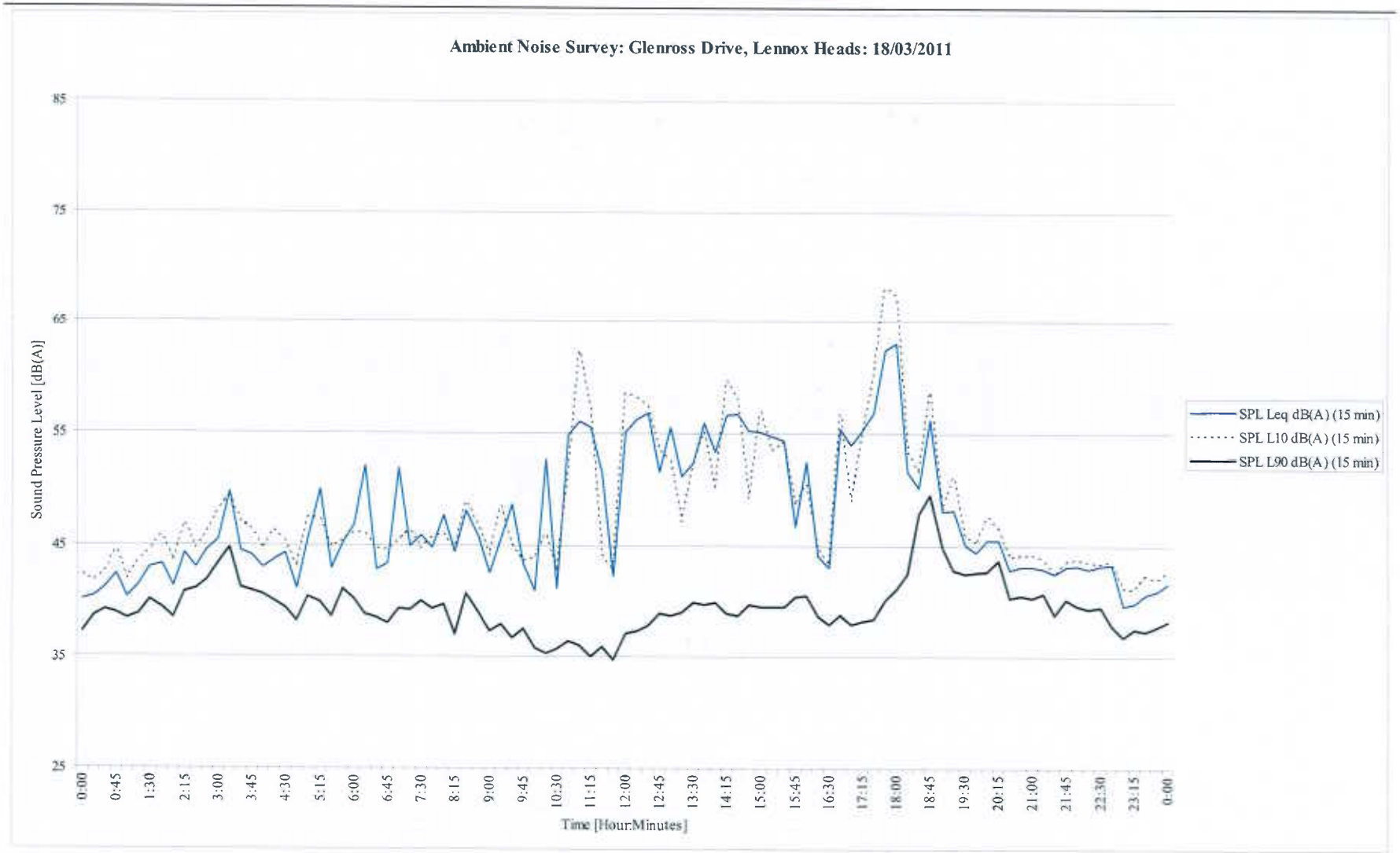
21:00
21:45
22:30
23:15
0:00
Time [Hour:Minutes]
SPL Leq dB(A) (15 min)
SPL L10 dB(A) (15 min)
SPL L90 dB(A) (15 min)


Ambient Noise Survey: Glenross Drive, Lennox Heads: 16/03/2011
Sound Pressure Level [dB(A)]
85
75
65
55
45
35
25
0:00
0:45
1:30
2:15
3:00
3:45
4:30
5:15
6:00
6:45
7:30
8:15
9:00
9:45
10:30
11:15
12:00
12:45
13:30
14:15
15:00
15:45
16:30
17:15
18:00
18:45
19:30
20:15
21:00
21:45
22:30
23:15
0:00
Time [Hour:Minutes]
SPL Leq dB(A) (15 min)
SPL L10 dB(A) (15 min)
SPL L90 dB(A) (15 min)


Ambient Noise Survey: Glenross Drive, Lennox Heads: 17/03/2011
Sound Pressure Level [dB(A)]
85
75
65
55
45
35
25
0:00
0:45
1:30
2:15
3:00
3:45
4:30
5:15
6:00
6:45
7:30
8:15
9:00
9:45
10:30
11:15
12:00
12:45
13:30
14:15
15:00
15:45
16:30
17:15
18:00
18:45
19:30
20:15
21:00
21:45
22:30
23:15
0:00
Time [Hour:Minutes]
SPL Leq dB(A) (15 min)
SPL L10 dB(A) (15 min)
SPL L90 dB(A) (15 min)


Ambient Noise Survey: Glenross Drive, Lennox Heads: 18/03/2011
Sound Pressure Level [dB(A)]
85
75
65
55
45
35
25
0:00
0:45
1:30
2:15
3:00
3:45
4:30
5:15
6:00
6:45
7:30
8:15
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9:45
10:30
11:15
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18:45
19:30
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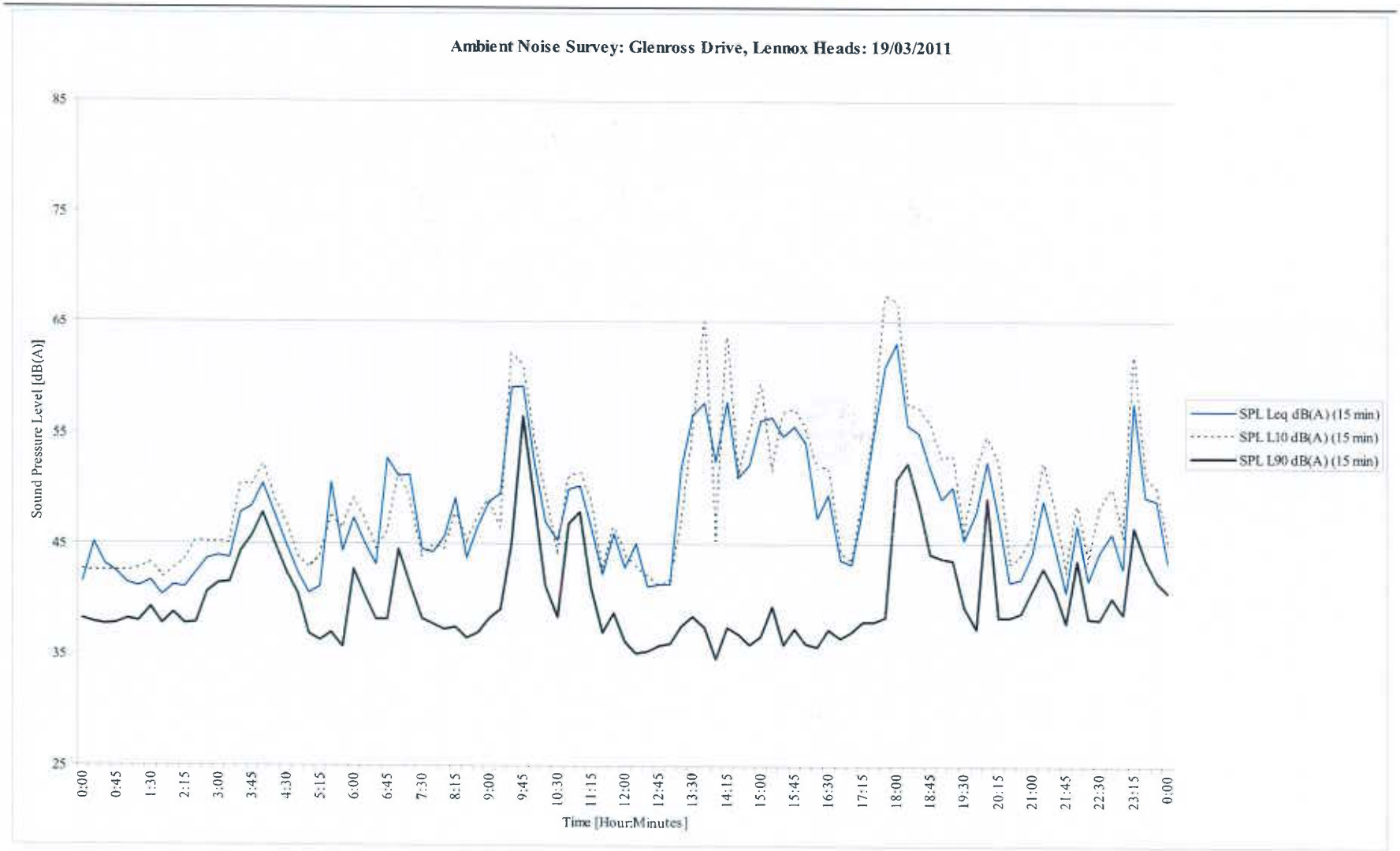
21:45
22:30
23:15
0:00
Time [Hour:Minutes]
SPL Leq dB(A) (15 min)
SPL L10 dB(A) (15 min)
SPL L90 dB(A) (15 min)


Ambient Noise Survey: Glenross Drive, Lennox Heads: 19/03/2011
Sound Pressure Level [dB(A)]
85
75
65
55
45
35
25
0:00
0:45
1:30
2:15
3:00
3:45
4:30
5:15
6:00
6:45
7:30
8:15
9:00
9:45
10:30
11:15
12:00
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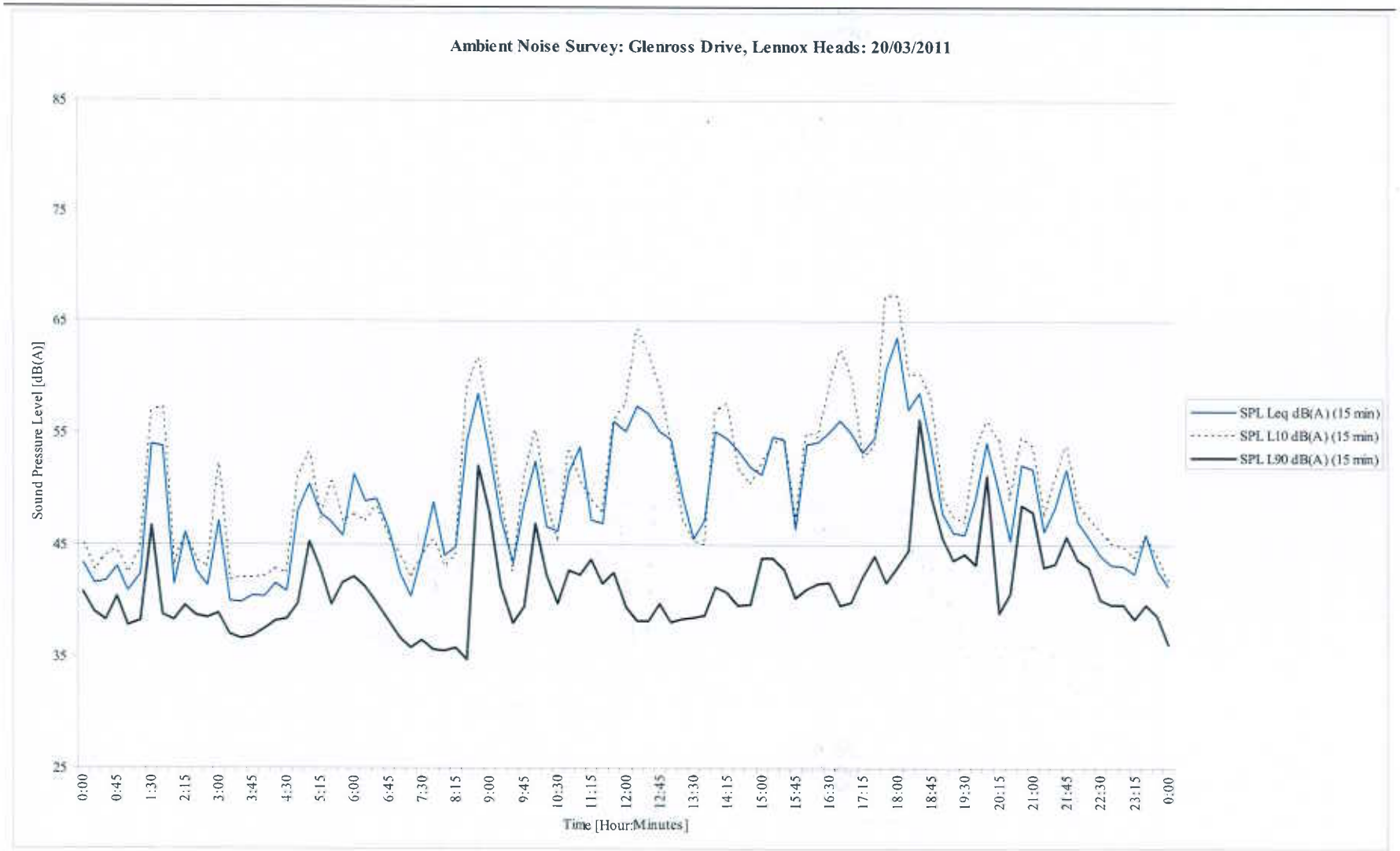
18:00
18:45
19:30
20:15
21:00
21:45
22:30
23:15
0:00
Time [Hour:Minutes]
SPL Leq dB(A) (15 min)
SPL L10 dB(A) (15 min)
SPL L90 dB(A) (15 min)


Ambient Noise Survey: Glenross Drive, Lennox Heads: 20/03/2011
Sound Pressure Level [dB(A)]
85
75
65
55
45
35
25
0:00
0:45
1:30
2:15
3:00
3:45
4:30
5:15
6:00
6:45
7:30
8:15
9:00
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11:15
12:00
12:45
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14:15
15:00
15:45
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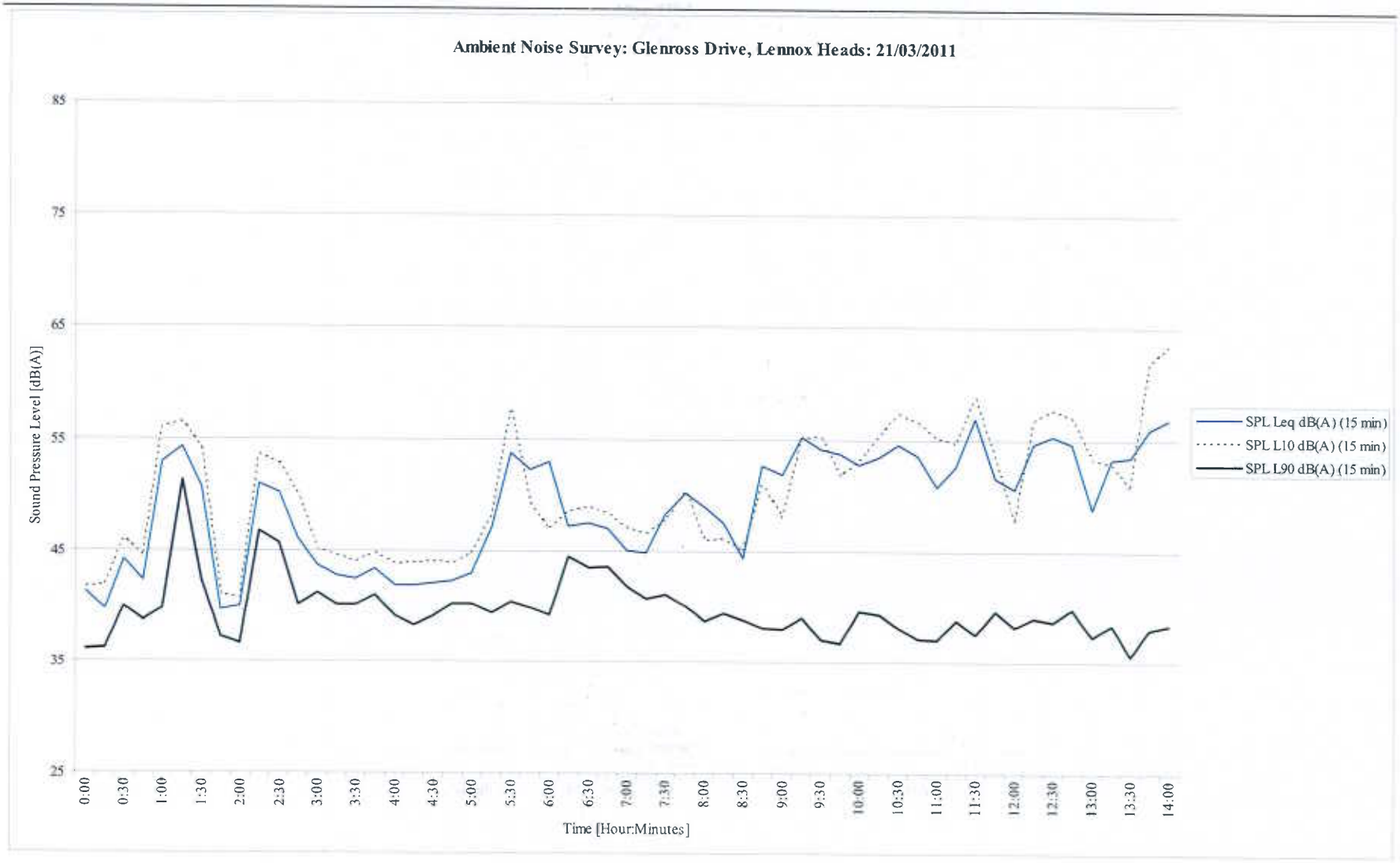
18:00
18:45
19:30
20:15
21:00
21:45
22:30
23:15
0:00
Time [Hour:Minutes]
SPL Leq dB(A) (15 min)
SPL L10 dB(A) (15 min)
SPL L90 dB(A) (15 min)


Ambient Noise Survey: Glenross Drive, Lennox Heads: 21/03/2011
Sound Pressure Level [dB(A)]
85
75
65
55
45
35
25
0:00
0:30
1:00
1:30
2:00
2:30
3:00
3:30
4:00
4:30
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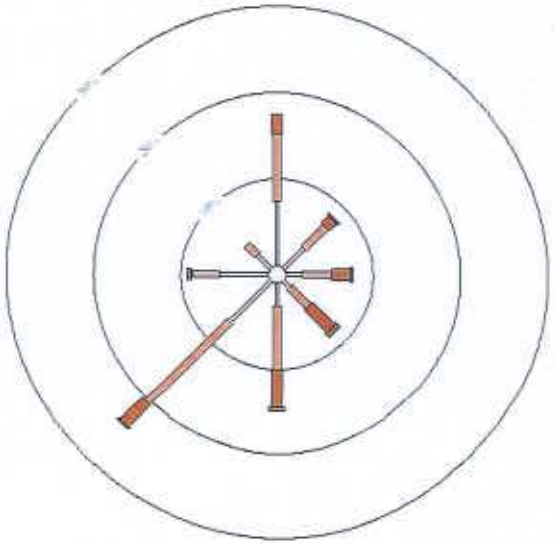
10:30
11:00
11:30
12:00
12:30
13:00
13:30
14:00
Time [Hour:Minutes]
SPL Leq dB(A) (15 min)
SPL L10 dB(A) (15 min)
SPL L90 dB(A) (15 min)

**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am Jan
428 Total Observations



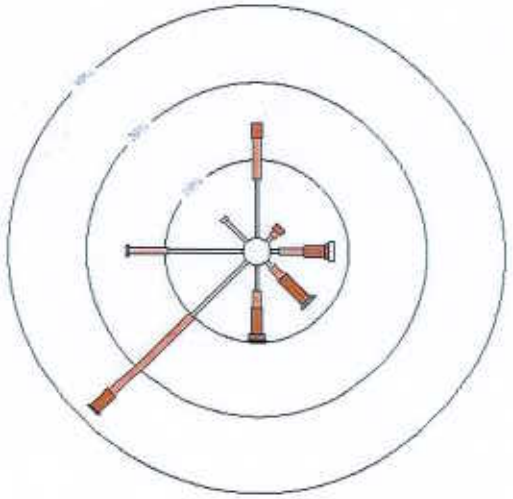




**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am Feb
391 Total Observations



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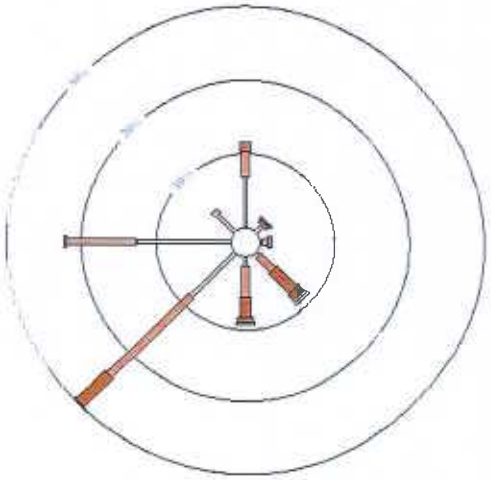
**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am Mar
414 Total Observations



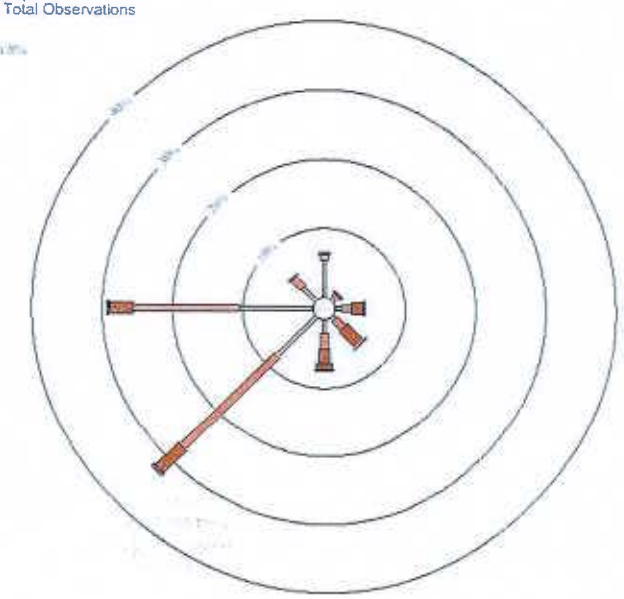




**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

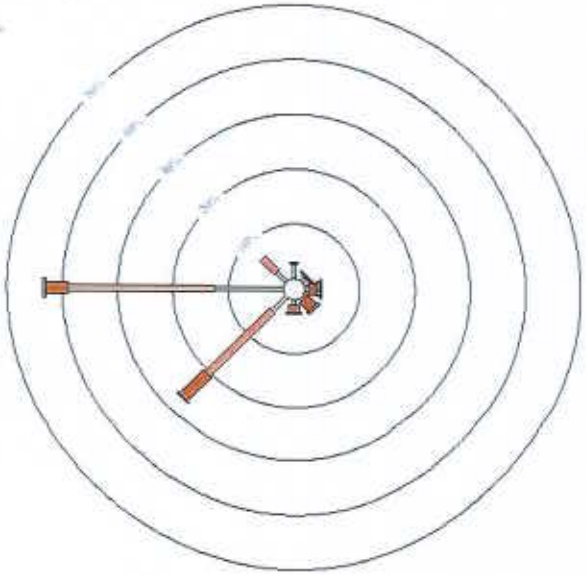
9 am Apr
401 Total Observations



**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am May
430 Total Observations



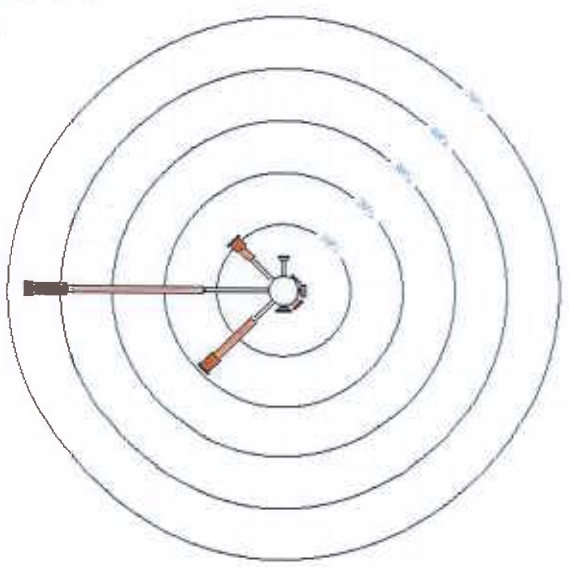




**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am Jun
392 Total Observations



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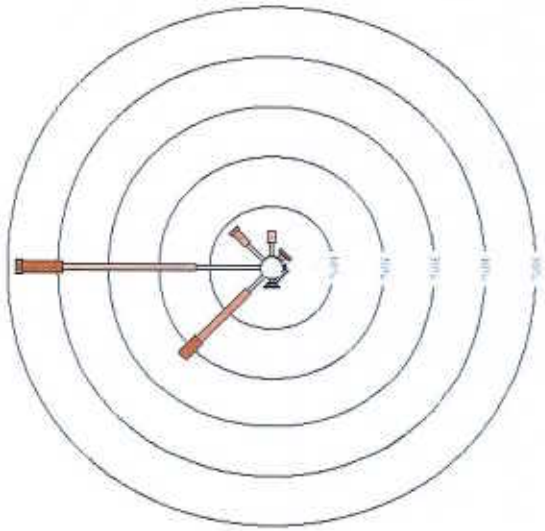
**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**
Site No: 058198 • Opened Nov 1992 • Still Open • Latitude: -28.8353° • Longitude: 153.5585° • Elevation 1 m

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am Jul
426 Total Observations

Calm 1.1%





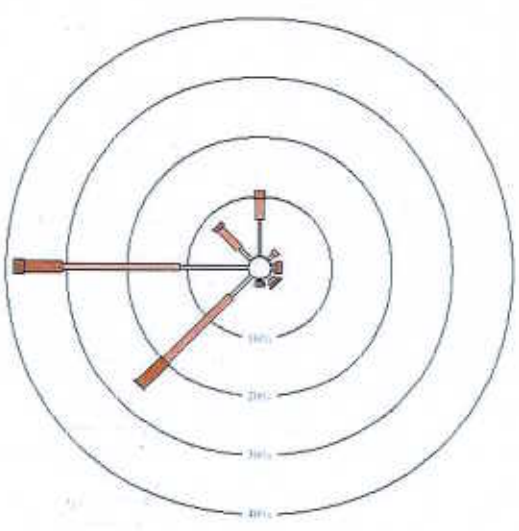


**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**
Site No: 058198 • Opened Nov 1992 • Still Open • Latitude: -28.8353° • Longitude: 153.5585° • Elevation 1 m

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am Aug
425 Total Observations

Calm 0%



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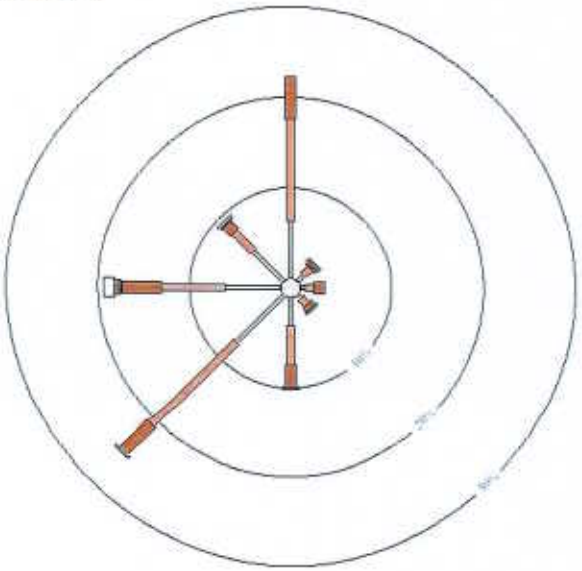
**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am Sep
411 Total Observations



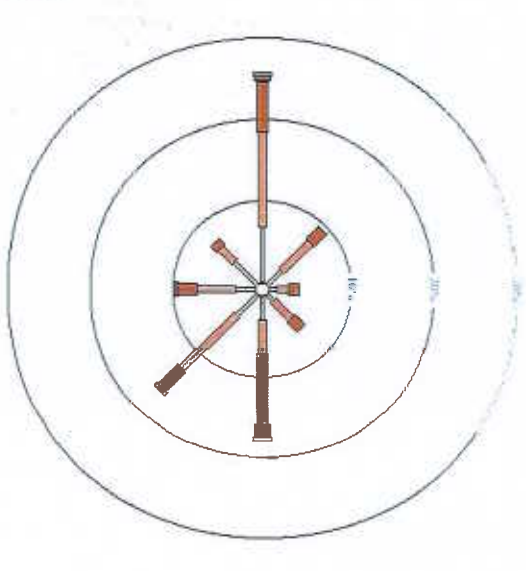




**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am Oct
426 Total Observations



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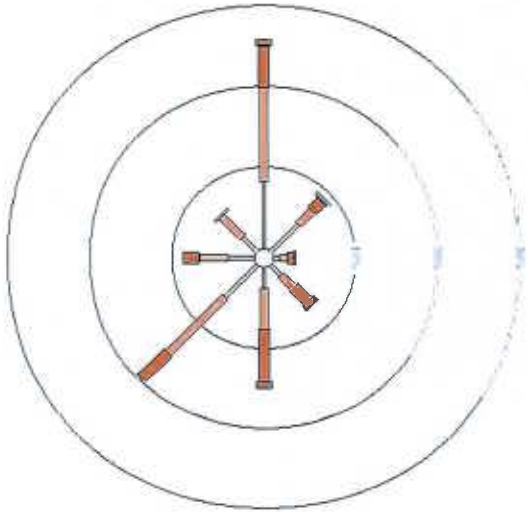
**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

9 am Nov
420 Total Observations



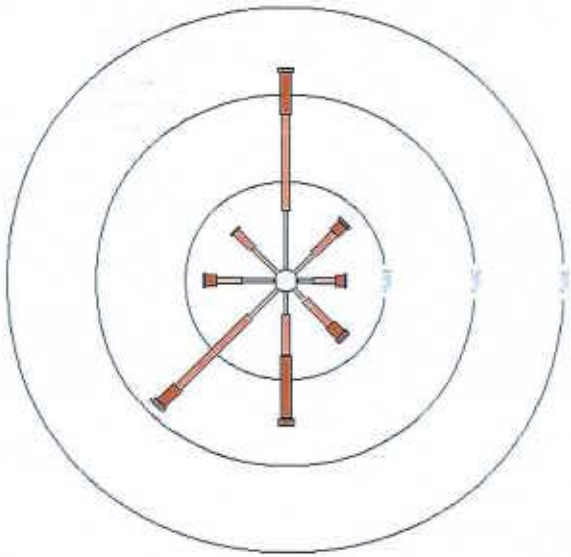




**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

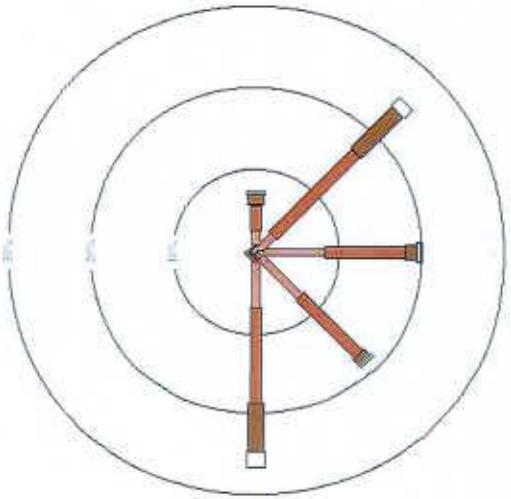
9 am Dec
450 Total Observations



**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Jan
430 Total Observations



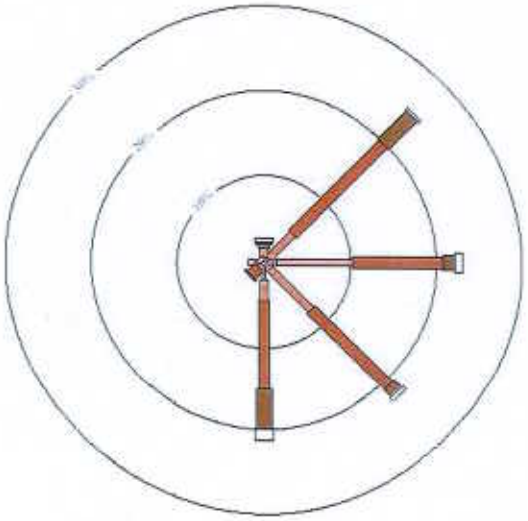




**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Feb
383 Total Observations



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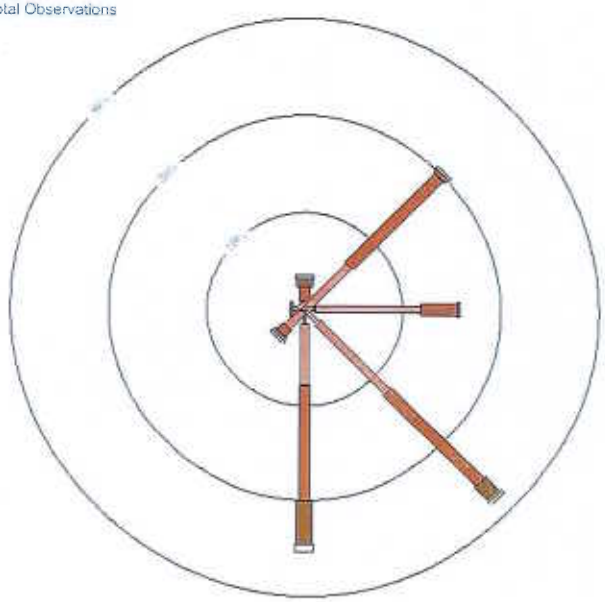
**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Mar
410 Total Observations

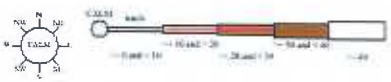




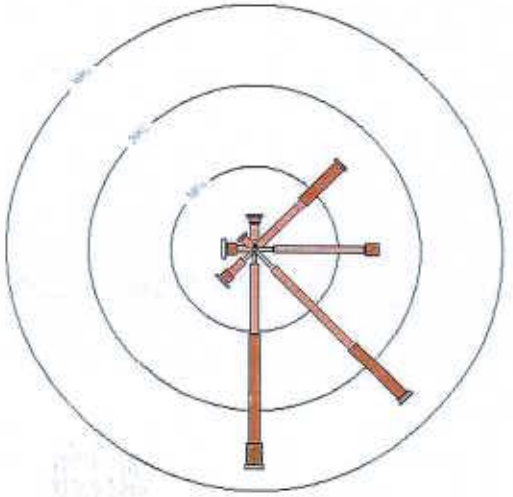


**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.



3 pm Apr
403 Total Observations



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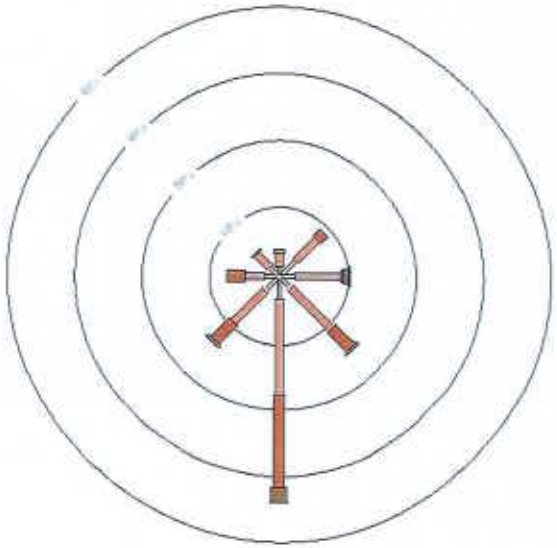
**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm May
429 Total Observations



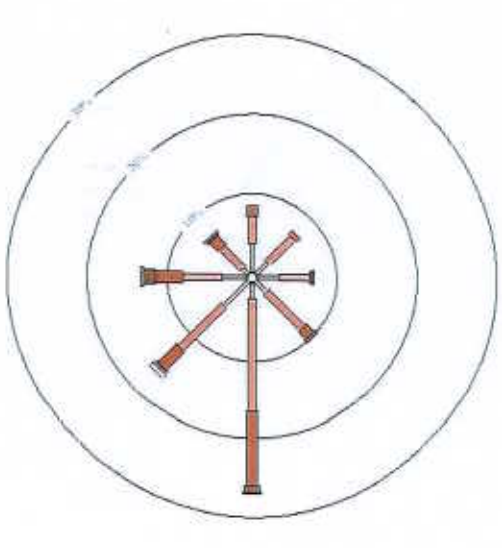




**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Jun
400 Total Observations



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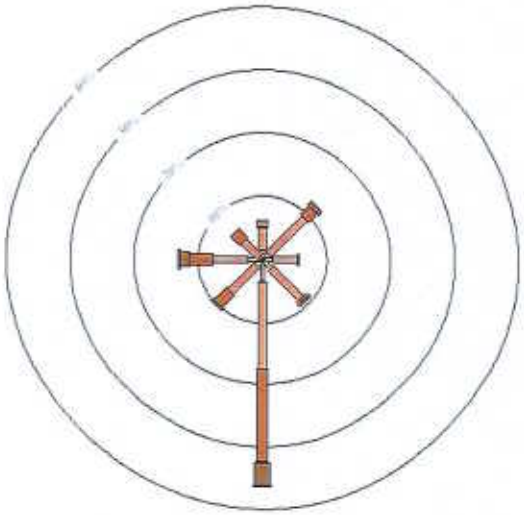
**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Jul
425 Total Observations



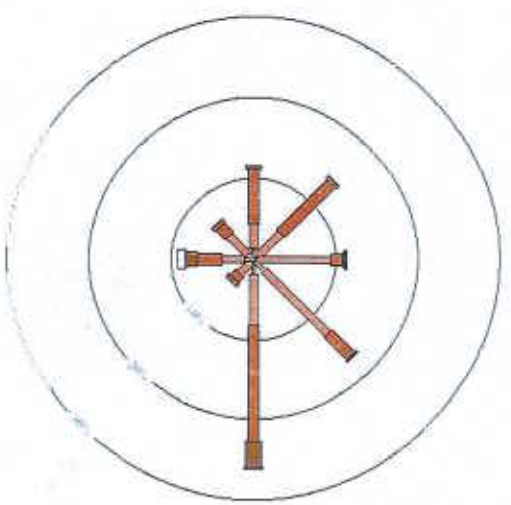




**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Aug
428 Total Observations



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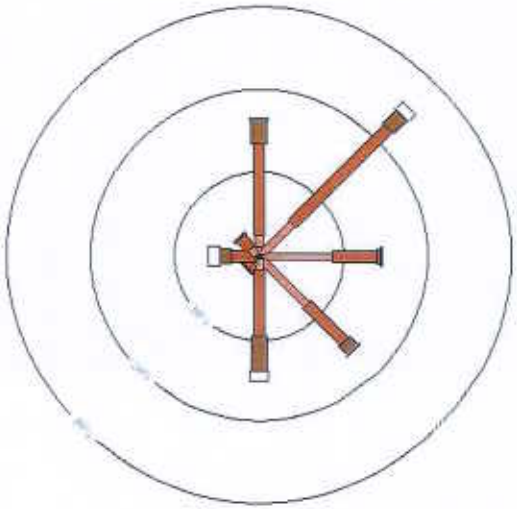
**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Sep
414 Total Observations



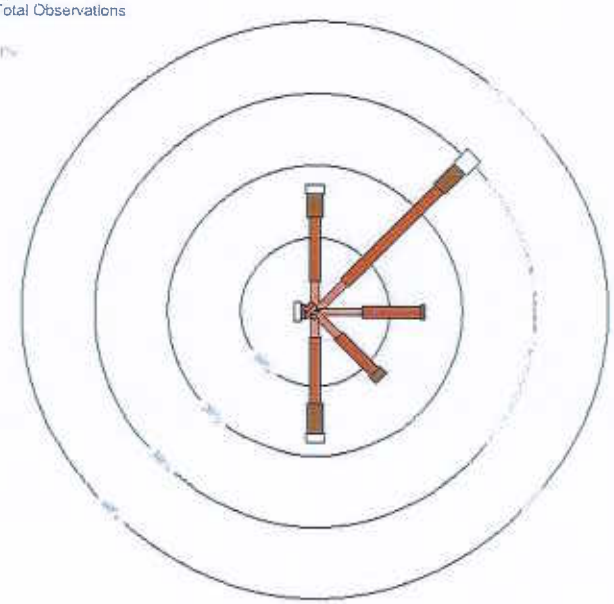




**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Oct
434 Total Observations



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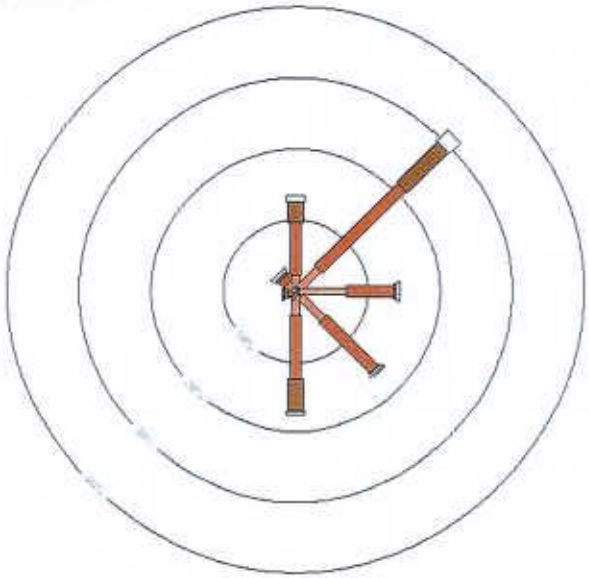
**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Nov
420 Total Observations

Calm *





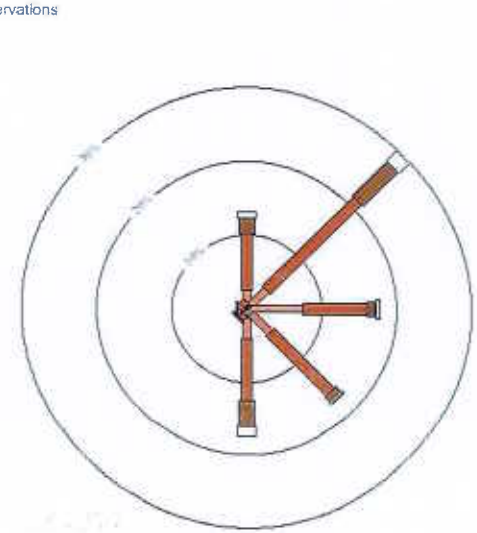


**Rose of Wind direction versus Wind speed in km/h (19 Nov 1992 to 31 Dec 2006)**
**BALLINA AIRPORT AWS**

An asterisk (*) indicates that calm is less than 0.5%.
Other important info about this analysis is available in the accompanying notes.

3 pm Dec
456 Total Observations

Calm *



## Pen3D Model Explanation:

The PEN3D General Prediction Model (GPM) is based on the method contained in the book "Engineering Noise Control - Theory and Practice" by David Bies & Colin H Hansen of the Department of Mechanical Engineering, University Of Adelaide, Publisher Unwin Hyman 1988. Chapter 5.9 Pages 117 to 127 describes the model.

The PEN3D software was originally developed in 1993 and has been in constant development and review.

The basic equation adopted by the GPM is:

$$Lp = Lw - 20 \log10(r) - 10\log10(4\pi) + AE$$

Where

Lp is the sound pressure level at an observer
Lw is the sound power level of the source
20 log10r - 10log10(4PI) is the Distance attenuation
AE is the excess attenuation factors and is determined as the sum of the contributions

The excess attenuation factors AE comprise

$$AE = Aa + Ag + Am + Ab + Af$$

Where

Aa = Excess attenuation due to air absorbtion
Ag = Excess attenuation due to ground reflection
Am = Excess attenuation due to meteorological effects
Ab = Excess attenuation due to barriers; and
Af = Excess attenuation due to forests

The following sections describe the excess attenuation factors and the implementation within PEN3D.

**Air Absorbtion Excess Attenuation**
***Aa***, the attenuation due to air absorption is dependent upon temperature and relative humidity. The values used in the PEN noise model are based on Sutherlan, LC JF Piercy, H.E. Bass & L.B. Evans 1974. Method for calculating the absorption of sound by the atmosphere. Journal of the Acoustical Society of America 56, Supplement 1 (abstract).

$$Aa = m\,r$$

where

m is the absorption per m; and
r is the actual distance from source to receiver

**Ground Reflection Excess Attenuation**
***Ag***, The excess attenuation due to ground reflection is obtained by combining the direct wave and the reflected wave incoherently, that is the energy from the ground wave is added to the direct wave.

$$R = \frac{Z \sin(\beta) - \rho c}{Z \sin(\beta) + \rho c}$$

where

- $\beta$ is the angle the reflected wave makes with the ground
- $Z$ is the complex ground impedance (a function of the flow resistivity);
- $\rho$ is the density of air; and
- $c$ the speed of sound.

The reflection loss $A_R$ is given by -20*log10(R)

$$Ag = -10\log10(1 + 10^{-AR/10})$$

**Meterological Excess Attenuation**
***Am***, the excess attenuation due to meteorology is obtained by firstly calculating the vertical sonic gradient due to wind and temperature effects. It is calculated by reference to the method outlined in "A Method to To Incorporate Meteorological Effects into A Road Traffic Model" by MA Simpson, Proceedings of Acoustics 2004.

**Barrier Excess Attenuation**
***Ab***, the excess attenuation due to barriers is obtained by firstly calculating the curved noise path due to wind and temperature effects. It is calculated by reference to the method outlined in "A Method to To Incorporate Meteorological Effects into A Road Traffic Model" by MA Simpson, Proceedings of Acoustics 2004.

If a barrier exists the effective location of the source and receiver is modified according to the method outlined in Tonin, R, "Estimating Noise Levels from Petrochemical Plants, Mines and Industrial Complexes", Acoustics Australia, 13(2):59-67, 1985.

**Forest Excess Attenuation**
***Af***, the excess attenuation due to forest is obtained by the following:

$$Af = 0.01\ r\ f^{(1/3)}$$

where

r = distance through the forest in (m), and
f = frequency in (Hz)

**ROAD TRAFFIC NOISE IMPACT PREDICTIONS**

POINT CALCULATIONS
Pen3D2000 V 1.9.11
Project Code:10453a
Project Description:Noise assessment of Newrybar Swamp Rd Quarry

File:existing traffic

Monday 04 Mar, 2013 at 12:55:51
CoRTN Calculations
All road segments included. Segmentation angle: 10degrees. Road elevations apply.

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Leq(15hour) (dB(A)) |
|---|---|---|---|---|
| east | 1256.3 | -429.9 | 1.8 | 55.7 |
| south | 1143.9 | -557.4 | 1.8 | 45.7 |
| southwest | 401.3 | -923.2 | 1.8 | 28.6 |
| west | 305.7 | -473.1 | 1.8 | 30 |
| northwest | 230.5 | 172.1 | 1.8 | 27.3 |
| east across newrybar | 1348.3 | -533.6 | 1.8 | 49.8 |

Project Description:Noise assessment of Newrybar Swamp Rd Quarry

File: Existing traffic with propsoed quarry traffic

Monday 04 Mar, 2013 at 12:56:06
CoRTN Calculations
All road segments included. Segmentation angle: 10degrees. Road elevations apply.

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Leq(15hour) (dB(A)) |
|---|---|---|---|---|
| east | 1256.3 | -429.9 | 1.8 | 56.9 |
| south | 1143.9 | -557.4 | 1.8 | 47 |
| southwest | 401.3 | -923.2 | 1.8 | 29.8 |
| west | 305.7 | -473.1 | 1.8 | 31.3 |
| northwest | 230.5 | 172.1 | 1.8 | 28.5 |
| east across newrybar | 1348.3 | -533.6 | 1.8 | 51 |

**OPERATIONAL NOISE IMPACT PREDICTIONS (Free-field Levels)**

**START OF QUARRY TO THE NORTH**
POINT CALCULATIONS
Pen3D2000 V 1.9.11
Project Code:10453a
Project Description:Noise assessment of Newrybar Swamp Rd Quarry
File:Z:\CRG ACOUSTICS\ACOUSTIC JOBS\10453a Sandmine Lennox Head\10453a_sandmine april 2012 start.PEN
File Description:Data file covering start
Tuesday 05 Mar, 2013 at 11:38:22
Environmental Calculations
All point and line sources included. Line source segmentation angle: 1 degrees. Calculations for specified meteorology.
Noise level results are the logarithmic addition of all the noise sources
Noise level results incorporate the incoherent ground reflection algorithm
Meteorology :
Wind speed 0.0 (m/s) Wind direction 0 Mast height 10.0 (m)
Temperature 20.0 (C) Temperature Gradient 0.0 (C/100m) Humidity 50.0 (%)
Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R1 | 553772.1 | 6815867.2 | 1.8 | 3 | 38.9 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 31.3 |
| Generator | 553406.4 | 6816251.5 | 1 | 22.1 |
| LOADER | 553327.3 | 6816183.5 | 2.5 | 23 |
| LOADER | 553284.2 | 6816216.4 | 2.5 | 20.1 |
| LOADER | 553258.3 | 6816248.7 | 2.5 | 21.3 |
| Road truck | 553382 | 6816257.5 | 2.5 | 16.9 |
| Road truck | 553365.8 | 6816259.8 | 2.5 | 16.8 |
| Road truck | 553348.8 | 6816262.2 | 2.5 | 16.8 |
| Road truck | 553330.8 | 6816264.7 | 2.5 | 16.7 |
| Road truck | 553312 | 6816267.4 | 2.5 | 16.7 |
| Road truck | 553295.1 | 6816269.8 | 2.5 | 9.7 |
| Road truck | 553288.9 | 6816262.9 | 2.5 | 10.1 |
| Road truck | 553290.6 | 6816248.9 | 2.5 | 9.2 |
| Road truck | 553299.7 | 6816243 | 2.5 | 10.6 |
| Road truck | 553315.9 | 6816243.3 | 2.5 | 10.7 |
| Road truck | 553331.4 | 6816243.6 | 2.5 | 10.7 |
| Road truck | 553346.3 | 6816243.9 | 2.5 | 16.2 |
| Road truck | 553360.5 | 6816244.2 | 2.5 | 16.2 |
| Road truck | 553374.8 | 6816244 | 2.5 | 16.6 |
| Road truck | 553389.1 | 6816243.4 | 2.5 | 16.6 |
| Road truck | 553402.8 | 6816242.8 | 2.5 | 16.7 |
| Road truck | 553416.1 | 6816242.2 | 2.5 | 16.7 |
| Road truck | 553428.8 | 6816241.6 | 2.5 | 16.8 |
| Road truck | 553441.2 | 6816241 | 2.5 | 16.8 |
| Road truck | 553453.1 | 6816240.5 | 2.5 | 16.8 |
| Road truck | 553464.6 | 6816240 | 2.5 | 16.9 |
| Road truck | 553475.8 | 6816239.5 | 2.5 | 16.9 |
| Road truck | 553486.6 | 6816239 | 2.5 | 16.9 |
| Road truck | 553497.2 | 6816238.5 | 2.5 | 16.9 |
| Road truck | 553507.4 | 6816238.1 | 2.5 | 17 |
| Road truck | 553517.4 | 6816237.6 | 2.5 | 17 |
| Road truck | 553522.3 | 6816237.4 | 2.5 | -10.8 |
| Road truck | 553529.2 | 6816244.4 | 2.5 | 17.2 |
| Road truck | 553539.3 | 6816243.1 | 2.5 | 17.3 |
| Road truck | 553549 | 6816241.8 | 2.5 | 17.3 |
| Road truck | 553558.5 | 6816240.5 | 2.5 | 17.4 |
| Road truck | 553567.7 | 6816239.2 | 2.5 | 17.4 |
| Road truck | 553576.8 | 6816238 | 2.5 | 17.4 |
| Road truck | 553585.5 | 6816236.9 | 2.5 | 17.4 |
| Road truck | 553594.1 | 6816235.7 | 2.5 | 17.4 |
| Road truck | 553602.5 | 6816234.6 | 2.5 | 17.4 |
| Road truck | 553610.7 | 6816233.5 | 2.5 | 17.5 |
| Road truck | 553618.7 | 6816232.4 | 2.5 | 17.5 |
| Road truck | 553626.6 | 6816231.4 | 2.5 | 17.5 |
| Road truck | 553634.3 | 6816230.4 | 2.5 | 17.5 |
| Road truck | 553641.9 | 6816229.3 | 2.5 | 17.5 |
| Road truck | 553649.3 | 6816228.4 | 2.5 | 17.5 |
| Road truck | 553656.6 | 6816227.4 | 2.5 | 17.5 |
| Road truck | 553663.8 | 6816226.4 | 2.5 | 17.5 |
| Road truck | 553670.9 | 6816225.5 | 2.5 | 17.5 |
| Road truck | 553677.8 | 6816224.5 | 2.5 | 17.6 |

| | | | | |
|---|---|---|---|---|
| Road truck | 553684.7 | 6816223.6 | 2.5 | 17.6 |
| Road truck | 553691.5 | 6816222.7 | 2.5 | 17.6 |
| Road truck | 553698.2 | 6816221.8 | 2.5 | 17.6 |
| Road truck | 553704.8 | 6816220.9 | 2.5 | 17.6 |
| Road truck | 553711.3 | 6816220.1 | 2.5 | 17.6 |
| Road truck | 553717.8 | 6816219.2 | 2.5 | 17.6 |
| Road truck | 553724.1 | 6816218.4 | 2.5 | 17.6 |
| Road truck | 553730.5 | 6816217.5 | 2.5 | 17.7 |
| Road truck | 553736.7 | 6816216.7 | 2.5 | 17.7 |
| Road truck | 553743 | 6816215.8 | 2.5 | 17.7 |
| Road truck | 553749.1 | 6816215 | 2.5 | 17.7 |
| Road truck | 553755.3 | 6816214.2 | 2.5 | 17.7 |
| Road truck | 553761.4 | 6816213.4 | 2.5 | 17.7 |
| Road truck | 553767.4 | 6816212.6 | 2.5 | 17.7 |
| Road truck | 553773.5 | 6816211.8 | 2.5 | 17.7 |
| Road truck | 553779.4 | 6816211 | 2.5 | 17.7 |
| Road truck | 553785.4 | 6816210.2 | 2.5 | 17.7 |
| Road truck | 553791.4 | 6816209.4 | 2.5 | 17.8 |
| Road truck | 553797.3 | 6816208.6 | 2.5 | 17.8 |
| Road truck | 553800.4 | 6816208.2 | 2.5 | 3.1 |
| Road truck | 553803.3 | 6816205.7 | 2.5 | 18.7 |
| Road truck | 553808.7 | 6816200.8 | 2.5 | 18.8 |
| Road truck | 553814 | 6816196.1 | 2.5 | 18.8 |
| Road truck | 553819.2 | 6816191.5 | 2.5 | 18.8 |
| Road truck | 553824.2 | 6816187 | 2.5 | 18.8 |
| Road truck | 553829.2 | 6816182.6 | 2.5 | 18.8 |
| Road truck | 553834 | 6816178.3 | 2.5 | 18.9 |
| Road truck | 553838.8 | 6816174 | 2.5 | 18.9 |
| Road truck | 553843.4 | 6816169.9 | 2.5 | 18.9 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 17.7 |
| HAUL TRUCK | 553475.4 | 6816194.3 | 2.5 | 15.8 |
| HAUL TRUCK | 553462.6 | 6816196.7 | 2.5 | 15.8 |
| HAUL TRUCK | 553449.1 | 6816199.3 | 2.5 | 15.7 |
| HAUL TRUCK | 553435 | 6816201.9 | 2.5 | 15.7 |
| HAUL TRUCK | 553420.1 | 6816204.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553404.4 | 6816207.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553387.8 | 6816210.8 | 2.5 | 15.6 |
| HAUL TRUCK | 553370.2 | 6816214.1 | 2.5 | 15.5 |
| HAUL TRUCK | 553351.5 | 6816217.6 | 2.5 | 11 |
| HAUL TRUCK | 553331.6 | 6816221.3 | 2.5 | 10.9 |
| HAUL TRUCK | 553310.4 | 6816225.3 | 2.5 | 10.8 |
| HAUL TRUCK | 553287.7 | 6816229.5 | 2.5 | 10.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 9 |
| HAUL TRUCK | 553474.1 | 6816176.3 | 2.5 | 16.7 |
| HAUL TRUCK | 553477.3 | 6816162.5 | 2.5 | 16.7 |
| HAUL TRUCK | 553480.4 | 6816149.4 | 2.5 | 16.7 |
| HAUL TRUCK | 553482.7 | 6816139.5 | 2.5 | 14.5 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 31.6 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2A | 553848.7 | 6815742.3 | 1.8 | 4.2 | 35.4 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 28.5 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.9 |
| LOADER | 553326.9 | 6816183.8 | 2.5 | 22.9 |
| LOADER | 553275.4 | 6816227.4 | 2.5 | 22.1 |
| LOADER | 553248.4 | 6816260.9 | 2.5 | 14.8 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 8 |
| Road truck | 553361.3 | 6816260.4 | 2.5 | 8.9 |
| Road truck | 553341.2 | 6816263.3 | 2.5 | 9.5 |
| Road truck | 553320.2 | 6816266.2 | 2.5 | 9.9 |
| Road truck | 553298.8 | 6816269.3 | 2.5 | 9.7 |
| Road truck | 553289.2 | 6816260.5 | 2.5 | 9.6 |
| Road truck | 553290.9 | 6816246.6 | 2.5 | 5.4 |
| Road truck | 553300.8 | 6816243 | 2.5 | 9.5 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 9.5 |
| Road truck | 553337.1 | 6816243.7 | 2.5 | 9.5 |
| Road truck | 553354.3 | 6816244.1 | 2.5 | 9.1 |
| Road truck | 553365 | 6816244.3 | 2.5 | 3.4 |
| Road truck | 553376.1 | 6816244 | 2.5 | 8.7 |
| Road truck | 553393.1 | 6816243.2 | 2.5 | 7.7 |

| | | | | |
|---|---|---|---|---|
| Road truck | 553409.4 | 6816242.5 | 2.5 | 10 |
| Road truck | 553425.3 | 6816241.8 | 2.5 | 14.9 |
| Road truck | 553440.6 | 6816241.1 | 2.5 | 14.9 |
| Road truck | 553455.5 | 6816240.4 | 2.5 | 14.9 |
| Road truck | 553469.9 | 6816239.7 | 2.5 | 15 |
| Road truck | 553483.9 | 6816239.1 | 2.5 | 15 |
| Road truck | 553497.5 | 6816238.5 | 2.5 | 6.9 |
| Road truck | 553510.7 | 6816237.9 | 2.5 | 6.9 |
| Road truck | 553519.8 | 6816237.5 | 2.5 | 2.9 |
| Road truck | 553530.8 | 6816244.2 | 2.5 | 7.1 |
| Road truck | 553544.1 | 6816242.4 | 2.5 | 7.5 |
| Road truck | 553556.9 | 6816240.7 | 2.5 | 7.5 |
| Road truck | 553569.4 | 6816239 | 2.5 | 7.6 |
| Road truck | 553581.6 | 6816237.4 | 2.5 | 7.5 |
| Road truck | 553593.5 | 6816235.8 | 2.5 | 15.5 |
| Road truck | 553605 | 6816234.3 | 2.5 | 11.1 |
| Road truck | 553616.4 | 6816232.8 | 2.5 | 11 |
| Road truck | 553627.4 | 6816231.3 | 2.5 | 11 |
| Road truck | 553638.3 | 6816229.8 | 2.5 | 15.6 |
| Road truck | 553648.9 | 6816228.4 | 2.5 | 15.6 |
| Road truck | 553659.3 | 6816227 | 2.5 | 15.6 |
| Road truck | 553669.4 | 6816225.7 | 2.5 | 15.6 |
| Road truck | 553679.5 | 6816224.3 | 2.5 | 15.7 |
| Road truck | 553689.3 | 6816223 | 2.5 | 15.7 |
| Road truck | 553698.9 | 6816221.7 | 2.5 | 15.7 |
| Road truck | 553708.5 | 6816220.5 | 2.5 | 15.7 |
| Road truck | 553717.8 | 6816219.2 | 2.5 | 15.7 |
| Road truck | 553727 | 6816218 | 2.5 | 15.8 |
| Road truck | 553736.1 | 6816216.8 | 2.5 | 15.8 |
| Road truck | 553745.1 | 6816215.6 | 2.5 | 15.8 |
| Road truck | 553754 | 6816214.4 | 2.5 | 15.8 |
| Road truck | 553762.7 | 6816213.2 | 2.5 | 15.8 |
| Road truck | 553771.4 | 6816212 | 2.5 | 15.9 |
| Road truck | 553780 | 6816210.9 | 2.5 | 15.9 |
| Road truck | 553788.4 | 6816209.8 | 2.5 | 15.9 |
| Road truck | 553796.6 | 6816208.7 | 2.5 | 15.6 |
| Road truck | 553805 | 6816204.2 | 2.5 | 17.5 |
| Road truck | 553813.7 | 6816196.4 | 2.5 | 17.6 |
| Road truck | 553822.1 | 6816188.9 | 2.5 | 17.6 |
| Road truck | 553830.2 | 6816181.7 | 2.5 | 17.7 |
| Road truck | 553838.1 | 6816174.7 | 2.5 | 17.7 |
| Road truck | 553845.5 | 6816168 | 2.5 | 17.6 |
| HAUL TRUCK | 553473.8 | 6816194.6 | 2.5 | 13.8 |
| HAUL TRUCK | 553457.7 | 6816197.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553440.9 | 6816200.8 | 2.5 | 9.3 |
| HAUL TRUCK | 553423.3 | 6816204.1 | 2.5 | 7.8 |
| HAUL TRUCK | 553404.8 | 6816207.6 | 2.5 | 8.4 |
| HAUL TRUCK | 553385.5 | 6816211.2 | 2.5 | 8.9 |
| HAUL TRUCK | 553365.1 | 6816215 | 2.5 | 9.6 |
| HAUL TRUCK | 553343.7 | 6816219 | 2.5 | 9.6 |
| HAUL TRUCK | 553321 | 6816223.3 | 2.5 | 9.5 |
| HAUL TRUCK | 553297 | 6816227.8 | 2.5 | 9.5 |
| HAUL TRUCK | 553271.6 | 6816232.6 | 2.5 | 9.5 |
| HAUL TRUCK | 553254.6 | 6816235.7 | 2.5 | 3.8 |
| HAUL TRUCK | 553474.9 | 6816173 | 2.5 | 10.8 |
| HAUL TRUCK | 553479.5 | 6816152.9 | 2.5 | 9.6 |
| HAUL TRUCK | 553482.6 | 6816139.6 | 2.5 | 5.3 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 28.8 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2B | 554002.8 | 6815828.9 | 1.8 | 4 | 35.9 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 26.5 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.8 |
| LOADER | 553326.8 | 6816183.8 | 2.5 | 25.3 |
| LOADER | 553284.8 | 6816215.6 | 2.5 | 22.1 |
| LOADER | 553260.9 | 6816245.4 | 2.5 | 22 |
| LOADER | 553246.1 | 6816263.9 | 2.5 | 14.1 |
| Road truck | 553375.3 | 6816258.4 | 2.5 | 16 |
| Road truck | 553344.6 | 6816262.8 | 2.5 | 15.9 |
| Road truck | 553311.5 | 6816267.5 | 2.5 | 15.7 |

| | | | | | |
|---|---|---|---|---|---|
| Road truck | 553291 | 6816270.4 | 2.5 | | 8 |
| Road truck | 553289.1 | 6816261.6 | 2.5 | | 12.8 |
| Road truck | 553290.8 | 6816247.6 | 2.5 | | 10.2 |
| Road truck | 553305 | 6816243.1 | 2.5 | | 14.8 |
| Road truck | 553331.1 | 6816243.6 | 2.5 | | 14.8 |
| Road truck | 553355.6 | 6816244.1 | 2.5 | | 14.9 |
| Road truck | 553380.2 | 6816243.8 | 2.5 | | 15.4 |
| Road truck | 553404.8 | 6816242.7 | 2.5 | | 15.5 |
| Road truck | 553428 | 6816241.6 | 2.5 | | 15.6 |
| Road truck | 553450 | 6816240.6 | 2.5 | | 15.7 |
| Road truck | 553470.9 | 6816239.7 | 2.5 | | 15.7 |
| Road truck | 553490.8 | 6816238.8 | 2.5 | | 15.8 |
| Road truck | 553509.7 | 6816237.9 | 2.5 | | 15.8 |
| Road truck | 553520.6 | 6816237.5 | 2.5 | | 8.7 |
| Road truck | 553533.9 | 6816243.8 | 2.5 | | 16.3 |
| Road truck | 553552.9 | 6816241.2 | 2.5 | | 16.5 |
| Road truck | 553570.9 | 6816238.8 | 2.5 | | 16.5 |
| Road truck | 553588 | 6816236.5 | 2.5 | | 16.5 |
| Road truck | 553604.4 | 6816234.4 | 2.5 | | 16.6 |
| Road truck | 553620.1 | 6816232.3 | 2.5 | | 16.7 |
| Road truck | 553635.1 | 6816230.3 | 2.5 | | 16.7 |
| Road truck | 553649.4 | 6816228.3 | 2.5 | | 16.7 |
| Road truck | 553663.3 | 6816226.5 | 2.5 | | 16.8 |
| Road truck | 553676.5 | 6816224.7 | 2.5 | | 16.8 |
| Road truck | 553689.3 | 6816223 | 2.5 | | 12.1 |
| Road truck | 553701.7 | 6816221.4 | 2.5 | | 16.9 |
| Road truck | 553713.6 | 6816219.8 | 2.5 | | 16.9 |
| Road truck | 553725.1 | 6816218.2 | 2.5 | | 17 |
| Road truck | 553736.3 | 6816216.7 | 2.5 | | 17 |
| Road truck | 553747.1 | 6816215.3 | 2.5 | | 17 |
| Road truck | 553757.6 | 6816213.9 | 2.5 | | 17.1 |
| Road truck | 553767.7 | 6816212.5 | 2.5 | | 17.1 |
| Road truck | 553777.6 | 6816211.2 | 2.5 | | 17.1 |
| Road truck | 553787.3 | 6816209.9 | 2.5 | | 17.2 |
| Road truck | 553796.3 | 6816208.7 | 2.5 | | 16.9 |
| Road truck | 553808.4 | 6816201.1 | 2.5 | | 20.9 |
| Road truck | 553823.2 | 6816187.9 | 2.5 | | 21 |
| Road truck | 553836.7 | 6816175.8 | 2.5 | | 21.1 |
| Road truck | 553846.2 | 6816167.5 | 2.5 | | 18.2 |
| HAUL TRUCK | 553468.1 | 6816195.7 | 2.5 | | 15.2 |
| HAUL TRUCK | 553439.5 | 6816201.1 | 2.5 | | 15.1 |
| HAUL TRUCK | 553408.3 | 6816206.9 | 2.5 | | 15 |
| HAUL TRUCK | 553374.3 | 6816213.3 | 2.5 | | 14.9 |
| HAUL TRUCK | 553337.1 | 6816220.3 | 2.5 | | 14.9 |
| HAUL TRUCK | 553296 | 6816228 | 2.5 | | 14.8 |
| HAUL TRUCK | 553262.6 | 6816234.3 | 2.5 | | 11.7 |
| HAUL TRUCK | 553474.2 | 6816175.7 | 2.5 | | 13 |
| HAUL TRUCK | 553477.8 | 6816160.4 | 2.5 | | 13.1 |
| HAUL TRUCK | 553481.2 | 6816145.6 | 2.5 | | 13.1 |
| HAUL TRUCK | 553483.2 | 6816137.2 | 2.5 | | 5.6 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | | 26.7 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R3 | 553634.8 | 6815756.9 | 1.8 | 3.6 | 35.8 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 28.9 |
| Generator | 553406.4 | 6816251.5 | 1 | 21.4 |
| LOADER | 553346 | 6816172.7 | 2.5 | 20.4 |
| LOADER | 553327.3 | 6816183.6 | 2.5 | 20.4 |
| LOADER | 553307 | 6816195.3 | 2.5 | 20.4 |
| LOADER | 553296.1 | 6816201.6 | 2.5 | -1.4 |
| LOADER | 553271.8 | 6816231.8 | 2.5 | 24.7 |
| Road truck | 553384 | 6816257.2 | 2.5 | 9.9 |
| Road truck | 553372.1 | 6816258.9 | 2.5 | 9.9 |
| Road truck | 553359.9 | 6816260.6 | 2.5 | 9.9 |
| Road truck | 553347.4 | 6816262.4 | 2.5 | 9.9 |
| Road truck | 553334.5 | 6816264.2 | 2.5 | 9.9 |
| Road truck | 553321.3 | 6816266.1 | 2.5 | 9.9 |
| Road truck | 553307.6 | 6816268 | 2.5 | 9.9 |
| Road truck | 553294.4 | 6816269.9 | 2.5 | 9.4 |
| Road truck | 553289.4 | 6816259.2 | 2.5 | 12 |

| | | | | |
|---|---|---|---|---|
| Road truck | 553291 | 6816245.4 | 2.5 | 5.9 |
| Road truck | 553297.6 | 6816242.9 | 2.5 | 9.7 |
| Road truck | 553309.8 | 6816243.2 | 2.5 | 9.7 |
| Road truck | 553321.8 | 6816243.4 | 2.5 | 9.7 |
| Road truck | 553333.5 | 6816243.7 | 2.5 | 9.7 |
| Road truck | 553345 | 6816243.9 | 2.5 | 9.7 |
| Road truck | 553356.3 | 6816244.1 | 2.5 | 9.7 |
| Road truck | 553364.6 | 6816244.3 | 2.5 | 6.7 |
| Road truck | 553373 | 6816244.1 | 2.5 | 9.8 |
| Road truck | 553384.2 | 6816243.6 | 2.5 | 9.8 |
| Road truck | 553395.1 | 6816243.1 | 2.5 | 9.8 |
| Road truck | 553405.7 | 6816242.6 | 2.5 | 9.8 |
| Road truck | 553416.2 | 6816242.2 | 2.5 | 9.7 |
| Road truck | 553426.5 | 6816241.7 | 2.5 | 9.7 |
| Road truck | 553436.7 | 6816241.2 | 2.5 | 10 |
| Road truck | 553446.7 | 6816240.8 | 2.5 | 10 |
| Road truck | 553456.5 | 6816240.3 | 2.5 | 10 |
| Road truck | 553466.2 | 6816239.9 | 2.5 | 10 |
| Road truck | 553475.7 | 6816239.5 | 2.5 | 10 |
| Road truck | 553485.1 | 6816239.1 | 2.5 | 10 |
| Road truck | 553494.4 | 6816238.6 | 2.5 | 10 |
| Road truck | 553503.6 | 6816238.2 | 2.5 | 10 |
| Road truck | 553512.7 | 6816237.8 | 2.5 | 10 |
| Road truck | 553519.7 | 6816237.5 | 2.5 | 7.6 |
| Road truck | 553528.7 | 6816244.5 | 2.5 | 9.9 |
| Road truck | 553537.8 | 6816243.2 | 2.5 | 9.8 |
| Road truck | 553546.8 | 6816242 | 2.5 | 10.2 |
| Road truck | 553555.7 | 6816240.9 | 2.5 | 10.2 |
| Road truck | 553564.6 | 6816239.7 | 2.5 | 10.3 |
| Road truck | 553573.3 | 6816238.5 | 2.5 | 10.3 |
| Road truck | 553581.9 | 6816237.4 | 2.5 | 10.2 |
| Road truck | 553590.5 | 6816236.2 | 2.5 | 10.1 |
| Road truck | 553599 | 6816235.1 | 2.5 | 10.1 |
| Road truck | 553607.5 | 6816233.9 | 2.5 | 10.1 |
| Road truck | 553615.9 | 6816232.8 | 2.5 | 10.2 |
| Road truck | 553624.2 | 6816231.7 | 2.5 | 10.2 |
| Road truck | 553632.5 | 6816230.6 | 2.5 | 10.2 |
| Road truck | 553640.8 | 6816229.5 | 2.5 | 10 |
| Road truck | 553649 | 6816228.4 | 2.5 | 10.1 |
| Road truck | 553657.2 | 6816227.3 | 2.5 | 10.2 |
| Road truck | 553665.3 | 6816226.2 | 2.5 | 10.3 |
| Road truck | 553673.5 | 6816225.1 | 2.5 | 10.3 |
| Road truck | 553681.6 | 6816224 | 2.5 | 10.4 |
| Road truck | 553689.7 | 6816223 | 2.5 | 10.5 |
| Road truck | 553697.8 | 6816221.9 | 2.5 | 10.5 |
| Road truck | 553706 | 6816220.8 | 2.5 | 10.5 |
| Road truck | 553714.1 | 6816219.7 | 2.5 | 9.9 |
| Road truck | 553722.2 | 6816218.6 | 2.5 | 8.8 |
| Road truck | 553730.4 | 6816217.5 | 2.5 | 15.7 |
| Road truck | 553738.5 | 6816216.4 | 2.5 | 15.7 |
| Road truck | 553746.7 | 6816215.3 | 2.5 | 15.8 |
| Road truck | 553755 | 6816214.2 | 2.5 | 15.8 |
| Road truck | 553763.2 | 6816213.1 | 2.5 | 15.8 |
| Road truck | 553771.5 | 6816212 | 2.5 | 15.8 |
| Road truck | 553779.9 | 6816210.9 | 2.5 | 15.8 |
| Road truck | 553788.3 | 6816209.8 | 2.5 | 15.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 15.5 |
| Road truck | 553803.8 | 6816205.2 | 2.5 | 16 |
| Road truck | 553810.5 | 6816199.2 | 2.5 | 16 |
| Road truck | 553817 | 6816193.4 | 2.5 | 16 |
| Road truck | 553823.5 | 6816187.6 | 2.5 | 16 |
| Road truck | 553829.9 | 6816181.9 | 2.5 | 16.1 |
| Road truck | 553836.3 | 6816176.3 | 2.5 | 16.1 |
| Road truck | 553842.6 | 6816170.7 | 2.5 | 16.1 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 13.6 |
| HAUL TRUCK | 553477 | 6816194 | 2.5 | 9 |
| HAUL TRUCK | 553467.7 | 6816195.8 | 2.5 | 9 |
| HAUL TRUCK | 553458.1 | 6816197.6 | 2.5 | 9 |
| HAUL TRUCK | 553448.4 | 6816199.4 | 2.5 | 8.7 |
| HAUL TRUCK | 553438.4 | 6816201.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553428.1 | 6816203.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553417.7 | 6816205.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553406.9 | 6816207.2 | 2.5 | 8.8 |

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|---|---|---|---|---|
| HAUL TRUCK | 553395.8 | 6816209.3 | 2.5 | 8.8 |
| HAUL TRUCK | 553384.5 | 6816211.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553372.8 | 6816213.6 | 2.5 | 8.8 |
| HAUL TRUCK | 553360.7 | 6816215.9 | 2.5 | 9.2 |
| HAUL TRUCK | 553348.3 | 6816218.2 | 2.5 | 9.2 |
| HAUL TRUCK | 553335.4 | 6816220.6 | 2.5 | 9.2 |
| HAUL TRUCK | 553322.2 | 6816223.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553308.4 | 6816225.7 | 2.5 | 9.2 |
| HAUL TRUCK | 553294.2 | 6816228.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553279.5 | 6816231.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553264.1 | 6816234 | 2.5 | 9.2 |
| HAUL TRUCK | 553253.6 | 6816235.9 | 2.5 | 4.4 |
| HAUL TRUCK | 553478.3 | 6816158.4 | 2.5 | 16.7 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 29.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4A | 552797.6 | 6815469.6 | 1.8 | 16.9 | 30.7 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 20.1 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.8 |
| LOADER | 553348 | 6816171.5 | 2.5 | 16.9 |
| LOADER | 553334.5 | 6816179.3 | 2.5 | 16.9 |
| LOADER | 553321 | 6816187.2 | 2.5 | 16.9 |
| LOADER | 553307.5 | 6816195 | 2.5 | 16.9 |
| LOADER | 553298.4 | 6816200.3 | 2.5 | 12.4 |
| LOADER | 553291 | 6816208 | 2.5 | 17.1 |
| LOADER | 553280.8 | 6816220.7 | 2.5 | 17.1 |
| LOADER | 553270.4 | 6816233.6 | 2.5 | 17.1 |
| LOADER | 553259.9 | 6816246.6 | 2.5 | 17.1 |
| LOADER | 553249.3 | 6816259.8 | 2.5 | 17.1 |
| Road truck | 553380.2 | 6816257.7 | 2.5 | 10.7 |
| Road truck | 553361.1 | 6816260.4 | 2.5 | 10.7 |
| Road truck | 553342.4 | 6816263.1 | 2.5 | 10.8 |
| Road truck | 553324 | 6816265.7 | 2.5 | 10.8 |
| Road truck | 553305.9 | 6816268.3 | 2.5 | 10.8 |
| Road truck | 553292.5 | 6816270.2 | 2.5 | 7.9 |
| Road truck | 553289.6 | 6816257.8 | 2.5 | 12.6 |
| Road truck | 553291.2 | 6816244 | 2.5 | 2.3 |
| Road truck | 553301 | 6816243 | 2.5 | 11.4 |
| Road truck | 553320.8 | 6816243.4 | 2.5 | 11.4 |
| Road truck | 553341 | 6816243.8 | 2.5 | 11.3 |
| Road truck | 553359.3 | 6816244.2 | 2.5 | 10.2 |
| Road truck | 553377.5 | 6816243.9 | 2.5 | 11.1 |
| Road truck | 553398.2 | 6816243 | 2.5 | 11 |
| Road truck | 553419.4 | 6816242 | 2.5 | 11 |
| Road truck | 553441.1 | 6816241 | 2.5 | 10.9 |
| Road truck | 553463.4 | 6816240 | 2.5 | 10.9 |
| Road truck | 553486.3 | 6816239 | 2.5 | 10.9 |
| Road truck | 553509.9 | 6816237.9 | 2.5 | 10.8 |
| Road truck | 553522.1 | 6816237.4 | 2.5 | -8.6 |
| Road truck | 553535.4 | 6816243.6 | 2.5 | 10.4 |
| Road truck | 553558.6 | 6816240.5 | 2.5 | 10.4 |
| Road truck | 553582.4 | 6816237.3 | 2.5 | 10.3 |
| Road truck | 553606.9 | 6816234 | 2.5 | 10.3 |
| Road truck | 553632 | 6816230.7 | 2.5 | 10.2 |
| Road truck | 553657.9 | 6816227.2 | 2.5 | 10.2 |
| Road truck | 553684.6 | 6816223.6 | 2.5 | 10.1 |
| Road truck | 553712.1 | 6816220 | 2.5 | 10.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 10 |
| Road truck | 553770 | 6816212.2 | 2.5 | 10 |
| Road truck | 553792.8 | 6816209.2 | 2.5 | 6.9 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 8.4 |
| Road truck | 553825.5 | 6816185.9 | 2.5 | 8.4 |
| Road truck | 553841.5 | 6816171.6 | 2.5 | 7.9 |
| HAUL TRUCK | 553471.5 | 6816195.1 | 2.5 | 8.7 |
| HAUL TRUCK | 553451.7 | 6816198.8 | 2.5 | 8.8 |
| HAUL TRUCK | 553432.2 | 6816202.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553413.1 | 6816206 | 2.5 | 8.8 |
| HAUL TRUCK | 553394.4 | 6816209.5 | 2.5 | 8.8 |
| HAUL TRUCK | 553376.1 | 6816213 | 2.5 | 8.9 |
| HAUL TRUCK | 553358.1 | 6816216.3 | 2.5 | 8.9 |

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|---|---|---|---|---|
| HAUL TRUCK | 553340.4 | 6816219.7 | 2.5 | 9 |
| HAUL TRUCK | 553322.9 | 6816222.9 | 2.5 | 9 |
| HAUL TRUCK | 553305.8 | 6816226.2 | 2.5 | 9 |
| HAUL TRUCK | 553288.9 | 6816229.3 | 2.5 | 9 |
| HAUL TRUCK | 553272.2 | 6816232.4 | 2.5 | 9 |
| HAUL TRUCK | 553257.5 | 6816235.2 | 2.5 | 8.1 |
| HAUL TRUCK | 553474.7 | 6816173.6 | 2.5 | 8.9 |
| HAUL TRUCK | 553479.3 | 6816154 | 2.5 | 8.9 |
| HAUL TRUCK | 553482.5 | 6816140.1 | 2.5 | 5.4 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 20.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4B | 552865.6 | 6815421 | 1.8 | 18.9 | 30.7 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 20.4 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.7 |
| LOADER | 553348.1 | 6816171.4 | 2.5 | 16.8 |
| LOADER | 553334.6 | 6816179.3 | 2.5 | 16.8 |
| LOADER | 553321.2 | 6816187.1 | 2.5 | 16.8 |
| LOADER | 553307.7 | 6816194.9 | 2.5 | 16.8 |
| LOADER | 553298.5 | 6816200.2 | 2.5 | 12.4 |
| LOADER | 553290.8 | 6816208.2 | 2.5 | 17.1 |
| LOADER | 553280.1 | 6816221.5 | 2.5 | 17.1 |
| LOADER | 553269.2 | 6816235.1 | 2.5 | 17.1 |
| LOADER | 553258.2 | 6816248.8 | 2.5 | 17.1 |
| LOADER | 553248.3 | 6816261.1 | 2.5 | 15.9 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 10.4 |
| Road truck | 553362.2 | 6816260.3 | 2.5 | 10.5 |
| Road truck | 553344.1 | 6816262.9 | 2.5 | 10.5 |
| Road truck | 553326.2 | 6816265.4 | 2.5 | 10.5 |
| Road truck | 553308.6 | 6816267.9 | 2.5 | 10.5 |
| Road truck | 553293.9 | 6816270 | 2.5 | 8.9 |
| Road truck | 553289.7 | 6816256.6 | 2.5 | 12.8 |
| Road truck | 553300.6 | 6816243 | 2.5 | 11.1 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 11 |
| Road truck | 553338.5 | 6816243.8 | 2.5 | 11 |
| Road truck | 553357.7 | 6816244.2 | 2.5 | 10.8 |
| Road truck | 553377 | 6816243.9 | 2.5 | 10.8 |
| Road truck | 553396.6 | 6816243 | 2.5 | 10.7 |
| Road truck | 553416.6 | 6816242.1 | 2.5 | 10.7 |
| Road truck | 553437 | 6816241.2 | 2.5 | 10.7 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 10.6 |
| Road truck | 553479.1 | 6816239.3 | 2.5 | 10.6 |
| Road truck | 553501 | 6816238.3 | 2.5 | 10.6 |
| Road truck | 553517.2 | 6816237.6 | 2.5 | 7.1 |
| Road truck | 553534.8 | 6816243.7 | 2.5 | 10.2 |
| Road truck | 553556.5 | 6816240.7 | 2.5 | 10.2 |
| Road truck | 553578.8 | 6816237.8 | 2.5 | 10.1 |
| Road truck | 553601.6 | 6816234.7 | 2.5 | 10.1 |
| Road truck | 553624.9 | 6816231.6 | 2.5 | 10.1 |
| Road truck | 553648.8 | 6816228.4 | 2.5 | 10 |
| Road truck | 553673.3 | 6816225.1 | 2.5 | 9.9 |
| Road truck | 553698.5 | 6816221.8 | 2.5 | 9.9 |
| Road truck | 553724.4 | 6816218.3 | 2.5 | 9.9 |
| Road truck | 553751.1 | 6816214.8 | 2.5 | 9.8 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 9.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 4.2 |
| Road truck | 553808.5 | 6816201 | 2.5 | 8.5 |
| Road truck | 553824.7 | 6816186.6 | 2.5 | 8.5 |
| Road truck | 553841 | 6816172.1 | 2.5 | 8.5 |
| HAUL TRUCK | 553472.1 | 6816195 | 2.5 | 8.5 |
| HAUL TRUCK | 553453.2 | 6816198.5 | 2.5 | 8.5 |
| HAUL TRUCK | 553434.7 | 6816202 | 2.5 | 8.6 |
| HAUL TRUCK | 553416.5 | 6816205.4 | 2.5 | 8.6 |
| HAUL TRUCK | 553398.6 | 6816208.7 | 2.5 | 8.6 |
| HAUL TRUCK | 553380.9 | 6816212.1 | 2.5 | 8.6 |
| HAUL TRUCK | 553363.5 | 6816215.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553346.4 | 6816218.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553329.4 | 6816221.7 | 2.5 | 8.7 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 8.7 |
| HAUL TRUCK | 553296.1 | 6816228 | 2.5 | 8.7 |

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|---|---|---|---|---|
| HAUL TRUCK | 553279.8 | 6816231 | 2.5 | 8.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 8.8 |
| HAUL TRUCK | 553253.3 | 6816236 | 2.5 | 3.4 |
| HAUL TRUCK | 553474.8 | 6816173.1 | 2.5 | 9.1 |
| HAUL TRUCK | 553479.6 | 6816152.5 | 2.5 | 9.2 |
| HAUL TRUCK | 553482.7 | 6816139.2 | 2.5 | 4.3 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 20.5 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5A | 552762.8 | 6815886.6 | 1.8 | 24 | 33.7 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 22.8 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.1 |
| LOADER | 553348.9 | 6816171 | 2.5 | 18.9 |
| LOADER | 553337.2 | 6816177.8 | 2.5 | 18.9 |
| LOADER | 553325.7 | 6816184.4 | 2.5 | 18.9 |
| LOADER | 553314.5 | 6816191 | 2.5 | 18.9 |
| LOADER | 553303.5 | 6816197.3 | 2.5 | 18.9 |
| LOADER | 553297.1 | 6816201.1 | 2.5 | 11.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.4 |
| LOADER | 553285.8 | 6816214.4 | 2.5 | 18.4 |
| LOADER | 553279.1 | 6816222.8 | 2.5 | 18.4 |
| LOADER | 553272.3 | 6816231.2 | 2.5 | 18.4 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 18.4 |
| LOADER | 553258.8 | 6816248 | 2.5 | 18.4 |
| LOADER | 553252.1 | 6816256.3 | 2.5 | 18.4 |
| LOADER | 553246.4 | 6816263.5 | 2.5 | 17 |
| Road truck | 553379.9 | 6816257.8 | 2.5 | 14.1 |
| Road truck | 553360.6 | 6816260.5 | 2.5 | 14.1 |
| Road truck | 553342 | 6816263.1 | 2.5 | 14.2 |
| Road truck | 553324.2 | 6816265.7 | 2.5 | 14.2 |
| Road truck | 553307.1 | 6816268.1 | 2.5 | 14.3 |
| Road truck | 553293.4 | 6816270 | 2.5 | 12.5 |
| Road truck | 553288.8 | 6816264.4 | 2.5 | 13.4 |
| Road truck | 553290.3 | 6816251.7 | 2.5 | 13.4 |
| Road truck | 553291.2 | 6816244.1 | 2.5 | 6.7 |
| Road truck | 553301.8 | 6816243 | 2.5 | 15.5 |
| Road truck | 553323.5 | 6816243.5 | 2.5 | 15.5 |
| Road truck | 553346.4 | 6816243.9 | 2.5 | 15.4 |
| Road truck | 553362.9 | 6816244.3 | 2.5 | 11 |
| Road truck | 553378.7 | 6816243.8 | 2.5 | 14.8 |
| Road truck | 553402.4 | 6816242.8 | 2.5 | 14.8 |
| Road truck | 553427.4 | 6816241.7 | 2.5 | 14.7 |
| Road truck | 553453.9 | 6816240.5 | 2.5 | 14.6 |
| Road truck | 553482.1 | 6816239.2 | 2.5 | 14.5 |
| Road truck | 553509.4 | 6816238 | 2.5 | 13.6 |
| Road truck | 553537.7 | 6816243.3 | 2.5 | 13.6 |
| Road truck | 553566.1 | 6816239.5 | 2.5 | 13.6 |
| Road truck | 553596.1 | 6816235.5 | 2.5 | 13.5 |
| Road truck | 553628.1 | 6816231.2 | 2.5 | 13.4 |
| Road truck | 553662 | 6816226.7 | 2.5 | 13.3 |
| Road truck | 553698.3 | 6816221.8 | 2.5 | 13.2 |
| Road truck | 553737 | 6816216.6 | 2.5 | 13.1 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 13 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 9.9 |
| Road truck | 553825.7 | 6816185.7 | 2.5 | 9.8 |
| Road truck | 553841.7 | 6816171.5 | 2.5 | 9.1 |
| HAUL TRUCK | 553469.7 | 6816195.4 | 2.5 | 11.9 |
| HAUL TRUCK | 553446.8 | 6816199.7 | 2.5 | 11.9 |
| HAUL TRUCK | 553424.9 | 6816203.8 | 2.5 | 12 |
| HAUL TRUCK | 553404.1 | 6816207.7 | 2.5 | 12 |
| HAUL TRUCK | 553384.2 | 6816211.4 | 2.5 | 12 |
| HAUL TRUCK | 553365.2 | 6816215 | 2.5 | 12.1 |
| HAUL TRUCK | 553347 | 6816218.4 | 2.5 | 12.2 |
| HAUL TRUCK | 553329.5 | 6816221.7 | 2.5 | 12.2 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 12.2 |
| HAUL TRUCK | 553296.5 | 6816227.9 | 2.5 | 12.3 |
| HAUL TRUCK | 553280.9 | 6816230.8 | 2.5 | 12.3 |
| HAUL TRUCK | 553265.9 | 6816233.6 | 2.5 | 12.3 |
| HAUL TRUCK | 553254.7 | 6816235.7 | 2.5 | 9.6 |
| HAUL TRUCK | 553473.9 | 6816176.9 | 2.5 | 9.5 |

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|---|---|---|---|---|
| HAUL TRUCK | 553477 | 6816163.7 | 2.5 | 9.5 |
| HAUL TRUCK | 553480.1 | 6816150.6 | 2.5 | 9.5 |
| HAUL TRUCK | 553482.6 | 6816140 | 2.5 | 7.5 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 23.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5B | 552747.8 | 6815977.7 | 1.8 | 26.9 | 34 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 22.5 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.3 |
| LOADER | 553348.4 | 6816171.3 | 2.5 | 19.5 |
| LOADER | 553335.8 | 6816178.6 | 2.5 | 19.5 |
| LOADER | 553323.5 | 6816185.7 | 2.5 | 19.5 |
| LOADER | 553311.7 | 6816192.6 | 2.5 | 19.5 |
| LOADER | 553300.9 | 6816198.8 | 2.5 | 18.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.7 |
| LOADER | 553286 | 6816214.2 | 2.5 | 18.7 |
| LOADER | 553279.4 | 6816222.4 | 2.5 | 18.7 |
| LOADER | 553272.8 | 6816230.6 | 2.5 | 18.7 |
| LOADER | 553266.3 | 6816238.7 | 2.5 | 18.7 |
| LOADER | 553259.8 | 6816246.7 | 2.5 | 18.7 |
| LOADER | 553253.4 | 6816254.7 | 2.5 | 18.7 |
| LOADER | 553247.1 | 6816262.6 | 2.5 | 18.6 |
| Road truck | 553378.5 | 6816258 | 2.5 | 15 |
| Road truck | 553356.6 | 6816261.1 | 2.5 | 15.1 |
| Road truck | 553335.9 | 6816264 | 2.5 | 15.2 |
| Road truck | 553316.2 | 6816266.8 | 2.5 | 15.2 |
| Road truck | 553297.4 | 6816269.5 | 2.5 | 15.3 |
| Road truck | 553288.2 | 6816270.8 | 2.5 | -1.2 |
| Road truck | 553288.7 | 6816265.1 | 2.5 | 13.4 |
| Road truck | 553290 | 6816253.8 | 2.5 | 13.4 |
| Road truck | 553291 | 6816245.5 | 2.5 | 10.3 |
| Road truck | 553304.2 | 6816243.1 | 2.5 | 16.9 |
| Road truck | 553331.3 | 6816243.6 | 2.5 | 16.8 |
| Road truck | 553356.4 | 6816244.1 | 2.5 | 15.3 |
| Road truck | 553381.1 | 6816243.7 | 2.5 | 16 |
| Road truck | 553410.2 | 6816242.4 | 2.5 | 15.9 |
| Road truck | 553441.5 | 6816241 | 2.5 | 15.8 |
| Road truck | 553475.5 | 6816239.5 | 2.5 | 15.7 |
| Road truck | 553507.7 | 6816238 | 2.5 | 14.4 |
| Road truck | 553540.2 | 6816242.9 | 2.5 | 14.5 |
| Road truck | 553574.3 | 6816238.4 | 2.5 | 14.5 |
| Road truck | 553611 | 6816233.5 | 2.5 | 14.4 |
| Road truck | 553650.6 | 6816228.2 | 2.5 | 14.2 |
| Road truck | 553693.7 | 6816222.4 | 2.5 | 14.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 14 |
| Road truck | 553782.8 | 6816210.5 | 2.5 | 12.1 |
| Road truck | 553809.2 | 6816200.4 | 2.5 | 10.1 |
| Road truck | 553827 | 6816184.5 | 2.5 | 10.1 |
| Road truck | 553842.6 | 6816170.6 | 2.5 | 8.5 |
| HAUL TRUCK | 553467.4 | 6816195.8 | 2.5 | 12.8 |
| HAUL TRUCK | 553440.4 | 6816200.9 | 2.5 | 12.9 |
| HAUL TRUCK | 553415 | 6816205.7 | 2.5 | 12.9 |
| HAUL TRUCK | 553391.2 | 6816210.1 | 2.5 | 13 |
| HAUL TRUCK | 553368.7 | 6816214.4 | 2.5 | 13 |
| HAUL TRUCK | 553347.5 | 6816218.3 | 2.5 | 13.1 |
| HAUL TRUCK | 553327.4 | 6816222.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553308.3 | 6816225.7 | 2.5 | 13.2 |
| HAUL TRUCK | 553290.2 | 6816229.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553273 | 6816232.3 | 2.5 | 13.3 |
| HAUL TRUCK | 553257.7 | 6816235.2 | 2.5 | 12.6 |
| HAUL TRUCK | 553473.9 | 6816177.1 | 2.5 | 9.5 |
| HAUL TRUCK | 553476.9 | 6816164.3 | 2.5 | 9.5 |
| HAUL TRUCK | 553479.9 | 6816151.5 | 2.5 | 9.5 |
| HAUL TRUCK | 553482.4 | 6816140.5 | 2.5 | 8.1 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 23.7 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6A | 552849.5 | 6816597 | 1.8 | 7.7 | 34.8 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 22.8 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.7 |
| LOADER | 553327.9 | 6816183.2 | 2.5 | 26.2 |
| LOADER | 553299.7 | 6816199.6 | 2.5 | 18.3 |
| LOADER | 553277.6 | 6816224.6 | 2.5 | 26.9 |
| LOADER | 553252.2 | 6816256.2 | 2.5 | 24.5 |
| Road truck | 553376.6 | 6816258.2 | 2.5 | 17.4 |
| Road truck | 553351.6 | 6816261.8 | 2.5 | 17.5 |
| Road truck | 553328.4 | 6816265.1 | 2.5 | 17.5 |
| Road truck | 553306.7 | 6816268.2 | 2.5 | 17.6 |
| Road truck | 553292.2 | 6816270.2 | 2.5 | 13.9 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 15.9 |
| Road truck | 553290.4 | 6816250.7 | 2.5 | 15.9 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 4.4 |
| Road truck | 553299.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553315.2 | 6816243.3 | 2.5 | 16.1 |
| Road truck | 553332 | 6816243.6 | 2.5 | 16.1 |
| Road truck | 553349.6 | 6816244 | 2.5 | 16 |
| Road truck | 553363 | 6816244.3 | 2.5 | 12.7 |
| Road truck | 553378 | 6816243.9 | 2.5 | 16.4 |
| Road truck | 553400 | 6816242.9 | 2.5 | 16.3 |
| Road truck | 553423.4 | 6816241.8 | 2.5 | 7.9 |
| Road truck | 553448.3 | 6816240.7 | 2.5 | 16.1 |
| Road truck | 553474.9 | 6816239.5 | 2.5 | 16.1 |
| Road truck | 553503.4 | 6816238.2 | 2.5 | 16 |
| Road truck | 553520.3 | 6816237.5 | 2.5 | 6.9 |
| Road truck | 553543.9 | 6816242.4 | 2.5 | 16.8 |
| Road truck | 553586.5 | 6816236.7 | 2.5 | 16.7 |
| Road truck | 553633.8 | 6816230.4 | 2.5 | 16.6 |
| Road truck | 553686.7 | 6816223.4 | 2.5 | 16.3 |
| Road truck | 553746.3 | 6816215.4 | 2.5 | 16.2 |
| Road truck | 553789.6 | 6816209.6 | 2.5 | 11.1 |
| Road truck | 553821.1 | 6816189.8 | 2.5 | 14.8 |
| Road truck | 553845.9 | 6816167.7 | 2.5 | 6.3 |
| HAUL TRUCK | 553464.8 | 6816196.3 | 2.5 | 14.4 |
| HAUL TRUCK | 553433.1 | 6816202.3 | 2.5 | 14.5 |
| HAUL TRUCK | 553403.9 | 6816207.7 | 2.5 | 14.6 |
| HAUL TRUCK | 553376.9 | 6816212.8 | 2.5 | 14.7 |
| HAUL TRUCK | 553351.8 | 6816217.5 | 2.5 | 14.8 |
| HAUL TRUCK | 553328.3 | 6816221.9 | 2.5 | 14.9 |
| HAUL TRUCK | 553306.4 | 6816226 | 2.5 | 15 |
| HAUL TRUCK | 553285.9 | 6816229.9 | 2.5 | 15 |
| HAUL TRUCK | 553266.6 | 6816233.5 | 2.5 | 15.1 |
| HAUL TRUCK | 553254.1 | 6816235.8 | 2.5 | 10.7 |
| HAUL TRUCK | 553474.6 | 6816174.2 | 2.5 | 11.8 |
| HAUL TRUCK | 553479.1 | 6816154.9 | 2.5 | 11.8 |
| HAUL TRUCK | 553482.4 | 6816140.5 | 2.5 | 8.3 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 21.7 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6B | 552715.7 | 6816554.2 | 1.8 | 10.6 | 33.5 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553506.2 | 6816195.1 | 2.5 | 22 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.3 |
| LOADER | 553324.1 | 6816185.4 | 2.5 | 25.5 |
| LOADER | 553285.4 | 6816214.9 | 2.5 | 23.1 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 23.1 |
| LOADER | 553250 | 6816258.9 | 2.5 | 21.6 |
| Road truck | 553367.1 | 6816259.6 | 2.5 | 18.1 |
| Road truck | 553325.5 | 6816265.5 | 2.5 | 18.2 |
| Road truck | 553297.1 | 6816269.5 | 2.5 | 15.4 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 14.1 |
| Road truck | 553290.4 | 6816250.6 | 2.5 | 14.1 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 2.4 |
| Road truck | 553303.1 | 6816243 | 2.5 | 16.2 |

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| Road truck | 553327.7 | 6816243.5 | 2.5 | | 16.1 |
| Road truck | 553353.8 | 6816244.1 | 2.5 | | 16 |
| Road truck | 553383.9 | 6816243.6 | 2.5 | | 16.6 |
| Road truck | 553419.2 | 6816242 | 2.5 | | 16.4 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | | 16.3 |
| Road truck | 553499.8 | 6816238.4 | 2.5 | | 16.1 |
| Road truck | 553557.8 | 6816240.6 | 2.5 | | 17.4 |
| Road truck | 553633.7 | 6816230.4 | 2.5 | | 17.2 |
| Road truck | 553723.4 | 6816218.5 | 2.5 | | 16.9 |
| Road truck | 553787.5 | 6816209.9 | 2.5 | | 10.5 |
| Road truck | 553819.1 | 6816191.6 | 2.5 | | 13 |
| Road truck | 553843.8 | 6816169.6 | 2.5 | | 7.3 |
| HAUL TRUCK | 553453.8 | 6816198.4 | 2.5 | | 15.2 |
| HAUL TRUCK | 553403.1 | 6816207.9 | 2.5 | | 15.4 |
| HAUL TRUCK | 553358.3 | 6816216.3 | 2.5 | | 15.6 |
| HAUL TRUCK | 553318.2 | 6816223.8 | 2.5 | | 15.7 |
| HAUL TRUCK | 553282.2 | 6816230.6 | 2.5 | | 15.8 |
| HAUL TRUCK | 553258.2 | 6816235.1 | 2.5 | | 12.5 |
| HAUL TRUCK | 553474.6 | 6816174.2 | 2.5 | | 10.4 |
| HAUL TRUCK | 553479 | 6816155.2 | 2.5 | | 10.3 |
| HAUL TRUCK | 553482.4 | 6816140.7 | 2.5 | | 7.2 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | | 22.4 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5B | 552747.8 | 6815977.7 | 1.8 | 26.9 | 34.4 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | | 23.7 |
| Generator | 553406.4 | 6816251.5 | 1 | | 19.3 |
| LOADER | 553348.4 | 6816171.3 | 2.5 | | 19.5 |
| LOADER | 553335.8 | 6816178.6 | 2.5 | | 19.5 |
| LOADER | 553323.5 | 6816185.7 | 2.5 | | 19.5 |
| LOADER | 553311.7 | 6816192.6 | 2.5 | | 19.5 |
| LOADER | 553300.9 | 6816198.8 | 2.5 | | 18.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | | 18.7 |
| LOADER | 553286 | 6816214.2 | 2.5 | | 18.7 |
| LOADER | 553279.4 | 6816222.4 | 2.5 | | 18.7 |
| LOADER | 553272.8 | 6816230.6 | 2.5 | | 18.7 |
| LOADER | 553266.3 | 6816238.7 | 2.5 | | 18.7 |
| LOADER | 553259.8 | 6816246.7 | 2.5 | | 18.7 |
| LOADER | 553253.4 | 6816254.7 | 2.5 | | 18.7 |
| LOADER | 553247.1 | 6816262.6 | 2.5 | | 18.6 |
| Road truck | 553378.5 | 6816258 | 2.5 | | 15 |
| Road truck | 553356.6 | 6816261.1 | 2.5 | | 15.1 |
| Road truck | 553335.9 | 6816264 | 2.5 | | 15.2 |
| Road truck | 553316.2 | 6816266.8 | 2.5 | | 15.2 |
| Road truck | 553297.4 | 6816269.5 | 2.5 | | 15.3 |
| Road truck | 553288.2 | 6816270.8 | 2.5 | | -1.2 |
| Road truck | 553288.7 | 6816265.1 | 2.5 | | 13.4 |
| Road truck | 553290 | 6816253.8 | 2.5 | | 13.4 |
| Road truck | 553291 | 6816245.5 | 2.5 | | 10.3 |
| Road truck | 553304.2 | 6816243.1 | 2.5 | | 16.9 |
| Road truck | 553331.3 | 6816243.6 | 2.5 | | 16.8 |
| Road truck | 553356.4 | 6816244.1 | 2.5 | | 15.3 |
| Road truck | 553381.1 | 6816243.7 | 2.5 | | 16 |
| Road truck | 553410.2 | 6816242.4 | 2.5 | | 15.9 |
| Road truck | 553441.5 | 6816241 | 2.5 | | 15.8 |
| Road truck | 553475.5 | 6816239.5 | 2.5 | | 15.7 |
| Road truck | 553507.7 | 6816238 | 2.5 | | 14.4 |
| Road truck | 553540.2 | 6816242.9 | 2.5 | | 14.5 |
| Road truck | 553574.3 | 6816238.4 | 2.5 | | 14.5 |
| Road truck | 553611 | 6816233.5 | 2.5 | | 14.4 |
| Road truck | 553650.6 | 6816228.2 | 2.5 | | 14.2 |
| Road truck | 553693.7 | 6816222.4 | 2.5 | | 14.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | | 14 |
| Road truck | 553782.8 | 6816210.5 | 2.5 | | 12.1 |
| Road truck | 553809.2 | 6816200.4 | 2.5 | | 10.1 |
| Road truck | 553827 | 6816184.5 | 2.5 | | 10.1 |
| Road truck | 553842.6 | 6816170.6 | 2.5 | | 8.5 |
| HAUL TRUCK | 553467.4 | 6816195.8 | 2.5 | | 12.8 |
| HAUL TRUCK | 553440.4 | 6816200.9 | 2.5 | | 12.9 |
| HAUL TRUCK | 553415 | 6816205.7 | 2.5 | | 12.9 |
| HAUL TRUCK | 553391.2 | 6816210.1 | 2.5 | | 13 |

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|---|---|---|---|---|
| HAUL TRUCK | 553368.7 | 6816214.4 | 2.5 | 13 |
| HAUL TRUCK | 553347.5 | 6816218.3 | 2.5 | 13.1 |
| HAUL TRUCK | 553327.4 | 6816222.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553308.3 | 6816225.7 | 2.5 | 13.2 |
| HAUL TRUCK | 553290.2 | 6816229.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553273 | 6816232.3 | 2.5 | 13.3 |
| HAUL TRUCK | 553257.7 | 6816235.2 | 2.5 | 12.6 |
| HAUL TRUCK | 553470.2 | 6816176.1 | 2.5 | 10.2 |
| HAUL TRUCK | 553465.8 | 6816161.5 | 2.5 | 10.2 |
| HAUL TRUCK | 553461.5 | 6816147.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553457.3 | 6816133.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553453.1 | 6816119.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553449.1 | 6816105.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553445.1 | 6816092.6 | 2.5 | 10.3 |
| HAUL TRUCK | 553441.2 | 6816079.6 | 2.5 | 10.3 |
| HAUL TRUCK | 553437.4 | 6816066.8 | 2.5 | 10.3 |
| HAUL TRUCK | 553433.6 | 6816054.1 | 2.5 | 10.4 |
| HAUL TRUCK | 553429.8 | 6816041.7 | 2.5 | 10.4 |
| HAUL TRUCK | 553426.2 | 6816029.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553422.5 | 6816017.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553418.9 | 6816005.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553415.4 | 6815993.5 | 2.5 | 10.4 |
| HAUL TRUCK | 553411.9 | 6815981.9 | 2.5 | 10.4 |
| HAUL TRUCK | 553408.4 | 6815970.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553405 | 6815958.9 | 2.5 | 10.4 |
| HAUL TRUCK | 553401.6 | 6815947.6 | 2.5 | 10.4 |
| HAUL TRUCK | 553398.2 | 6815936.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553394.9 | 6815925.2 | 2.5 | 10.4 |
| HAUL TRUCK | 553391.6 | 6815914.1 | 2.5 | 10.4 |
| HAUL TRUCK | 553389.4 | 6815906.8 | 2.5 | 5.8 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 23.7 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6A | 552849.5 | 6816597 | 1.8 | 7.7 | 35 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 21.7 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.7 |
| LOADER | 553327.9 | 6816183.2 | 2.5 | 26.2 |
| LOADER | 553299.7 | 6816199.6 | 2.5 | 18.3 |
| LOADER | 553277.6 | 6816224.6 | 2.5 | 26.9 |
| LOADER | 553252.2 | 6816256.2 | 2.5 | 24.5 |
| Road truck | 553376.6 | 6816258.2 | 2.5 | 17.4 |
| Road truck | 553351.6 | 6816261.8 | 2.5 | 17.5 |
| Road truck | 553328.4 | 6816265.1 | 2.5 | 17.5 |
| Road truck | 553306.7 | 6816268.2 | 2.5 | 17.6 |
| Road truck | 553292.2 | 6816270.2 | 2.5 | 13.9 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 15.9 |
| Road truck | 553290.4 | 6816250.7 | 2.5 | 15.9 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 4.4 |
| Road truck | 553299.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553315.2 | 6816243.3 | 2.5 | 16.1 |
| Road truck | 553332 | 6816243.6 | 2.5 | 16.1 |
| Road truck | 553349.6 | 6816244 | 2.5 | 16 |
| Road truck | 553363 | 6816244.3 | 2.5 | 12.7 |
| Road truck | 553378 | 6816243.9 | 2.5 | 16.4 |
| Road truck | 553400 | 6816242.9 | 2.5 | 16.3 |
| Road truck | 553423.4 | 6816241.8 | 2.5 | 7.9 |
| Road truck | 553448.3 | 6816240.7 | 2.5 | 16.1 |
| Road truck | 553474.9 | 6816239.5 | 2.5 | 16.1 |
| Road truck | 553503.4 | 6816238.2 | 2.5 | 16 |
| Road truck | 553520.3 | 6816237.5 | 2.5 | 6.9 |
| Road truck | 553543.9 | 6816242.4 | 2.5 | 16.8 |
| Road truck | 553586.5 | 6816236.7 | 2.5 | 16.7 |
| Road truck | 553633.8 | 6816230.4 | 2.5 | 16.6 |
| Road truck | 553686.7 | 6816223.4 | 2.5 | 16.3 |
| Road truck | 553746.3 | 6816215.4 | 2.5 | 16.2 |
| Road truck | 553789.6 | 6816209.6 | 2.5 | 11.1 |
| Road truck | 553821.1 | 6816189.8 | 2.5 | 14.8 |
| Road truck | 553845.9 | 6816167.7 | 2.5 | 6.3 |
| HAUL TRUCK | 553464.8 | 6816196.3 | 2.5 | 14.4 |
| HAUL TRUCK | 553433.1 | 6816202.3 | 2.5 | 14.5 |

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|---|---|---|---|---|
| HAUL TRUCK | 553403.9 | 6816207.7 | 2.5 | 14.6 |
| HAUL TRUCK | 553376.9 | 6816212.8 | 2.5 | 14.7 |
| HAUL TRUCK | 553351.8 | 6816217.5 | 2.5 | 14.8 |
| HAUL TRUCK | 553328.3 | 6816221.9 | 2.5 | 14.9 |
| HAUL TRUCK | 553306.4 | 6816226 | 2.5 | 15 |
| HAUL TRUCK | 553285.9 | 6816229.9 | 2.5 | 15 |
| HAUL TRUCK | 553266.6 | 6816233.5 | 2.5 | 15.1 |
| HAUL TRUCK | 553254.1 | 6816235.8 | 2.5 | 10.7 |
| HAUL TRUCK | 553470.4 | 6816177 | 2.5 | 10.4 |
| HAUL TRUCK | 553466.5 | 6816163.8 | 2.5 | 10.4 |
| HAUL TRUCK | 553462.5 | 6816150.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553458.4 | 6816136.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553454.3 | 6816123.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553450.1 | 6816109.3 | 2.5 | 10.3 |
| HAUL TRUCK | 553445.9 | 6816095.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553441.6 | 6816080.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553437.2 | 6816066.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553432.8 | 6816051.6 | 2.5 | 10.2 |
| HAUL TRUCK | 553428.3 | 6816036.6 | 2.5 | 10.2 |
| HAUL TRUCK | 553423.7 | 6816021.3 | 2.5 | 10.2 |
| HAUL TRUCK | 553419 | 6816005.7 | 2.5 | 10.2 |
| HAUL TRUCK | 553414.3 | 6815989.8 | 2.5 | 10.2 |
| HAUL TRUCK | 553409.4 | 6815973.5 | 2.5 | 10.1 |
| HAUL TRUCK | 553404.4 | 6815956.9 | 2.5 | 10.1 |
| HAUL TRUCK | 553399.3 | 6815940 | 2.5 | 10 |
| HAUL TRUCK | 553394.1 | 6815922.6 | 2.5 | 10 |
| HAUL TRUCK | 553390.1 | 6815909.3 | 2.5 | 7 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 21.7 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6B | 552715.7 | 6816554.2 | 1.8 | 10.6 | 33.8 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 22.4 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.3 |
| LOADER | 553324.1 | 6816185.4 | 2.5 | 25.5 |
| LOADER | 553285.4 | 6816214.9 | 2.5 | 23.1 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 23.1 |
| LOADER | 553250 | 6816258.9 | 2.5 | 21.6 |
| Road truck | 553367.1 | 6816259.6 | 2.5 | 18.1 |
| Road truck | 553325.5 | 6816265.5 | 2.5 | 18.2 |
| Road truck | 553297.1 | 6816269.5 | 2.5 | 15.4 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 14.1 |
| Road truck | 553290.4 | 6816250.6 | 2.5 | 14.1 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 2.4 |
| Road truck | 553303.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553327.7 | 6816243.5 | 2.5 | 16.1 |
| Road truck | 553353.8 | 6816244.1 | 2.5 | 16 |
| Road truck | 553383.9 | 6816243.6 | 2.5 | 16.6 |
| Road truck | 553419.2 | 6816242 | 2.5 | 16.4 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 16.3 |
| Road truck | 553499.8 | 6816238.4 | 2.5 | 16.1 |
| Road truck | 553557.8 | 6816240.6 | 2.5 | 17.4 |
| Road truck | 553633.7 | 6816230.4 | 2.5 | 17.2 |
| Road truck | 553723.4 | 6816218.5 | 2.5 | 16.9 |
| Road truck | 553787.5 | 6816209.9 | 2.5 | 10.5 |
| Road truck | 553819.1 | 6816191.6 | 2.5 | 13 |
| Road truck | 553843.8 | 6816169.6 | 2.5 | 7.3 |
| HAUL TRUCK | 553453.8 | 6816198.4 | 2.5 | 15.2 |
| HAUL TRUCK | 553403.1 | 6816207.9 | 2.5 | 15.4 |
| HAUL TRUCK | 553358.3 | 6816216.3 | 2.5 | 15.6 |
| HAUL TRUCK | 553318.2 | 6816223.8 | 2.5 | 15.7 |
| HAUL TRUCK | 553282.2 | 6816230.6 | 2.5 | 15.8 |
| HAUL TRUCK | 553258.2 | 6816235.1 | 2.5 | 12.5 |
| HAUL TRUCK | 553470.2 | 6816176.4 | 2.5 | 9.4 |
| HAUL TRUCK | 553465.9 | 6816162 | 2.5 | 9.3 |
| HAUL TRUCK | 553461.6 | 6816147.6 | 2.5 | 9.3 |
| HAUL TRUCK | 553457.2 | 6816133 | 2.5 | 9.3 |
| HAUL TRUCK | 553452.8 | 6816118.3 | 2.5 | 9.3 |
| HAUL TRUCK | 553448.4 | 6816103.5 | 2.5 | 9.3 |
| HAUL TRUCK | 553443.9 | 6816088.5 | 2.5 | 9.3 |
| HAUL TRUCK | 553439.4 | 6816073.4 | 2.5 | 9.3 |

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|---|---|---|---|---|
| HAUL TRUCK | 553434.8 | 6816058.2 | 2.5 | 9.3 |
| HAUL TRUCK | 553430.2 | 6816042.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553425.5 | 6816027.1 | 2.5 | 9.3 |
| HAUL TRUCK | 553420.7 | 6816011.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553415.9 | 6815995.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553411 | 6815979 | 2.5 | 9.2 |
| HAUL TRUCK | 553406.1 | 6815962.5 | 2.5 | 9.2 |
| HAUL TRUCK | 553401.1 | 6815945.8 | 2.5 | 9.1 |
| HAUL TRUCK | 553396 | 6815928.7 | 2.5 | 9.1 |
| HAUL TRUCK | 553391.1 | 6815912.5 | 2.5 | 8.5 |
| EXCAVATOR | 553514.2 | 6816181.2 | 2.5 | 22.4 |

**SOUTH BOUNDARY**

File:Z:\CRG ACOUSTICS\ACOUSTIC JOBS\10453a Sandmine Lennox Head\10453a_sandmine april 2012 s.PEN
File Description:Data file covering south
Tuesday 05 Mar, 2013 at 12:17:41
Environmental Calculations
All point and line sources included. Line source segmentation angle: 1 degrees. Calculations for specified meteorology.
Noise level results are the logarithmic addition of all the noise sources
Noise level results incorporate the incoherent ground reflection algorithm
Meteorology :
Wind speed 0.0 (m/s) Wind direction 0 Mast height 10.0 (m)
Temperature 20.0 (C) Temperature Gradient 0.0 (C/100m) Humidity 50.0 (%)
Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R1 | 553772.1 | 6815867.2 | 1.8 | 3 | 38.5 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 30 |
| Generator | 553406.4 | 6816251.5 | 1 | 22.1 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 27.9 |
| LOADER | 553327.3 | 6816183.5 | 2.5 | 23 |
| LOADER | 553284.2 | 6816216.4 | 2.5 | 20.1 |
| LOADER | 553258.3 | 6816248.7 | 2.5 | 21.3 |
| Road truck | 553382 | 6816257.5 | 2.5 | 16.9 |
| Road truck | 553365.8 | 6816259.8 | 2.5 | 16.8 |
| Road truck | 553348.8 | 6816262.2 | 2.5 | 16.8 |
| Road truck | 553330.8 | 6816264.7 | 2.5 | 16.7 |
| Road truck | 553312 | 6816267.4 | 2.5 | 16.7 |
| Road truck | 553295.1 | 6816269.8 | 2.5 | 9.7 |
| Road truck | 553288.9 | 6816262.9 | 2.5 | 10.1 |
| Road truck | 553290.6 | 6816248.9 | 2.5 | 9.2 |
| Road truck | 553299.7 | 6816243 | 2.5 | 10.6 |
| Road truck | 553315.9 | 6816243.3 | 2.5 | 10.7 |
| Road truck | 553331.4 | 6816243.6 | 2.5 | 10.7 |
| Road truck | 553346.3 | 6816243.9 | 2.5 | 16.2 |
| Road truck | 553360.5 | 6816244.2 | 2.5 | 16.2 |
| Road truck | 553374.8 | 6816244 | 2.5 | 16.6 |
| Road truck | 553389.1 | 6816243.4 | 2.5 | 16.6 |
| Road truck | 553402.8 | 6816242.8 | 2.5 | 16.7 |
| Road truck | 553416.1 | 6816242.2 | 2.5 | 16.7 |
| Road truck | 553428.8 | 6816241.6 | 2.5 | 16.8 |
| Road truck | 553441.2 | 6816241 | 2.5 | 16.8 |
| Road truck | 553453.1 | 6816240.5 | 2.5 | 16.8 |
| Road truck | 553464.6 | 6816240 | 2.5 | 16.9 |
| Road truck | 553475.8 | 6816239.5 | 2.5 | 16.9 |
| Road truck | 553486.6 | 6816239 | 2.5 | 16.9 |
| Road truck | 553497.2 | 6816238.5 | 2.5 | 16.9 |
| Road truck | 553507.4 | 6816238.1 | 2.5 | 17 |
| Road truck | 553517.4 | 6816237.6 | 2.5 | 17 |
| Road truck | 553522.3 | 6816237.4 | 2.5 | -10.8 |
| Road truck | 553529.2 | 6816244.4 | 2.5 | 17.2 |
| Road truck | 553539.3 | 6816243.1 | 2.5 | 17.3 |
| Road truck | 553549 | 6816241.8 | 2.5 | 17.3 |
| Road truck | 553558.5 | 6816240.5 | 2.5 | 17.4 |
| Road truck | 553567.7 | 6816239.2 | 2.5 | 17.4 |
| Road truck | 553576.8 | 6816238 | 2.5 | 17.4 |
| Road truck | 553585.5 | 6816236.9 | 2.5 | 17.4 |
| Road truck | 553594.1 | 6816235.7 | 2.5 | 17.4 |
| Road truck | 553602.5 | 6816234.6 | 2.5 | 17.4 |
| Road truck | 553610.7 | 6816233.5 | 2.5 | 17.5 |
| Road truck | 553618.7 | 6816232.4 | 2.5 | 17.5 |

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|---|---|---|---|---|
| Road truck | 553626.6 | 6816231.4 | 2.5 | 17.5 |
| Road truck | 553634.3 | 6816230.4 | 2.5 | 17.5 |
| Road truck | 553641.9 | 6816229.3 | 2.5 | 17.5 |
| Road truck | 553649.3 | 6816228.4 | 2.5 | 17.5 |
| Road truck | 553656.6 | 6816227.4 | 2.5 | 17.5 |
| Road truck | 553663.8 | 6816226.4 | 2.5 | 17.5 |
| Road truck | 553670.9 | 6816225.5 | 2.5 | 17.5 |
| Road truck | 553677.8 | 6816224.5 | 2.5 | 17.6 |
| Road truck | 553684.7 | 6816223.6 | 2.5 | 17.6 |
| Road truck | 553691.5 | 6816222.7 | 2.5 | 17.6 |
| Road truck | 553698.2 | 6816221.8 | 2.5 | 17.6 |
| Road truck | 553704.8 | 6816220.9 | 2.5 | 17.6 |
| Road truck | 553711.3 | 6816220.1 | 2.5 | 17.6 |
| Road truck | 553717.8 | 6816219.2 | 2.5 | 17.6 |
| Road truck | 553724.1 | 6816218.4 | 2.5 | 17.6 |
| Road truck | 553730.5 | 6816217.5 | 2.5 | 17.7 |
| Road truck | 553736.7 | 6816216.7 | 2.5 | 17.7 |
| Road truck | 553743 | 6816215.8 | 2.5 | 17.7 |
| Road truck | 553749.1 | 6816215 | 2.5 | 17.7 |
| Road truck | 553755.3 | 6816214.2 | 2.5 | 17.7 |
| Road truck | 553761.4 | 6816213.4 | 2.5 | 17.7 |
| Road truck | 553767.4 | 6816212.6 | 2.5 | 17.7 |
| Road truck | 553773.5 | 6816211.8 | 2.5 | 17.7 |
| Road truck | 553779.4 | 6816211 | 2.5 | 17.7 |
| Road truck | 553785.4 | 6816210.2 | 2.5 | 17.7 |
| Road truck | 553791.4 | 6816209.4 | 2.5 | 17.8 |
| Road truck | 553797.3 | 6816208.6 | 2.5 | 17.8 |
| Road truck | 553800.4 | 6816208.2 | 2.5 | 3.1 |
| Road truck | 553803.3 | 6816205.7 | 2.5 | 18.7 |
| Road truck | 553808.7 | 6816200.8 | 2.5 | 18.8 |
| Road truck | 553814 | 6816196.1 | 2.5 | 18.8 |
| Road truck | 553819.2 | 6816191.5 | 2.5 | 18.8 |
| Road truck | 553824.2 | 6816187 | 2.5 | 18.8 |
| Road truck | 553829.2 | 6816182.6 | 2.5 | 18.8 |
| Road truck | 553834 | 6816178.3 | 2.5 | 18.9 |
| Road truck | 553838.8 | 6816174 | 2.5 | 18.9 |
| Road truck | 553843.4 | 6816169.9 | 2.5 | 18.9 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 17.7 |
| HAUL TRUCK | 553361.3 | 6815910.8 | 2.5 | 17.3 |
| HAUL TRUCK | 553291.7 | 6815910.5 | 2.5 | 16.4 |
| HAUL TRUCK | 553475.4 | 6816194.3 | 2.5 | 15.8 |
| HAUL TRUCK | 553462.6 | 6816196.7 | 2.5 | 15.8 |
| HAUL TRUCK | 553449.1 | 6816199.3 | 2.5 | 15.7 |
| HAUL TRUCK | 553435 | 6816201.9 | 2.5 | 15.7 |
| HAUL TRUCK | 553420.1 | 6816204.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553404.4 | 6816207.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553387.8 | 6816210.8 | 2.5 | 15.6 |
| HAUL TRUCK | 553370.2 | 6816214.1 | 2.5 | 15.5 |
| HAUL TRUCK | 553351.5 | 6816217.6 | 2.5 | 11 |
| HAUL TRUCK | 553331.6 | 6816221.3 | 2.5 | 10.9 |
| HAUL TRUCK | 553310.4 | 6816225.3 | 2.5 | 10.8 |
| HAUL TRUCK | 553287.7 | 6816229.5 | 2.5 | 10.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 9 |
| HAUL TRUCK | 553471.1 | 6816179.4 | 2.5 | 14.3 |
| HAUL TRUCK | 553468.7 | 6816171.1 | 2.5 | 14.3 |
| HAUL TRUCK | 553466.2 | 6816163 | 2.5 | 14.4 |
| HAUL TRUCK | 553463.9 | 6816155.1 | 2.5 | 14.4 |
| HAUL TRUCK | 553461.5 | 6816147.3 | 2.5 | 14.4 |
| HAUL TRUCK | 553459.2 | 6816139.6 | 2.5 | 14.4 |
| HAUL TRUCK | 553456.9 | 6816132.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553454.7 | 6816124.6 | 2.5 | 9.2 |
| HAUL TRUCK | 553452.5 | 6816117.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553450.3 | 6816110.1 | 2.5 | 9.3 |
| HAUL TRUCK | 553448.2 | 6816102.9 | 2.5 | 7.9 |
| HAUL TRUCK | 553446.1 | 6816095.9 | 2.5 | 6.6 |
| HAUL TRUCK | 553444 | 6816088.9 | 2.5 | 7.2 |
| HAUL TRUCK | 553441.9 | 6816082 | 2.5 | 7.6 |
| HAUL TRUCK | 553439.9 | 6816075.2 | 2.5 | 8 |
| HAUL TRUCK | 553437.8 | 6816068.4 | 2.5 | 8.4 |
| HAUL TRUCK | 553435.8 | 6816061.7 | 2.5 | 8.7 |
| HAUL TRUCK | 553433.8 | 6816055 | 2.5 | 8.9 |
| HAUL TRUCK | 553431.9 | 6816048.4 | 2.5 | 9.1 |
| HAUL TRUCK | 553429.9 | 6816041.9 | 2.5 | 9.2 |

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|---|---|---|---|---|
| HAUL TRUCK | 553427.9 | 6816035.4 | 2.5 | 9.2 |
| HAUL TRUCK | 553426 | 6816028.9 | 2.5 | 9.2 |
| HAUL TRUCK | 553424.1 | 6816022.5 | 2.5 | 9.1 |
| HAUL TRUCK | 553422.2 | 6816016.1 | 2.5 | 9.1 |
| HAUL TRUCK | 553420.2 | 6816009.7 | 2.5 | 9.1 |
| HAUL TRUCK | 553418.3 | 6816003.3 | 2.5 | 9.1 |
| HAUL TRUCK | 553416.4 | 6815997 | 2.5 | 9.1 |
| HAUL TRUCK | 553414.5 | 6815990.6 | 2.5 | 9.1 |
| HAUL TRUCK | 553412.6 | 6815984.3 | 2.5 | 9 |
| HAUL TRUCK | 553410.7 | 6815978 | 2.5 | 9 |
| HAUL TRUCK | 553408.8 | 6815971.7 | 2.5 | 9 |
| HAUL TRUCK | 553406.9 | 6815965.3 | 2.5 | 9 |
| HAUL TRUCK | 553405 | 6815959 | 2.5 | 9 |
| HAUL TRUCK | 553403.1 | 6815952.7 | 2.5 | 8.9 |
| HAUL TRUCK | 553401.2 | 6815946.3 | 2.5 | 8.8 |
| HAUL TRUCK | 553399.3 | 6815940 | 2.5 | 8.7 |
| HAUL TRUCK | 553397.4 | 6815933.6 | 2.5 | 8.5 |
| HAUL TRUCK | 553395.5 | 6815927.1 | 2.5 | 8.4 |
| HAUL TRUCK | 553393.5 | 6815920.7 | 2.5 | 8.3 |
| HAUL TRUCK | 553391.6 | 6815914.2 | 2.5 | 8.3 |
| HAUL TRUCK | 553389.7 | 6815907.9 | 2.5 | 8 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2A | 553848.7 | 6815742.3 | 1.8 | 3.5 | 36.3 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 26.9 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.9 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 31.7 |
| LOADER | 553326.9 | 6816183.8 | 2.5 | 22.9 |
| LOADER | 553275.4 | 6816227.4 | 2.5 | 22.1 |
| LOADER | 553248.4 | 6816260.9 | 2.5 | 14.8 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 8 |
| Road truck | 553361.3 | 6816260.4 | 2.5 | 8.9 |
| Road truck | 553341.2 | 6816263.3 | 2.5 | 9.5 |
| Road truck | 553320.2 | 6816266.2 | 2.5 | 9.9 |
| Road truck | 553298.8 | 6816269.3 | 2.5 | 9.7 |
| Road truck | 553289.2 | 6816260.5 | 2.5 | 9.6 |
| Road truck | 553290.9 | 6816246.6 | 2.5 | 5.4 |
| Road truck | 553300.8 | 6816243 | 2.5 | 9.5 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 9.5 |
| Road truck | 553337.1 | 6816243.7 | 2.5 | 9.5 |
| Road truck | 553354.3 | 6816244.1 | 2.5 | 9.1 |
| Road truck | 553365 | 6816244.3 | 2.5 | 3.4 |
| Road truck | 553376.1 | 6816244 | 2.5 | 8.7 |
| Road truck | 553393.1 | 6816243.2 | 2.5 | 7.7 |
| Road truck | 553409.4 | 6816242.5 | 2.5 | 10 |
| Road truck | 553425.3 | 6816241.8 | 2.5 | 14.9 |
| Road truck | 553440.6 | 6816241.1 | 2.5 | 14.9 |
| Road truck | 553455.5 | 6816240.4 | 2.5 | 14.9 |
| Road truck | 553469.9 | 6816239.7 | 2.5 | 15 |
| Road truck | 553483.9 | 6816239.1 | 2.5 | 15 |
| Road truck | 553497.5 | 6816238.5 | 2.5 | 6.9 |
| Road truck | 553510.7 | 6816237.9 | 2.5 | 6.9 |
| Road truck | 553519.8 | 6816237.5 | 2.5 | 2.9 |
| Road truck | 553530.8 | 6816244.2 | 2.5 | 7.1 |
| Road truck | 553544.1 | 6816242.4 | 2.5 | 7.5 |
| Road truck | 553556.9 | 6816240.7 | 2.5 | 7.5 |
| Road truck | 553569.4 | 6816239 | 2.5 | 7.6 |
| Road truck | 553581.6 | 6816237.4 | 2.5 | 7.5 |
| Road truck | 553593.5 | 6816235.8 | 2.5 | 15.5 |
| Road truck | 553605 | 6816234.3 | 2.5 | 11.1 |
| Road truck | 553616.4 | 6816232.8 | 2.5 | 11 |
| Road truck | 553627.4 | 6816231.3 | 2.5 | 11 |
| Road truck | 553638.3 | 6816229.8 | 2.5 | 15.6 |
| Road truck | 553648.9 | 6816228.4 | 2.5 | 15.6 |
| Road truck | 553659.3 | 6816227 | 2.5 | 15.6 |
| Road truck | 553669.4 | 6816225.7 | 2.5 | 15.6 |
| Road truck | 553679.5 | 6816224.3 | 2.5 | 15.7 |
| Road truck | 553689.3 | 6816223 | 2.5 | 15.7 |
| Road truck | 553698.9 | 6816221.7 | 2.5 | 15.7 |
| Road truck | 553708.5 | 6816220.5 | 2.5 | 15.7 |

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|---|---|---|---|---|
| Road truck | 553717.8 | 6816219.2 | 2.5 | 15.7 |
| Road truck | 553727 | 6816218 | 2.5 | 15.8 |
| Road truck | 553736.1 | 6816216.8 | 2.5 | 15.8 |
| Road truck | 553745.1 | 6816215.6 | 2.5 | 15.8 |
| Road truck | 553754 | 6816214.4 | 2.5 | 15.8 |
| Road truck | 553762.7 | 6816213.2 | 2.5 | 15.8 |
| Road truck | 553771.4 | 6816212 | 2.5 | 15.9 |
| Road truck | 553780 | 6816210.9 | 2.5 | 15.9 |
| Road truck | 553788.4 | 6816209.8 | 2.5 | 15.9 |
| Road truck | 553796.6 | 6816208.7 | 2.5 | 15.6 |
| Road truck | 553805 | 6816204.2 | 2.5 | 17.5 |
| Road truck | 553813.7 | 6816196.4 | 2.5 | 17.6 |
| Road truck | 553822.1 | 6816188.9 | 2.5 | 17.6 |
| Road truck | 553830.2 | 6816181.7 | 2.5 | 17.7 |
| Road truck | 553838.1 | 6816174.7 | 2.5 | 17.7 |
| Road truck | 553845.5 | 6816168 | 2.5 | 17.6 |
| HAUL TRUCK | 553379.3 | 6815910.9 | 2.5 | 11.1 |
| HAUL TRUCK | 553352.6 | 6815910.8 | 2.5 | 11.1 |
| HAUL TRUCK | 553323 | 6815910.6 | 2.5 | 11.1 |
| HAUL TRUCK | 553290.1 | 6815910.5 | 2.5 | 11.1 |
| HAUL TRUCK | 553262.3 | 6815910.4 | 2.5 | 8.4 |
| HAUL TRUCK | 553473.8 | 6816194.6 | 2.5 | 13.8 |
| HAUL TRUCK | 553457.7 | 6816197.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553440.9 | 6816200.8 | 2.5 | 9.3 |
| HAUL TRUCK | 553423.3 | 6816204.1 | 2.5 | 7.8 |
| HAUL TRUCK | 553404.8 | 6816207.6 | 2.5 | 8.4 |
| HAUL TRUCK | 553385.5 | 6816211.2 | 2.5 | 8.9 |
| HAUL TRUCK | 553365.1 | 6816215 | 2.5 | 9.6 |
| HAUL TRUCK | 553343.7 | 6816219 | 2.5 | 9.6 |
| HAUL TRUCK | 553321 | 6816223.3 | 2.5 | 9.5 |
| HAUL TRUCK | 553297 | 6816227.8 | 2.5 | 9.5 |
| HAUL TRUCK | 553271.6 | 6816232.6 | 2.5 | 9.5 |
| HAUL TRUCK | 553254.6 | 6816235.7 | 2.5 | 3.8 |
| HAUL TRUCK | 553470.7 | 6816177.8 | 2.5 | 8.2 |
| HAUL TRUCK | 553467.3 | 6816166.5 | 2.5 | 7 |
| HAUL TRUCK | 553464 | 6816155.5 | 2.5 | 6.9 |
| HAUL TRUCK | 553460.7 | 6816144.6 | 2.5 | 7.5 |
| HAUL TRUCK | 553457.5 | 6816134 | 2.5 | 8 |
| HAUL TRUCK | 553454.4 | 6816123.6 | 2.5 | 8.2 |
| HAUL TRUCK | 553451.3 | 6816113.4 | 2.5 | 8.2 |
| HAUL TRUCK | 553448.3 | 6816103.3 | 2.5 | 8.2 |
| HAUL TRUCK | 553445.4 | 6816093.4 | 2.5 | 8.2 |
| HAUL TRUCK | 553442.4 | 6816083.7 | 2.5 | 8.3 |
| HAUL TRUCK | 553439.6 | 6816074.1 | 2.5 | 8.3 |
| HAUL TRUCK | 553436.7 | 6816064.6 | 2.5 | 8.3 |
| HAUL TRUCK | 553433.9 | 6816055.3 | 2.5 | 8.3 |
| HAUL TRUCK | 553431.2 | 6816046.1 | 2.5 | 8.4 |
| HAUL TRUCK | 553428.4 | 6816037 | 2.5 | 8.3 |
| HAUL TRUCK | 553425.7 | 6816028 | 2.5 | 8.3 |
| HAUL TRUCK | 553423.1 | 6816019.1 | 2.5 | 8.2 |
| HAUL TRUCK | 553420.4 | 6816010.3 | 2.5 | 8.1 |
| HAUL TRUCK | 553417.8 | 6816001.6 | 2.5 | 8.1 |
| HAUL TRUCK | 553415.2 | 6815993 | 2.5 | 8.1 |
| HAUL TRUCK | 553412.7 | 6815984.4 | 2.5 | 8.2 |
| HAUL TRUCK | 553410.1 | 6815975.9 | 2.5 | 8.3 |
| HAUL TRUCK | 553407.6 | 6815967.5 | 2.5 | 8.3 |
| HAUL TRUCK | 553405.1 | 6815959.1 | 2.5 | 8.3 |
| HAUL TRUCK | 553402.5 | 6815950.7 | 2.5 | 8.1 |
| HAUL TRUCK | 553400.1 | 6815942.4 | 2.5 | 7.9 |
| HAUL TRUCK | 553397.6 | 6815934.2 | 2.5 | 8.2 |
| HAUL TRUCK | 553395.1 | 6815925.9 | 2.5 | 7.7 |
| HAUL TRUCK | 553392.6 | 6815917.7 | 2.5 | 7 |
| HAUL TRUCK | 553390.2 | 6815909.5 | 2.5 | 6.5 |
| HAUL TRUCK | 553388.9 | 6815905.2 | 2.5 | -5.6 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2B | 554002.8 | 6815828.9 | 1.8 | 4 | 35.6 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 24.6 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.8 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 23.2 |

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|---|---|---|---|---|
| LOADER | 553326.8 | 6816183.8 | 2.5 | 25.3 |
| LOADER | 553284.8 | 6816215.6 | 2.5 | 22.1 |
| LOADER | 553260.9 | 6816245.4 | 2.5 | 22 |
| LOADER | 553246.1 | 6816263.9 | 2.5 | 14.1 |
| Road truck | 553375.3 | 6816258.4 | 2.5 | 16 |
| Road truck | 553344.6 | 6816262.8 | 2.5 | 15.9 |
| Road truck | 553311.5 | 6816267.5 | 2.5 | 15.7 |
| Road truck | 553291 | 6816270.4 | 2.5 | 8 |
| Road truck | 553289.1 | 6816261.6 | 2.5 | 12.8 |
| Road truck | 553290.8 | 6816247.6 | 2.5 | 10.2 |
| Road truck | 553305 | 6816243.1 | 2.5 | 14.8 |
| Road truck | 553331.1 | 6816243.6 | 2.5 | 14.8 |
| Road truck | 553355.6 | 6816244.1 | 2.5 | 14.9 |
| Road truck | 553380.2 | 6816243.8 | 2.5 | 15.4 |
| Road truck | 553404.8 | 6816242.7 | 2.5 | 15.5 |
| Road truck | 553428 | 6816241.6 | 2.5 | 15.6 |
| Road truck | 553450 | 6816240.6 | 2.5 | 15.7 |
| Road truck | 553470.9 | 6816239.7 | 2.5 | 15.7 |
| Road truck | 553490.8 | 6816238.8 | 2.5 | 15.8 |
| Road truck | 553509.7 | 6816237.9 | 2.5 | 15.8 |
| Road truck | 553520.6 | 6816237.5 | 2.5 | 8.7 |
| Road truck | 553533.9 | 6816243.8 | 2.5 | 16.3 |
| Road truck | 553552.9 | 6816241.2 | 2.5 | 16.5 |
| Road truck | 553570.9 | 6816238.8 | 2.5 | 16.5 |
| Road truck | 553588 | 6816236.5 | 2.5 | 16.5 |
| Road truck | 553604.4 | 6816234.4 | 2.5 | 16.6 |
| Road truck | 553620.1 | 6816232.3 | 2.5 | 16.7 |
| Road truck | 553635.1 | 6816230.3 | 2.5 | 16.7 |
| Road truck | 553649.4 | 6816228.3 | 2.5 | 16.7 |
| Road truck | 553663.3 | 6816226.5 | 2.5 | 16.8 |
| Road truck | 553676.5 | 6816224.7 | 2.5 | 16.8 |
| Road truck | 553689.3 | 6816223 | 2.5 | 12.1 |
| Road truck | 553701.7 | 6816221.4 | 2.5 | 16.9 |
| Road truck | 553713.6 | 6816219.8 | 2.5 | 16.9 |
| Road truck | 553725.1 | 6816218.2 | 2.5 | 17 |
| Road truck | 553736.3 | 6816216.7 | 2.5 | 17 |
| Road truck | 553747.1 | 6816215.3 | 2.5 | 17 |
| Road truck | 553757.6 | 6816213.9 | 2.5 | 17.1 |
| Road truck | 553767.7 | 6816212.5 | 2.5 | 17.1 |
| Road truck | 553777.6 | 6816211.2 | 2.5 | 17.1 |
| Road truck | 553787.3 | 6816209.9 | 2.5 | 17.2 |
| Road truck | 553796.3 | 6816208.7 | 2.5 | 16.9 |
| Road truck | 553808.4 | 6816201.1 | 2.5 | 20.9 |
| Road truck | 553823.2 | 6816187.9 | 2.5 | 21 |
| Road truck | 553836.7 | 6816175.8 | 2.5 | 21.1 |
| Road truck | 553846.2 | 6816167.5 | 2.5 | 18.2 |
| HAUL TRUCK | 553349.9 | 6815910.7 | 2.5 | 13.1 |
| HAUL TRUCK | 553277.9 | 6815910.4 | 2.5 | 9.9 |
| HAUL TRUCK | 553468.1 | 6816195.7 | 2.5 | 15.2 |
| HAUL TRUCK | 553439.5 | 6816201.1 | 2.5 | 15.1 |
| HAUL TRUCK | 553408.3 | 6816206.9 | 2.5 | 15 |
| HAUL TRUCK | 553374.3 | 6816213.3 | 2.5 | 14.9 |
| HAUL TRUCK | 553337.1 | 6816220.3 | 2.5 | 14.9 |
| HAUL TRUCK | 553296 | 6816228 | 2.5 | 14.8 |
| HAUL TRUCK | 553262.6 | 6816234.3 | 2.5 | 11.7 |
| HAUL TRUCK | 553470.7 | 6816178 | 2.5 | 11.6 |
| HAUL TRUCK | 553467.4 | 6816166.9 | 2.5 | 11.6 |
| HAUL TRUCK | 553464.1 | 6816156 | 2.5 | 11.6 |
| HAUL TRUCK | 553460.9 | 6816145.2 | 2.5 | 11.6 |
| HAUL TRUCK | 553457.7 | 6816134.4 | 2.5 | 11.6 |
| HAUL TRUCK | 553454.5 | 6816123.7 | 2.5 | 11.6 |
| HAUL TRUCK | 553451.3 | 6816113.2 | 2.5 | 11.6 |
| HAUL TRUCK | 553448.1 | 6816102.6 | 2.5 | 11.6 |
| HAUL TRUCK | 553445 | 6816092.2 | 2.5 | 11.6 |
| HAUL TRUCK | 553441.9 | 6816081.8 | 2.5 | 11.7 |
| HAUL TRUCK | 553438.8 | 6816071.4 | 2.5 | 11.7 |
| HAUL TRUCK | 553435.7 | 6816061.1 | 2.5 | 11.7 |
| HAUL TRUCK | 553432.6 | 6816050.8 | 2.5 | 7.4 |
| HAUL TRUCK | 553429.5 | 6816040.6 | 2.5 | 7.4 |
| HAUL TRUCK | 553426.4 | 6816030.4 | 2.5 | 7.5 |
| HAUL TRUCK | 553423.4 | 6816020.2 | 2.5 | 5.6 |
| HAUL TRUCK | 553420.3 | 6816010 | 2.5 | 6.7 |
| HAUL TRUCK | 553417.3 | 6815999.8 | 2.5 | 7.3 |

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|---|---|---|---|---|
| HAUL TRUCK | 553414.2 | 6815989.6 | 2.5 | 7.5 |
| HAUL TRUCK | 553411.1 | 6815979.4 | 2.5 | 7.4 |
| HAUL TRUCK | 553408.1 | 6815969.1 | 2.5 | 7.4 |
| HAUL TRUCK | 553405 | 6815958.9 | 2.5 | 7.4 |
| HAUL TRUCK | 553401.9 | 6815948.6 | 2.5 | 7.2 |
| HAUL TRUCK | 553398.8 | 6815938.3 | 2.5 | 7 |
| HAUL TRUCK | 553395.7 | 6815928 | 2.5 | 6.7 |
| HAUL TRUCK | 553392.6 | 6815917.6 | 2.5 | 4.8 |
| HAUL TRUCK | 553389.9 | 6815908.6 | 2.5 | 3.3 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R3 | 553634.8 | 6815756.9 | 1.8 | 3.6 | 38.9 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 30.9 |
| Generator | 553406.4 | 6816251.5 | 1 | 21.4 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 35.8 |
| LOADER | 553346 | 6816172.7 | 2.5 | 20.4 |
| LOADER | 553327.3 | 6816183.6 | 2.5 | 20.4 |
| LOADER | 553307 | 6816195.3 | 2.5 | 20.4 |
| LOADER | 553296.1 | 6816201.6 | 2.5 | 21.4 |
| LOADER | 553271.8 | 6816231.8 | 2.5 | 24.7 |
| Road truck | 553384 | 6816257.2 | 2.5 | 9.9 |
| Road truck | 553372.1 | 6816258.9 | 2.5 | 9.9 |
| Road truck | 553359.9 | 6816260.6 | 2.5 | 9.9 |
| Road truck | 553347.4 | 6816262.4 | 2.5 | 9.9 |
| Road truck | 553334.5 | 6816264.2 | 2.5 | 9.9 |
| Road truck | 553321.3 | 6816266.1 | 2.5 | 9.9 |
| Road truck | 553307.6 | 6816268 | 2.5 | 9.9 |
| Road truck | 553294.4 | 6816269.9 | 2.5 | 9.4 |
| Road truck | 553289.4 | 6816259.2 | 2.5 | 12 |
| Road truck | 553291 | 6816245.4 | 2.5 | 5.9 |
| Road truck | 553297.6 | 6816242.9 | 2.5 | 9.7 |
| Road truck | 553309.8 | 6816243.2 | 2.5 | 9.7 |
| Road truck | 553321.8 | 6816243.4 | 2.5 | 9.7 |
| Road truck | 553333.5 | 6816243.7 | 2.5 | 9.7 |
| Road truck | 553345 | 6816243.9 | 2.5 | 9.7 |
| Road truck | 553356.3 | 6816244.1 | 2.5 | 9.7 |
| Road truck | 553364.6 | 6816244.3 | 2.5 | 6.7 |
| Road truck | 553373 | 6816244.1 | 2.5 | 9.8 |
| Road truck | 553384.2 | 6816243.6 | 2.5 | 9.8 |
| Road truck | 553395.1 | 6816243.1 | 2.5 | 9.8 |
| Road truck | 553405.7 | 6816242.6 | 2.5 | 9.8 |
| Road truck | 553416.2 | 6816242.2 | 2.5 | 9.7 |
| Road truck | 553426.5 | 6816241.7 | 2.5 | 9.7 |
| Road truck | 553436.7 | 6816241.2 | 2.5 | 10 |
| Road truck | 553446.7 | 6816240.8 | 2.5 | 10 |
| Road truck | 553456.5 | 6816240.3 | 2.5 | 10 |
| Road truck | 553466.2 | 6816239.9 | 2.5 | 10 |
| Road truck | 553475.7 | 6816239.5 | 2.5 | 10 |
| Road truck | 553485.1 | 6816239.1 | 2.5 | 10 |
| Road truck | 553494.4 | 6816238.6 | 2.5 | 10 |
| Road truck | 553503.6 | 6816238.2 | 2.5 | 10 |
| Road truck | 553512.7 | 6816237.8 | 2.5 | 10 |
| Road truck | 553519.7 | 6816237.5 | 2.5 | 7.6 |
| Road truck | 553528.7 | 6816244.5 | 2.5 | 9.9 |
| Road truck | 553537.8 | 6816243.2 | 2.5 | 9.8 |
| Road truck | 553546.8 | 6816242 | 2.5 | 10.2 |
| Road truck | 553555.7 | 6816240.9 | 2.5 | 10.2 |
| Road truck | 553564.6 | 6816239.7 | 2.5 | 10.3 |
| Road truck | 553573.3 | 6816238.5 | 2.5 | 10.3 |
| Road truck | 553581.9 | 6816237.4 | 2.5 | 10.2 |
| Road truck | 553590.5 | 6816236.2 | 2.5 | 10.1 |
| Road truck | 553599 | 6816235.1 | 2.5 | 10.1 |
| Road truck | 553607.5 | 6816233.9 | 2.5 | 10.1 |
| Road truck | 553615.9 | 6816232.8 | 2.5 | 10.2 |
| Road truck | 553624.2 | 6816231.7 | 2.5 | 10.2 |
| Road truck | 553632.5 | 6816230.6 | 2.5 | 10.2 |
| Road truck | 553640.8 | 6816229.5 | 2.5 | 10 |
| Road truck | 553649 | 6816228.4 | 2.5 | 10.1 |
| Road truck | 553657.2 | 6816227.3 | 2.5 | 10.2 |
| Road truck | 553665.3 | 6816226.2 | 2.5 | 10.3 |

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|---|---|---|---|---|
| Road truck | 553673.5 | 6816225.1 | 2.5 | 10.3 |
| Road truck | 553681.6 | 6816224 | 2.5 | 10.4 |
| Road truck | 553689.7 | 6816223 | 2.5 | 10.5 |
| Road truck | 553697.8 | 6816221.9 | 2.5 | 10.5 |
| Road truck | 553706 | 6816220.8 | 2.5 | 10.5 |
| Road truck | 553714.1 | 6816219.7 | 2.5 | 9.9 |
| Road truck | 553722.2 | 6816218.6 | 2.5 | 8.8 |
| Road truck | 553730.4 | 6816217.5 | 2.5 | 15.7 |
| Road truck | 553738.5 | 6816216.4 | 2.5 | 15.7 |
| Road truck | 553746.7 | 6816215.3 | 2.5 | 15.8 |
| Road truck | 553755 | 6816214.2 | 2.5 | 15.8 |
| Road truck | 553763.2 | 6816213.1 | 2.5 | 15.8 |
| Road truck | 553771.5 | 6816212 | 2.5 | 15.8 |
| Road truck | 553779.9 | 6816210.9 | 2.5 | 15.8 |
| Road truck | 553788.3 | 6816209.8 | 2.5 | 15.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 15.5 |
| Road truck | 553803.8 | 6816205.2 | 2.5 | 16 |
| Road truck | 553810.5 | 6816199.2 | 2.5 | 16 |
| Road truck | 553817 | 6816193.4 | 2.5 | 16 |
| Road truck | 553823.5 | 6816187.6 | 2.5 | 16 |
| Road truck | 553829.9 | 6816181.9 | 2.5 | 16.1 |
| Road truck | 553836.3 | 6816176.3 | 2.5 | 16.1 |
| Road truck | 553842.6 | 6816170.7 | 2.5 | 16.1 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 13.6 |
| HAUL TRUCK | 553387 | 6815910.9 | 2.5 | 11.1 |
| HAUL TRUCK | 553377.2 | 6815910.9 | 2.5 | 11.1 |
| HAUL TRUCK | 553366.7 | 6815910.8 | 2.5 | 11.2 |
| HAUL TRUCK | 553355.6 | 6815910.8 | 2.5 | 11.2 |
| HAUL TRUCK | 553343.8 | 6815910.7 | 2.5 | 11.2 |
| HAUL TRUCK | 553331.2 | 6815910.7 | 2.5 | 11.3 |
| HAUL TRUCK | 553317.7 | 6815910.6 | 2.5 | 11.3 |
| HAUL TRUCK | 553303.2 | 6815910.5 | 2.5 | 11.4 |
| HAUL TRUCK | 553287.6 | 6815910.5 | 2.5 | 11.4 |
| HAUL TRUCK | 553270.7 | 6815910.4 | 2.5 | 18.1 |
| HAUL TRUCK | 553257 | 6815910.3 | 2.5 | 15.2 |
| HAUL TRUCK | 553477 | 6816194 | 2.5 | 9 |
| HAUL TRUCK | 553467.7 | 6816195.8 | 2.5 | 9 |
| HAUL TRUCK | 553458.1 | 6816197.6 | 2.5 | 9 |
| HAUL TRUCK | 553448.4 | 6816199.4 | 2.5 | 8.7 |
| HAUL TRUCK | 553438.4 | 6816201.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553428.1 | 6816203.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553417.7 | 6816205.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553406.9 | 6816207.2 | 2.5 | 8.8 |
| HAUL TRUCK | 553395.8 | 6816209.3 | 2.5 | 8.8 |
| HAUL TRUCK | 553384.5 | 6816211.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553372.8 | 6816213.6 | 2.5 | 8.8 |
| HAUL TRUCK | 553360.7 | 6816215.9 | 2.5 | 9.2 |
| HAUL TRUCK | 553348.3 | 6816218.2 | 2.5 | 9.2 |
| HAUL TRUCK | 553335.4 | 6816220.6 | 2.5 | 9.2 |
| HAUL TRUCK | 553322.2 | 6816223.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553308.4 | 6816225.7 | 2.5 | 9.2 |
| HAUL TRUCK | 553294.2 | 6816228.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553279.5 | 6816231.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553264.1 | 6816234 | 2.5 | 9.2 |
| HAUL TRUCK | 553253.6 | 6816235.9 | 2.5 | 4.4 |
| HAUL TRUCK | 553470.5 | 6816177.3 | 2.5 | 10.6 |
| HAUL TRUCK | 553466.9 | 6816165.4 | 2.5 | 10.6 |
| HAUL TRUCK | 553463.5 | 6816153.9 | 2.5 | 10.4 |
| HAUL TRUCK | 553460.2 | 6816142.9 | 2.5 | 10.4 |
| HAUL TRUCK | 553457 | 6816132.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553454 | 6816122.1 | 2.5 | 10.5 |
| HAUL TRUCK | 553451 | 6816112.3 | 2.5 | 10.5 |
| HAUL TRUCK | 553448.2 | 6816102.9 | 2.5 | 10.6 |
| HAUL TRUCK | 553445.5 | 6816093.8 | 2.5 | 10.6 |
| HAUL TRUCK | 553442.8 | 6816084.9 | 2.5 | 10.6 |
| HAUL TRUCK | 553440.2 | 6816076.4 | 2.5 | 10.7 |
| HAUL TRUCK | 553437.8 | 6816068.1 | 2.5 | 10.7 |
| HAUL TRUCK | 553435.4 | 6816060.1 | 2.5 | 10.7 |
| HAUL TRUCK | 553433 | 6816052.3 | 2.5 | 10.7 |
| HAUL TRUCK | 553430.7 | 6816044.7 | 2.5 | 10.7 |
| HAUL TRUCK | 553428.5 | 6816037.3 | 2.5 | 10.7 |
| HAUL TRUCK | 553426.4 | 6816030.1 | 2.5 | 10.7 |
| HAUL TRUCK | 553424.3 | 6816023.1 | 2.5 | 10.7 |

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|---|---|---|---|---|
| HAUL TRUCK | 553422.2 | 6816016.3 | 2.5 | 10.9 |
| HAUL TRUCK | 553420.2 | 6816009.6 | 2.5 | 10.8 |
| HAUL TRUCK | 553418.2 | 6816003.1 | 2.5 | 10.8 |
| HAUL TRUCK | 553416.3 | 6815996.7 | 2.5 | 10.8 |
| HAUL TRUCK | 553414.5 | 6815990.4 | 2.5 | 10.8 |
| HAUL TRUCK | 553412.6 | 6815984.3 | 2.5 | 10.8 |
| HAUL TRUCK | 553410.8 | 6815978.3 | 2.5 | 11.8 |
| HAUL TRUCK | 553409 | 6815972.3 | 2.5 | 11.8 |
| HAUL TRUCK | 553407.3 | 6815966.5 | 2.5 | 11.7 |
| HAUL TRUCK | 553405.6 | 6815960.8 | 2.5 | 11.7 |
| HAUL TRUCK | 553403.9 | 6815955.2 | 2.5 | 11.6 |
| HAUL TRUCK | 553402.2 | 6815949.7 | 2.5 | 11.4 |
| HAUL TRUCK | 553400.6 | 6815944.3 | 2.5 | 11.2 |
| HAUL TRUCK | 553399 | 6815938.9 | 2.5 | 10.9 |
| HAUL TRUCK | 553397.4 | 6815933.6 | 2.5 | 10.6 |
| HAUL TRUCK | 553395.8 | 6815928.4 | 2.5 | 10 |
| HAUL TRUCK | 553394.3 | 6815923.2 | 2.5 | 9.6 |
| HAUL TRUCK | 553392.8 | 6815918.1 | 2.5 | 9.1 |
| HAUL TRUCK | 553391.2 | 6815913 | 2.5 | 8.8 |
| HAUL TRUCK | 553389.7 | 6815908 | 2.5 | 8.3 |
| HAUL TRUCK | 553388.9 | 6815905.2 | 2.5 | -0.9 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4A | 552797.6 | 6815469.6 | 1.8 | 16.9 | 32.9 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 23.3 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.8 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 27.3 |
| LOADER | 553348 | 6816171.5 | 2.5 | 16.9 |
| LOADER | 553334.5 | 6816179.3 | 2.5 | 16.9 |
| LOADER | 553321 | 6816187.2 | 2.5 | 16.9 |
| LOADER | 553307.5 | 6816195 | 2.5 | 16.9 |
| LOADER | 553298.4 | 6816200.3 | 2.5 | 12.4 |
| LOADER | 553291 | 6816208 | 2.5 | 17.1 |
| LOADER | 553280.8 | 6816220.7 | 2.5 | 17.1 |
| LOADER | 553270.4 | 6816233.6 | 2.5 | 17.1 |
| LOADER | 553259.9 | 6816246.6 | 2.5 | 17.1 |
| LOADER | 553249.3 | 6816259.8 | 2.5 | 17.1 |
| Road truck | 553380.2 | 6816257.7 | 2.5 | 10.7 |
| Road truck | 553361.1 | 6816260.4 | 2.5 | 10.7 |
| Road truck | 553342.4 | 6816263.1 | 2.5 | 10.8 |
| Road truck | 553324 | 6816265.7 | 2.5 | 10.8 |
| Road truck | 553305.9 | 6816268.3 | 2.5 | 10.8 |
| Road truck | 553292.5 | 6816270.2 | 2.5 | 7.9 |
| Road truck | 553289.6 | 6816257.8 | 2.5 | 12.6 |
| Road truck | 553291.2 | 6816244 | 2.5 | 2.3 |
| Road truck | 553301 | 6816243 | 2.5 | 11.4 |
| Road truck | 553320.8 | 6816243.4 | 2.5 | 11.4 |
| Road truck | 553341 | 6816243.8 | 2.5 | 11.3 |
| Road truck | 553359.3 | 6816244.2 | 2.5 | 10.2 |
| Road truck | 553377.5 | 6816243.9 | 2.5 | 11.1 |
| Road truck | 553398.2 | 6816243 | 2.5 | 11 |
| Road truck | 553419.4 | 6816242 | 2.5 | 11 |
| Road truck | 553441.1 | 6816241 | 2.5 | 10.9 |
| Road truck | 553463.4 | 6816240 | 2.5 | 10.9 |
| Road truck | 553486.3 | 6816239 | 2.5 | 10.9 |
| Road truck | 553509.9 | 6816237.9 | 2.5 | 10.8 |
| Road truck | 553522.1 | 6816237.4 | 2.5 | -8.6 |
| Road truck | 553535.4 | 6816243.6 | 2.5 | 10.4 |
| Road truck | 553558.6 | 6816240.5 | 2.5 | 10.4 |
| Road truck | 553582.4 | 6816237.3 | 2.5 | 10.3 |
| Road truck | 553606.9 | 6816234 | 2.5 | 10.3 |
| Road truck | 553632 | 6816230.7 | 2.5 | 10.2 |
| Road truck | 553657.9 | 6816227.2 | 2.5 | 10.2 |
| Road truck | 553684.6 | 6816223.6 | 2.5 | 10.1 |
| Road truck | 553712.1 | 6816220 | 2.5 | 10.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 10 |
| Road truck | 553770 | 6816212.2 | 2.5 | 10 |
| Road truck | 553792.8 | 6816209.2 | 2.5 | 6.9 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 8.4 |
| Road truck | 553825.5 | 6816185.9 | 2.5 | 8.4 |

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|---|---|---|---|---|
| Road truck | 553841.5 | 6816171.6 | 2.5 | 7.9 |
| HAUL TRUCK | 553381 | 6815910.9 | 2.5 | 6.5 |
| HAUL TRUCK | 553360.2 | 6815910.8 | 2.5 | 12.1 |
| HAUL TRUCK | 553340.3 | 6815910.7 | 2.5 | 12.2 |
| HAUL TRUCK | 553321.2 | 6815910.6 | 2.5 | 12.2 |
| HAUL TRUCK | 553303 | 6815910.5 | 2.5 | 12.2 |
| HAUL TRUCK | 553285.4 | 6815910.5 | 2.5 | 12.3 |
| HAUL TRUCK | 553268.6 | 6815910.4 | 2.5 | 12.3 |
| HAUL TRUCK | 553256.2 | 6815910.3 | 2.5 | 5.9 |
| HAUL TRUCK | 553471.5 | 6816195.1 | 2.5 | 8.7 |
| HAUL TRUCK | 553451.7 | 6816198.8 | 2.5 | 8.8 |
| HAUL TRUCK | 553432.2 | 6816202.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553413.1 | 6816206 | 2.5 | 8.8 |
| HAUL TRUCK | 553394.4 | 6816209.5 | 2.5 | 8.8 |
| HAUL TRUCK | 553376.1 | 6816213 | 2.5 | 8.9 |
| HAUL TRUCK | 553358.1 | 6816216.3 | 2.5 | 8.9 |
| HAUL TRUCK | 553340.4 | 6816219.7 | 2.5 | 9 |
| HAUL TRUCK | 553322.9 | 6816222.9 | 2.5 | 9 |
| HAUL TRUCK | 553305.8 | 6816226.2 | 2.5 | 9 |
| HAUL TRUCK | 553288.9 | 6816229.3 | 2.5 | 9 |
| HAUL TRUCK | 553272.2 | 6816232.4 | 2.5 | 9 |
| HAUL TRUCK | 553257.5 | 6816235.2 | 2.5 | 8.1 |
| HAUL TRUCK | 553467 | 6816165.6 | 2.5 | 11.5 |
| HAUL TRUCK | 553456.7 | 6816131.4 | 2.5 | 11.6 |
| HAUL TRUCK | 553447.1 | 6816099.4 | 2.5 | 11.7 |
| HAUL TRUCK | 553438.1 | 6816069.3 | 2.5 | 11.8 |
| HAUL TRUCK | 553429.6 | 6816041 | 2.5 | 11.8 |
| HAUL TRUCK | 553421.6 | 6816014.2 | 2.5 | 11.9 |
| HAUL TRUCK | 553414 | 6815988.9 | 2.5 | 11.9 |
| HAUL TRUCK | 553406.8 | 6815965 | 2.5 | 12 |
| HAUL TRUCK | 553400 | 6815942.2 | 2.5 | 12 |
| HAUL TRUCK | 553393.5 | 6815920.5 | 2.5 | 7.4 |
| HAUL TRUCK | 553389.6 | 6815907.5 | 2.5 | 0.1 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4B | 552865.6 | 6815421 | 1.8 | 18.9 | 34.3 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 23.3 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.7 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 31.1 |
| LOADER | 553348.1 | 6816171.4 | 2.5 | 16.8 |
| LOADER | 553334.6 | 6816179.3 | 2.5 | 16.8 |
| LOADER | 553321.2 | 6816187.1 | 2.5 | 16.8 |
| LOADER | 553307.7 | 6816194.9 | 2.5 | 16.8 |
| LOADER | 553298.5 | 6816200.2 | 2.5 | 12.4 |
| LOADER | 553290.8 | 6816208.2 | 2.5 | 17.1 |
| LOADER | 553280.1 | 6816221.5 | 2.5 | 17.1 |
| LOADER | 553269.2 | 6816235.1 | 2.5 | 17.1 |
| LOADER | 553258.2 | 6816248.8 | 2.5 | 17.1 |
| LOADER | 553248.3 | 6816261.1 | 2.5 | 15.9 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 10.4 |
| Road truck | 553362.2 | 6816260.3 | 2.5 | 10.5 |
| Road truck | 553344.1 | 6816262.9 | 2.5 | 10.5 |
| Road truck | 553326.2 | 6816265.4 | 2.5 | 10.5 |
| Road truck | 553308.6 | 6816267.9 | 2.5 | 10.5 |
| Road truck | 553293.9 | 6816270 | 2.5 | 8.9 |
| Road truck | 553289.7 | 6816256.6 | 2.5 | 12.8 |
| Road truck | 553300.6 | 6816243 | 2.5 | 11.1 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 11 |
| Road truck | 553338.5 | 6816243.8 | 2.5 | 11 |
| Road truck | 553357.7 | 6816244.2 | 2.5 | 10.8 |
| Road truck | 553377 | 6816243.9 | 2.5 | 10.8 |
| Road truck | 553396.6 | 6816243 | 2.5 | 10.7 |
| Road truck | 553416.6 | 6816242.1 | 2.5 | 10.7 |
| Road truck | 553437 | 6816241.2 | 2.5 | 10.7 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 10.6 |
| Road truck | 553479.1 | 6816239.3 | 2.5 | 10.6 |
| Road truck | 553501 | 6816238.3 | 2.5 | 10.6 |
| Road truck | 553517.2 | 6816237.6 | 2.5 | 7.1 |
| Road truck | 553534.8 | 6816243.7 | 2.5 | 10.2 |
| Road truck | 553556.5 | 6816240.7 | 2.5 | 10.2 |

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|---|---|---|---|---|
| Road truck | 553578.8 | 6816237.8 | 2.5 | 10.1 |
| Road truck | 553601.6 | 6816234.7 | 2.5 | 10.1 |
| Road truck | 553624.9 | 6816231.6 | 2.5 | 10.1 |
| Road truck | 553648.8 | 6816228.4 | 2.5 | 10 |
| Road truck | 553673.3 | 6816225.1 | 2.5 | 9.9 |
| Road truck | 553698.5 | 6816221.8 | 2.5 | 9.9 |
| Road truck | 553724.4 | 6816218.3 | 2.5 | 9.9 |
| Road truck | 553751.1 | 6816214.8 | 2.5 | 9.8 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 9.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 4.2 |
| Road truck | 553808.5 | 6816201 | 2.5 | 8.5 |
| Road truck | 553824.7 | 6816186.6 | 2.5 | 8.5 |
| Road truck | 553841 | 6816172.1 | 2.5 | 8.5 |
| HAUL TRUCK | 553382.6 | 6815910.9 | 2.5 | 5.9 |
| HAUL TRUCK | 553364.8 | 6815910.8 | 2.5 | 5.9 |
| HAUL TRUCK | 553347.6 | 6815910.7 | 2.5 | 11.7 |
| HAUL TRUCK | 553331 | 6815910.7 | 2.5 | 11.7 |
| HAUL TRUCK | 553314.9 | 6815910.6 | 2.5 | 11.7 |
| HAUL TRUCK | 553299.3 | 6815910.5 | 2.5 | 11.7 |
| HAUL TRUCK | 553284.3 | 6815910.5 | 2.5 | 11.8 |
| HAUL TRUCK | 553269.6 | 6815910.4 | 2.5 | 11.8 |
| HAUL TRUCK | 553257.3 | 6815910.3 | 2.5 | 10.5 |
| HAUL TRUCK | 553472.1 | 6816195 | 2.5 | 8.5 |
| HAUL TRUCK | 553453.2 | 6816198.5 | 2.5 | 8.5 |
| HAUL TRUCK | 553434.7 | 6816202 | 2.5 | 8.6 |
| HAUL TRUCK | 553416.5 | 6816205.4 | 2.5 | 8.6 |
| HAUL TRUCK | 553398.6 | 6816208.7 | 2.5 | 8.6 |
| HAUL TRUCK | 553380.9 | 6816212.1 | 2.5 | 8.6 |
| HAUL TRUCK | 553363.5 | 6816215.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553346.4 | 6816218.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553329.4 | 6816221.7 | 2.5 | 8.7 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 8.7 |
| HAUL TRUCK | 553296.1 | 6816228 | 2.5 | 8.7 |
| HAUL TRUCK | 553279.8 | 6816231 | 2.5 | 8.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 8.8 |
| HAUL TRUCK | 553253.3 | 6816236 | 2.5 | 3.4 |
| HAUL TRUCK | 553466 | 6816162.1 | 2.5 | 12.3 |
| HAUL TRUCK | 553453.9 | 6816121.8 | 2.5 | 12.4 |
| HAUL TRUCK | 553442.7 | 6816084.6 | 2.5 | 12.5 |
| HAUL TRUCK | 553432.4 | 6816050.3 | 2.5 | 12.6 |
| HAUL TRUCK | 553422.8 | 6816018.3 | 2.5 | 12.7 |
| HAUL TRUCK | 553413.9 | 6815988.6 | 2.5 | 12.7 |
| HAUL TRUCK | 553405.6 | 6815960.7 | 2.5 | 12.8 |
| HAUL TRUCK | 553397.7 | 6815934.7 | 2.5 | 12.8 |
| HAUL TRUCK | 553391.4 | 6815913.5 | 2.5 | 6.1 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5A | 552762.8 | 6815886.6 | 1.8 | 24.1 | 37.6 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 31.3 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.1 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 33.3 |
| LOADER | 553348.9 | 6816171 | 2.5 | 18.9 |
| LOADER | 553337.2 | 6816177.8 | 2.5 | 18.9 |
| LOADER | 553325.7 | 6816184.4 | 2.5 | 18.9 |
| LOADER | 553314.5 | 6816191 | 2.5 | 18.9 |
| LOADER | 553303.5 | 6816197.3 | 2.5 | 18.9 |
| LOADER | 553297.1 | 6816201.1 | 2.5 | 11.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.4 |
| LOADER | 553285.8 | 6816214.4 | 2.5 | 18.4 |
| LOADER | 553279.1 | 6816222.8 | 2.5 | 18.4 |
| LOADER | 553272.3 | 6816231.2 | 2.5 | 18.4 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 18.4 |
| LOADER | 553258.8 | 6816248 | 2.5 | 18.4 |
| LOADER | 553252.1 | 6816256.3 | 2.5 | 18.4 |
| LOADER | 553246.4 | 6816263.5 | 2.5 | 17 |
| Road truck | 553379.9 | 6816257.8 | 2.5 | 14.1 |
| Road truck | 553360.6 | 6816260.5 | 2.5 | 14.1 |
| Road truck | 553342 | 6816263.1 | 2.5 | 14.2 |
| Road truck | 553324.2 | 6816265.7 | 2.5 | 14.2 |
| Road truck | 553307.1 | 6816268.1 | 2.5 | 14.3 |

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|---|---|---|---|---|
| Road truck | 553293.4 | 6816270 | 2.5 | 12.5 |
| Road truck | 553288.8 | 6816264.4 | 2.5 | 13.4 |
| Road truck | 553290.3 | 6816251.7 | 2.5 | 13.4 |
| Road truck | 553291.2 | 6816244.1 | 2.5 | 6.7 |
| Road truck | 553301.8 | 6816243 | 2.5 | 15.5 |
| Road truck | 553323.5 | 6816243.5 | 2.5 | 15.5 |
| Road truck | 553346.4 | 6816243.9 | 2.5 | 15.4 |
| Road truck | 553362.9 | 6816244.3 | 2.5 | 11 |
| Road truck | 553378.7 | 6816243.8 | 2.5 | 14.8 |
| Road truck | 553402.4 | 6816242.8 | 2.5 | 14.8 |
| Road truck | 553427.4 | 6816241.7 | 2.5 | 14.7 |
| Road truck | 553453.9 | 6816240.5 | 2.5 | 14.6 |
| Road truck | 553482.1 | 6816239.2 | 2.5 | 14.5 |
| Road truck | 553509.4 | 6816238 | 2.5 | 13.6 |
| Road truck | 553537.7 | 6816243.3 | 2.5 | 13.6 |
| Road truck | 553566.1 | 6816239.5 | 2.5 | 13.6 |
| Road truck | 553596.1 | 6816235.5 | 2.5 | 13.5 |
| Road truck | 553628.1 | 6816231.2 | 2.5 | 13.4 |
| Road truck | 553662 | 6816226.7 | 2.5 | 13.3 |
| Road truck | 553698.3 | 6816221.8 | 2.5 | 13.2 |
| Road truck | 553737 | 6816216.6 | 2.5 | 13.1 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 13 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 9.9 |
| Road truck | 553825.7 | 6816185.7 | 2.5 | 9.8 |
| Road truck | 553841.7 | 6816171.5 | 2.5 | 9.1 |
| HAUL TRUCK | 553313.2 | 6815910.6 | 2.5 | 22.5 |
| HAUL TRUCK | 553469.7 | 6816195.4 | 2.5 | 11.9 |
| HAUL TRUCK | 553446.8 | 6816199.7 | 2.5 | 11.9 |
| HAUL TRUCK | 553424.9 | 6816203.8 | 2.5 | 12 |
| HAUL TRUCK | 553404.1 | 6816207.7 | 2.5 | 12 |
| HAUL TRUCK | 553384.2 | 6816211.4 | 2.5 | 12 |
| HAUL TRUCK | 553365.2 | 6816215 | 2.5 | 12.1 |
| HAUL TRUCK | 553347 | 6816218.4 | 2.5 | 12.2 |
| HAUL TRUCK | 553329.5 | 6816221.7 | 2.5 | 12.2 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 12.2 |
| HAUL TRUCK | 553296.5 | 6816227.9 | 2.5 | 12.3 |
| HAUL TRUCK | 553280.9 | 6816230.8 | 2.5 | 12.3 |
| HAUL TRUCK | 553265.9 | 6816233.6 | 2.5 | 12.3 |
| HAUL TRUCK | 553254.7 | 6816235.7 | 2.5 | 9.6 |
| HAUL TRUCK | 553469.9 | 6816175.3 | 2.5 | 10.5 |
| HAUL TRUCK | 553465.1 | 6816159.1 | 2.5 | 10.6 |
| HAUL TRUCK | 553460.3 | 6816143.3 | 2.5 | 10.6 |
| HAUL TRUCK | 553455.7 | 6816128 | 2.5 | 10.6 |
| HAUL TRUCK | 553451.2 | 6816113.1 | 2.5 | 10.6 |
| HAUL TRUCK | 553446.9 | 6816098.5 | 2.5 | 10.7 |
| HAUL TRUCK | 553442.6 | 6816084.2 | 2.5 | 10.7 |
| HAUL TRUCK | 553438.4 | 6816070.3 | 2.5 | 10.7 |
| HAUL TRUCK | 553434.3 | 6816056.6 | 2.5 | 10.7 |
| HAUL TRUCK | 553430.3 | 6816043.3 | 2.5 | 10.7 |
| HAUL TRUCK | 553426.4 | 6816030.2 | 2.5 | 10.7 |
| HAUL TRUCK | 553422.5 | 6816017.3 | 2.5 | 10.8 |
| HAUL TRUCK | 553418.7 | 6816004.7 | 2.5 | 10.8 |
| HAUL TRUCK | 553415 | 6815992.3 | 2.5 | 10.8 |
| HAUL TRUCK | 553411.4 | 6815980.2 | 2.5 | 10.8 |
| HAUL TRUCK | 553407.8 | 6815968.2 | 2.5 | 10.8 |
| HAUL TRUCK | 553404.2 | 6815956.4 | 2.5 | 10.8 |
| HAUL TRUCK | 553400.8 | 6815944.7 | 2.5 | 10.8 |
| HAUL TRUCK | 553397.3 | 6815933.3 | 2.5 | 10.8 |
| HAUL TRUCK | 553393.9 | 6815922 | 2.5 | 10.8 |
| HAUL TRUCK | 553390.6 | 6815910.8 | 2.5 | 10.8 |
| HAUL TRUCK | 553388.9 | 6815905.1 | 2.5 | -3.8 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5B | 552747.8 | 6815977.7 | 1.8 | 26.9 | 37.5 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 30.9 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.3 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 32.9 |
| LOADER | 553348.4 | 6816171.3 | 2.5 | 19.5 |
| LOADER | 553335.8 | 6816178.6 | 2.5 | 19.5 |
| LOADER | 553323.5 | 6816185.7 | 2.5 | 19.5 |

| | | | | |
|---|---|---|---|---|
| LOADER | 553311.7 | 6816192.6 | 2.5 | 19.5 |
| LOADER | 553300.9 | 6816198.8 | 2.5 | 18.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.7 |
| LOADER | 553286 | 6816214.2 | 2.5 | 18.7 |
| LOADER | 553279.4 | 6816222.4 | 2.5 | 18.7 |
| LOADER | 553272.8 | 6816230.6 | 2.5 | 18.7 |
| LOADER | 553266.3 | 6816238.7 | 2.5 | 18.7 |
| LOADER | 553259.8 | 6816246.7 | 2.5 | 18.7 |
| LOADER | 553253.4 | 6816254.7 | 2.5 | 18.7 |
| LOADER | 553247.1 | 6816262.6 | 2.5 | 18.6 |
| Road truck | 553378.5 | 6816258 | 2.5 | 15 |
| Road truck | 553356.6 | 6816261.1 | 2.5 | 15.1 |
| Road truck | 553335.9 | 6816264 | 2.5 | 15.2 |
| Road truck | 553316.2 | 6816266.8 | 2.5 | 15.2 |
| Road truck | 553297.4 | 6816269.5 | 2.5 | 15.3 |
| Road truck | 553288.2 | 6816270.8 | 2.5 | -1.2 |
| Road truck | 553288.7 | 6816265.1 | 2.5 | 13.4 |
| Road truck | 553290 | 6816253.8 | 2.5 | 13.4 |
| Road truck | 553291 | 6816245.5 | 2.5 | 10.3 |
| Road truck | 553304.2 | 6816243.1 | 2.5 | 16.9 |
| Road truck | 553331.3 | 6816243.6 | 2.5 | 16.8 |
| Road truck | 553356.4 | 6816244.1 | 2.5 | 15.3 |
| Road truck | 553381.1 | 6816243.7 | 2.5 | 16 |
| Road truck | 553410.2 | 6816242.4 | 2.5 | 15.9 |
| Road truck | 553441.5 | 6816241 | 2.5 | 15.8 |
| Road truck | 553475.5 | 6816239.5 | 2.5 | 15.7 |
| Road truck | 553507.7 | 6816238 | 2.5 | 14.4 |
| Road truck | 553540.2 | 6816242.9 | 2.5 | 14.5 |
| Road truck | 553574.3 | 6816238.4 | 2.5 | 14.5 |
| Road truck | 553611 | 6816233.5 | 2.5 | 14.4 |
| Road truck | 553650.6 | 6816228.2 | 2.5 | 14.2 |
| Road truck | 553693.7 | 6816222.4 | 2.5 | 14.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 14 |
| Road truck | 553782.8 | 6816210.5 | 2.5 | 12.1 |
| Road truck | 553809.2 | 6816200.4 | 2.5 | 10.1 |
| Road truck | 553827 | 6816184.5 | 2.5 | 10.1 |
| Road truck | 553842.6 | 6816170.6 | 2.5 | 8.5 |
| HAUL TRUCK | 553343.1 | 6815910.7 | 2.5 | 19.9 |
| HAUL TRUCK | 553275.5 | 6815910.4 | 2.5 | 18.5 |
| HAUL TRUCK | 553467.4 | 6816195.8 | 2.5 | 12.8 |
| HAUL TRUCK | 553440.4 | 6816200.9 | 2.5 | 12.9 |
| HAUL TRUCK | 553415 | 6816205.7 | 2.5 | 12.9 |
| HAUL TRUCK | 553391.2 | 6816210.1 | 2.5 | 13 |
| HAUL TRUCK | 553368.7 | 6816214.4 | 2.5 | 13 |
| HAUL TRUCK | 553347.5 | 6816218.3 | 2.5 | 13.1 |
| HAUL TRUCK | 553327.4 | 6816222.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553308.3 | 6816225.7 | 2.5 | 13.2 |
| HAUL TRUCK | 553290.2 | 6816229.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553273 | 6816232.3 | 2.5 | 13.3 |
| HAUL TRUCK | 553257.7 | 6816235.2 | 2.5 | 12.6 |
| HAUL TRUCK | 553470.2 | 6816176.1 | 2.5 | 10.2 |
| HAUL TRUCK | 553465.8 | 6816161.5 | 2.5 | 10.2 |
| HAUL TRUCK | 553461.5 | 6816147.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553457.3 | 6816133.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553453.1 | 6816119.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553449.1 | 6816105.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553445.1 | 6816092.6 | 2.5 | 10.3 |
| HAUL TRUCK | 553441.2 | 6816079.6 | 2.5 | 10.3 |
| HAUL TRUCK | 553437.4 | 6816066.8 | 2.5 | 10.3 |
| HAUL TRUCK | 553433.6 | 6816054.1 | 2.5 | 10.4 |
| HAUL TRUCK | 553429.8 | 6816041.7 | 2.5 | 10.4 |
| HAUL TRUCK | 553426.2 | 6816029.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553422.5 | 6816017.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553418.9 | 6816005.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553415.4 | 6815993.5 | 2.5 | 10.4 |
| HAUL TRUCK | 553411.9 | 6815981.9 | 2.5 | 10.4 |
| HAUL TRUCK | 553408.4 | 6815970.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553405 | 6815958.9 | 2.5 | 10.4 |
| HAUL TRUCK | 553401.6 | 6815947.6 | 2.5 | 10.4 |
| HAUL TRUCK | 553398.2 | 6815936.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553394.9 | 6815925.2 | 2.5 | 10.4 |
| HAUL TRUCK | 553391.6 | 6815914.1 | 2.5 | 10.4 |
| HAUL TRUCK | 553389.4 | 6815906.8 | 2.5 | 5.8 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6A | 552849.5 | 6816597 | 1.8 | 7.6 | 36.4 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 28.1 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.7 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 29 |
| LOADER | 553327.9 | 6816183.2 | 2.5 | 26.2 |
| LOADER | 553299.7 | 6816199.6 | 2.5 | 18.3 |
| LOADER | 553277.6 | 6816224.6 | 2.5 | 26.9 |
| LOADER | 553252.2 | 6816256.2 | 2.5 | 24.5 |
| Road truck | 553376.6 | 6816258.2 | 2.5 | 17.4 |
| Road truck | 553351.6 | 6816261.8 | 2.5 | 17.5 |
| Road truck | 553328.4 | 6816265.1 | 2.5 | 17.5 |
| Road truck | 553306.7 | 6816268.2 | 2.5 | 17.6 |
| Road truck | 553292.2 | 6816270.2 | 2.5 | 13.9 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 15.9 |
| Road truck | 553290.4 | 6816250.7 | 2.5 | 15.9 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 4.4 |
| Road truck | 553299.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553315.2 | 6816243.3 | 2.5 | 16.1 |
| Road truck | 553332 | 6816243.6 | 2.5 | 16.1 |
| Road truck | 553349.6 | 6816244 | 2.5 | 16 |
| Road truck | 553363 | 6816244.3 | 2.5 | 12.7 |
| Road truck | 553378 | 6816243.9 | 2.5 | 16.4 |
| Road truck | 553400 | 6816242.9 | 2.5 | 16.3 |
| Road truck | 553423.4 | 6816241.8 | 2.5 | 7.9 |
| Road truck | 553448.3 | 6816240.7 | 2.5 | 16.1 |
| Road truck | 553474.9 | 6816239.5 | 2.5 | 16.1 |
| Road truck | 553503.4 | 6816238.2 | 2.5 | 16 |
| Road truck | 553520.3 | 6816237.5 | 2.5 | 6.9 |
| Road truck | 553543.9 | 6816242.4 | 2.5 | 16.8 |
| Road truck | 553586.5 | 6816236.7 | 2.5 | 16.7 |
| Road truck | 553633.8 | 6816230.4 | 2.5 | 16.6 |
| Road truck | 553686.7 | 6816223.4 | 2.5 | 16.3 |
| Road truck | 553746.3 | 6816215.4 | 2.5 | 16.2 |
| Road truck | 553789.6 | 6816209.6 | 2.5 | 11.1 |
| Road truck | 553821.1 | 6816189.8 | 2.5 | 14.8 |
| Road truck | 553845.9 | 6816167.7 | 2.5 | 6.3 |
| HAUL TRUCK | 553382.1 | 6815910.9 | 2.5 | 10.1 |
| HAUL TRUCK | 553363.2 | 6815910.8 | 2.5 | 10.2 |
| HAUL TRUCK | 553344.8 | 6815910.7 | 2.5 | 10.2 |
| HAUL TRUCK | 553326.9 | 6815910.6 | 2.5 | 10.2 |
| HAUL TRUCK | 553309.4 | 6815910.6 | 2.5 | 10.3 |
| HAUL TRUCK | 553292.3 | 6815910.5 | 2.5 | 10.3 |
| HAUL TRUCK | 553275.5 | 6815910.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553259.7 | 6815910.4 | 2.5 | 10 |
| HAUL TRUCK | 553464.8 | 6816196.3 | 2.5 | 14.4 |
| HAUL TRUCK | 553433.1 | 6816202.3 | 2.5 | 14.5 |
| HAUL TRUCK | 553403.9 | 6816207.7 | 2.5 | 14.6 |
| HAUL TRUCK | 553376.9 | 6816212.8 | 2.5 | 14.7 |
| HAUL TRUCK | 553351.8 | 6816217.5 | 2.5 | 14.8 |
| HAUL TRUCK | 553328.3 | 6816221.9 | 2.5 | 14.9 |
| HAUL TRUCK | 553306.4 | 6816226 | 2.5 | 15 |
| HAUL TRUCK | 553285.9 | 6816229.9 | 2.5 | 15 |
| HAUL TRUCK | 553266.6 | 6816233.5 | 2.5 | 15.1 |
| HAUL TRUCK | 553254.1 | 6816235.8 | 2.5 | 10.7 |
| HAUL TRUCK | 553470.4 | 6816177 | 2.5 | 10.4 |
| HAUL TRUCK | 553466.5 | 6816163.8 | 2.5 | 10.4 |
| HAUL TRUCK | 553462.5 | 6816150.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553458.4 | 6816136.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553454.3 | 6816123.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553450.1 | 6816109.3 | 2.5 | 10.3 |
| HAUL TRUCK | 553445.9 | 6816095.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553441.6 | 6816080.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553437.2 | 6816066.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553432.8 | 6816051.6 | 2.5 | 10.2 |
| HAUL TRUCK | 553428.3 | 6816036.6 | 2.5 | 10.2 |
| HAUL TRUCK | 553423.7 | 6816021.3 | 2.5 | 10.2 |
| HAUL TRUCK | 553419 | 6816005.7 | 2.5 | 10.2 |
| HAUL TRUCK | 553414.3 | 6815989.8 | 2.5 | 10.2 |
| HAUL TRUCK | 553409.4 | 6815973.5 | 2.5 | 10.1 |

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|---|---|---|---|---|
| HAUL TRUCK | 553404.4 | 6815956.9 | 2.5 | 10.1 |
| HAUL TRUCK | 553399.3 | 6815940 | 2.5 | 10 |
| HAUL TRUCK | 553394.1 | 6815922.6 | 2.5 | 10 |
| HAUL TRUCK | 553390.1 | 6815909.3 | 2.5 | 7 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6B | 552715.7 | 6816554.2 | 1.8 | 10.6 | 35.2 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553362.8 | 6815905.2 | 2.5 | 27.3 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.3 |
| EXCAVATOR | 553250.3 | 6815909.1 | 2.5 | 28.3 |
| LOADER | 553324.1 | 6816185.4 | 2.5 | 25.5 |
| LOADER | 553285.4 | 6816214.9 | 2.5 | 23.1 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 23.1 |
| LOADER | 553250 | 6816258.9 | 2.5 | 21.6 |
| Road truck | 553367.1 | 6816259.6 | 2.5 | 18.1 |
| Road truck | 553325.5 | 6816265.5 | 2.5 | 18.2 |
| Road truck | 553297.1 | 6816269.5 | 2.5 | 15.4 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 14.1 |
| Road truck | 553290.4 | 6816250.6 | 2.5 | 14.1 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 2.4 |
| Road truck | 553303.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553327.7 | 6816243.5 | 2.5 | 16.1 |
| Road truck | 553353.8 | 6816244.1 | 2.5 | 16 |
| Road truck | 553383.9 | 6816243.6 | 2.5 | 16.6 |
| Road truck | 553419.2 | 6816242 | 2.5 | 16.4 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 16.3 |
| Road truck | 553499.8 | 6816238.4 | 2.5 | 16.1 |
| Road truck | 553557.8 | 6816240.6 | 2.5 | 17.4 |
| Road truck | 553633.7 | 6816230.4 | 2.5 | 17.2 |
| Road truck | 553723.4 | 6816218.5 | 2.5 | 16.9 |
| Road truck | 553787.5 | 6816209.9 | 2.5 | 10.5 |
| Road truck | 553819.1 | 6816191.6 | 2.5 | 13 |
| Road truck | 553843.8 | 6816169.6 | 2.5 | 7.3 |
| HAUL TRUCK | 553380.1 | 6815910.9 | 2.5 | 10.2 |
| HAUL TRUCK | 553357.4 | 6815910.8 | 2.5 | 10.2 |
| HAUL TRUCK | 553335.5 | 6815910.7 | 2.5 | 10.2 |
| HAUL TRUCK | 553314.3 | 6815910.6 | 2.5 | 10.3 |
| HAUL TRUCK | 553293.7 | 6815910.5 | 2.5 | 10.3 |
| HAUL TRUCK | 553273.8 | 6815910.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553258.1 | 6815910.3 | 2.5 | 8.3 |
| HAUL TRUCK | 553453.8 | 6816198.4 | 2.5 | 15.2 |
| HAUL TRUCK | 553403.1 | 6816207.9 | 2.5 | 15.4 |
| HAUL TRUCK | 553358.3 | 6816216.3 | 2.5 | 15.6 |
| HAUL TRUCK | 553318.2 | 6816223.8 | 2.5 | 15.7 |
| HAUL TRUCK | 553282.2 | 6816230.6 | 2.5 | 15.8 |
| HAUL TRUCK | 553258.2 | 6816235.1 | 2.5 | 12.5 |
| HAUL TRUCK | 553470.2 | 6816176.4 | 2.5 | 9.4 |
| HAUL TRUCK | 553465.9 | 6816162 | 2.5 | 9.3 |
| HAUL TRUCK | 553461.6 | 6816147.6 | 2.5 | 9.3 |
| HAUL TRUCK | 553457.2 | 6816133 | 2.5 | 9.3 |
| HAUL TRUCK | 553452.8 | 6816118.3 | 2.5 | 9.3 |
| HAUL TRUCK | 553448.4 | 6816103.5 | 2.5 | 9.3 |
| HAUL TRUCK | 553443.9 | 6816088.5 | 2.5 | 9.3 |
| HAUL TRUCK | 553439.4 | 6816073.4 | 2.5 | 9.3 |
| HAUL TRUCK | 553434.8 | 6816058.2 | 2.5 | 9.3 |
| HAUL TRUCK | 553430.2 | 6816042.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553425.5 | 6816027.1 | 2.5 | 9.3 |
| HAUL TRUCK | 553420.7 | 6816011.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553415.9 | 6815995.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553411 | 6815979 | 2.5 | 9.2 |
| HAUL TRUCK | 553406.1 | 6815962.5 | 2.5 | 9.2 |
| HAUL TRUCK | 553401.1 | 6815945.8 | 2.5 | 9.1 |
| HAUL TRUCK | 553396 | 6815928.7 | 2.5 | 9.1 |
| HAUL TRUCK | 553391.1 | 6815912.5 | 2.5 | 8.5 |
| Road truck | 553325.5 | 6816265.5 | 2.5 | 18.2 |
| Road truck | 553297.1 | 6816269.5 | 2.5 | 15.4 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 14.1 |
| Road truck | 553290.4 | 6816250.6 | 2.5 | 14.1 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 2.4 |
| Road truck | 553303.1 | 6816243 | 2.5 | 16.2 |

| | | | | |
|---|---|---|---|---|
| Road truck | 553327.7 | 6816243.5 | 2.5 | 16.1 |
| Road truck | 553353.8 | 6816244.1 | 2.5 | 16 |
| Road truck | 553383.9 | 6816243.6 | 2.5 | 16.6 |
| Road truck | 553419.2 | 6816242 | 2.5 | 16.4 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 16.3 |
| Road truck | 553499.8 | 6816238.4 | 2.5 | 16.1 |
| Road truck | 553557.8 | 6816240.6 | 2.5 | 17.4 |
| Road truck | 553633.7 | 6816230.4 | 2.5 | 17.2 |
| Road truck | 553723.4 | 6816218.5 | 2.5 | 16.9 |
| Road truck | 553787.5 | 6816209.9 | 2.5 | 10.5 |
| Road truck | 553819.1 | 6816191.6 | 2.5 | 13 |
| Road truck | 553843.8 | 6816169.6 | 2.5 | 7.3 |
| HAUL TRUCK | 553519.9 | 6815909.2 | 2.5 | 9.9 |
| HAUL TRUCK | 553491.5 | 6815909.4 | 2.5 | 10 |
| HAUL TRUCK | 553464.3 | 6815909.6 | 2.5 | 10 |
| HAUL TRUCK | 553438.2 | 6815909.7 | 2.5 | 10.1 |
| HAUL TRUCK | 553413.2 | 6815909.9 | 2.5 | 10.1 |
| HAUL TRUCK | 553389 | 6815910.1 | 2.5 | 10.2 |
| HAUL TRUCK | 553365.8 | 6815910.2 | 2.5 | 10.2 |
| HAUL TRUCK | 553343.3 | 6815910.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553321.6 | 6815910.5 | 2.5 | 10.3 |
| HAUL TRUCK | 553300.6 | 6815910.7 | 2.5 | 10.3 |
| HAUL TRUCK | 553285.9 | 6815910.8 | 2.5 | 6.9 |
| HAUL TRUCK | 553453.8 | 6816198.4 | 2.5 | 15.2 |
| HAUL TRUCK | 553403.1 | 6816207.9 | 2.5 | 15.4 |
| HAUL TRUCK | 553358.3 | 6816216.3 | 2.5 | 15.6 |
| HAUL TRUCK | 553318.2 | 6816223.8 | 2.5 | 15.7 |
| HAUL TRUCK | 553282.2 | 6816230.6 | 2.5 | 15.8 |
| HAUL TRUCK | 553258.2 | 6816235.1 | 2.5 | 12.5 |
| HAUL TRUCK | 553470.2 | 6816176.4 | 2.5 | 9.4 |
| HAUL TRUCK | 553465.9 | 6816162 | 2.5 | 9.3 |
| HAUL TRUCK | 553461.6 | 6816147.6 | 2.5 | 9.3 |
| HAUL TRUCK | 553457.2 | 6816133 | 2.5 | 9.3 |
| HAUL TRUCK | 553452.8 | 6816118.3 | 2.5 | 9.3 |
| HAUL TRUCK | 553448.4 | 6816103.5 | 2.5 | 9.3 |
| HAUL TRUCK | 553443.9 | 6816088.5 | 2.5 | 9.3 |
| HAUL TRUCK | 553439.4 | 6816073.4 | 2.5 | 9.3 |
| HAUL TRUCK | 553434.8 | 6816058.2 | 2.5 | 9.3 |
| HAUL TRUCK | 553430.2 | 6816042.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553425.5 | 6816027.1 | 2.5 | 9.3 |
| HAUL TRUCK | 553420.7 | 6816011.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553415.9 | 6815995.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553411 | 6815979 | 2.5 | 9.2 |
| HAUL TRUCK | 553406.1 | 6815962.5 | 2.5 | 9.2 |
| HAUL TRUCK | 553401.1 | 6815945.8 | 2.5 | 9.1 |
| HAUL TRUCK | 553396 | 6815928.7 | 2.5 | 9.1 |
| HAUL TRUCK | 553391.1 | 6815912.5 | 2.5 | 8.5 |
| EXCAVATOR | 553286.9 | 6815896.8 | 2.5 | 27.9 |

**SOUTHEAST CORNER**

File:Z:\CRG ACOUSTICS\ACOUSTIC JOBS\10453a Sandmine Lennox Head\10453a_sandmine april 2012 s.PEN
File Description:Data file covering souteast
Tuesday 05 Mar, 2013 at 11:54:28
Environmental Calculations
All point and line sources included. Line source segmentation angle: 1 degrees. Calculations for specified meteorology.
Noise level results are the logarithmic addition of all the noise sources
Noise level results incorporate the incoherent ground reflection algorithm
Meteorology :
Wind speed 0.0 (m/s) Wind direction 0 Mast height 10.0 (m)
Temperature 20.0 (C) Temperature Gradient 0.0 (C/100m) Humidity 50.0 (%)
Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R1 | 553772.1 | 6815867.2 | 1.8 | 3 | 38.9 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 30 |
| Generator | 553406.4 | 6816251.5 | 1 | 22.1 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 29.2 |
| LOADER | 553327.3 | 6816183.5 | 2.5 | 23 |
| LOADER | 553284.2 | 6816216.4 | 2.5 | 20.1 |
| LOADER | 553258.3 | 6816248.7 | 2.5 | 21.3 |
| Road truck | 553382 | 6816257.5 | 2.5 | 16.9 |

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|---|---|---|---|---|
| Road truck | 553365.8 | 6816259.8 | 2.5 | 16.8 |
| Road truck | 553348.8 | 6816262.2 | 2.5 | 16.8 |
| Road truck | 553330.8 | 6816264.7 | 2.5 | 16.7 |
| Road truck | 553312 | 6816267.4 | 2.5 | 16.7 |
| Road truck | 553295.1 | 6816269.8 | 2.5 | 9.7 |
| Road truck | 553288.9 | 6816262.9 | 2.5 | 10.1 |
| Road truck | 553290.6 | 6816248.9 | 2.5 | 9.2 |
| Road truck | 553299.7 | 6816243 | 2.5 | 10.6 |
| Road truck | 553315.9 | 6816243.3 | 2.5 | 10.7 |
| Road truck | 553331.4 | 6816243.6 | 2.5 | 10.7 |
| Road truck | 553346.3 | 6816243.9 | 2.5 | 16.2 |
| Road truck | 553360.5 | 6816244.2 | 2.5 | 16.2 |
| Road truck | 553374.8 | 6816244 | 2.5 | 16.6 |
| Road truck | 553389.1 | 6816243.4 | 2.5 | 16.6 |
| Road truck | 553402.8 | 6816242.8 | 2.5 | 16.7 |
| Road truck | 553416.1 | 6816242.2 | 2.5 | 16.7 |
| Road truck | 553428.8 | 6816241.6 | 2.5 | 16.8 |
| Road truck | 553441.2 | 6816241 | 2.5 | 16.8 |
| Road truck | 553453.1 | 6816240.5 | 2.5 | 16.8 |
| Road truck | 553464.6 | 6816240 | 2.5 | 16.9 |
| Road truck | 553475.8 | 6816239.5 | 2.5 | 16.9 |
| Road truck | 553486.6 | 6816239 | 2.5 | 16.9 |
| Road truck | 553497.2 | 6816238.5 | 2.5 | 16.9 |
| Road truck | 553507.4 | 6816238.1 | 2.5 | 17 |
| Road truck | 553517.4 | 6816237.6 | 2.5 | 17 |
| Road truck | 553522.3 | 6816237.4 | 2.5 | -10.8 |
| Road truck | 553529.2 | 6816244.4 | 2.5 | 17.2 |
| Road truck | 553539.3 | 6816243.1 | 2.5 | 17.3 |
| Road truck | 553549 | 6816241.8 | 2.5 | 17.3 |
| Road truck | 553558.5 | 6816240.5 | 2.5 | 17.4 |
| Road truck | 553567.7 | 6816239.2 | 2.5 | 17.4 |
| Road truck | 553576.8 | 6816238 | 2.5 | 17.4 |
| Road truck | 553585.5 | 6816236.9 | 2.5 | 17.4 |
| Road truck | 553594.1 | 6816235.7 | 2.5 | 17.4 |
| Road truck | 553602.5 | 6816234.6 | 2.5 | 17.4 |
| Road truck | 553610.7 | 6816233.5 | 2.5 | 17.5 |
| Road truck | 553618.7 | 6816232.4 | 2.5 | 17.5 |
| Road truck | 553626.6 | 6816231.4 | 2.5 | 17.5 |
| Road truck | 553634.3 | 6816230.4 | 2.5 | 17.5 |
| Road truck | 553641.9 | 6816229.3 | 2.5 | 17.5 |
| Road truck | 553649.3 | 6816228.4 | 2.5 | 17.5 |
| Road truck | 553656.6 | 6816227.4 | 2.5 | 17.5 |
| Road truck | 553663.8 | 6816226.4 | 2.5 | 17.5 |
| Road truck | 553670.9 | 6816225.5 | 2.5 | 17.5 |
| Road truck | 553677.8 | 6816224.5 | 2.5 | 17.6 |
| Road truck | 553684.7 | 6816223.6 | 2.5 | 17.6 |
| Road truck | 553691.5 | 6816222.7 | 2.5 | 17.6 |
| Road truck | 553698.2 | 6816221.8 | 2.5 | 17.6 |
| Road truck | 553704.8 | 6816220.9 | 2.5 | 17.6 |
| Road truck | 553711.3 | 6816220.1 | 2.5 | 17.6 |
| Road truck | 553717.8 | 6816219.2 | 2.5 | 17.6 |
| Road truck | 553724.1 | 6816218.4 | 2.5 | 17.6 |
| Road truck | 553730.5 | 6816217.5 | 2.5 | 17.7 |
| Road truck | 553736.7 | 6816216.7 | 2.5 | 17.7 |
| Road truck | 553743 | 6816215.8 | 2.5 | 17.7 |
| Road truck | 553749.1 | 6816215 | 2.5 | 17.7 |
| Road truck | 553755.3 | 6816214.2 | 2.5 | 17.7 |
| Road truck | 553761.4 | 6816213.4 | 2.5 | 17.7 |
| Road truck | 553767.4 | 6816212.6 | 2.5 | 17.7 |
| Road truck | 553773.5 | 6816211.8 | 2.5 | 17.7 |
| Road truck | 553779.4 | 6816211 | 2.5 | 17.7 |
| Road truck | 553785.4 | 6816210.2 | 2.5 | 17.7 |
| Road truck | 553791.4 | 6816209.4 | 2.5 | 17.8 |
| Road truck | 553797.3 | 6816208.6 | 2.5 | 17.8 |
| Road truck | 553800.4 | 6816208.2 | 2.5 | 3.1 |
| Road truck | 553803.3 | 6816205.7 | 2.5 | 18.7 |
| Road truck | 553808.7 | 6816200.8 | 2.5 | 18.8 |
| Road truck | 553814 | 6816196.1 | 2.5 | 18.8 |
| Road truck | 553819.2 | 6816191.5 | 2.5 | 18.8 |
| Road truck | 553824.2 | 6816187 | 2.5 | 18.8 |
| Road truck | 553829.2 | 6816182.6 | 2.5 | 18.8 |
| Road truck | 553834 | 6816178.3 | 2.5 | 18.9 |
| Road truck | 553838.8 | 6816174 | 2.5 | 18.9 |

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|---|---|---|---|---|
| Road truck | 553843.4 | 6816169.9 | 2.5 | 18.9 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 17.7 |
| HAUL TRUCK | 553475.4 | 6816194.3 | 2.5 | 15.8 |
| HAUL TRUCK | 553462.6 | 6816196.7 | 2.5 | 15.8 |
| HAUL TRUCK | 553449.1 | 6816199.3 | 2.5 | 15.7 |
| HAUL TRUCK | 553435 | 6816201.9 | 2.5 | 15.7 |
| HAUL TRUCK | 553420.1 | 6816204.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553404.4 | 6816207.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553387.8 | 6816210.8 | 2.5 | 15.6 |
| HAUL TRUCK | 553370.2 | 6816214.1 | 2.5 | 15.5 |
| HAUL TRUCK | 553351.5 | 6816217.6 | 2.5 | 11 |
| HAUL TRUCK | 553331.6 | 6816221.3 | 2.5 | 10.9 |
| HAUL TRUCK | 553310.4 | 6816225.3 | 2.5 | 10.8 |
| HAUL TRUCK | 553287.7 | 6816229.5 | 2.5 | 10.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 9 |
| HAUL TRUCK | 553478 | 6816172.2 | 2.5 | 19 |
| HAUL TRUCK | 553488.3 | 6816151.4 | 2.5 | 19.1 |
| HAUL TRUCK | 553497.7 | 6816132.6 | 2.5 | 19.1 |
| HAUL TRUCK | 553506.1 | 6816115.6 | 2.5 | 19.2 |
| HAUL TRUCK | 553513.8 | 6816100.1 | 2.5 | 19.2 |
| HAUL TRUCK | 553520.8 | 6816086 | 2.5 | 19.3 |
| HAUL TRUCK | 553527.3 | 6816072.9 | 2.5 | 13.9 |
| HAUL TRUCK | 553533.3 | 6816060.9 | 2.5 | 13.9 |
| HAUL TRUCK | 553538.8 | 6816049.7 | 2.5 | 13.9 |
| HAUL TRUCK | 553544 | 6816039.4 | 2.5 | 14 |
| HAUL TRUCK | 553548.8 | 6816029.7 | 2.5 | 12.4 |
| HAUL TRUCK | 553553.2 | 6816020.7 | 2.5 | 11 |
| HAUL TRUCK | 553557.5 | 6816012.2 | 2.5 | 11.5 |
| HAUL TRUCK | 553561.4 | 6816004.2 | 2.5 | 12 |
| HAUL TRUCK | 553565.1 | 6815996.7 | 2.5 | 12.4 |
| HAUL TRUCK | 553568.7 | 6815989.6 | 2.5 | 12.8 |
| HAUL TRUCK | 553572 | 6815982.9 | 2.5 | 13.2 |
| HAUL TRUCK | 553575.2 | 6815976.5 | 2.5 | 13.4 |
| HAUL TRUCK | 553578.2 | 6815970.5 | 2.5 | 13.7 |
| HAUL TRUCK | 553581 | 6815964.7 | 2.5 | 13.7 |
| HAUL TRUCK | 553583.8 | 6815959.2 | 2.5 | 13.7 |
| HAUL TRUCK | 553586.4 | 6815954 | 2.5 | 13.7 |
| HAUL TRUCK | 553588.9 | 6815948.9 | 2.5 | 13.6 |
| HAUL TRUCK | 553591.3 | 6815944.1 | 2.5 | 13.6 |
| HAUL TRUCK | 553593.6 | 6815939.5 | 2.5 | 13.6 |
| HAUL TRUCK | 553595.8 | 6815935 | 2.5 | 13.5 |
| HAUL TRUCK | 553597.9 | 6815930.7 | 2.5 | 13.5 |
| HAUL TRUCK | 553600 | 6815926.6 | 2.5 | 13.5 |
| HAUL TRUCK | 553601.9 | 6815922.6 | 2.5 | 13.4 |
| HAUL TRUCK | 553603.3 | 6815919.9 | 2.5 | 9.4 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2A | 553848.7 | 6815742.3 | 1.8 | 3.4 | 34.7 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 24.8 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.9 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 25.3 |
| LOADER | 553326.9 | 6816183.8 | 2.5 | 22.9 |
| LOADER | 553275.4 | 6816227.4 | 2.5 | 22.1 |
| LOADER | 553248.4 | 6816260.9 | 2.5 | 14.8 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 8 |
| Road truck | 553361.3 | 6816260.4 | 2.5 | 8.9 |
| Road truck | 553341.2 | 6816263.3 | 2.5 | 9.5 |
| Road truck | 553320.2 | 6816266.2 | 2.5 | 9.9 |
| Road truck | 553298.8 | 6816269.3 | 2.5 | 9.7 |
| Road truck | 553289.2 | 6816260.5 | 2.5 | 9.6 |
| Road truck | 553290.9 | 6816246.6 | 2.5 | 5.4 |
| Road truck | 553300.8 | 6816243 | 2.5 | 9.5 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 9.5 |
| Road truck | 553337.1 | 6816243.7 | 2.5 | 9.5 |
| Road truck | 553354.3 | 6816244.1 | 2.5 | 9.1 |
| Road truck | 553365 | 6816244.3 | 2.5 | 3.4 |
| Road truck | 553376.1 | 6816244 | 2.5 | 8.7 |
| Road truck | 553393.1 | 6816243.2 | 2.5 | 7.7 |
| Road truck | 553409.4 | 6816242.5 | 2.5 | 10 |
| Road truck | 553425.3 | 6816241.8 | 2.5 | 14.9 |

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|---|---|---|---|---|
| Road truck | 553440.6 | 6816241.1 | 2.5 | 14.9 |
| Road truck | 553455.5 | 6816240.4 | 2.5 | 14.9 |
| Road truck | 553469.9 | 6816239.7 | 2.5 | 15 |
| Road truck | 553483.9 | 6816239.1 | 2.5 | 15 |
| Road truck | 553497.5 | 6816238.5 | 2.5 | 6.9 |
| Road truck | 553510.7 | 6816237.9 | 2.5 | 6.9 |
| Road truck | 553519.8 | 6816237.5 | 2.5 | 2.9 |
| Road truck | 553530.8 | 6816244.2 | 2.5 | 7.1 |
| Road truck | 553544.1 | 6816242.4 | 2.5 | 7.5 |
| Road truck | 553556.9 | 6816240.7 | 2.5 | 7.5 |
| Road truck | 553569.4 | 6816239 | 2.5 | 7.6 |
| Road truck | 553581.6 | 6816237.4 | 2.5 | 7.5 |
| Road truck | 553593.5 | 6816235.8 | 2.5 | 15.5 |
| Road truck | 553605 | 6816234.3 | 2.5 | 11.1 |
| Road truck | 553616.4 | 6816232.8 | 2.5 | 11 |
| Road truck | 553627.4 | 6816231.3 | 2.5 | 11 |
| Road truck | 553638.3 | 6816229.8 | 2.5 | 15.6 |
| Road truck | 553648.9 | 6816228.4 | 2.5 | 15.6 |
| Road truck | 553659.3 | 6816227 | 2.5 | 15.6 |
| Road truck | 553669.4 | 6816225.7 | 2.5 | 15.6 |
| Road truck | 553679.5 | 6816224.3 | 2.5 | 15.7 |
| Road truck | 553689.3 | 6816223 | 2.5 | 15.7 |
| Road truck | 553698.9 | 6816221.7 | 2.5 | 15.7 |
| Road truck | 553708.5 | 6816220.5 | 2.5 | 15.7 |
| Road truck | 553717.8 | 6816219.2 | 2.5 | 15.7 |
| Road truck | 553727 | 6816218 | 2.5 | 15.8 |
| Road truck | 553736.1 | 6816216.8 | 2.5 | 15.8 |
| Road truck | 553745.1 | 6816215.6 | 2.5 | 15.8 |
| Road truck | 553754 | 6816214.4 | 2.5 | 15.8 |
| Road truck | 553762.7 | 6816213.2 | 2.5 | 15.8 |
| Road truck | 553771.4 | 6816212 | 2.5 | 15.9 |
| Road truck | 553780 | 6816210.9 | 2.5 | 15.9 |
| Road truck | 553788.4 | 6816209.8 | 2.5 | 15.9 |
| Road truck | 553796.6 | 6816208.7 | 2.5 | 15.6 |
| Road truck | 553805 | 6816204.2 | 2.5 | 17.5 |
| Road truck | 553813.7 | 6816196.4 | 2.5 | 17.6 |
| Road truck | 553822.1 | 6816188.9 | 2.5 | 17.6 |
| Road truck | 553830.2 | 6816181.7 | 2.5 | 17.7 |
| Road truck | 553838.1 | 6816174.7 | 2.5 | 17.7 |
| Road truck | 553845.5 | 6816168 | 2.5 | 17.6 |
| HAUL TRUCK | 553473.8 | 6816194.6 | 2.5 | 13.8 |
| HAUL TRUCK | 553457.7 | 6816197.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553440.9 | 6816200.8 | 2.5 | 9.3 |
| HAUL TRUCK | 553423.3 | 6816204.1 | 2.5 | 7.8 |
| HAUL TRUCK | 553404.8 | 6816207.6 | 2.5 | 8.4 |
| HAUL TRUCK | 553385.5 | 6816211.2 | 2.5 | 8.9 |
| HAUL TRUCK | 553365.1 | 6816215 | 2.5 | 9.6 |
| HAUL TRUCK | 553343.7 | 6816219 | 2.5 | 9.6 |
| HAUL TRUCK | 553321 | 6816223.3 | 2.5 | 9.5 |
| HAUL TRUCK | 553297 | 6816227.8 | 2.5 | 9.5 |
| HAUL TRUCK | 553271.6 | 6816232.6 | 2.5 | 9.5 |
| HAUL TRUCK | 553254.6 | 6816235.7 | 2.5 | 3.8 |
| HAUL TRUCK | 553481.3 | 6816165.5 | 2.5 | 13.5 |
| HAUL TRUCK | 553497.6 | 6816132.8 | 2.5 | 12.3 |
| HAUL TRUCK | 553511.9 | 6816104 | 2.5 | 12.2 |
| HAUL TRUCK | 553524.6 | 6816078.4 | 2.5 | 12.8 |
| HAUL TRUCK | 553536 | 6816055.5 | 2.5 | 13.3 |
| HAUL TRUCK | 553546.2 | 6816034.8 | 2.5 | 13.6 |
| HAUL TRUCK | 553555.5 | 6816016.1 | 2.5 | 13.6 |
| HAUL TRUCK | 553564 | 6815999 | 2.5 | 13.5 |
| HAUL TRUCK | 553571.8 | 6815983.4 | 2.5 | 13.5 |
| HAUL TRUCK | 553578.9 | 6815969 | 2.5 | 13.5 |
| HAUL TRUCK | 553585.5 | 6815955.7 | 2.5 | 13.5 |
| HAUL TRUCK | 553591.6 | 6815943.5 | 2.5 | 13.4 |
| HAUL TRUCK | 553597.3 | 6815932 | 2.5 | 13.3 |
| HAUL TRUCK | 553601.8 | 6815922.8 | 2.5 | 11.9 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2B | 554002.8 | 6815828.9 | 1.8 | 4 | 35.6 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 20.6 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.8 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 22.1 |
| LOADER | 553326.8 | 6816183.8 | 2.5 | 25.3 |
| LOADER | 553284.8 | 6816215.6 | 2.5 | 22.1 |
| LOADER | 553260.9 | 6816245.4 | 2.5 | 22 |
| LOADER | 553246.1 | 6816263.9 | 2.5 | 14.1 |
| Road truck | 553375.3 | 6816258.4 | 2.5 | 16 |
| Road truck | 553344.6 | 6816262.8 | 2.5 | 15.9 |
| Road truck | 553311.5 | 6816267.5 | 2.5 | 15.7 |
| Road truck | 553291 | 6816270.4 | 2.5 | 8 |
| Road truck | 553289.1 | 6816261.6 | 2.5 | 12.8 |
| Road truck | 553290.8 | 6816247.6 | 2.5 | 10.2 |
| Road truck | 553305 | 6816243.1 | 2.5 | 14.8 |
| Road truck | 553331.1 | 6816243.6 | 2.5 | 14.8 |
| Road truck | 553355.6 | 6816244.1 | 2.5 | 14.9 |
| Road truck | 553380.2 | 6816243.8 | 2.5 | 15.4 |
| Road truck | 553404.8 | 6816242.7 | 2.5 | 15.5 |
| Road truck | 553428 | 6816241.6 | 2.5 | 15.6 |
| Road truck | 553450 | 6816240.6 | 2.5 | 15.7 |
| Road truck | 553470.9 | 6816239.7 | 2.5 | 15.7 |
| Road truck | 553490.8 | 6816238.8 | 2.5 | 15.8 |
| Road truck | 553509.7 | 6816237.9 | 2.5 | 15.8 |
| Road truck | 553520.6 | 6816237.5 | 2.5 | 8.7 |
| Road truck | 553533.9 | 6816243.8 | 2.5 | 16.3 |
| Road truck | 553552.9 | 6816241.2 | 2.5 | 16.5 |
| Road truck | 553570.9 | 6816238.8 | 2.5 | 16.5 |
| Road truck | 553588 | 6816236.5 | 2.5 | 16.5 |
| Road truck | 553604.4 | 6816234.4 | 2.5 | 16.6 |
| Road truck | 553620.1 | 6816232.3 | 2.5 | 16.7 |
| Road truck | 553635.1 | 6816230.3 | 2.5 | 16.7 |
| Road truck | 553649.4 | 6816228.3 | 2.5 | 16.7 |
| Road truck | 553663.3 | 6816226.5 | 2.5 | 16.8 |
| Road truck | 553676.5 | 6816224.7 | 2.5 | 16.8 |
| Road truck | 553689.3 | 6816223 | 2.5 | 12.1 |
| Road truck | 553701.7 | 6816221.4 | 2.5 | 16.9 |
| Road truck | 553713.6 | 6816219.8 | 2.5 | 16.9 |
| Road truck | 553725.1 | 6816218.2 | 2.5 | 17 |
| Road truck | 553736.3 | 6816216.7 | 2.5 | 17 |
| Road truck | 553747.1 | 6816215.3 | 2.5 | 17 |
| Road truck | 553757.6 | 6816213.9 | 2.5 | 17.1 |
| Road truck | 553767.7 | 6816212.5 | 2.5 | 17.1 |
| Road truck | 553777.6 | 6816211.2 | 2.5 | 17.1 |
| Road truck | 553787.3 | 6816209.9 | 2.5 | 17.2 |
| Road truck | 553796.3 | 6816208.7 | 2.5 | 16.9 |
| Road truck | 553808.4 | 6816201.1 | 2.5 | 20.9 |
| Road truck | 553823.2 | 6816187.9 | 2.5 | 21 |
| Road truck | 553836.7 | 6816175.8 | 2.5 | 21.1 |
| Road truck | 553846.2 | 6816167.5 | 2.5 | 18.2 |
| HAUL TRUCK | 553468.1 | 6816195.7 | 2.5 | 15.2 |
| HAUL TRUCK | 553439.5 | 6816201.1 | 2.5 | 15.1 |
| HAUL TRUCK | 553408.3 | 6816206.9 | 2.5 | 15 |
| HAUL TRUCK | 553374.3 | 6816213.3 | 2.5 | 14.9 |
| HAUL TRUCK | 553337.1 | 6816220.3 | 2.5 | 14.9 |
| HAUL TRUCK | 553296 | 6816228 | 2.5 | 14.8 |
| HAUL TRUCK | 553262.6 | 6816234.3 | 2.5 | 11.7 |
| HAUL TRUCK | 553477.3 | 6816173.7 | 2.5 | 14.4 |
| HAUL TRUCK | 553486.7 | 6816154.8 | 2.5 | 14.5 |
| HAUL TRUCK | 553495.5 | 6816136.9 | 2.5 | 14.5 |
| HAUL TRUCK | 553503.9 | 6816120 | 2.5 | 14.6 |
| HAUL TRUCK | 553511.9 | 6816104 | 2.5 | 14.6 |
| HAUL TRUCK | 553519.4 | 6816088.8 | 2.5 | 14.7 |
| HAUL TRUCK | 553526.6 | 6816074.3 | 2.5 | 14.7 |
| HAUL TRUCK | 553533.5 | 6816060.5 | 2.5 | 14.7 |
| HAUL TRUCK | 553540 | 6816047.3 | 2.5 | 14.8 |
| HAUL TRUCK | 553546.3 | 6816034.7 | 2.5 | 14.8 |
| HAUL TRUCK | 553552.3 | 6816022.6 | 2.5 | 14.8 |
| HAUL TRUCK | 553558.1 | 6816011 | 2.5 | 14.9 |

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|---|---|---|---|---|
| HAUL TRUCK | 553563.6 | 6815999.9 | 2.5 | 9.9 |
| HAUL TRUCK | 553568.9 | 6815989.1 | 2.5 | 9.9 |
| HAUL TRUCK | 553574.1 | 6815978.8 | 2.5 | 10.1 |
| HAUL TRUCK | 553579 | 6815968.8 | 2.5 | 7.2 |
| HAUL TRUCK | 553583.8 | 6815959.1 | 2.5 | 8.8 |
| HAUL TRUCK | 553588.4 | 6815949.8 | 2.5 | 9.7 |
| HAUL TRUCK | 553592.9 | 6815940.8 | 2.5 | 9.9 |
| HAUL TRUCK | 553597.3 | 6815932 | 2.5 | 9.8 |
| HAUL TRUCK | 553601.5 | 6815923.5 | 2.5 | 9.8 |
| HAUL TRUCK | 553603.6 | 6815919.3 | 2.5 | -5.8 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R3 | 553634.8 | 6815756.9 | 1.8 | 3.6 | 38.2 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 32.7 |
| Generator | 553406.4 | 6816251.5 | 1 | 21.4 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 33 |
| LOADER | 553346 | 6816172.7 | 2.5 | 20.4 |
| LOADER | 553327.3 | 6816183.6 | 2.5 | 20.4 |
| LOADER | 553307 | 6816195.3 | 2.5 | 20.4 |
| LOADER | 553296.1 | 6816201.6 | 2.5 | -1.4 |
| LOADER | 553271.8 | 6816231.8 | 2.5 | 24.7 |
| Road truck | 553384 | 6816257.2 | 2.5 | 9.9 |
| Road truck | 553372.1 | 6816258.9 | 2.5 | 9.9 |
| Road truck | 553359.9 | 6816260.6 | 2.5 | 9.9 |
| Road truck | 553347.4 | 6816262.4 | 2.5 | 9.9 |
| Road truck | 553334.5 | 6816264.2 | 2.5 | 9.9 |
| Road truck | 553321.3 | 6816266.1 | 2.5 | 9.9 |
| Road truck | 553307.6 | 6816268 | 2.5 | 9.9 |
| Road truck | 553294.4 | 6816269.9 | 2.5 | 9.4 |
| Road truck | 553289.4 | 6816259.2 | 2.5 | 12 |
| Road truck | 553291 | 6816245.4 | 2.5 | 5.9 |
| Road truck | 553297.6 | 6816242.9 | 2.5 | 9.7 |
| Road truck | 553309.8 | 6816243.2 | 2.5 | 9.7 |
| Road truck | 553321.8 | 6816243.4 | 2.5 | 9.7 |
| Road truck | 553333.5 | 6816243.7 | 2.5 | 9.7 |
| Road truck | 553345 | 6816243.9 | 2.5 | 9.7 |
| Road truck | 553356.3 | 6816244.1 | 2.5 | 9.7 |
| Road truck | 553364.6 | 6816244.3 | 2.5 | 6.7 |
| Road truck | 553373 | 6816244.1 | 2.5 | 9.8 |
| Road truck | 553384.2 | 6816243.6 | 2.5 | 9.8 |
| Road truck | 553395.1 | 6816243.1 | 2.5 | 9.8 |
| Road truck | 553405.7 | 6816242.6 | 2.5 | 9.8 |
| Road truck | 553416.2 | 6816242.2 | 2.5 | 9.7 |
| Road truck | 553426.5 | 6816241.7 | 2.5 | 9.7 |
| Road truck | 553436.7 | 6816241.2 | 2.5 | 10 |
| Road truck | 553446.7 | 6816240.8 | 2.5 | 10 |
| Road truck | 553456.5 | 6816240.3 | 2.5 | 10 |
| Road truck | 553466.2 | 6816239.9 | 2.5 | 10 |
| Road truck | 553475.7 | 6816239.5 | 2.5 | 10 |
| Road truck | 553485.1 | 6816239.1 | 2.5 | 10 |
| Road truck | 553494.4 | 6816238.6 | 2.5 | 10 |
| Road truck | 553503.6 | 6816238.2 | 2.5 | 10 |
| Road truck | 553512.7 | 6816237.8 | 2.5 | 10 |
| Road truck | 553519.7 | 6816237.5 | 2.5 | 7.6 |
| Road truck | 553528.7 | 6816244.5 | 2.5 | 9.9 |
| Road truck | 553537.8 | 6816243.2 | 2.5 | 9.8 |
| Road truck | 553546.8 | 6816242 | 2.5 | 10.2 |
| Road truck | 553555.7 | 6816240.9 | 2.5 | 10.2 |
| Road truck | 553564.6 | 6816239.7 | 2.5 | 10.3 |
| Road truck | 553573.3 | 6816238.5 | 2.5 | 10.3 |
| Road truck | 553581.9 | 6816237.4 | 2.5 | 10.2 |
| Road truck | 553590.5 | 6816236.2 | 2.5 | 10.1 |
| Road truck | 553599 | 6816235.1 | 2.5 | 10.1 |
| Road truck | 553607.5 | 6816233.9 | 2.5 | 10.1 |
| Road truck | 553615.9 | 6816232.8 | 2.5 | 10.2 |
| Road truck | 553624.2 | 6816231.7 | 2.5 | 10.2 |
| Road truck | 553632.5 | 6816230.6 | 2.5 | 10.2 |
| Road truck | 553640.8 | 6816229.5 | 2.5 | 10 |
| Road truck | 553649 | 6816228.4 | 2.5 | 10.1 |
| Road truck | 553657.2 | 6816227.3 | 2.5 | 10.2 |

| | | | | |
|---|---|---|---|---|
| Road truck | 553665.3 | 6816226.2 | 2.5 | 10.3 |
| Road truck | 553673.5 | 6816225.1 | 2.5 | 10.3 |
| Road truck | 553681.6 | 6816224 | 2.5 | 10.4 |
| Road truck | 553689.7 | 6816223 | 2.5 | 10.5 |
| Road truck | 553697.8 | 6816221.9 | 2.5 | 10.5 |
| Road truck | 553706 | 6816220.8 | 2.5 | 10.5 |
| Road truck | 553714.1 | 6816219.7 | 2.5 | 9.9 |
| Road truck | 553722.2 | 6816218.6 | 2.5 | 8.8 |
| Road truck | 553730.4 | 6816217.5 | 2.5 | 15.7 |
| Road truck | 553738.5 | 6816216.4 | 2.5 | 15.7 |
| Road truck | 553746.7 | 6816215.3 | 2.5 | 15.8 |
| Road truck | 553755 | 6816214.2 | 2.5 | 15.8 |
| Road truck | 553763.2 | 6816213.1 | 2.5 | 15.8 |
| Road truck | 553771.5 | 6816212 | 2.5 | 15.8 |
| Road truck | 553779.9 | 6816210.9 | 2.5 | 15.8 |
| Road truck | 553788.3 | 6816209.8 | 2.5 | 15.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 15.5 |
| Road truck | 553803.8 | 6816205.2 | 2.5 | 16 |
| Road truck | 553810.5 | 6816199.2 | 2.5 | 16 |
| Road truck | 553817 | 6816193.4 | 2.5 | 16 |
| Road truck | 553823.5 | 6816187.6 | 2.5 | 16 |
| Road truck | 553829.9 | 6816181.9 | 2.5 | 16.1 |
| Road truck | 553836.3 | 6816176.3 | 2.5 | 16.1 |
| Road truck | 553842.6 | 6816170.7 | 2.5 | 16.1 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 13.6 |
| HAUL TRUCK | 553477 | 6816194 | 2.5 | 9 |
| HAUL TRUCK | 553467.7 | 6816195.8 | 2.5 | 9 |
| HAUL TRUCK | 553458.1 | 6816197.6 | 2.5 | 9 |
| HAUL TRUCK | 553448.4 | 6816199.4 | 2.5 | 8.7 |
| HAUL TRUCK | 553438.4 | 6816201.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553428.1 | 6816203.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553417.7 | 6816205.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553406.9 | 6816207.2 | 2.5 | 8.8 |
| HAUL TRUCK | 553395.8 | 6816209.3 | 2.5 | 8.8 |
| HAUL TRUCK | 553384.5 | 6816211.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553372.8 | 6816213.6 | 2.5 | 8.8 |
| HAUL TRUCK | 553360.7 | 6816215.9 | 2.5 | 9.2 |
| HAUL TRUCK | 553348.3 | 6816218.2 | 2.5 | 9.2 |
| HAUL TRUCK | 553335.4 | 6816220.6 | 2.5 | 9.2 |
| HAUL TRUCK | 553322.2 | 6816223.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553308.4 | 6816225.7 | 2.5 | 9.2 |
| HAUL TRUCK | 553294.2 | 6816228.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553279.5 | 6816231.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553264.1 | 6816234 | 2.5 | 9.2 |
| HAUL TRUCK | 553253.6 | 6816235.9 | 2.5 | 4.4 |
| HAUL TRUCK | 553489.2 | 6816149.7 | 2.5 | 18.3 |
| HAUL TRUCK | 553515.6 | 6816096.5 | 2.5 | 18.5 |
| HAUL TRUCK | 553535.5 | 6816056.3 | 2.5 | 18.5 |
| HAUL TRUCK | 553551.1 | 6816025 | 2.5 | 18.5 |
| HAUL TRUCK | 553563.6 | 6815999.9 | 2.5 | 18.5 |
| HAUL TRUCK | 553573.8 | 6815979.3 | 2.5 | 18.4 |
| HAUL TRUCK | 553582.4 | 6815962 | 2.5 | 18.4 |
| HAUL TRUCK | 553589.6 | 6815947.4 | 2.5 | 18.3 |
| HAUL TRUCK | 553595.9 | 6815934.8 | 2.5 | 18.3 |
| HAUL TRUCK | 553601.3 | 6815924 | 2.5 | 18.1 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4A | 552797.6 | 6815469.6 | 1.8 | 16.9 | 30.9 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 18.4 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.8 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 18.3 |
| LOADER | 553348 | 6816171.5 | 2.5 | 16.9 |
| LOADER | 553334.5 | 6816179.3 | 2.5 | 16.9 |
| LOADER | 553321 | 6816187.2 | 2.5 | 16.9 |
| LOADER | 553307.5 | 6816195 | 2.5 | 16.9 |
| LOADER | 553298.4 | 6816200.3 | 2.5 | 12.4 |
| LOADER | 553291 | 6816208 | 2.5 | 17.1 |
| LOADER | 553280.8 | 6816220.7 | 2.5 | 17.1 |
| LOADER | 553270.4 | 6816233.6 | 2.5 | 17.1 |
| LOADER | 553259.9 | 6816246.6 | 2.5 | 17.1 |

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|---|---|---|---|---|
| LOADER | 553249.3 | 6816259.8 | 2.5 | 17.1 |
| Road truck | 553380.2 | 6816257.7 | 2.5 | 10.7 |
| Road truck | 553361.1 | 6816260.4 | 2.5 | 10.7 |
| Road truck | 553342.4 | 6816263.1 | 2.5 | 10.8 |
| Road truck | 553324 | 6816265.7 | 2.5 | 10.8 |
| Road truck | 553305.9 | 6816268.3 | 2.5 | 10.8 |
| Road truck | 553292.5 | 6816270.2 | 2.5 | 7.9 |
| Road truck | 553289.6 | 6816257.8 | 2.5 | 12.6 |
| Road truck | 553291.2 | 6816244 | 2.5 | 2.3 |
| Road truck | 553301 | 6816243 | 2.5 | 11.4 |
| Road truck | 553320.8 | 6816243.4 | 2.5 | 11.4 |
| Road truck | 553341 | 6816243.8 | 2.5 | 11.3 |
| Road truck | 553359.3 | 6816244.2 | 2.5 | 10.2 |
| Road truck | 553377.5 | 6816243.9 | 2.5 | 11.1 |
| Road truck | 553398.2 | 6816243 | 2.5 | 11 |
| Road truck | 553419.4 | 6816242 | 2.5 | 11 |
| Road truck | 553441.1 | 6816241 | 2.5 | 10.9 |
| Road truck | 553463.4 | 6816240 | 2.5 | 10.9 |
| Road truck | 553486.3 | 6816239 | 2.5 | 10.9 |
| Road truck | 553509.9 | 6816237.9 | 2.5 | 10.8 |
| Road truck | 553522.1 | 6816237.4 | 2.5 | -8.6 |
| Road truck | 553535.4 | 6816243.6 | 2.5 | 10.4 |
| Road truck | 553558.6 | 6816240.5 | 2.5 | 10.4 |
| Road truck | 553582.4 | 6816237.3 | 2.5 | 10.3 |
| Road truck | 553606.9 | 6816234 | 2.5 | 10.3 |
| Road truck | 553632 | 6816230.7 | 2.5 | 10.2 |
| Road truck | 553657.9 | 6816227.2 | 2.5 | 10.2 |
| Road truck | 553684.6 | 6816223.6 | 2.5 | 10.1 |
| Road truck | 553712.1 | 6816220 | 2.5 | 10.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 10 |
| Road truck | 553770 | 6816212.2 | 2.5 | 10 |
| Road truck | 553792.8 | 6816209.2 | 2.5 | 6.9 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 8.4 |
| Road truck | 553825.5 | 6816185.9 | 2.5 | 8.4 |
| Road truck | 553841.5 | 6816171.6 | 2.5 | 7.9 |
| HAUL TRUCK | 553471.5 | 6816195.1 | 2.5 | 8.7 |
| HAUL TRUCK | 553451.7 | 6816198.8 | 2.5 | 8.8 |
| HAUL TRUCK | 553432.2 | 6816202.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553413.1 | 6816206 | 2.5 | 8.8 |
| HAUL TRUCK | 553394.4 | 6816209.5 | 2.5 | 8.8 |
| HAUL TRUCK | 553376.1 | 6816213 | 2.5 | 8.9 |
| HAUL TRUCK | 553358.1 | 6816216.3 | 2.5 | 8.9 |
| HAUL TRUCK | 553340.4 | 6816219.7 | 2.5 | 9 |
| HAUL TRUCK | 553322.9 | 6816222.9 | 2.5 | 9 |
| HAUL TRUCK | 553305.8 | 6816226.2 | 2.5 | 9 |
| HAUL TRUCK | 553288.9 | 6816229.3 | 2.5 | 9 |
| HAUL TRUCK | 553272.2 | 6816232.4 | 2.5 | 9 |
| HAUL TRUCK | 553257.5 | 6816235.2 | 2.5 | 8.1 |
| HAUL TRUCK | 553476.4 | 6816175.4 | 2.5 | 8.4 |
| HAUL TRUCK | 553484.5 | 6816159.2 | 2.5 | 8.4 |
| HAUL TRUCK | 553492.4 | 6816143.2 | 2.5 | 8.4 |
| HAUL TRUCK | 553500.2 | 6816127.5 | 2.5 | 8.4 |
| HAUL TRUCK | 553508 | 6816111.8 | 2.5 | 8.4 |
| HAUL TRUCK | 553515.7 | 6816096.3 | 2.5 | 8.4 |
| HAUL TRUCK | 553523.3 | 6816081 | 2.5 | 8.4 |
| HAUL TRUCK | 553530.8 | 6816065.8 | 2.5 | 8.4 |
| HAUL TRUCK | 553538.3 | 6816050.7 | 2.5 | 8.4 |
| HAUL TRUCK | 553545.8 | 6816035.7 | 2.5 | 8.4 |
| HAUL TRUCK | 553553.2 | 6816020.9 | 2.5 | 8.5 |
| HAUL TRUCK | 553560.5 | 6816006.1 | 2.5 | 8.5 |
| HAUL TRUCK | 553567.8 | 6815991.4 | 2.5 | 8.5 |
| HAUL TRUCK | 553575.1 | 6815976.7 | 2.5 | 8.5 |
| HAUL TRUCK | 553582.3 | 6815962.1 | 2.5 | 8.5 |
| HAUL TRUCK | 553589.5 | 6815947.6 | 2.5 | 8.5 |
| HAUL TRUCK | 553596.7 | 6815933.1 | 2.5 | 8.5 |
| HAUL TRUCK | 553602 | 6815922.5 | 2.5 | 5.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4B | 552865.6 | 6815421 | 1.8 | 18.9 | 30.9 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 18.9 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.7 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 18.9 |
| LOADER | 553348.1 | 6816171.4 | 2.5 | 16.8 |
| LOADER | 553334.6 | 6816179.3 | 2.5 | 16.8 |
| LOADER | 553321.2 | 6816187.1 | 2.5 | 16.8 |
| LOADER | 553307.7 | 6816194.9 | 2.5 | 16.8 |
| LOADER | 553298.5 | 6816200.2 | 2.5 | 12.4 |
| LOADER | 553290.8 | 6816208.2 | 2.5 | 17.1 |
| LOADER | 553280.1 | 6816221.5 | 2.5 | 17.1 |
| LOADER | 553269.2 | 6816235.1 | 2.5 | 17.1 |
| LOADER | 553258.2 | 6816248.8 | 2.5 | 17.1 |
| LOADER | 553248.3 | 6816261.1 | 2.5 | 15.9 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 10.4 |
| Road truck | 553362.2 | 6816260.3 | 2.5 | 10.5 |
| Road truck | 553344.1 | 6816262.9 | 2.5 | 10.5 |
| Road truck | 553326.2 | 6816265.4 | 2.5 | 10.5 |
| Road truck | 553308.6 | 6816267.9 | 2.5 | 10.5 |
| Road truck | 553293.9 | 6816270 | 2.5 | 8.9 |
| Road truck | 553289.7 | 6816256.6 | 2.5 | 12.8 |
| Road truck | 553300.6 | 6816243 | 2.5 | 11.1 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 11 |
| Road truck | 553338.5 | 6816243.8 | 2.5 | 11 |
| Road truck | 553357.7 | 6816244.2 | 2.5 | 10.8 |
| Road truck | 553377 | 6816243.9 | 2.5 | 10.8 |
| Road truck | 553396.6 | 6816243 | 2.5 | 10.7 |
| Road truck | 553416.6 | 6816242.1 | 2.5 | 10.7 |
| Road truck | 553437 | 6816241.2 | 2.5 | 10.7 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 10.6 |
| Road truck | 553479.1 | 6816239.3 | 2.5 | 10.6 |
| Road truck | 553501 | 6816238.3 | 2.5 | 10.6 |
| Road truck | 553517.2 | 6816237.6 | 2.5 | 7.1 |
| Road truck | 553534.8 | 6816243.7 | 2.5 | 10.2 |
| Road truck | 553556.5 | 6816240.7 | 2.5 | 10.2 |
| Road truck | 553578.8 | 6816237.8 | 2.5 | 10.1 |
| Road truck | 553601.6 | 6816234.7 | 2.5 | 10.1 |
| Road truck | 553624.9 | 6816231.6 | 2.5 | 10.1 |
| Road truck | 553648.8 | 6816228.4 | 2.5 | 10 |
| Road truck | 553673.3 | 6816225.1 | 2.5 | 9.9 |
| Road truck | 553698.5 | 6816221.8 | 2.5 | 9.9 |
| Road truck | 553724.4 | 6816218.3 | 2.5 | 9.9 |
| Road truck | 553751.1 | 6816214.8 | 2.5 | 9.8 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 9.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 4.2 |
| Road truck | 553808.5 | 6816201 | 2.5 | 8.5 |
| Road truck | 553824.7 | 6816186.6 | 2.5 | 8.5 |
| Road truck | 553841 | 6816172.1 | 2.5 | 8.5 |
| HAUL TRUCK | 553472.1 | 6816195 | 2.5 | 8.5 |
| HAUL TRUCK | 553453.2 | 6816198.5 | 2.5 | 8.5 |
| HAUL TRUCK | 553434.7 | 6816202 | 2.5 | 8.6 |
| HAUL TRUCK | 553416.5 | 6816205.4 | 2.5 | 8.6 |
| HAUL TRUCK | 553398.6 | 6816208.7 | 2.5 | 8.6 |
| HAUL TRUCK | 553380.9 | 6816212.1 | 2.5 | 8.6 |
| HAUL TRUCK | 553363.5 | 6816215.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553346.4 | 6816218.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553329.4 | 6816221.7 | 2.5 | 8.7 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 8.7 |
| HAUL TRUCK | 553296.1 | 6816228 | 2.5 | 8.7 |
| HAUL TRUCK | 553279.8 | 6816231 | 2.5 | 8.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 8.8 |
| HAUL TRUCK | 553253.3 | 6816236 | 2.5 | 3.4 |
| HAUL TRUCK | 553476.5 | 6816175.2 | 2.5 | 8.5 |
| HAUL TRUCK | 553484.8 | 6816158.6 | 2.5 | 8.5 |
| HAUL TRUCK | 553492.9 | 6816142.3 | 2.5 | 8.5 |
| HAUL TRUCK | 553500.8 | 6816126.2 | 2.5 | 8.5 |
| HAUL TRUCK | 553508.7 | 6816110.4 | 2.5 | 8.6 |
| HAUL TRUCK | 553516.5 | 6816094.7 | 2.5 | 8.6 |
| HAUL TRUCK | 553524.1 | 6816079.3 | 2.5 | 8.6 |

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| HAUL TRUCK | 553531.7 | 6816064 | 2.5 | 8.6 |
| HAUL TRUCK | 553539.2 | 6816048.9 | 2.5 | 8.6 |
| HAUL TRUCK | 553546.6 | 6816034 | 2.5 | 8.6 |
| HAUL TRUCK | 553554 | 6816019.2 | 2.5 | 8.6 |
| HAUL TRUCK | 553561.3 | 6816004.5 | 2.5 | 8.6 |
| HAUL TRUCK | 553568.5 | 6815990 | 2.5 | 8.7 |
| HAUL TRUCK | 553575.7 | 6815975.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553582.8 | 6815961.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553589.8 | 6815947 | 2.5 | 8.7 |
| HAUL TRUCK | 553596.9 | 6815932.8 | 2.5 | 8.7 |
| HAUL TRUCK | 553602 | 6815922.5 | 2.5 | 5.4 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5A | 552762.8 | 6815886.6 | 1.8 | 24.1 | 33.6 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 20.3 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.1 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 20.4 |
| LOADER | 553348.9 | 6816171 | 2.5 | 18.9 |
| LOADER | 553337.2 | 6816177.8 | 2.5 | 18.9 |
| LOADER | 553325.7 | 6816184.4 | 2.5 | 18.9 |
| LOADER | 553314.5 | 6816191 | 2.5 | 18.9 |
| LOADER | 553303.5 | 6816197.3 | 2.5 | 18.9 |
| LOADER | 553297.1 | 6816201.1 | 2.5 | 11.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.4 |
| LOADER | 553285.8 | 6816214.4 | 2.5 | 18.4 |
| LOADER | 553279.1 | 6816222.8 | 2.5 | 18.4 |
| LOADER | 553272.3 | 6816231.2 | 2.5 | 18.4 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 18.4 |
| LOADER | 553258.8 | 6816248 | 2.5 | 18.4 |
| LOADER | 553252.1 | 6816256.3 | 2.5 | 18.4 |
| LOADER | 553246.4 | 6816263.5 | 2.5 | 17 |
| Road truck | 553379.9 | 6816257.8 | 2.5 | 14.1 |
| Road truck | 553360.6 | 6816260.5 | 2.5 | 14.1 |
| Road truck | 553342 | 6816263.1 | 2.5 | 14.2 |
| Road truck | 553324.2 | 6816265.7 | 2.5 | 14.2 |
| Road truck | 553307.1 | 6816268.1 | 2.5 | 14.3 |
| Road truck | 553293.4 | 6816270 | 2.5 | 12.5 |
| Road truck | 553288.8 | 6816264.4 | 2.5 | 13.4 |
| Road truck | 553290.3 | 6816251.7 | 2.5 | 13.4 |
| Road truck | 553291.2 | 6816244.1 | 2.5 | 6.7 |
| Road truck | 553301.8 | 6816243 | 2.5 | 15.5 |
| Road truck | 553323.5 | 6816243.5 | 2.5 | 15.5 |
| Road truck | 553346.4 | 6816243.9 | 2.5 | 15.4 |
| Road truck | 553362.9 | 6816244.3 | 2.5 | 11 |
| Road truck | 553378.7 | 6816243.8 | 2.5 | 14.8 |
| Road truck | 553402.4 | 6816242.8 | 2.5 | 14.8 |
| Road truck | 553427.4 | 6816241.7 | 2.5 | 14.7 |
| Road truck | 553453.9 | 6816240.5 | 2.5 | 14.6 |
| Road truck | 553482.1 | 6816239.2 | 2.5 | 14.5 |
| Road truck | 553509.4 | 6816238 | 2.5 | 13.6 |
| Road truck | 553537.7 | 6816243.3 | 2.5 | 13.6 |
| Road truck | 553566.1 | 6816239.5 | 2.5 | 13.6 |
| Road truck | 553596.1 | 6816235.5 | 2.5 | 13.5 |
| Road truck | 553628.1 | 6816231.2 | 2.5 | 13.4 |
| Road truck | 553662 | 6816226.7 | 2.5 | 13.3 |
| Road truck | 553698.3 | 6816221.8 | 2.5 | 13.2 |
| Road truck | 553737 | 6816216.6 | 2.5 | 13.1 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 13 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 9.9 |
| Road truck | 553825.7 | 6816185.7 | 2.5 | 9.8 |
| Road truck | 553841.7 | 6816171.5 | 2.5 | 9.1 |
| HAUL TRUCK | 553469.7 | 6816195.4 | 2.5 | 11.9 |
| HAUL TRUCK | 553446.8 | 6816199.7 | 2.5 | 11.9 |
| HAUL TRUCK | 553424.9 | 6816203.8 | 2.5 | 12 |
| HAUL TRUCK | 553404.1 | 6816207.7 | 2.5 | 12 |
| HAUL TRUCK | 553384.2 | 6816211.4 | 2.5 | 12 |
| HAUL TRUCK | 553365.2 | 6816215 | 2.5 | 12.1 |
| HAUL TRUCK | 553347 | 6816218.4 | 2.5 | 12.2 |
| HAUL TRUCK | 553329.5 | 6816221.7 | 2.5 | 12.2 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 12.2 |

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| HAUL TRUCK | 553296.5 | 6816227.9 | 2.5 | 12.3 |
| HAUL TRUCK | 553280.9 | 6816230.8 | 2.5 | 12.3 |
| HAUL TRUCK | 553265.9 | 6816233.6 | 2.5 | 12.3 |
| HAUL TRUCK | 553254.7 | 6816235.7 | 2.5 | 9.6 |
| HAUL TRUCK | 553475.4 | 6816177.5 | 2.5 | 9.4 |
| HAUL TRUCK | 553481.4 | 6816165.4 | 2.5 | 9.4 |
| HAUL TRUCK | 553487.4 | 6816153.3 | 2.5 | 9.4 |
| HAUL TRUCK | 553493.4 | 6816141.1 | 2.5 | 9.4 |
| HAUL TRUCK | 553499.5 | 6816128.9 | 2.5 | 9.4 |
| HAUL TRUCK | 553505.6 | 6816116.6 | 2.5 | 9.4 |
| HAUL TRUCK | 553511.7 | 6816104.3 | 2.5 | 9.4 |
| HAUL TRUCK | 553517.9 | 6816091.9 | 2.5 | 9.4 |
| HAUL TRUCK | 553524.1 | 6816079.3 | 2.5 | 9.4 |
| HAUL TRUCK | 553530.4 | 6816066.7 | 2.5 | 9.4 |
| HAUL TRUCK | 553536.7 | 6816054 | 2.5 | 9.4 |
| HAUL TRUCK | 553543.1 | 6816041.2 | 2.5 | 9.4 |
| HAUL TRUCK | 553549.5 | 6816028.3 | 2.5 | 9.4 |
| HAUL TRUCK | 553556 | 6816015.2 | 2.5 | 9.3 |
| HAUL TRUCK | 553562.5 | 6816001.9 | 2.5 | 9.3 |
| HAUL TRUCK | 553569.2 | 6815988.6 | 2.5 | 9.3 |
| HAUL TRUCK | 553575.9 | 6815975 | 2.5 | 9.3 |
| HAUL TRUCK | 553582.7 | 6815961.3 | 2.5 | 9.3 |
| HAUL TRUCK | 553589.6 | 6815947.4 | 2.5 | 9.3 |
| HAUL TRUCK | 553596.6 | 6815933.3 | 2.5 | 9.3 |
| HAUL TRUCK | 553601.9 | 6815922.7 | 2.5 | 6.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5B | 552747.8 | 6815977.7 | 1.8 | 26.9 | 33.9 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 20.6 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.3 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 20.6 |
| LOADER | 553348.4 | 6816171.3 | 2.5 | 19.5 |
| LOADER | 553335.8 | 6816178.6 | 2.5 | 19.5 |
| LOADER | 553323.5 | 6816185.7 | 2.5 | 19.5 |
| LOADER | 553311.7 | 6816192.6 | 2.5 | 19.5 |
| LOADER | 553300.9 | 6816198.8 | 2.5 | 18.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.7 |
| LOADER | 553286 | 6816214.2 | 2.5 | 18.7 |
| LOADER | 553279.4 | 6816222.4 | 2.5 | 18.7 |
| LOADER | 553272.8 | 6816230.6 | 2.5 | 18.7 |
| LOADER | 553266.3 | 6816238.7 | 2.5 | 18.7 |
| LOADER | 553259.8 | 6816246.7 | 2.5 | 18.7 |
| LOADER | 553253.4 | 6816254.7 | 2.5 | 18.7 |
| LOADER | 553247.1 | 6816262.6 | 2.5 | 18.6 |
| Road truck | 553378.5 | 6816258 | 2.5 | 15 |
| Road truck | 553356.6 | 6816261.1 | 2.5 | 15.1 |
| Road truck | 553335.9 | 6816264 | 2.5 | 15.2 |
| Road truck | 553316.2 | 6816266.8 | 2.5 | 15.2 |
| Road truck | 553297.4 | 6816269.5 | 2.5 | 15.3 |
| Road truck | 553288.2 | 6816270.8 | 2.5 | -1.2 |
| Road truck | 553288.7 | 6816265.1 | 2.5 | 13.4 |
| Road truck | 553290 | 6816253.8 | 2.5 | 13.4 |
| Road truck | 553291 | 6816245.5 | 2.5 | 10.3 |
| Road truck | 553304.2 | 6816243.1 | 2.5 | 16.9 |
| Road truck | 553331.3 | 6816243.6 | 2.5 | 16.8 |
| Road truck | 553356.4 | 6816244.1 | 2.5 | 15.3 |
| Road truck | 553381.1 | 6816243.7 | 2.5 | 16 |
| Road truck | 553410.2 | 6816242.4 | 2.5 | 15.9 |
| Road truck | 553441.5 | 6816241 | 2.5 | 15.8 |
| Road truck | 553475.5 | 6816239.5 | 2.5 | 15.7 |
| Road truck | 553507.7 | 6816238 | 2.5 | 14.4 |
| Road truck | 553540.2 | 6816242.9 | 2.5 | 14.5 |
| Road truck | 553574.3 | 6816238.4 | 2.5 | 14.5 |
| Road truck | 553611 | 6816233.5 | 2.5 | 14.4 |
| Road truck | 553650.6 | 6816228.2 | 2.5 | 14.2 |
| Road truck | 553693.7 | 6816222.4 | 2.5 | 14.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 14 |
| Road truck | 553782.8 | 6816210.5 | 2.5 | 12.1 |
| Road truck | 553809.2 | 6816200.4 | 2.5 | 10.1 |
| Road truck | 553827 | 6816184.5 | 2.5 | 10.1 |

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| Road truck | 553842.6 | 6816170.6 | 2.5 | 8.5 |
| HAUL TRUCK | 553467.4 | 6816195.8 | 2.5 | 12.8 |
| HAUL TRUCK | 553440.4 | 6816200.9 | 2.5 | 12.9 |
| HAUL TRUCK | 553415 | 6816205.7 | 2.5 | 12.9 |
| HAUL TRUCK | 553391.2 | 6816210.1 | 2.5 | 13 |
| HAUL TRUCK | 553368.7 | 6816214.4 | 2.5 | 13 |
| HAUL TRUCK | 553347.5 | 6816218.3 | 2.5 | 13.1 |
| HAUL TRUCK | 553327.4 | 6816222.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553308.3 | 6816225.7 | 2.5 | 13.2 |
| HAUL TRUCK | 553290.2 | 6816229.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553273 | 6816232.3 | 2.5 | 13.3 |
| HAUL TRUCK | 553257.7 | 6816235.2 | 2.5 | 12.6 |
| HAUL TRUCK | 553475.4 | 6816177.5 | 2.5 | 9.5 |
| HAUL TRUCK | 553481.4 | 6816165.5 | 2.5 | 9.5 |
| HAUL TRUCK | 553487.4 | 6816153.3 | 2.5 | 9.5 |
| HAUL TRUCK | 553493.5 | 6816141.1 | 2.5 | 9.5 |
| HAUL TRUCK | 553499.6 | 6816128.7 | 2.5 | 9.5 |
| HAUL TRUCK | 553505.8 | 6816116.3 | 2.5 | 9.5 |
| HAUL TRUCK | 553512.1 | 6816103.7 | 2.5 | 9.5 |
| HAUL TRUCK | 553518.4 | 6816090.9 | 2.5 | 9.5 |
| HAUL TRUCK | 553524.8 | 6816078 | 2.5 | 9.5 |
| HAUL TRUCK | 553531.2 | 6816065 | 2.5 | 9.5 |
| HAUL TRUCK | 553537.8 | 6816051.8 | 2.5 | 9.5 |
| HAUL TRUCK | 553544.4 | 6816038.4 | 2.5 | 9.4 |
| HAUL TRUCK | 553551.2 | 6816024.9 | 2.5 | 9.4 |
| HAUL TRUCK | 553558 | 6816011.1 | 2.5 | 9.4 |
| HAUL TRUCK | 553565 | 6815997.1 | 2.5 | 9.4 |
| HAUL TRUCK | 553572 | 6815982.9 | 2.5 | 9.4 |
| HAUL TRUCK | 553579.2 | 6815968.4 | 2.5 | 9.4 |
| HAUL TRUCK | 553586.5 | 6815953.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553594 | 6815938.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553600.7 | 6815925.1 | 2.5 | 8.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6A | 552849.5 | 6816597 | 1.8 | 7.7 | 34.8 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 19.8 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.7 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 20 |
| LOADER | 553327.9 | 6816183.2 | 2.5 | 26.2 |
| LOADER | 553299.7 | 6816199.6 | 2.5 | 18.3 |
| LOADER | 553277.6 | 6816224.6 | 2.5 | 26.9 |
| LOADER | 553252.2 | 6816256.2 | 2.5 | 24.5 |
| Road truck | 553376.6 | 6816258.2 | 2.5 | 17.4 |
| Road truck | 553351.6 | 6816261.8 | 2.5 | 17.5 |
| Road truck | 553328.4 | 6816265.1 | 2.5 | 17.5 |
| Road truck | 553306.7 | 6816268.2 | 2.5 | 17.6 |
| Road truck | 553292.2 | 6816270.2 | 2.5 | 13.9 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 15.9 |
| Road truck | 553290.4 | 6816250.7 | 2.5 | 15.9 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 4.4 |
| Road truck | 553299.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553315.2 | 6816243.3 | 2.5 | 16.1 |
| Road truck | 553332 | 6816243.6 | 2.5 | 16.1 |
| Road truck | 553349.6 | 6816244 | 2.5 | 16 |
| Road truck | 553363 | 6816244.3 | 2.5 | 12.7 |
| Road truck | 553378 | 6816243.9 | 2.5 | 16.4 |
| Road truck | 553400 | 6816242.9 | 2.5 | 16.3 |
| Road truck | 553423.4 | 6816241.8 | 2.5 | 7.9 |
| Road truck | 553448.3 | 6816240.7 | 2.5 | 16.1 |
| Road truck | 553474.9 | 6816239.5 | 2.5 | 16.1 |
| Road truck | 553503.4 | 6816238.2 | 2.5 | 16 |
| Road truck | 553520.3 | 6816237.5 | 2.5 | 6.9 |
| Road truck | 553543.9 | 6816242.4 | 2.5 | 16.8 |
| Road truck | 553586.5 | 6816236.7 | 2.5 | 16.7 |
| Road truck | 553633.8 | 6816230.4 | 2.5 | 16.6 |
| Road truck | 553686.7 | 6816223.4 | 2.5 | 16.3 |
| Road truck | 553746.3 | 6816215.4 | 2.5 | 16.2 |
| Road truck | 553789.6 | 6816209.6 | 2.5 | 11.1 |
| Road truck | 553821.1 | 6816189.8 | 2.5 | 14.8 |
| Road truck | 553845.9 | 6816167.7 | 2.5 | 6.3 |

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|---|---|---|---|---|
| HAUL TRUCK | 553464.8 | 6816196.3 | 2.5 | 14.4 |
| HAUL TRUCK | 553433.1 | 6816202.3 | 2.5 | 14.5 |
| HAUL TRUCK | 553403.9 | 6816207.7 | 2.5 | 14.6 |
| HAUL TRUCK | 553376.9 | 6816212.8 | 2.5 | 14.7 |
| HAUL TRUCK | 553351.8 | 6816217.5 | 2.5 | 14.8 |
| HAUL TRUCK | 553328.3 | 6816221.9 | 2.5 | 14.9 |
| HAUL TRUCK | 553306.4 | 6816226 | 2.5 | 15 |
| HAUL TRUCK | 553285.9 | 6816229.9 | 2.5 | 15 |
| HAUL TRUCK | 553266.6 | 6816233.5 | 2.5 | 15.1 |
| HAUL TRUCK | 553254.1 | 6816235.8 | 2.5 | 10.7 |
| HAUL TRUCK | 553478.3 | 6816171.7 | 2.5 | 13.1 |
| HAUL TRUCK | 553490.6 | 6816146.8 | 2.5 | 13.1 |
| HAUL TRUCK | 553503.8 | 6816120.3 | 2.5 | 13 |
| HAUL TRUCK | 553517.8 | 6816092 | 2.5 | 12.9 |
| HAUL TRUCK | 553532.9 | 6816061.6 | 2.5 | 12.8 |
| HAUL TRUCK | 553549.2 | 6816028.9 | 2.5 | 12.8 |
| HAUL TRUCK | 553566.7 | 6815993.6 | 2.5 | 12.7 |
| HAUL TRUCK | 553585.7 | 6815955.3 | 2.5 | 12.6 |
| HAUL TRUCK | 553599.7 | 6815927.1 | 2.5 | 8.3 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6B | 552715.7 | 6816554.2 | 1.8 | 10.6 | 33.3 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553643.9 | 6815944.2 | 2.5 | 18.6 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.3 |
| EXCAVATOR | 553634.2 | 6815963.6 | 2.5 | 18.8 |
| LOADER | 553324.1 | 6816185.4 | 2.5 | 25.5 |
| LOADER | 553285.4 | 6816214.9 | 2.5 | 23.1 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 23.1 |
| LOADER | 553250 | 6816258.9 | 2.5 | 21.6 |
| Road truck | 553367.1 | 6816259.6 | 2.5 | 18.1 |
| Road truck | 553325.5 | 6816265.5 | 2.5 | 18.2 |
| Road truck | 553297.1 | 6816269.5 | 2.5 | 15.4 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 14.1 |
| Road truck | 553290.4 | 6816250.6 | 2.5 | 14.1 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 2.4 |
| Road truck | 553303.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553327.7 | 6816243.5 | 2.5 | 16.1 |
| Road truck | 553353.8 | 6816244.1 | 2.5 | 16 |
| Road truck | 553383.9 | 6816243.6 | 2.5 | 16.6 |
| Road truck | 553419.2 | 6816242 | 2.5 | 16.4 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 16.3 |
| Road truck | 553499.8 | 6816238.4 | 2.5 | 16.1 |
| Road truck | 553557.8 | 6816240.6 | 2.5 | 17.4 |
| Road truck | 553633.7 | 6816230.4 | 2.5 | 17.2 |
| Road truck | 553723.4 | 6816218.5 | 2.5 | 16.9 |
| Road truck | 553787.5 | 6816209.9 | 2.5 | 10.5 |
| Road truck | 553819.1 | 6816191.6 | 2.5 | 13 |
| Road truck | 553843.8 | 6816169.6 | 2.5 | 7.3 |
| HAUL TRUCK | 553453.8 | 6816198.4 | 2.5 | 15.2 |
| HAUL TRUCK | 553403.1 | 6816207.9 | 2.5 | 15.4 |
| HAUL TRUCK | 553358.3 | 6816216.3 | 2.5 | 15.6 |
| HAUL TRUCK | 553318.2 | 6816223.8 | 2.5 | 15.7 |
| HAUL TRUCK | 553282.2 | 6816230.6 | 2.5 | 15.8 |
| HAUL TRUCK | 553258.2 | 6816235.1 | 2.5 | 12.5 |
| HAUL TRUCK | 553477.8 | 6816172.6 | 2.5 | 11.4 |
| HAUL TRUCK | 553489.1 | 6816149.9 | 2.5 | 11.4 |
| HAUL TRUCK | 553500.9 | 6816126.1 | 2.5 | 11.3 |
| HAUL TRUCK | 553513.3 | 6816101.1 | 2.5 | 11.2 |
| HAUL TRUCK | 553526.4 | 6816074.8 | 2.5 | 11.2 |
| HAUL TRUCK | 553540.2 | 6816047 | 2.5 | 11.1 |
| HAUL TRUCK | 553554.8 | 6816017.6 | 2.5 | 11 |
| HAUL TRUCK | 553570.2 | 6815986.5 | 2.5 | 11 |
| HAUL TRUCK | 553586.6 | 6815953.4 | 2.5 | 10.9 |
| HAUL TRUCK | 553599.4 | 6815927.7 | 2.5 | 7.6 |
| HAUL TRUCK | 553290.2 | 6816229.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553273 | 6816232.3 | 2.5 | 13.3 |
| HAUL TRUCK | 553257.7 | 6816235.2 | 2.5 | 12.6 |
| HAUL TRUCK | 553470.2 | 6816176.1 | 2.5 | 10.2 |
| HAUL TRUCK | 553465.8 | 6816161.5 | 2.5 | 10.2 |
| HAUL TRUCK | 553461.5 | 6816147.2 | 2.5 | 10.3 |

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|---|---|---|---|---|
| HAUL TRUCK | 553457.3 | 6816133.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553453.1 | 6816119.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553449.1 | 6816105.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553445.1 | 6816092.6 | 2.5 | 10.3 |
| HAUL TRUCK | 553441.2 | 6816079.6 | 2.5 | 10.3 |
| HAUL TRUCK | 553437.4 | 6816066.8 | 2.5 | 10.3 |
| HAUL TRUCK | 553433.6 | 6816054.1 | 2.5 | 10.4 |
| HAUL TRUCK | 553429.8 | 6816041.7 | 2.5 | 10.4 |
| HAUL TRUCK | 553426.2 | 6816029.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553422.5 | 6816017.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553418.9 | 6816005.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553415.4 | 6815993.5 | 2.5 | 10.4 |
| HAUL TRUCK | 553411.9 | 6815981.9 | 2.5 | 10.4 |
| HAUL TRUCK | 553408.4 | 6815970.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553405 | 6815958.9 | 2.5 | 10.4 |
| HAUL TRUCK | 553401.6 | 6815947.6 | 2.5 | 10.4 |
| HAUL TRUCK | 553398.2 | 6815936.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553394.9 | 6815925.2 | 2.5 | 10.4 |
| HAUL TRUCK | 553391.6 | 6815914.1 | 2.5 | 10.4 |
| HAUL TRUCK | 553389.4 | 6815906.8 | 2.5 | 5.8 |
| EXCAVATOR | 553286.9 | 6815896.8 | 2.5 | 32.1 |

**SOUTHWEST CORNER**

File:Z:\CRG ACOUSTICS\ACOUSTIC JOBS\10453a Sandmine Lennox Head\10453a_sandmine april 2012 se.PEN
File Description:Data file covering souteast
Tuesday 05 Mar, 2013 at 12:05:18
Environmental Calculations
All point and line sources included. Line source segmentation angle: 1 degrees. Calculations for specified meteorology.
Noise level results are the logarithmic addition of all the noise sources
Noise level results incorporate the incoherent ground reflection algorithm
Meteorology :
Wind speed 0.0 (m/s) Wind direction 0 Mast height 10.0 (m)
Temperature 20.0 (C) Temperature Gradient 0.0 (C/100m) Humidity 50.0 (%)
Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R1 | 553772.1 | 6815867.2 | 1.8 | 3 | 38 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 27.4 |
| Generator | 553406.4 | 6816251.5 | 1 | 22.1 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 27 |
| LOADER | 553327.3 | 6816183.5 | 2.5 | 23 |
| LOADER | 553284.2 | 6816216.4 | 2.5 | 20.1 |
| LOADER | 553258.3 | 6816248.7 | 2.5 | 21.3 |
| Road truck | 553382 | 6816257.5 | 2.5 | 16.9 |
| Road truck | 553365.8 | 6816259.8 | 2.5 | 16.8 |
| Road truck | 553348.8 | 6816262.2 | 2.5 | 16.8 |
| Road truck | 553330.8 | 6816264.7 | 2.5 | 16.7 |
| Road truck | 553312 | 6816267.4 | 2.5 | 16.7 |
| Road truck | 553295.1 | 6816269.8 | 2.5 | 9.7 |
| Road truck | 553288.9 | 6816262.9 | 2.5 | 10.1 |
| Road truck | 553290.6 | 6816248.9 | 2.5 | 9.2 |
| Road truck | 553299.7 | 6816243 | 2.5 | 10.6 |
| Road truck | 553315.9 | 6816243.3 | 2.5 | 10.7 |
| Road truck | 553331.4 | 6816243.6 | 2.5 | 10.7 |
| Road truck | 553346.3 | 6816243.9 | 2.5 | 16.2 |
| Road truck | 553360.5 | 6816244.2 | 2.5 | 16.2 |
| Road truck | 553374.8 | 6816244 | 2.5 | 16.6 |
| Road truck | 553389.1 | 6816243.4 | 2.5 | 16.6 |
| Road truck | 553402.8 | 6816242.8 | 2.5 | 16.7 |
| Road truck | 553416.1 | 6816242.2 | 2.5 | 16.7 |
| Road truck | 553428.8 | 6816241.6 | 2.5 | 16.8 |
| Road truck | 553441.2 | 6816241 | 2.5 | 16.8 |
| Road truck | 553453.1 | 6816240.5 | 2.5 | 16.8 |
| Road truck | 553464.6 | 6816240 | 2.5 | 16.9 |
| Road truck | 553475.8 | 6816239.5 | 2.5 | 16.9 |
| Road truck | 553486.6 | 6816239 | 2.5 | 16.9 |
| Road truck | 553497.2 | 6816238.5 | 2.5 | 16.9 |
| Road truck | 553507.4 | 6816238.1 | 2.5 | 17 |
| Road truck | 553517.4 | 6816237.6 | 2.5 | 17 |
| Road truck | 553522.3 | 6816237.4 | 2.5 | -10.8 |
| Road truck | 553529.2 | 6816244.4 | 2.5 | 17.2 |

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|---|---|---|---|---|
| Road truck | 553539.3 | 6816243.1 | 2.5 | 17.3 |
| Road truck | 553549 | 6816241.8 | 2.5 | 17.3 |
| Road truck | 553558.5 | 6816240.5 | 2.5 | 17.4 |
| Road truck | 553567.7 | 6816239.2 | 2.5 | 17.4 |
| Road truck | 553576.8 | 6816238 | 2.5 | 17.4 |
| Road truck | 553585.5 | 6816236.9 | 2.5 | 17.4 |
| Road truck | 553594.1 | 6816235.7 | 2.5 | 17.4 |
| Road truck | 553602.5 | 6816234.6 | 2.5 | 17.4 |
| Road truck | 553610.7 | 6816233.5 | 2.5 | 17.5 |
| Road truck | 553618.7 | 6816232.4 | 2.5 | 17.5 |
| Road truck | 553626.6 | 6816231.4 | 2.5 | 17.5 |
| Road truck | 553634.3 | 6816230.4 | 2.5 | 17.5 |
| Road truck | 553641.9 | 6816229.3 | 2.5 | 17.5 |
| Road truck | 553649.3 | 6816228.4 | 2.5 | 17.5 |
| Road truck | 553656.6 | 6816227.4 | 2.5 | 17.5 |
| Road truck | 553663.8 | 6816226.4 | 2.5 | 17.5 |
| Road truck | 553670.9 | 6816225.5 | 2.5 | 17.5 |
| Road truck | 553677.8 | 6816224.5 | 2.5 | 17.6 |
| Road truck | 553684.7 | 6816223.6 | 2.5 | 17.6 |
| Road truck | 553691.5 | 6816222.7 | 2.5 | 17.6 |
| Road truck | 553698.2 | 6816221.8 | 2.5 | 17.6 |
| Road truck | 553704.8 | 6816220.9 | 2.5 | 17.6 |
| Road truck | 553711.3 | 6816220.1 | 2.5 | 17.6 |
| Road truck | 553717.8 | 6816219.2 | 2.5 | 17.6 |
| Road truck | 553724.1 | 6816218.4 | 2.5 | 17.6 |
| Road truck | 553730.5 | 6816217.5 | 2.5 | 17.7 |
| Road truck | 553736.7 | 6816216.7 | 2.5 | 17.7 |
| Road truck | 553743 | 6816215.8 | 2.5 | 17.7 |
| Road truck | 553749.1 | 6816215 | 2.5 | 17.7 |
| Road truck | 553755.3 | 6816214.2 | 2.5 | 17.7 |
| Road truck | 553761.4 | 6816213.4 | 2.5 | 17.7 |
| Road truck | 553767.4 | 6816212.6 | 2.5 | 17.7 |
| Road truck | 553773.5 | 6816211.8 | 2.5 | 17.7 |
| Road truck | 553779.4 | 6816211 | 2.5 | 17.7 |
| Road truck | 553785.4 | 6816210.2 | 2.5 | 17.7 |
| Road truck | 553791.4 | 6816209.4 | 2.5 | 17.8 |
| Road truck | 553797.3 | 6816208.6 | 2.5 | 17.8 |
| Road truck | 553800.4 | 6816208.2 | 2.5 | 3.1 |
| Road truck | 553803.3 | 6816205.7 | 2.5 | 18.7 |
| Road truck | 553808.7 | 6816200.8 | 2.5 | 18.8 |
| Road truck | 553814 | 6816196.1 | 2.5 | 18.8 |
| Road truck | 553819.2 | 6816191.5 | 2.5 | 18.8 |
| Road truck | 553824.2 | 6816187 | 2.5 | 18.8 |
| Road truck | 553829.2 | 6816182.6 | 2.5 | 18.8 |
| Road truck | 553834 | 6816178.3 | 2.5 | 18.9 |
| Road truck | 553838.8 | 6816174 | 2.5 | 18.9 |
| Road truck | 553843.4 | 6816169.9 | 2.5 | 18.9 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 17.7 |
| HAUL TRUCK | 553475.4 | 6816194.3 | 2.5 | 15.8 |
| HAUL TRUCK | 553462.6 | 6816196.7 | 2.5 | 15.8 |
| HAUL TRUCK | 553449.1 | 6816199.3 | 2.5 | 15.7 |
| HAUL TRUCK | 553435 | 6816201.9 | 2.5 | 15.7 |
| HAUL TRUCK | 553420.1 | 6816204.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553404.4 | 6816207.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553387.8 | 6816210.8 | 2.5 | 15.6 |
| HAUL TRUCK | 553370.2 | 6816214.1 | 2.5 | 15.5 |
| HAUL TRUCK | 553351.5 | 6816217.6 | 2.5 | 11 |
| HAUL TRUCK | 553331.6 | 6816221.3 | 2.5 | 10.9 |
| HAUL TRUCK | 553310.4 | 6816225.3 | 2.5 | 10.8 |
| HAUL TRUCK | 553287.7 | 6816229.5 | 2.5 | 10.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 9 |
| HAUL TRUCK | 553469.7 | 6816180.9 | 2.5 | 13.7 |
| HAUL TRUCK | 553464.2 | 6816175.6 | 2.5 | 13.7 |
| HAUL TRUCK | 553458.7 | 6816170.3 | 2.5 | 13.7 |
| HAUL TRUCK | 553453.3 | 6816165 | 2.5 | 13.7 |
| HAUL TRUCK | 553447.8 | 6816159.7 | 2.5 | 13.7 |
| HAUL TRUCK | 553442.3 | 6816154.3 | 2.5 | 13.7 |
| HAUL TRUCK | 553436.8 | 6816149 | 2.5 | 8.6 |
| HAUL TRUCK | 553431.3 | 6816143.6 | 2.5 | 8.6 |
| HAUL TRUCK | 553425.8 | 6816138.2 | 2.5 | 8.5 |
| HAUL TRUCK | 553420.2 | 6816132.8 | 2.5 | 8.6 |
| HAUL TRUCK | 553414.6 | 6816127.4 | 2.5 | 7.3 |
| HAUL TRUCK | 553409 | 6816121.9 | 2.5 | 6 |

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|---|---|---|---|---|
| HAUL TRUCK | 553403.3 | 6816116.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553397.6 | 6816110.9 | 2.5 | 7 |
| HAUL TRUCK | 553391.8 | 6816105.3 | 2.5 | 7.4 |
| HAUL TRUCK | 553386 | 6816099.6 | 2.5 | 7.7 |
| HAUL TRUCK | 553380.1 | 6816093.9 | 2.5 | 8 |
| HAUL TRUCK | 553374.2 | 6816088.2 | 2.5 | 8.1 |
| HAUL TRUCK | 553368.2 | 6816082.4 | 2.5 | 8.3 |
| HAUL TRUCK | 553362.2 | 6816076.5 | 2.5 | 8.2 |
| HAUL TRUCK | 553356.1 | 6816070.5 | 2.5 | 8.1 |
| HAUL TRUCK | 553349.9 | 6816064.5 | 2.5 | 8 |
| HAUL TRUCK | 553343.6 | 6816058.4 | 2.5 | 7.8 |
| HAUL TRUCK | 553337.2 | 6816052.2 | 2.5 | 7.8 |
| HAUL TRUCK | 553330.7 | 6816045.9 | 2.5 | 7.8 |
| HAUL TRUCK | 553324.2 | 6816039.6 | 2.5 | 7.8 |
| HAUL TRUCK | 553317.5 | 6816033.1 | 2.5 | 7.8 |
| HAUL TRUCK | 553310.7 | 6816026.5 | 2.5 | 7.8 |
| HAUL TRUCK | 553303.8 | 6816019.8 | 2.5 | 7.7 |
| HAUL TRUCK | 553296.8 | 6816012.9 | 2.5 | 7.7 |
| HAUL TRUCK | 553289.6 | 6816006 | 2.5 | 7.7 |
| HAUL TRUCK | 553282.3 | 6815998.9 | 2.5 | 7.7 |
| HAUL TRUCK | 553274.8 | 6815991.6 | 2.5 | 7.7 |
| HAUL TRUCK | 553267.2 | 6815984.2 | 2.5 | 7.7 |
| HAUL TRUCK | 553259.4 | 6815976.6 | 2.5 | 7.7 |
| HAUL TRUCK | 553251.4 | 6815968.9 | 2.5 | 7.7 |
| HAUL TRUCK | 553243.2 | 6815960.9 | 2.5 | 7.7 |
| HAUL TRUCK | 553234.8 | 6815952.7 | 2.5 | 7.7 |
| HAUL TRUCK | 553226.2 | 6815944.4 | 2.5 | 7.7 |
| HAUL TRUCK | 553217.3 | 6815935.8 | 2.5 | 7.7 |
| HAUL TRUCK | 553209 | 6815927.7 | 2.5 | 6.9 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2A | 553848.7 | 6815742.3 | 1.8 | 3.8 | 35.9 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 31.2 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.9 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 26.2 |
| LOADER | 553326.9 | 6816183.8 | 2.5 | 22.9 |
| LOADER | 553275.4 | 6816227.4 | 2.5 | 22.1 |
| LOADER | 553248.4 | 6816260.9 | 2.5 | 14.8 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 8 |
| Road truck | 553361.3 | 6816260.4 | 2.5 | 8.9 |
| Road truck | 553341.2 | 6816263.3 | 2.5 | 9.5 |
| Road truck | 553320.2 | 6816266.2 | 2.5 | 9.9 |
| Road truck | 553298.8 | 6816269.3 | 2.5 | 9.7 |
| Road truck | 553289.2 | 6816260.5 | 2.5 | 9.6 |
| Road truck | 553290.9 | 6816246.6 | 2.5 | 5.4 |
| Road truck | 553300.8 | 6816243 | 2.5 | 9.5 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 9.5 |
| Road truck | 553337.1 | 6816243.7 | 2.5 | 9.5 |
| Road truck | 553354.3 | 6816244.1 | 2.5 | 9.1 |
| Road truck | 553365 | 6816244.3 | 2.5 | 3.4 |
| Road truck | 553376.1 | 6816244 | 2.5 | 8.7 |
| Road truck | 553393.1 | 6816243.2 | 2.5 | 7.7 |
| Road truck | 553409.4 | 6816242.5 | 2.5 | 10 |
| Road truck | 553425.3 | 6816241.8 | 2.5 | 14.9 |
| Road truck | 553440.6 | 6816241.1 | 2.5 | 14.9 |
| Road truck | 553455.5 | 6816240.4 | 2.5 | 14.9 |
| Road truck | 553469.9 | 6816239.7 | 2.5 | 15 |
| Road truck | 553483.9 | 6816239.1 | 2.5 | 15 |
| Road truck | 553497.5 | 6816238.5 | 2.5 | 6.9 |
| Road truck | 553510.7 | 6816237.9 | 2.5 | 6.9 |
| Road truck | 553519.8 | 6816237.5 | 2.5 | 2.9 |
| Road truck | 553530.8 | 6816244.2 | 2.5 | 7.1 |
| Road truck | 553544.1 | 6816242.4 | 2.5 | 7.5 |
| Road truck | 553556.9 | 6816240.7 | 2.5 | 7.5 |
| Road truck | 553569.4 | 6816239 | 2.5 | 7.6 |
| Road truck | 553581.6 | 6816237.4 | 2.5 | 7.5 |
| Road truck | 553593.5 | 6816235.8 | 2.5 | 15.5 |
| Road truck | 553605 | 6816234.3 | 2.5 | 11.1 |
| Road truck | 553616.4 | 6816232.8 | 2.5 | 11 |
| Road truck | 553627.4 | 6816231.3 | 2.5 | 11 |

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|---|---|---|---|---|
| Road truck | 553638.3 | 6816229.8 | 2.5 | 15.6 |
| Road truck | 553648.9 | 6816228.4 | 2.5 | 15.6 |
| Road truck | 553659.3 | 6816227 | 2.5 | 15.6 |
| Road truck | 553669.4 | 6816225.7 | 2.5 | 15.6 |
| Road truck | 553679.5 | 6816224.3 | 2.5 | 15.7 |
| Road truck | 553689.3 | 6816223 | 2.5 | 15.7 |
| Road truck | 553698.9 | 6816221.7 | 2.5 | 15.7 |
| Road truck | 553708.5 | 6816220.5 | 2.5 | 15.7 |
| Road truck | 553717.8 | 6816219.2 | 2.5 | 15.7 |
| Road truck | 553727 | 6816218 | 2.5 | 15.8 |
| Road truck | 553736.1 | 6816216.8 | 2.5 | 15.8 |
| Road truck | 553745.1 | 6816215.6 | 2.5 | 15.8 |
| Road truck | 553754 | 6816214.4 | 2.5 | 15.8 |
| Road truck | 553762.7 | 6816213.2 | 2.5 | 15.8 |
| Road truck | 553771.4 | 6816212 | 2.5 | 15.9 |
| Road truck | 553780 | 6816210.9 | 2.5 | 15.9 |
| Road truck | 553788.4 | 6816209.8 | 2.5 | 15.9 |
| Road truck | 553796.6 | 6816208.7 | 2.5 | 15.6 |
| Road truck | 553805 | 6816204.2 | 2.5 | 17.5 |
| Road truck | 553813.7 | 6816196.4 | 2.5 | 17.6 |
| Road truck | 553822.1 | 6816188.9 | 2.5 | 17.6 |
| Road truck | 553830.2 | 6816181.7 | 2.5 | 17.7 |
| Road truck | 553838.1 | 6816174.7 | 2.5 | 17.7 |
| Road truck | 553845.5 | 6816168 | 2.5 | 17.6 |
| HAUL TRUCK | 553473.8 | 6816194.6 | 2.5 | 13.8 |
| HAUL TRUCK | 553457.7 | 6816197.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553440.9 | 6816200.8 | 2.5 | 9.3 |
| HAUL TRUCK | 553423.3 | 6816204.1 | 2.5 | 7.8 |
| HAUL TRUCK | 553404.8 | 6816207.6 | 2.5 | 8.4 |
| HAUL TRUCK | 553385.5 | 6816211.2 | 2.5 | 8.9 |
| HAUL TRUCK | 553365.1 | 6816215 | 2.5 | 9.6 |
| HAUL TRUCK | 553343.7 | 6816219 | 2.5 | 9.6 |
| HAUL TRUCK | 553321 | 6816223.3 | 2.5 | 9.5 |
| HAUL TRUCK | 553297 | 6816227.8 | 2.5 | 9.5 |
| HAUL TRUCK | 553271.6 | 6816232.6 | 2.5 | 9.5 |
| HAUL TRUCK | 553254.6 | 6816235.7 | 2.5 | 3.8 |
| HAUL TRUCK | 553468.8 | 6816180 | 2.5 | 7.4 |
| HAUL TRUCK | 553461.5 | 6816173 | 2.5 | 6.3 |
| HAUL TRUCK | 553454.2 | 6816165.9 | 2.5 | 6.2 |
| HAUL TRUCK | 553447 | 6816158.9 | 2.5 | 6.8 |
| HAUL TRUCK | 553439.7 | 6816151.8 | 2.5 | 7.2 |
| HAUL TRUCK | 553432.5 | 6816144.8 | 2.5 | 7.4 |
| HAUL TRUCK | 553425.2 | 6816137.7 | 2.5 | 7.4 |
| HAUL TRUCK | 553418 | 6816130.7 | 2.5 | 7.4 |
| HAUL TRUCK | 553410.7 | 6816123.6 | 2.5 | 7.5 |
| HAUL TRUCK | 553403.4 | 6816116.5 | 2.5 | 7.5 |
| HAUL TRUCK | 553396 | 6816109.4 | 2.5 | 7.5 |
| HAUL TRUCK | 553388.7 | 6816102.2 | 2.5 | 7.5 |
| HAUL TRUCK | 553381.3 | 6816095 | 2.5 | 7.5 |
| HAUL TRUCK | 553373.8 | 6816087.8 | 2.5 | 7.4 |
| HAUL TRUCK | 553366.4 | 6816080.5 | 2.5 | 7.3 |
| HAUL TRUCK | 553358.8 | 6816073.2 | 2.5 | 7.1 |
| HAUL TRUCK | 553351.2 | 6816065.8 | 2.5 | 6.9 |
| HAUL TRUCK | 553343.6 | 6816058.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553335.9 | 6816050.9 | 2.5 | 6.6 |
| HAUL TRUCK | 553328.1 | 6816043.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553320.2 | 6816035.7 | 2.5 | 6.7 |
| HAUL TRUCK | 553312.3 | 6816028 | 2.5 | 6.8 |
| HAUL TRUCK | 553304.2 | 6816020.2 | 2.5 | 6.8 |
| HAUL TRUCK | 553296.1 | 6816012.3 | 2.5 | 6.8 |
| HAUL TRUCK | 553287.9 | 6816004.3 | 2.5 | 6.9 |
| HAUL TRUCK | 553279.5 | 6815996.2 | 2.5 | 6.9 |
| HAUL TRUCK | 553271.1 | 6815988 | 2.5 | 7.4 |
| HAUL TRUCK | 553262.5 | 6815979.6 | 2.5 | 7.4 |
| HAUL TRUCK | 553253.8 | 6815971.1 | 2.5 | 7.3 |
| HAUL TRUCK | 553244.9 | 6815962.5 | 2.5 | 7.2 |
| HAUL TRUCK | 553235.9 | 6815953.8 | 2.5 | 7 |
| HAUL TRUCK | 553226.7 | 6815944.9 | 2.5 | 6.9 |
| HAUL TRUCK | 553217.4 | 6815935.8 | 2.5 | 6.8 |
| HAUL TRUCK | 553208.9 | 6815927.6 | 2.5 | 5.5 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2B | 554002.8 | 6815828.9 | 1.8 | 4 | 35.6 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 22.9 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.8 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 24.5 |
| LOADER | 553326.8 | 6816183.8 | 2.5 | 25.3 |
| LOADER | 553284.8 | 6816215.6 | 2.5 | 22.1 |
| LOADER | 553260.9 | 6816245.4 | 2.5 | 22 |
| LOADER | 553246.1 | 6816263.9 | 2.5 | 14.1 |
| Road truck | 553375.3 | 6816258.4 | 2.5 | 16 |
| Road truck | 553344.6 | 6816262.8 | 2.5 | 15.9 |
| Road truck | 553311.5 | 6816267.5 | 2.5 | 15.7 |
| Road truck | 553291 | 6816270.4 | 2.5 | 8 |
| Road truck | 553289.1 | 6816261.6 | 2.5 | 12.8 |
| Road truck | 553290.8 | 6816247.6 | 2.5 | 10.2 |
| Road truck | 553305 | 6816243.1 | 2.5 | 14.8 |
| Road truck | 553331.1 | 6816243.6 | 2.5 | 14.8 |
| Road truck | 553355.6 | 6816244.1 | 2.5 | 14.9 |
| Road truck | 553380.2 | 6816243.8 | 2.5 | 15.4 |
| Road truck | 553404.8 | 6816242.7 | 2.5 | 15.5 |
| Road truck | 553428 | 6816241.6 | 2.5 | 15.6 |
| Road truck | 553450 | 6816240.6 | 2.5 | 15.7 |
| Road truck | 553470.9 | 6816239.7 | 2.5 | 15.7 |
| Road truck | 553490.8 | 6816238.8 | 2.5 | 15.8 |
| Road truck | 553509.7 | 6816237.9 | 2.5 | 15.8 |
| Road truck | 553520.6 | 6816237.5 | 2.5 | 8.7 |
| Road truck | 553533.9 | 6816243.8 | 2.5 | 16.3 |
| Road truck | 553552.9 | 6816241.2 | 2.5 | 16.5 |
| Road truck | 553570.9 | 6816238.8 | 2.5 | 16.5 |
| Road truck | 553588 | 6816236.5 | 2.5 | 16.5 |
| Road truck | 553604.4 | 6816234.4 | 2.5 | 16.6 |
| Road truck | 553620.1 | 6816232.3 | 2.5 | 16.7 |
| Road truck | 553635.1 | 6816230.3 | 2.5 | 16.7 |
| Road truck | 553649.4 | 6816228.3 | 2.5 | 16.7 |
| Road truck | 553663.3 | 6816226.5 | 2.5 | 16.8 |
| Road truck | 553676.5 | 6816224.7 | 2.5 | 16.8 |
| Road truck | 553689.3 | 6816223 | 2.5 | 12.1 |
| Road truck | 553701.7 | 6816221.4 | 2.5 | 16.9 |
| Road truck | 553713.6 | 6816219.8 | 2.5 | 16.9 |
| Road truck | 553725.1 | 6816218.2 | 2.5 | 17 |
| Road truck | 553736.3 | 6816216.7 | 2.5 | 17 |
| Road truck | 553747.1 | 6816215.3 | 2.5 | 17 |
| Road truck | 553757.6 | 6816213.9 | 2.5 | 17.1 |
| Road truck | 553767.7 | 6816212.5 | 2.5 | 17.1 |
| Road truck | 553777.6 | 6816211.2 | 2.5 | 17.1 |
| Road truck | 553787.3 | 6816209.9 | 2.5 | 17.2 |
| Road truck | 553796.3 | 6816208.7 | 2.5 | 16.9 |
| Road truck | 553808.4 | 6816201.1 | 2.5 | 20.9 |
| Road truck | 553823.2 | 6816187.9 | 2.5 | 21 |
| Road truck | 553836.7 | 6816175.8 | 2.5 | 21.1 |
| Road truck | 553846.2 | 6816167.5 | 2.5 | 18.2 |
| HAUL TRUCK | 553468.1 | 6816195.7 | 2.5 | 15.2 |
| HAUL TRUCK | 553439.5 | 6816201.1 | 2.5 | 15.1 |
| HAUL TRUCK | 553408.3 | 6816206.9 | 2.5 | 15 |
| HAUL TRUCK | 553374.3 | 6816213.3 | 2.5 | 14.9 |
| HAUL TRUCK | 553337.1 | 6816220.3 | 2.5 | 14.9 |
| HAUL TRUCK | 553296 | 6816228 | 2.5 | 14.8 |
| HAUL TRUCK | 553262.6 | 6816234.3 | 2.5 | 11.7 |
| HAUL TRUCK | 553468.3 | 6816179.6 | 2.5 | 11.5 |
| HAUL TRUCK | 553460.1 | 6816171.6 | 2.5 | 11.5 |
| HAUL TRUCK | 553451.8 | 6816163.5 | 2.5 | 11.5 |
| HAUL TRUCK | 553443.4 | 6816155.4 | 2.5 | 11.5 |
| HAUL TRUCK | 553434.9 | 6816147.1 | 2.5 | 11.4 |
| HAUL TRUCK | 553426.4 | 6816138.8 | 2.5 | 11.4 |
| HAUL TRUCK | 553417.7 | 6816130.4 | 2.5 | 11.4 |
| HAUL TRUCK | 553409 | 6816122 | 2.5 | 11.4 |
| HAUL TRUCK | 553400.1 | 6816113.4 | 2.5 | 11.4 |
| HAUL TRUCK | 553391.2 | 6816104.6 | 2.5 | 11.4 |
| HAUL TRUCK | 553382.1 | 6816095.8 | 2.5 | 11.4 |
| HAUL TRUCK | 553372.8 | 6816086.8 | 2.5 | 11.3 |

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|---|---|---|---|---|
| HAUL TRUCK | 553363.5 | 6816077.7 | 2.5 | 6.9 |
| HAUL TRUCK | 553354 | 6816068.5 | 2.5 | 6.8 |
| HAUL TRUCK | 553344.3 | 6816059.1 | 2.5 | 6.6 |
| HAUL TRUCK | 553334.4 | 6816049.5 | 2.5 | 4.8 |
| HAUL TRUCK | 553324.4 | 6816039.8 | 2.5 | 5.9 |
| HAUL TRUCK | 553314.2 | 6816029.8 | 2.5 | 6.5 |
| HAUL TRUCK | 553303.7 | 6816019.7 | 2.5 | 6.6 |
| HAUL TRUCK | 553293.1 | 6816009.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553282.2 | 6815998.8 | 2.5 | 6.6 |
| HAUL TRUCK | 553271.1 | 6815988 | 2.5 | 6.6 |
| HAUL TRUCK | 553259.7 | 6815976.9 | 2.5 | 6.6 |
| HAUL TRUCK | 553248.1 | 6815965.6 | 2.5 | 6.6 |
| HAUL TRUCK | 553236.1 | 6815954 | 2.5 | 6.6 |
| HAUL TRUCK | 553223.8 | 6815942.1 | 2.5 | 4.7 |
| HAUL TRUCK | 553211.4 | 6815930 | 2.5 | 4.6 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R3 | 553634.8 | 6815756.9 | 1.8 | 3.6 | 38.2 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 35.1 |
| Generator | 553406.4 | 6816251.5 | 1 | 21.4 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 29.4 |
| LOADER | 553346 | 6816172.7 | 2.5 | 20.4 |
| LOADER | 553327.3 | 6816183.6 | 2.5 | 20.4 |
| LOADER | 553307 | 6816195.3 | 2.5 | 20.4 |
| LOADER | 553296.1 | 6816201.6 | 2.5 | -1.4 |
| LOADER | 553271.8 | 6816231.8 | 2.5 | 24.7 |
| Road truck | 553384 | 6816257.2 | 2.5 | 9.9 |
| Road truck | 553372.1 | 6816258.9 | 2.5 | 9.9 |
| Road truck | 553359.9 | 6816260.6 | 2.5 | 9.9 |
| Road truck | 553347.4 | 6816262.4 | 2.5 | 9.9 |
| Road truck | 553334.5 | 6816264.2 | 2.5 | 9.9 |
| Road truck | 553321.3 | 6816266.1 | 2.5 | 9.9 |
| Road truck | 553307.6 | 6816268 | 2.5 | 9.9 |
| Road truck | 553294.4 | 6816269.9 | 2.5 | 9.4 |
| Road truck | 553289.4 | 6816259.2 | 2.5 | 12 |
| Road truck | 553291 | 6816245.4 | 2.5 | 5.9 |
| Road truck | 553297.6 | 6816242.9 | 2.5 | 9.7 |
| Road truck | 553309.8 | 6816243.2 | 2.5 | 9.7 |
| Road truck | 553321.8 | 6816243.4 | 2.5 | 9.7 |
| Road truck | 553333.5 | 6816243.7 | 2.5 | 9.7 |
| Road truck | 553345 | 6816243.9 | 2.5 | 9.7 |
| Road truck | 553356.3 | 6816244.1 | 2.5 | 9.7 |
| Road truck | 553364.6 | 6816244.3 | 2.5 | 6.7 |
| Road truck | 553373 | 6816244.1 | 2.5 | 9.8 |
| Road truck | 553384.2 | 6816243.6 | 2.5 | 9.8 |
| Road truck | 553395.1 | 6816243.1 | 2.5 | 9.8 |
| Road truck | 553405.7 | 6816242.6 | 2.5 | 9.8 |
| Road truck | 553416.2 | 6816242.2 | 2.5 | 9.7 |
| Road truck | 553426.5 | 6816241.7 | 2.5 | 9.7 |
| Road truck | 553436.7 | 6816241.2 | 2.5 | 10 |
| Road truck | 553446.7 | 6816240.8 | 2.5 | 10 |
| Road truck | 553456.5 | 6816240.3 | 2.5 | 10 |
| Road truck | 553466.2 | 6816239.9 | 2.5 | 10 |
| Road truck | 553475.7 | 6816239.5 | 2.5 | 10 |
| Road truck | 553485.1 | 6816239.1 | 2.5 | 10 |
| Road truck | 553494.4 | 6816238.6 | 2.5 | 10 |
| Road truck | 553503.6 | 6816238.2 | 2.5 | 10 |
| Road truck | 553512.7 | 6816237.8 | 2.5 | 10 |
| Road truck | 553519.7 | 6816237.5 | 2.5 | 7.6 |
| Road truck | 553528.7 | 6816244.5 | 2.5 | 9.9 |
| Road truck | 553537.8 | 6816243.2 | 2.5 | 9.8 |
| Road truck | 553546.8 | 6816242 | 2.5 | 10.2 |
| Road truck | 553555.7 | 6816240.9 | 2.5 | 10.2 |
| Road truck | 553564.6 | 6816239.7 | 2.5 | 10.3 |
| Road truck | 553573.3 | 6816238.5 | 2.5 | 10.3 |
| Road truck | 553581.9 | 6816237.4 | 2.5 | 10.2 |
| Road truck | 553590.5 | 6816236.2 | 2.5 | 10.1 |
| Road truck | 553599 | 6816235.1 | 2.5 | 10.1 |
| Road truck | 553607.5 | 6816233.9 | 2.5 | 10.1 |
| Road truck | 553615.9 | 6816232.8 | 2.5 | 10.2 |

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|---|---|---|---|---|
| Road truck | 553624.2 | 6816231.7 | 2.5 | 10.2 |
| Road truck | 553632.5 | 6816230.6 | 2.5 | 10.2 |
| Road truck | 553640.8 | 6816229.5 | 2.5 | 10 |
| Road truck | 553649 | 6816228.4 | 2.5 | 10.1 |
| Road truck | 553657.2 | 6816227.3 | 2.5 | 10.2 |
| Road truck | 553665.3 | 6816226.2 | 2.5 | 10.3 |
| Road truck | 553673.5 | 6816225.1 | 2.5 | 10.3 |
| Road truck | 553681.6 | 6816224 | 2.5 | 10.4 |
| Road truck | 553689.7 | 6816223 | 2.5 | 10.5 |
| Road truck | 553697.8 | 6816221.9 | 2.5 | 10.5 |
| Road truck | 553706 | 6816220.8 | 2.5 | 10.5 |
| Road truck | 553714.1 | 6816219.7 | 2.5 | 9.9 |
| Road truck | 553722.2 | 6816218.6 | 2.5 | 8.8 |
| Road truck | 553730.4 | 6816217.5 | 2.5 | 15.7 |
| Road truck | 553738.5 | 6816216.4 | 2.5 | 15.7 |
| Road truck | 553746.7 | 6816215.3 | 2.5 | 15.8 |
| Road truck | 553755 | 6816214.2 | 2.5 | 15.8 |
| Road truck | 553763.2 | 6816213.1 | 2.5 | 15.8 |
| Road truck | 553771.5 | 6816212 | 2.5 | 15.8 |
| Road truck | 553779.9 | 6816210.9 | 2.5 | 15.8 |
| Road truck | 553788.3 | 6816209.8 | 2.5 | 15.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 15.5 |
| Road truck | 553803.8 | 6816205.2 | 2.5 | 16 |
| Road truck | 553810.5 | 6816199.2 | 2.5 | 16 |
| Road truck | 553817 | 6816193.4 | 2.5 | 16 |
| Road truck | 553823.5 | 6816187.6 | 2.5 | 16 |
| Road truck | 553829.9 | 6816181.9 | 2.5 | 16.1 |
| Road truck | 553836.3 | 6816176.3 | 2.5 | 16.1 |
| Road truck | 553842.6 | 6816170.7 | 2.5 | 16.1 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 13.6 |
| HAUL TRUCK | 553477 | 6816194 | 2.5 | 9 |
| HAUL TRUCK | 553467.7 | 6816195.8 | 2.5 | 9 |
| HAUL TRUCK | 553458.1 | 6816197.6 | 2.5 | 9 |
| HAUL TRUCK | 553448.4 | 6816199.4 | 2.5 | 8.7 |
| HAUL TRUCK | 553438.4 | 6816201.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553428.1 | 6816203.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553417.7 | 6816205.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553406.9 | 6816207.2 | 2.5 | 8.8 |
| HAUL TRUCK | 553395.8 | 6816209.3 | 2.5 | 8.8 |
| HAUL TRUCK | 553384.5 | 6816211.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553372.8 | 6816213.6 | 2.5 | 8.8 |
| HAUL TRUCK | 553360.7 | 6816215.9 | 2.5 | 9.2 |
| HAUL TRUCK | 553348.3 | 6816218.2 | 2.5 | 9.2 |
| HAUL TRUCK | 553335.4 | 6816220.6 | 2.5 | 9.2 |
| HAUL TRUCK | 553322.2 | 6816223.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553308.4 | 6816225.7 | 2.5 | 9.2 |
| HAUL TRUCK | 553294.2 | 6816228.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553279.5 | 6816231.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553264.1 | 6816234 | 2.5 | 9.2 |
| HAUL TRUCK | 553253.6 | 6816235.9 | 2.5 | 4.4 |
| HAUL TRUCK | 553469.3 | 6816180.5 | 2.5 | 8.8 |
| HAUL TRUCK | 553463.2 | 6816174.6 | 2.5 | 8.8 |
| HAUL TRUCK | 553457.1 | 6816168.7 | 2.5 | 8.6 |
| HAUL TRUCK | 553451.1 | 6816162.9 | 2.5 | 8.6 |
| HAUL TRUCK | 553445.2 | 6816157.2 | 2.5 | 8.6 |
| HAUL TRUCK | 553439.4 | 6816151.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553433.7 | 6816145.9 | 2.5 | 8.7 |
| HAUL TRUCK | 553428 | 6816140.4 | 2.5 | 8.7 |
| HAUL TRUCK | 553422.3 | 6816134.9 | 2.5 | 8.8 |
| HAUL TRUCK | 553416.7 | 6816129.5 | 2.5 | 8.8 |
| HAUL TRUCK | 553411.2 | 6816124.1 | 2.5 | 8.8 |
| HAUL TRUCK | 553405.7 | 6816118.7 | 2.5 | 8.9 |
| HAUL TRUCK | 553400.2 | 6816113.4 | 2.5 | 8.9 |
| HAUL TRUCK | 553394.8 | 6816108.2 | 2.5 | 8.9 |
| HAUL TRUCK | 553389.4 | 6816102.9 | 2.5 | 8.9 |
| HAUL TRUCK | 553384.1 | 6816097.7 | 2.5 | 8.9 |
| HAUL TRUCK | 553378.7 | 6816092.6 | 2.5 | 8.9 |
| HAUL TRUCK | 553373.4 | 6816087.4 | 2.5 | 8.9 |
| HAUL TRUCK | 553368.1 | 6816082.2 | 2.5 | 8.9 |
| HAUL TRUCK | 553362.8 | 6816077.1 | 2.5 | 8.7 |
| HAUL TRUCK | 553357.6 | 6816072 | 2.5 | 8.7 |
| HAUL TRUCK | 553352.3 | 6816066.9 | 2.5 | 8.6 |
| HAUL TRUCK | 553347.1 | 6816061.8 | 2.5 | 8.4 |

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|---|---|---|---|---|
| HAUL TRUCK | 553341.8 | 6816056.7 | 2.5 | 8.1 |
| HAUL TRUCK | 553336.6 | 6816051.6 | 2.5 | 9.2 |
| HAUL TRUCK | 553331.3 | 6816046.5 | 2.5 | 9.2 |
| HAUL TRUCK | 553326.1 | 6816041.4 | 2.5 | 9.2 |
| HAUL TRUCK | 553320.8 | 6816036.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553315.5 | 6816031.1 | 2.5 | 9.1 |
| HAUL TRUCK | 553310.2 | 6816026 | 2.5 | 9.1 |
| HAUL TRUCK | 553304.9 | 6816020.8 | 2.5 | 9.1 |
| HAUL TRUCK | 553299.5 | 6816015.6 | 2.5 | 9.1 |
| HAUL TRUCK | 553294.2 | 6816010.4 | 2.5 | 9 |
| HAUL TRUCK | 553288.8 | 6816005.2 | 2.5 | 8.9 |
| HAUL TRUCK | 553283.3 | 6815999.9 | 2.5 | 8.9 |
| HAUL TRUCK | 553277.9 | 6815994.6 | 2.5 | 8.9 |
| HAUL TRUCK | 553272.4 | 6815989.2 | 2.5 | 8.9 |
| HAUL TRUCK | 553266.8 | 6815983.8 | 2.5 | 8.9 |
| HAUL TRUCK | 553261.2 | 6815978.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553255.5 | 6815972.9 | 2.5 | 8.8 |
| HAUL TRUCK | 553249.8 | 6815967.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553244 | 6815961.7 | 2.5 | 8.7 |
| HAUL TRUCK | 553238.2 | 6815956 | 2.5 | 8.6 |
| HAUL TRUCK | 553232.3 | 6815950.3 | 2.5 | 8.5 |
| HAUL TRUCK | 553226.3 | 6815944.4 | 2.5 | 8.4 |
| HAUL TRUCK | 553220.2 | 6815938.5 | 2.5 | 8.3 |
| HAUL TRUCK | 553214 | 6815932.6 | 2.5 | 13.6 |
| HAUL TRUCK | 553208 | 6815926.7 | 2.5 | 13.3 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4A | 552797.6 | 6815469.6 | 1.8 | 16.9 | 35.8 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 31.3 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.8 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 31 |
| LOADER | 553348 | 6816171.5 | 2.5 | 16.9 |
| LOADER | 553334.5 | 6816179.3 | 2.5 | 16.9 |
| LOADER | 553321 | 6816187.2 | 2.5 | 16.9 |
| LOADER | 553307.5 | 6816195 | 2.5 | 16.9 |
| LOADER | 553298.4 | 6816200.3 | 2.5 | 12.4 |
| LOADER | 553291 | 6816208 | 2.5 | 17.1 |
| LOADER | 553280.8 | 6816220.7 | 2.5 | 17.1 |
| LOADER | 553270.4 | 6816233.6 | 2.5 | 17.1 |
| LOADER | 553259.9 | 6816246.6 | 2.5 | 17.1 |
| LOADER | 553249.3 | 6816259.8 | 2.5 | 17.1 |
| Road truck | 553380.2 | 6816257.7 | 2.5 | 10.7 |
| Road truck | 553361.1 | 6816260.4 | 2.5 | 10.7 |
| Road truck | 553342.4 | 6816263.1 | 2.5 | 10.8 |
| Road truck | 553324 | 6816265.7 | 2.5 | 10.8 |
| Road truck | 553305.9 | 6816268.3 | 2.5 | 10.8 |
| Road truck | 553292.5 | 6816270.2 | 2.5 | 7.9 |
| Road truck | 553289.6 | 6816257.8 | 2.5 | 12.6 |
| Road truck | 553291.2 | 6816244 | 2.5 | 2.3 |
| Road truck | 553301 | 6816243 | 2.5 | 11.4 |
| Road truck | 553320.8 | 6816243.4 | 2.5 | 11.4 |
| Road truck | 553341 | 6816243.8 | 2.5 | 11.3 |
| Road truck | 553359.3 | 6816244.2 | 2.5 | 10.2 |
| Road truck | 553377.5 | 6816243.9 | 2.5 | 11.1 |
| Road truck | 553398.2 | 6816243 | 2.5 | 11 |
| Road truck | 553419.4 | 6816242 | 2.5 | 11 |
| Road truck | 553441.1 | 6816241 | 2.5 | 10.9 |
| Road truck | 553463.4 | 6816240 | 2.5 | 10.9 |
| Road truck | 553486.3 | 6816239 | 2.5 | 10.9 |
| Road truck | 553509.9 | 6816237.9 | 2.5 | 10.8 |
| Road truck | 553522.1 | 6816237.4 | 2.5 | -8.6 |
| Road truck | 553535.4 | 6816243.6 | 2.5 | 10.4 |
| Road truck | 553558.6 | 6816240.5 | 2.5 | 10.4 |
| Road truck | 553582.4 | 6816237.3 | 2.5 | 10.3 |
| Road truck | 553606.9 | 6816234 | 2.5 | 10.3 |
| Road truck | 553632 | 6816230.7 | 2.5 | 10.2 |
| Road truck | 553657.9 | 6816227.2 | 2.5 | 10.2 |
| Road truck | 553684.6 | 6816223.6 | 2.5 | 10.1 |
| Road truck | 553712.1 | 6816220 | 2.5 | 10.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 10 |

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|---|---|---|---|---|
| Road truck | 553770 | 6816212.2 | 2.5 | 10 |
| Road truck | 553792.8 | 6816209.2 | 2.5 | 6.9 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 8.4 |
| Road truck | 553825.5 | 6816185.9 | 2.5 | 8.4 |
| Road truck | 553841.5 | 6816171.6 | 2.5 | 7.9 |
| HAUL TRUCK | 553471.5 | 6816195.1 | 2.5 | 8.7 |
| HAUL TRUCK | 553451.7 | 6816198.8 | 2.5 | 8.8 |
| HAUL TRUCK | 553432.2 | 6816202.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553413.1 | 6816206 | 2.5 | 8.8 |
| HAUL TRUCK | 553394.4 | 6816209.5 | 2.5 | 8.8 |
| HAUL TRUCK | 553376.1 | 6816213 | 2.5 | 8.9 |
| HAUL TRUCK | 553358.1 | 6816216.3 | 2.5 | 8.9 |
| HAUL TRUCK | 553340.4 | 6816219.7 | 2.5 | 9 |
| HAUL TRUCK | 553322.9 | 6816222.9 | 2.5 | 9 |
| HAUL TRUCK | 553305.8 | 6816226.2 | 2.5 | 9 |
| HAUL TRUCK | 553288.9 | 6816229.3 | 2.5 | 9 |
| HAUL TRUCK | 553272.2 | 6816232.4 | 2.5 | 9 |
| HAUL TRUCK | 553257.5 | 6816235.2 | 2.5 | 8.1 |
| HAUL TRUCK | 553352.6 | 6816067.2 | 2.5 | 21.6 |
| HAUL TRUCK | 553234.3 | 6815952.2 | 2.5 | 19.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4B | 552865.6 | 6815421 | 1.8 | 18.9 | 34.6 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 26.9 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.7 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 30.9 |
| LOADER | 553348.1 | 6816171.4 | 2.5 | 16.8 |
| LOADER | 553334.6 | 6816179.3 | 2.5 | 16.8 |
| LOADER | 553321.2 | 6816187.1 | 2.5 | 16.8 |
| LOADER | 553307.7 | 6816194.9 | 2.5 | 16.8 |
| LOADER | 553298.5 | 6816200.2 | 2.5 | 12.4 |
| LOADER | 553290.8 | 6816208.2 | 2.5 | 17.1 |
| LOADER | 553280.1 | 6816221.5 | 2.5 | 17.1 |
| LOADER | 553269.2 | 6816235.1 | 2.5 | 17.1 |
| LOADER | 553258.2 | 6816248.8 | 2.5 | 17.1 |
| LOADER | 553248.3 | 6816261.1 | 2.5 | 15.9 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 10.4 |
| Road truck | 553362.2 | 6816260.3 | 2.5 | 10.5 |
| Road truck | 553344.1 | 6816262.9 | 2.5 | 10.5 |
| Road truck | 553326.2 | 6816265.4 | 2.5 | 10.5 |
| Road truck | 553308.6 | 6816267.9 | 2.5 | 10.5 |
| Road truck | 553293.9 | 6816270 | 2.5 | 8.9 |
| Road truck | 553289.7 | 6816256.6 | 2.5 | 12.8 |
| Road truck | 553300.6 | 6816243 | 2.5 | 11.1 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 11 |
| Road truck | 553338.5 | 6816243.8 | 2.5 | 11 |
| Road truck | 553357.7 | 6816244.2 | 2.5 | 10.8 |
| Road truck | 553377 | 6816243.9 | 2.5 | 10.8 |
| Road truck | 553396.6 | 6816243 | 2.5 | 10.7 |
| Road truck | 553416.6 | 6816242.1 | 2.5 | 10.7 |
| Road truck | 553437 | 6816241.2 | 2.5 | 10.7 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 10.6 |
| Road truck | 553479.1 | 6816239.3 | 2.5 | 10.6 |
| Road truck | 553501 | 6816238.3 | 2.5 | 10.6 |
| Road truck | 553517.2 | 6816237.6 | 2.5 | 7.1 |
| Road truck | 553534.8 | 6816243.7 | 2.5 | 10.2 |
| Road truck | 553556.5 | 6816240.7 | 2.5 | 10.2 |
| Road truck | 553578.8 | 6816237.8 | 2.5 | 10.1 |
| Road truck | 553601.6 | 6816234.7 | 2.5 | 10.1 |
| Road truck | 553624.9 | 6816231.6 | 2.5 | 10.1 |
| Road truck | 553648.8 | 6816228.4 | 2.5 | 10 |
| Road truck | 553673.3 | 6816225.1 | 2.5 | 9.9 |
| Road truck | 553698.5 | 6816221.8 | 2.5 | 9.9 |
| Road truck | 553724.4 | 6816218.3 | 2.5 | 9.9 |
| Road truck | 553751.1 | 6816214.8 | 2.5 | 9.8 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 9.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 4.2 |
| Road truck | 553808.5 | 6816201 | 2.5 | 8.5 |
| Road truck | 553824.7 | 6816186.6 | 2.5 | 8.5 |
| Road truck | 553841 | 6816172.1 | 2.5 | 8.5 |

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|---|---|---|---|---|
| HAUL TRUCK | 553472.1 | 6816195 | 2.5 | 8.5 |
| HAUL TRUCK | 553453.2 | 6816198.5 | 2.5 | 8.5 |
| HAUL TRUCK | 553434.7 | 6816202 | 2.5 | 8.6 |
| HAUL TRUCK | 553416.5 | 6816205.4 | 2.5 | 8.6 |
| HAUL TRUCK | 553398.6 | 6816208.7 | 2.5 | 8.6 |
| HAUL TRUCK | 553380.9 | 6816212.1 | 2.5 | 8.6 |
| HAUL TRUCK | 553363.5 | 6816215.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553346.4 | 6816218.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553329.4 | 6816221.7 | 2.5 | 8.7 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 8.7 |
| HAUL TRUCK | 553296.1 | 6816228 | 2.5 | 8.7 |
| HAUL TRUCK | 553279.8 | 6816231 | 2.5 | 8.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 8.8 |
| HAUL TRUCK | 553253.3 | 6816236 | 2.5 | 3.4 |
| HAUL TRUCK | 553427.6 | 6816140 | 2.5 | 16.9 |
| HAUL TRUCK | 553353 | 6816067.6 | 2.5 | 17.2 |
| HAUL TRUCK | 553293.6 | 6816009.8 | 2.5 | 17.4 |
| HAUL TRUCK | 553245 | 6815962.7 | 2.5 | 17.5 |
| HAUL TRUCK | 553214.3 | 6815932.9 | 2.5 | 14.6 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5A | 552762.8 | 6815886.6 | 1.8 | 24.1 | 38.8 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 33.9 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.1 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 34.3 |
| LOADER | 553348.9 | 6816171 | 2.5 | 18.9 |
| LOADER | 553337.2 | 6816177.8 | 2.5 | 18.9 |
| LOADER | 553325.7 | 6816184.4 | 2.5 | 18.9 |
| LOADER | 553314.5 | 6816191 | 2.5 | 18.9 |
| LOADER | 553303.5 | 6816197.3 | 2.5 | 18.9 |
| LOADER | 553297.1 | 6816201.1 | 2.5 | 11.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.4 |
| LOADER | 553285.8 | 6816214.4 | 2.5 | 18.4 |
| LOADER | 553279.1 | 6816222.8 | 2.5 | 18.4 |
| LOADER | 553272.3 | 6816231.2 | 2.5 | 18.4 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 18.4 |
| LOADER | 553258.8 | 6816248 | 2.5 | 18.4 |
| LOADER | 553252.1 | 6816256.3 | 2.5 | 18.4 |
| LOADER | 553246.4 | 6816263.5 | 2.5 | 17 |
| Road truck | 553379.9 | 6816257.8 | 2.5 | 14.1 |
| Road truck | 553360.6 | 6816260.5 | 2.5 | 14.1 |
| Road truck | 553342 | 6816263.1 | 2.5 | 14.2 |
| Road truck | 553324.2 | 6816265.7 | 2.5 | 14.2 |
| Road truck | 553307.1 | 6816268.1 | 2.5 | 14.3 |
| Road truck | 553293.4 | 6816270 | 2.5 | 12.5 |
| Road truck | 553288.8 | 6816264.4 | 2.5 | 13.4 |
| Road truck | 553290.3 | 6816251.7 | 2.5 | 13.4 |
| Road truck | 553291.2 | 6816244.1 | 2.5 | 6.7 |
| Road truck | 553301.8 | 6816243 | 2.5 | 15.5 |
| Road truck | 553323.5 | 6816243.5 | 2.5 | 15.5 |
| Road truck | 553346.4 | 6816243.9 | 2.5 | 15.4 |
| Road truck | 553362.9 | 6816244.3 | 2.5 | 11 |
| Road truck | 553378.7 | 6816243.8 | 2.5 | 14.8 |
| Road truck | 553402.4 | 6816242.8 | 2.5 | 14.8 |
| Road truck | 553427.4 | 6816241.7 | 2.5 | 14.7 |
| Road truck | 553453.9 | 6816240.5 | 2.5 | 14.6 |
| Road truck | 553482.1 | 6816239.2 | 2.5 | 14.5 |
| Road truck | 553509.4 | 6816238 | 2.5 | 13.6 |
| Road truck | 553537.7 | 6816243.3 | 2.5 | 13.6 |
| Road truck | 553566.1 | 6816239.5 | 2.5 | 13.6 |
| Road truck | 553596.1 | 6816235.5 | 2.5 | 13.5 |
| Road truck | 553628.1 | 6816231.2 | 2.5 | 13.4 |
| Road truck | 553662 | 6816226.7 | 2.5 | 13.3 |
| Road truck | 553698.3 | 6816221.8 | 2.5 | 13.2 |
| Road truck | 553737 | 6816216.6 | 2.5 | 13.1 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 13 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 9.9 |
| Road truck | 553825.7 | 6816185.7 | 2.5 | 9.8 |
| Road truck | 553841.7 | 6816171.5 | 2.5 | 9.1 |
| HAUL TRUCK | 553469.7 | 6816195.4 | 2.5 | 11.9 |

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|---|---|---|---|---|
| HAUL TRUCK | 553446.8 | 6816199.7 | 2.5 | 11.9 |
| HAUL TRUCK | 553424.9 | 6816203.8 | 2.5 | 12 |
| HAUL TRUCK | 553404.1 | 6816207.7 | 2.5 | 12 |
| HAUL TRUCK | 553384.2 | 6816211.4 | 2.5 | 12 |
| HAUL TRUCK | 553365.2 | 6816215 | 2.5 | 12.1 |
| HAUL TRUCK | 553347 | 6816218.4 | 2.5 | 12.2 |
| HAUL TRUCK | 553329.5 | 6816221.7 | 2.5 | 12.2 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 12.2 |
| HAUL TRUCK | 553296.5 | 6816227.9 | 2.5 | 12.3 |
| HAUL TRUCK | 553280.9 | 6816230.8 | 2.5 | 12.3 |
| HAUL TRUCK | 553265.9 | 6816233.6 | 2.5 | 12.3 |
| HAUL TRUCK | 553254.7 | 6816235.7 | 2.5 | 9.6 |
| HAUL TRUCK | 553459.5 | 6816171 | 2.5 | 13.8 |
| HAUL TRUCK | 553435.4 | 6816147.6 | 2.5 | 13.8 |
| HAUL TRUCK | 553413.1 | 6816126 | 2.5 | 13.9 |
| HAUL TRUCK | 553392.6 | 6816106 | 2.5 | 14 |
| HAUL TRUCK | 553373.5 | 6816087.5 | 2.5 | 14 |
| HAUL TRUCK | 553355.8 | 6816070.2 | 2.5 | 14.1 |
| HAUL TRUCK | 553339.2 | 6816054.2 | 2.5 | 14.1 |
| HAUL TRUCK | 553323.7 | 6816039.1 | 2.5 | 14.1 |
| HAUL TRUCK | 553309.1 | 6816024.9 | 2.5 | 14.2 |
| HAUL TRUCK | 553295.4 | 6816011.6 | 2.5 | 14.2 |
| HAUL TRUCK | 553282.5 | 6815999 | 2.5 | 14.3 |
| HAUL TRUCK | 553270.2 | 6815987.2 | 2.5 | 14.3 |
| HAUL TRUCK | 553258.6 | 6815975.9 | 2.5 | 14.3 |
| HAUL TRUCK | 553247.6 | 6815965.2 | 2.5 | 14.4 |
| HAUL TRUCK | 553237.2 | 6815955 | 2.5 | 14.4 |
| HAUL TRUCK | 553227.2 | 6815945.3 | 2.5 | 14.4 |
| HAUL TRUCK | 553217.7 | 6815936.1 | 2.5 | 14.4 |
| HAUL TRUCK | 553209 | 6815927.7 | 2.5 | 14 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5B | 552747.8 | 6815977.7 | 1.8 | 26.9 | 38.6 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 33.5 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.3 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 34 |
| LOADER | 553348.4 | 6816171.3 | 2.5 | 19.5 |
| LOADER | 553335.8 | 6816178.6 | 2.5 | 19.5 |
| LOADER | 553323.5 | 6816185.7 | 2.5 | 19.5 |
| LOADER | 553311.7 | 6816192.6 | 2.5 | 19.5 |
| LOADER | 553300.9 | 6816198.8 | 2.5 | 18.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.7 |
| LOADER | 553286 | 6816214.2 | 2.5 | 18.7 |
| LOADER | 553279.4 | 6816222.4 | 2.5 | 18.7 |
| LOADER | 553272.8 | 6816230.6 | 2.5 | 18.7 |
| LOADER | 553266.3 | 6816238.7 | 2.5 | 18.7 |
| LOADER | 553259.8 | 6816246.7 | 2.5 | 18.7 |
| LOADER | 553253.4 | 6816254.7 | 2.5 | 18.7 |
| LOADER | 553247.1 | 6816262.6 | 2.5 | 18.6 |
| Road truck | 553378.5 | 6816258 | 2.5 | 15 |
| Road truck | 553356.6 | 6816261.1 | 2.5 | 15.1 |
| Road truck | 553335.9 | 6816264 | 2.5 | 15.2 |
| Road truck | 553316.2 | 6816266.8 | 2.5 | 15.2 |
| Road truck | 553297.4 | 6816269.5 | 2.5 | 15.3 |
| Road truck | 553288.2 | 6816270.8 | 2.5 | -1.2 |
| Road truck | 553288.7 | 6816265.1 | 2.5 | 13.4 |
| Road truck | 553290 | 6816253.8 | 2.5 | 13.4 |
| Road truck | 553291 | 6816245.5 | 2.5 | 10.3 |
| Road truck | 553304.2 | 6816243.1 | 2.5 | 16.9 |
| Road truck | 553331.3 | 6816243.6 | 2.5 | 16.8 |
| Road truck | 553356.4 | 6816244.1 | 2.5 | 15.3 |
| Road truck | 553381.1 | 6816243.7 | 2.5 | 16 |
| Road truck | 553410.2 | 6816242.4 | 2.5 | 15.9 |
| Road truck | 553441.5 | 6816241 | 2.5 | 15.8 |
| Road truck | 553475.5 | 6816239.5 | 2.5 | 15.7 |
| Road truck | 553507.7 | 6816238 | 2.5 | 14.4 |
| Road truck | 553540.2 | 6816242.9 | 2.5 | 14.5 |
| Road truck | 553574.3 | 6816238.4 | 2.5 | 14.5 |
| Road truck | 553611 | 6816233.5 | 2.5 | 14.4 |
| Road truck | 553650.6 | 6816228.2 | 2.5 | 14.2 |

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|---|---|---|---|---|
| Road truck | 553693.7 | 6816222.4 | 2.5 | 14.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 14 |
| Road truck | 553782.8 | 6816210.5 | 2.5 | 12.1 |
| Road truck | 553809.2 | 6816200.4 | 2.5 | 10.1 |
| Road truck | 553827 | 6816184.5 | 2.5 | 10.1 |
| Road truck | 553842.6 | 6816170.6 | 2.5 | 8.5 |
| HAUL TRUCK | 553467.4 | 6816195.8 | 2.5 | 12.8 |
| HAUL TRUCK | 553440.4 | 6816200.9 | 2.5 | 12.9 |
| HAUL TRUCK | 553415 | 6816205.7 | 2.5 | 12.9 |
| HAUL TRUCK | 553391.2 | 6816210.1 | 2.5 | 13 |
| HAUL TRUCK | 553368.7 | 6816214.4 | 2.5 | 13 |
| HAUL TRUCK | 553347.5 | 6816218.3 | 2.5 | 13.1 |
| HAUL TRUCK | 553327.4 | 6816222.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553308.3 | 6816225.7 | 2.5 | 13.2 |
| HAUL TRUCK | 553290.2 | 6816229.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553273 | 6816232.3 | 2.5 | 13.3 |
| HAUL TRUCK | 553257.7 | 6816235.2 | 2.5 | 12.6 |
| HAUL TRUCK | 553462.6 | 6816174 | 2.5 | 12.7 |
| HAUL TRUCK | 553443.9 | 6816155.9 | 2.5 | 12.8 |
| HAUL TRUCK | 553426.4 | 6816138.8 | 2.5 | 12.8 |
| HAUL TRUCK | 553409.8 | 6816122.8 | 2.5 | 12.9 |
| HAUL TRUCK | 553394.2 | 6816107.5 | 2.5 | 12.9 |
| HAUL TRUCK | 553379.3 | 6816093.1 | 2.5 | 12.9 |
| HAUL TRUCK | 553365.3 | 6816079.5 | 2.5 | 13 |
| HAUL TRUCK | 553351.9 | 6816066.5 | 2.5 | 13 |
| HAUL TRUCK | 553339.1 | 6816054.1 | 2.5 | 13 |
| HAUL TRUCK | 553326.9 | 6816042.2 | 2.5 | 13 |
| HAUL TRUCK | 553315.3 | 6816030.9 | 2.5 | 13.1 |
| HAUL TRUCK | 553304.2 | 6816020.1 | 2.5 | 13.1 |
| HAUL TRUCK | 553293.5 | 6816009.7 | 2.5 | 13.1 |
| HAUL TRUCK | 553283.2 | 6815999.8 | 2.5 | 13.2 |
| HAUL TRUCK | 553273.3 | 6815990.2 | 2.5 | 13.2 |
| HAUL TRUCK | 553263.8 | 6815980.9 | 2.5 | 13.2 |
| HAUL TRUCK | 553254.7 | 6815972 | 2.5 | 13.2 |
| HAUL TRUCK | 553245.8 | 6815963.4 | 2.5 | 13.2 |
| HAUL TRUCK | 553237.3 | 6815955.1 | 2.5 | 13.3 |
| HAUL TRUCK | 553229 | 6815947.1 | 2.5 | 13.3 |
| HAUL TRUCK | 553221 | 6815939.3 | 2.5 | 13.3 |
| HAUL TRUCK | 553213.2 | 6815931.7 | 2.5 | 13.3 |
| HAUL TRUCK | 553207.2 | 6815926 | 2.5 | 10.9 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6A | 552849.5 | 6816597 | 1.8 | 7.7 | 36.2 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 29.2 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.7 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 26.5 |
| LOADER | 553327.9 | 6816183.2 | 2.5 | 26.2 |
| LOADER | 553299.7 | 6816199.6 | 2.5 | 18.3 |
| LOADER | 553277.6 | 6816224.6 | 2.5 | 26.9 |
| LOADER | 553252.2 | 6816256.2 | 2.5 | 24.5 |
| Road truck | 553376.6 | 6816258.2 | 2.5 | 17.4 |
| Road truck | 553351.6 | 6816261.8 | 2.5 | 17.5 |
| Road truck | 553328.4 | 6816265.1 | 2.5 | 17.5 |
| Road truck | 553306.7 | 6816268.2 | 2.5 | 17.6 |
| Road truck | 553292.2 | 6816270.2 | 2.5 | 13.9 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 15.9 |
| Road truck | 553290.4 | 6816250.7 | 2.5 | 15.9 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 4.4 |
| Road truck | 553299.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553315.2 | 6816243.3 | 2.5 | 16.1 |
| Road truck | 553332 | 6816243.6 | 2.5 | 16.1 |
| Road truck | 553349.6 | 6816244 | 2.5 | 16 |
| Road truck | 553363 | 6816244.3 | 2.5 | 12.7 |
| Road truck | 553378 | 6816243.9 | 2.5 | 16.4 |
| Road truck | 553400 | 6816242.9 | 2.5 | 16.3 |
| Road truck | 553423.4 | 6816241.8 | 2.5 | 7.9 |
| Road truck | 553448.3 | 6816240.7 | 2.5 | 16.1 |
| Road truck | 553474.9 | 6816239.5 | 2.5 | 16.1 |
| Road truck | 553503.4 | 6816238.2 | 2.5 | 16 |
| Road truck | 553520.3 | 6816237.5 | 2.5 | 6.9 |

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|---|---|---|---|---|
| Road truck | 553543.9 | 6816242.4 | 2.5 | 16.8 |
| Road truck | 553586.5 | 6816236.7 | 2.5 | 16.7 |
| Road truck | 553633.8 | 6816230.4 | 2.5 | 16.6 |
| Road truck | 553686.7 | 6816223.4 | 2.5 | 16.3 |
| Road truck | 553746.3 | 6816215.4 | 2.5 | 16.2 |
| Road truck | 553789.6 | 6816209.6 | 2.5 | 11.1 |
| Road truck | 553821.1 | 6816189.8 | 2.5 | 14.8 |
| Road truck | 553845.9 | 6816167.7 | 2.5 | 6.3 |
| HAUL TRUCK | 553464.8 | 6816196.3 | 2.5 | 14.4 |
| HAUL TRUCK | 553433.1 | 6816202.3 | 2.5 | 14.5 |
| HAUL TRUCK | 553403.9 | 6816207.7 | 2.5 | 14.6 |
| HAUL TRUCK | 553376.9 | 6816212.8 | 2.5 | 14.7 |
| HAUL TRUCK | 553351.8 | 6816217.5 | 2.5 | 14.8 |
| HAUL TRUCK | 553328.3 | 6816221.9 | 2.5 | 14.9 |
| HAUL TRUCK | 553306.4 | 6816226 | 2.5 | 15 |
| HAUL TRUCK | 553285.9 | 6816229.9 | 2.5 | 15 |
| HAUL TRUCK | 553266.6 | 6816233.5 | 2.5 | 15.1 |
| HAUL TRUCK | 553254.1 | 6816235.8 | 2.5 | 10.7 |
| HAUL TRUCK | 553467.6 | 6816178.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553458.1 | 6816169.7 | 2.5 | 10.3 |
| HAUL TRUCK | 553448.7 | 6816160.5 | 2.5 | 10.3 |
| HAUL TRUCK | 553439.3 | 6816151.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553429.9 | 6816142.3 | 2.5 | 10.3 |
| HAUL TRUCK | 553420.6 | 6816133.3 | 2.5 | 10.3 |
| HAUL TRUCK | 553411.4 | 6816124.3 | 2.5 | 10.3 |
| HAUL TRUCK | 553402.1 | 6816115.3 | 2.5 | 10.3 |
| HAUL TRUCK | 553393 | 6816106.4 | 2.5 | 10.3 |
| HAUL TRUCK | 553383.8 | 6816097.5 | 2.5 | 10.3 |
| HAUL TRUCK | 553374.6 | 6816088.6 | 2.5 | 10.3 |
| HAUL TRUCK | 553365.5 | 6816079.7 | 2.5 | 10.3 |
| HAUL TRUCK | 553356.3 | 6816070.8 | 2.5 | 10.3 |
| HAUL TRUCK | 553347.2 | 6816061.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553338 | 6816053 | 2.5 | 10.2 |
| HAUL TRUCK | 553328.8 | 6816044.1 | 2.5 | 10.2 |
| HAUL TRUCK | 553319.7 | 6816035.2 | 2.5 | 10.2 |
| HAUL TRUCK | 553310.4 | 6816026.2 | 2.5 | 6.9 |
| HAUL TRUCK | 553301.2 | 6816017.2 | 2.5 | 6.9 |
| HAUL TRUCK | 553291.9 | 6816008.2 | 2.5 | 6.9 |
| HAUL TRUCK | 553282.6 | 6815999.2 | 2.5 | 6.9 |
| HAUL TRUCK | 553273.3 | 6815990.1 | 2.5 | 6.9 |
| HAUL TRUCK | 553263.8 | 6815980.9 | 2.5 | 6.8 |
| HAUL TRUCK | 553254.4 | 6815971.7 | 2.5 | 6.8 |
| HAUL TRUCK | 553244.8 | 6815962.5 | 2.5 | 6.8 |
| HAUL TRUCK | 553235.2 | 6815953.1 | 2.5 | 6.8 |
| HAUL TRUCK | 553225.5 | 6815943.7 | 2.5 | 6.8 |
| HAUL TRUCK | 553215.7 | 6815934.2 | 2.5 | 6.8 |
| HAUL TRUCK | 553208 | 6815926.7 | 2.5 | 4.4 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6B | 552715.7 | 6816554.2 | 1.8 | 10.6 | 35.7 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553218.8 | 6815913.5 | 2.5 | 28.6 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.3 |
| EXCAVATOR | 553196.1 | 6815961.7 | 2.5 | 29.3 |
| LOADER | 553324.1 | 6816185.4 | 2.5 | 25.5 |
| LOADER | 553285.4 | 6816214.9 | 2.5 | 23.1 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 23.1 |
| LOADER | 553250 | 6816258.9 | 2.5 | 21.6 |
| Road truck | 553367.1 | 6816259.6 | 2.5 | 18.1 |
| Road truck | 553325.5 | 6816265.5 | 2.5 | 18.2 |
| Road truck | 553297.1 | 6816269.5 | 2.5 | 15.4 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 14.1 |
| Road truck | 553290.4 | 6816250.6 | 2.5 | 14.1 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 2.4 |
| Road truck | 553303.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553327.7 | 6816243.5 | 2.5 | 16.1 |
| Road truck | 553353.8 | 6816244.1 | 2.5 | 16 |
| Road truck | 553383.9 | 6816243.6 | 2.5 | 16.6 |
| Road truck | 553419.2 | 6816242 | 2.5 | 16.4 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 16.3 |
| Road truck | 553499.8 | 6816238.4 | 2.5 | 16.1 |

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|---|---|---|---|---|
| Road truck | 553557.8 | 6816240.6 | 2.5 | 17.4 |
| Road truck | 553633.7 | 6816230.4 | 2.5 | 17.2 |
| Road truck | 553723.4 | 6816218.5 | 2.5 | 16.9 |
| Road truck | 553787.5 | 6816209.9 | 2.5 | 10.5 |
| Road truck | 553819.1 | 6816191.6 | 2.5 | 13 |
| Road truck | 553843.8 | 6816169.6 | 2.5 | 7.3 |
| HAUL TRUCK | 553453.8 | 6816198.4 | 2.5 | 15.2 |
| HAUL TRUCK | 553403.1 | 6816207.9 | 2.5 | 15.4 |
| HAUL TRUCK | 553358.3 | 6816216.3 | 2.5 | 15.6 |
| HAUL TRUCK | 553318.2 | 6816223.8 | 2.5 | 15.7 |
| HAUL TRUCK | 553282.2 | 6816230.6 | 2.5 | 15.8 |
| HAUL TRUCK | 553258.2 | 6816235.1 | 2.5 | 12.5 |
| HAUL TRUCK | 553466.8 | 6816178.1 | 2.5 | 9.6 |
| HAUL TRUCK | 553455.7 | 6816167.4 | 2.5 | 9.6 |
| HAUL TRUCK | 553444.8 | 6816156.7 | 2.5 | 9.6 |
| HAUL TRUCK | 553434 | 6816146.2 | 2.5 | 9.6 |
| HAUL TRUCK | 553423.2 | 6816135.8 | 2.5 | 9.6 |
| HAUL TRUCK | 553412.6 | 6816125.5 | 2.5 | 9.6 |
| HAUL TRUCK | 553402.1 | 6816115.3 | 2.5 | 9.6 |
| HAUL TRUCK | 553391.7 | 6816105.1 | 2.5 | 9.6 |
| HAUL TRUCK | 553381.3 | 6816095.1 | 2.5 | 9.6 |
| HAUL TRUCK | 553371 | 6816085.1 | 2.5 | 9.6 |
| HAUL TRUCK | 553360.8 | 6816075.1 | 2.5 | 9.6 |
| HAUL TRUCK | 553350.6 | 6816065.3 | 2.5 | 9.6 |
| HAUL TRUCK | 553340.5 | 6816055.4 | 2.5 | 9.6 |
| HAUL TRUCK | 553330.5 | 6816045.7 | 2.5 | 9.6 |
| HAUL TRUCK | 553320.4 | 6816035.9 | 2.5 | 9.6 |
| HAUL TRUCK | 553310.4 | 6816026.2 | 2.5 | 9.6 |
| HAUL TRUCK | 553300.5 | 6816016.5 | 2.5 | 9.6 |
| HAUL TRUCK | 553290.5 | 6816006.9 | 2.5 | 9.6 |
| HAUL TRUCK | 553280.6 | 6815997.2 | 2.5 | 9.6 |
| HAUL TRUCK | 553270.6 | 6815987.6 | 2.5 | 9.6 |
| HAUL TRUCK | 553260.7 | 6815977.9 | 2.5 | 9.6 |
| HAUL TRUCK | 553250.8 | 6815968.3 | 2.5 | 9.6 |
| HAUL TRUCK | 553240.8 | 6815958.6 | 2.5 | 9.6 |
| HAUL TRUCK | 553230.9 | 6815948.9 | 2.5 | 9.6 |
| HAUL TRUCK | 553220.9 | 6815939.2 | 2.5 | 9.6 |
| HAUL TRUCK | 553210.9 | 6815929.5 | 2.5 | 9.6 |
| HAUL TRUCK | 553205.5 | 6815924.3 | 2.5 | -1.7 |
| HAUL TRUCK | 553389.4 | 6815906.8 | 2.5 | 5.8 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 32.2 |

**NORTHWEST CORNER**

File:Z:\CRG ACOUSTICS\ACOUSTIC JOBS\10453a Sandmine Lennox Head\10453a_sandmine april 2012 w.PEN
File Description:Data file covering west
Tuesday 05 Mar, 2013 at 13:05:57
Environmental Calculations
All point and line sources included. Line source segmentation angle: 1 degrees. Calculations for specified meteorology.

Noise level results are the logarithmic addition of all the noise sources
Noise level results incorporate the incoherent ground reflection algorithm
Meteorology :
Wind speed 0.0 (m/s) Wind direction 0 Mast height 10.0 (m)
Temperature 20.0 (C) Temperature Gradient 0.0 (C/100m) Humidity 50.0 (%)
Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R1 | 553772.1 | 6815867.2 | 1.8 | 3.1 | 38 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 27.1 |
| Generator | 553406.4 | 6816251.5 | 1 | 22.1 |
| LOADER | 553327.3 | 6816183.5 | 2.5 | 23 |
| LOADER | 553284.2 | 6816216.4 | 2.5 | 20.1 |
| LOADER | 553258.3 | 6816248.7 | 2.5 | 21.3 |
| Road truck | 553382 | 6816257.5 | 2.5 | 16.9 |
| Road truck | 553365.8 | 6816259.8 | 2.5 | 16.8 |
| Road truck | 553348.8 | 6816262.2 | 2.5 | 16.8 |
| Road truck | 553330.8 | 6816264.7 | 2.5 | 16.7 |
| Road truck | 553312 | 6816267.4 | 2.5 | 16.7 |
| Road truck | 553295.1 | 6816269.8 | 2.5 | 9.7 |
| Road truck | 553288.9 | 6816262.9 | 2.5 | 10.1 |
| Road truck | 553290.6 | 6816248.9 | 2.5 | 9.2 |
| Road truck | 553299.7 | 6816243 | 2.5 | 10.6 |

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|---|---|---|---|---|
| Road truck | 553315.9 | 6816243.3 | 2.5 | 10.7 |
| Road truck | 553331.4 | 6816243.6 | 2.5 | 10.7 |
| Road truck | 553346.3 | 6816243.9 | 2.5 | 16.2 |
| Road truck | 553360.5 | 6816244.2 | 2.5 | 16.2 |
| Road truck | 553374.8 | 6816244 | 2.5 | 16.6 |
| Road truck | 553389.1 | 6816243.4 | 2.5 | 16.6 |
| Road truck | 553402.8 | 6816242.8 | 2.5 | 16.7 |
| Road truck | 553416.1 | 6816242.2 | 2.5 | 16.7 |
| Road truck | 553428.8 | 6816241.6 | 2.5 | 16.8 |
| Road truck | 553441.2 | 6816241 | 2.5 | 16.8 |
| Road truck | 553453.1 | 6816240.5 | 2.5 | 16.8 |
| Road truck | 553464.6 | 6816240 | 2.5 | 16.9 |
| Road truck | 553475.8 | 6816239.5 | 2.5 | 16.9 |
| Road truck | 553486.6 | 6816239 | 2.5 | 16.9 |
| Road truck | 553497.2 | 6816238.5 | 2.5 | 16.9 |
| Road truck | 553507.4 | 6816238.1 | 2.5 | 17 |
| Road truck | 553517.4 | 6816237.6 | 2.5 | 17 |
| Road truck | 553522.3 | 6816237.4 | 2.5 | -10.8 |
| Road truck | 553529.2 | 6816244.4 | 2.5 | 17.2 |
| Road truck | 553539.3 | 6816243.1 | 2.5 | 17.3 |
| Road truck | 553549 | 6816241.8 | 2.5 | 17.3 |
| Road truck | 553558.5 | 6816240.5 | 2.5 | 17.4 |
| Road truck | 553567.7 | 6816239.2 | 2.5 | 17.4 |
| Road truck | 553576.8 | 6816238 | 2.5 | 17.4 |
| Road truck | 553585.5 | 6816236.9 | 2.5 | 17.4 |
| Road truck | 553594.1 | 6816235.7 | 2.5 | 17.4 |
| Road truck | 553602.5 | 6816234.6 | 2.5 | 17.4 |
| Road truck | 553610.7 | 6816233.5 | 2.5 | 17.5 |
| Road truck | 553618.7 | 6816232.4 | 2.5 | 17.5 |
| Road truck | 553626.6 | 6816231.4 | 2.5 | 17.5 |
| Road truck | 553634.3 | 6816230.4 | 2.5 | 17.5 |
| Road truck | 553641.9 | 6816229.3 | 2.5 | 17.5 |
| Road truck | 553649.3 | 6816228.4 | 2.5 | 17.5 |
| Road truck | 553656.6 | 6816227.4 | 2.5 | 17.5 |
| Road truck | 553663.8 | 6816226.4 | 2.5 | 17.5 |
| Road truck | 553670.9 | 6816225.5 | 2.5 | 17.5 |
| Road truck | 553677.8 | 6816224.5 | 2.5 | 17.6 |
| Road truck | 553684.7 | 6816223.6 | 2.5 | 17.6 |
| Road truck | 553691.5 | 6816222.7 | 2.5 | 17.6 |
| Road truck | 553698.2 | 6816221.8 | 2.5 | 17.6 |
| Road truck | 553704.8 | 6816220.9 | 2.5 | 17.6 |
| Road truck | 553711.3 | 6816220.1 | 2.5 | 17.6 |
| Road truck | 553717.8 | 6816219.2 | 2.5 | 17.6 |
| Road truck | 553724.1 | 6816218.4 | 2.5 | 17.6 |
| Road truck | 553730.5 | 6816217.5 | 2.5 | 17.7 |
| Road truck | 553736.7 | 6816216.7 | 2.5 | 17.7 |
| Road truck | 553743 | 6816215.8 | 2.5 | 17.7 |
| Road truck | 553749.1 | 6816215 | 2.5 | 17.7 |
| Road truck | 553755.3 | 6816214.2 | 2.5 | 17.7 |
| Road truck | 553761.4 | 6816213.4 | 2.5 | 17.7 |
| Road truck | 553767.4 | 6816212.6 | 2.5 | 17.7 |
| Road truck | 553773.5 | 6816211.8 | 2.5 | 17.7 |
| Road truck | 553779.4 | 6816211 | 2.5 | 17.7 |
| Road truck | 553785.4 | 6816210.2 | 2.5 | 17.7 |
| Road truck | 553791.4 | 6816209.4 | 2.5 | 17.8 |
| Road truck | 553797.3 | 6816208.6 | 2.5 | 17.8 |
| Road truck | 553800.4 | 6816208.2 | 2.5 | 3.1 |
| Road truck | 553803.3 | 6816205.7 | 2.5 | 18.7 |
| Road truck | 553808.7 | 6816200.8 | 2.5 | 18.8 |
| Road truck | 553814 | 6816196.1 | 2.5 | 18.8 |
| Road truck | 553819.2 | 6816191.5 | 2.5 | 18.8 |
| Road truck | 553824.2 | 6816187 | 2.5 | 18.8 |
| Road truck | 553829.2 | 6816182.6 | 2.5 | 18.8 |
| Road truck | 553834 | 6816178.3 | 2.5 | 18.9 |
| Road truck | 553838.8 | 6816174 | 2.5 | 18.9 |
| Road truck | 553843.4 | 6816169.9 | 2.5 | 18.9 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 17.7 |
| HAUL TRUCK | 553266.8 | 6816137.2 | 2.5 | 6.6 |
| HAUL TRUCK | 553263.4 | 6816127.7 | 2.5 | 6.7 |
| HAUL TRUCK | 553260.1 | 6816118.3 | 2.5 | 6.7 |
| HAUL TRUCK | 553256.8 | 6816108.8 | 2.5 | 6.6 |
| HAUL TRUCK | 553253.4 | 6816099.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553250.1 | 6816090 | 2.5 | 6.6 |

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| HAUL TRUCK | 553246.8 | 6816080.7 | 2.5 | 6.6 |
| HAUL TRUCK | 553243.5 | 6816071.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553240.2 | 6816062 | 2.5 | 6.6 |
| HAUL TRUCK | 553237 | 6816052.7 | 2.5 | 6.6 |
| HAUL TRUCK | 553233.7 | 6816043.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553230.4 | 6816034.1 | 2.5 | 6.6 |
| HAUL TRUCK | 553227.1 | 6816024.7 | 2.5 | 6.6 |
| HAUL TRUCK | 553223.8 | 6816015.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553220.5 | 6816006 | 2.5 | 6.6 |
| HAUL TRUCK | 553217.1 | 6815996.5 | 2.5 | 6.6 |
| HAUL TRUCK | 553213.8 | 6815987.1 | 2.5 | 6.6 |
| HAUL TRUCK | 553210.4 | 6815977.6 | 2.5 | 6.6 |
| HAUL TRUCK | 553207.1 | 6815968 | 2.5 | 6.6 |
| HAUL TRUCK | 553203.7 | 6815958.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553200.3 | 6815948.8 | 2.5 | 6.6 |
| HAUL TRUCK | 553196.8 | 6815939.1 | 2.5 | 6.6 |
| HAUL TRUCK | 553193.7 | 6815930.2 | 2.5 | 5.6 |
| HAUL TRUCK | 553475.4 | 6816194.3 | 2.5 | 15.8 |
| HAUL TRUCK | 553462.6 | 6816196.7 | 2.5 | 15.8 |
| HAUL TRUCK | 553449.1 | 6816199.3 | 2.5 | 15.7 |
| HAUL TRUCK | 553435 | 6816201.9 | 2.5 | 15.7 |
| HAUL TRUCK | 553420.1 | 6816204.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553404.4 | 6816207.7 | 2.5 | 15.6 |
| HAUL TRUCK | 553387.8 | 6816210.8 | 2.5 | 15.6 |
| HAUL TRUCK | 553370.2 | 6816214.1 | 2.5 | 15.5 |
| HAUL TRUCK | 553351.5 | 6816217.6 | 2.5 | 11 |
| HAUL TRUCK | 553331.6 | 6816221.3 | 2.5 | 10.9 |
| HAUL TRUCK | 553310.4 | 6816225.3 | 2.5 | 10.8 |
| HAUL TRUCK | 553287.7 | 6816229.5 | 2.5 | 10.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 9 |
| HAUL TRUCK | 553469.6 | 6816181 | 2.5 | 13.7 |
| HAUL TRUCK | 553464 | 6816175.8 | 2.5 | 13.7 |
| HAUL TRUCK | 553458.3 | 6816170.7 | 2.5 | 13.7 |
| HAUL TRUCK | 553452.7 | 6816165.5 | 2.5 | 13.7 |
| HAUL TRUCK | 553447 | 6816160.4 | 2.5 | 13.7 |
| HAUL TRUCK | 553441.4 | 6816155.2 | 2.5 | 13.7 |
| HAUL TRUCK | 553435.7 | 6816150 | 2.5 | 8.6 |
| HAUL TRUCK | 553429.9 | 6816144.7 | 2.5 | 8.6 |
| HAUL TRUCK | 553424.2 | 6816139.5 | 2.5 | 8.5 |
| HAUL TRUCK | 553418.4 | 6816134.2 | 2.5 | 8.6 |
| HAUL TRUCK | 553412.6 | 6816128.9 | 2.5 | 7.3 |
| HAUL TRUCK | 553406.7 | 6816123.5 | 2.5 | 6 |
| HAUL TRUCK | 553400.8 | 6816118.1 | 2.5 | 6.6 |
| HAUL TRUCK | 553394.8 | 6816112.6 | 2.5 | 7 |
| HAUL TRUCK | 553388.8 | 6816107.1 | 2.5 | 7.4 |
| HAUL TRUCK | 553382.7 | 6816101.6 | 2.5 | 7.7 |
| HAUL TRUCK | 553376.6 | 6816096 | 2.5 | 7.9 |
| HAUL TRUCK | 553370.4 | 6816090.3 | 2.5 | 8.1 |
| HAUL TRUCK | 553364.1 | 6816084.6 | 2.5 | 8.2 |
| HAUL TRUCK | 553357.7 | 6816078.7 | 2.5 | 8.1 |
| HAUL TRUCK | 553351.3 | 6816072.9 | 2.5 | 8 |
| HAUL TRUCK | 553344.8 | 6816066.9 | 2.5 | 7.9 |
| HAUL TRUCK | 553338.1 | 6816060.8 | 2.5 | 7.8 |
| HAUL TRUCK | 553331.4 | 6816054.7 | 2.5 | 7.8 |
| HAUL TRUCK | 553324.6 | 6816048.4 | 2.5 | 7.8 |
| HAUL TRUCK | 553317.6 | 6816042.1 | 2.5 | 7.8 |
| HAUL TRUCK | 553310.6 | 6816035.6 | 2.5 | 7.8 |
| HAUL TRUCK | 553303.4 | 6816029 | 2.5 | 7.8 |
| HAUL TRUCK | 553296 | 6816022.3 | 2.5 | 7.7 |
| HAUL TRUCK | 553288.5 | 6816015.5 | 2.5 | 7.7 |
| HAUL TRUCK | 553280.9 | 6816008.5 | 2.5 | 7.7 |
| HAUL TRUCK | 553273.1 | 6816001.3 | 2.5 | 7.7 |
| HAUL TRUCK | 553265.1 | 6815994 | 2.5 | 7.7 |
| HAUL TRUCK | 553256.9 | 6815986.6 | 2.5 | 7.7 |
| HAUL TRUCK | 553248.6 | 6815978.9 | 2.5 | 7.7 |
| HAUL TRUCK | 553240 | 6815971.1 | 2.5 | 7.7 |
| HAUL TRUCK | 553231.2 | 6815963 | 2.5 | 7.7 |
| HAUL TRUCK | 553222.1 | 6815954.8 | 2.5 | 7.7 |
| HAUL TRUCK | 553212.8 | 6815946.3 | 2.5 | 7.7 |
| HAUL TRUCK | 553203.3 | 6815937.5 | 2.5 | 7.7 |
| HAUL TRUCK | 553195.9 | 6815930.8 | 2.5 | 4.6 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 27 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2A | 553848.7 | 6815742.3 | 1.8 | 3.3 | 34.7 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 25.5 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.9 |
| LOADER | 553326.9 | 6816183.8 | 2.5 | 22.9 |
| LOADER | 553275.4 | 6816227.4 | 2.5 | 22.1 |
| LOADER | 553248.4 | 6816260.9 | 2.5 | 14.8 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 8 |
| Road truck | 553361.3 | 6816260.4 | 2.5 | 8.9 |
| Road truck | 553341.2 | 6816263.3 | 2.5 | 9.5 |
| Road truck | 553320.2 | 6816266.2 | 2.5 | 9.9 |
| Road truck | 553298.8 | 6816269.3 | 2.5 | 9.7 |
| Road truck | 553289.2 | 6816260.5 | 2.5 | 9.6 |
| Road truck | 553290.9 | 6816246.6 | 2.5 | 5.4 |
| Road truck | 553300.8 | 6816243 | 2.5 | 9.5 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 9.5 |
| Road truck | 553337.1 | 6816243.7 | 2.5 | 9.5 |
| Road truck | 553354.3 | 6816244.1 | 2.5 | 9.1 |
| Road truck | 553365 | 6816244.3 | 2.5 | 3.4 |
| Road truck | 553376.1 | 6816244 | 2.5 | 8.7 |
| Road truck | 553393.1 | 6816243.2 | 2.5 | 7.7 |
| Road truck | 553409.4 | 6816242.5 | 2.5 | 10 |
| Road truck | 553425.3 | 6816241.8 | 2.5 | 14.9 |
| Road truck | 553440.6 | 6816241.1 | 2.5 | 14.9 |
| Road truck | 553455.5 | 6816240.4 | 2.5 | 14.9 |
| Road truck | 553469.9 | 6816239.7 | 2.5 | 15 |
| Road truck | 553483.9 | 6816239.1 | 2.5 | 15 |
| Road truck | 553497.5 | 6816238.5 | 2.5 | 6.9 |
| Road truck | 553510.7 | 6816237.9 | 2.5 | 6.9 |
| Road truck | 553519.8 | 6816237.5 | 2.5 | 2.9 |
| Road truck | 553530.8 | 6816244.2 | 2.5 | 7.1 |
| Road truck | 553544.1 | 6816242.4 | 2.5 | 7.5 |
| Road truck | 553556.9 | 6816240.7 | 2.5 | 7.5 |
| Road truck | 553569.4 | 6816239 | 2.5 | 7.6 |
| Road truck | 553581.6 | 6816237.4 | 2.5 | 7.5 |
| Road truck | 553593.5 | 6816235.8 | 2.5 | 15.5 |
| Road truck | 553605 | 6816234.3 | 2.5 | 11.1 |
| Road truck | 553616.4 | 6816232.8 | 2.5 | 11 |
| Road truck | 553627.4 | 6816231.3 | 2.5 | 11 |
| Road truck | 553638.3 | 6816229.8 | 2.5 | 15.6 |
| Road truck | 553648.9 | 6816228.4 | 2.5 | 15.6 |
| Road truck | 553659.3 | 6816227 | 2.5 | 15.6 |
| Road truck | 553669.4 | 6816225.7 | 2.5 | 15.6 |
| Road truck | 553679.5 | 6816224.3 | 2.5 | 15.7 |
| Road truck | 553689.3 | 6816223 | 2.5 | 15.7 |
| Road truck | 553698.9 | 6816221.7 | 2.5 | 15.7 |
| Road truck | 553708.5 | 6816220.5 | 2.5 | 15.7 |
| Road truck | 553717.8 | 6816219.2 | 2.5 | 15.7 |
| Road truck | 553727 | 6816218 | 2.5 | 15.8 |
| Road truck | 553736.1 | 6816216.8 | 2.5 | 15.8 |
| Road truck | 553745.1 | 6816215.6 | 2.5 | 15.8 |
| Road truck | 553754 | 6816214.4 | 2.5 | 15.8 |
| Road truck | 553762.7 | 6816213.2 | 2.5 | 15.8 |
| Road truck | 553771.4 | 6816212 | 2.5 | 15.9 |
| Road truck | 553780 | 6816210.9 | 2.5 | 15.9 |
| Road truck | 553788.4 | 6816209.8 | 2.5 | 15.9 |
| Road truck | 553796.6 | 6816208.7 | 2.5 | 15.6 |
| Road truck | 553805 | 6816204.2 | 2.5 | 17.5 |
| Road truck | 553813.7 | 6816196.4 | 2.5 | 17.6 |
| Road truck | 553822.1 | 6816188.9 | 2.5 | 17.6 |
| Road truck | 553830.2 | 6816181.7 | 2.5 | 17.7 |
| Road truck | 553838.1 | 6816174.7 | 2.5 | 17.7 |
| Road truck | 553845.5 | 6816168 | 2.5 | 17.6 |
| HAUL TRUCK | 553266.4 | 6816136 | 2.5 | 6 |
| HAUL TRUCK | 553262.2 | 6816124.1 | 2.5 | 6 |
| HAUL TRUCK | 553258 | 6816112.3 | 2.5 | 5.9 |
| HAUL TRUCK | 553253.9 | 6816100.6 | 2.5 | 5.9 |
| HAUL TRUCK | 553249.8 | 6816089 | 2.5 | 5.9 |
| HAUL TRUCK | 553245.7 | 6816077.4 | 2.5 | 6 |
| HAUL TRUCK | 553241.6 | 6816065.9 | 2.5 | 6.1 |

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|---|---|---|---|---|
| HAUL TRUCK | 553237.6 | 6816054.5 | 2.5 | 6.1 |
| HAUL TRUCK | 553233.6 | 6816043.1 | 2.5 | 6.1 |
| HAUL TRUCK | 553229.6 | 6816031.8 | 2.5 | 6.2 |
| HAUL TRUCK | 553225.6 | 6816020.5 | 2.5 | 6.1 |
| HAUL TRUCK | 553221.6 | 6816009.3 | 2.5 | 6.8 |
| HAUL TRUCK | 553217.7 | 6815998 | 2.5 | 6.7 |
| HAUL TRUCK | 553213.7 | 6815986.8 | 2.5 | 6.6 |
| HAUL TRUCK | 553209.8 | 6815975.6 | 2.5 | 6.5 |
| HAUL TRUCK | 553205.8 | 6815964.4 | 2.5 | 6.4 |
| HAUL TRUCK | 553201.9 | 6815953.2 | 2.5 | 6.3 |
| HAUL TRUCK | 553197.9 | 6815942 | 2.5 | 6.2 |
| HAUL TRUCK | 553194.1 | 6815931.4 | 2.5 | 5.5 |
| HAUL TRUCK | 553473.8 | 6816194.6 | 2.5 | 13.8 |
| HAUL TRUCK | 553457.7 | 6816197.7 | 2.5 | 9.3 |
| HAUL TRUCK | 553440.9 | 6816200.8 | 2.5 | 9.3 |
| HAUL TRUCK | 553423.3 | 6816204.1 | 2.5 | 7.8 |
| HAUL TRUCK | 553404.8 | 6816207.6 | 2.5 | 8.4 |
| HAUL TRUCK | 553385.5 | 6816211.2 | 2.5 | 8.9 |
| HAUL TRUCK | 553365.1 | 6816215 | 2.5 | 9.6 |
| HAUL TRUCK | 553343.7 | 6816219 | 2.5 | 9.6 |
| HAUL TRUCK | 553321 | 6816223.3 | 2.5 | 9.5 |
| HAUL TRUCK | 553297 | 6816227.8 | 2.5 | 9.5 |
| HAUL TRUCK | 553271.6 | 6816232.6 | 2.5 | 9.5 |
| HAUL TRUCK | 553254.6 | 6816235.7 | 2.5 | 3.8 |
| HAUL TRUCK | 553468.7 | 6816180.1 | 2.5 | 7.4 |
| HAUL TRUCK | 553461.2 | 6816173.3 | 2.5 | 6.3 |
| HAUL TRUCK | 553453.7 | 6816166.5 | 2.5 | 6.1 |
| HAUL TRUCK | 553446.2 | 6816159.6 | 2.5 | 6.8 |
| HAUL TRUCK | 553438.8 | 6816152.8 | 2.5 | 7.2 |
| HAUL TRUCK | 553431.3 | 6816146 | 2.5 | 7.4 |
| HAUL TRUCK | 553423.8 | 6816139.1 | 2.5 | 7.4 |
| HAUL TRUCK | 553416.3 | 6816132.2 | 2.5 | 7.4 |
| HAUL TRUCK | 553408.7 | 6816125.3 | 2.5 | 7.5 |
| HAUL TRUCK | 553401.1 | 6816118.4 | 2.5 | 7.5 |
| HAUL TRUCK | 553393.5 | 6816111.4 | 2.5 | 7.5 |
| HAUL TRUCK | 553385.9 | 6816104.4 | 2.5 | 7.5 |
| HAUL TRUCK | 553378.2 | 6816097.4 | 2.5 | 7.5 |
| HAUL TRUCK | 553370.4 | 6816090.3 | 2.5 | 7.4 |
| HAUL TRUCK | 553362.6 | 6816083.2 | 2.5 | 7.2 |
| HAUL TRUCK | 553354.7 | 6816076 | 2.5 | 7 |
| HAUL TRUCK | 553346.8 | 6816068.7 | 2.5 | 6.8 |
| HAUL TRUCK | 553338.8 | 6816061.4 | 2.5 | 6.6 |
| HAUL TRUCK | 553330.7 | 6816054 | 2.5 | 6.6 |
| HAUL TRUCK | 553322.5 | 6816046.6 | 2.5 | 6.6 |
| HAUL TRUCK | 553314.3 | 6816039 | 2.5 | 6.7 |
| HAUL TRUCK | 553305.9 | 6816031.4 | 2.5 | 6.8 |
| HAUL TRUCK | 553297.5 | 6816023.6 | 2.5 | 6.8 |
| HAUL TRUCK | 553288.9 | 6816015.8 | 2.5 | 6.8 |
| HAUL TRUCK | 553280.2 | 6816007.9 | 2.5 | 6.9 |
| HAUL TRUCK | 553271.4 | 6815999.8 | 2.5 | 6.8 |
| HAUL TRUCK | 553262.5 | 6815991.6 | 2.5 | 7.4 |
| HAUL TRUCK | 553253.4 | 6815983.3 | 2.5 | 7.4 |
| HAUL TRUCK | 553244.1 | 6815974.9 | 2.5 | 7.3 |
| HAUL TRUCK | 553234.7 | 6815966.3 | 2.5 | 7.2 |
| HAUL TRUCK | 553225.1 | 6815957.5 | 2.5 | 7.1 |
| HAUL TRUCK | 553215.4 | 6815948.6 | 2.5 | 7 |
| HAUL TRUCK | 553205.4 | 6815939.5 | 2.5 | 6.8 |
| HAUL TRUCK | 553196.9 | 6815931.7 | 2.5 | 4.9 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 25.6 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R2B | 554002.8 | 6815828.9 | 1.8 | 4 | 36.2 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 23.6 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.8 |
| LOADER | 553326.8 | 6816183.8 | 2.5 | 25.3 |
| LOADER | 553284.8 | 6816215.6 | 2.5 | 22.1 |
| LOADER | 553260.9 | 6816245.4 | 2.5 | 22 |
| LOADER | 553246.1 | 6816263.9 | 2.5 | 14.1 |
| Road truck | 553375.3 | 6816258.4 | 2.5 | 16 |
| Road truck | 553344.6 | 6816262.8 | 2.5 | 15.9 |

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|---|---|---|---|---|
| Road truck | 553311.5 | 6816267.5 | 2.5 | 15.7 |
| Road truck | 553291 | 6816270.4 | 2.5 | 8 |
| Road truck | 553289.1 | 6816261.6 | 2.5 | 12.8 |
| Road truck | 553290.8 | 6816247.6 | 2.5 | 10.2 |
| Road truck | 553305 | 6816243.1 | 2.5 | 14.8 |
| Road truck | 553331.1 | 6816243.6 | 2.5 | 14.8 |
| Road truck | 553355.6 | 6816244.1 | 2.5 | 14.9 |
| Road truck | 553380.2 | 6816243.8 | 2.5 | 15.4 |
| Road truck | 553404.8 | 6816242.7 | 2.5 | 15.5 |
| Road truck | 553428 | 6816241.6 | 2.5 | 15.6 |
| Road truck | 553450 | 6816240.6 | 2.5 | 15.7 |
| Road truck | 553470.9 | 6816239.7 | 2.5 | 15.7 |
| Road truck | 553490.8 | 6816238.8 | 2.5 | 15.8 |
| Road truck | 553509.7 | 6816237.9 | 2.5 | 15.8 |
| Road truck | 553520.6 | 6816237.5 | 2.5 | 8.7 |
| Road truck | 553533.9 | 6816243.8 | 2.5 | 16.3 |
| Road truck | 553552.9 | 6816241.2 | 2.5 | 16.5 |
| Road truck | 553570.9 | 6816238.8 | 2.5 | 16.5 |
| Road truck | 553588 | 6816236.5 | 2.5 | 16.5 |
| Road truck | 553604.4 | 6816234.4 | 2.5 | 16.6 |
| Road truck | 553620.1 | 6816232.3 | 2.5 | 16.7 |
| Road truck | 553635.1 | 6816230.3 | 2.5 | 16.7 |
| Road truck | 553649.4 | 6816228.3 | 2.5 | 16.7 |
| Road truck | 553663.3 | 6816226.5 | 2.5 | 16.8 |
| Road truck | 553676.5 | 6816224.7 | 2.5 | 16.8 |
| Road truck | 553689.3 | 6816223 | 2.5 | 12.1 |
| Road truck | 553701.7 | 6816221.4 | 2.5 | 16.9 |
| Road truck | 553713.6 | 6816219.8 | 2.5 | 16.9 |
| Road truck | 553725.1 | 6816218.2 | 2.5 | 17 |
| Road truck | 553736.3 | 6816216.7 | 2.5 | 17 |
| Road truck | 553747.1 | 6816215.3 | 2.5 | 17 |
| Road truck | 553757.6 | 6816213.9 | 2.5 | 17.1 |
| Road truck | 553767.7 | 6816212.5 | 2.5 | 17.1 |
| Road truck | 553777.6 | 6816211.2 | 2.5 | 17.1 |
| Road truck | 553787.3 | 6816209.9 | 2.5 | 17.2 |
| Road truck | 553796.3 | 6816208.7 | 2.5 | 16.9 |
| Road truck | 553808.4 | 6816201.1 | 2.5 | 20.9 |
| Road truck | 553823.2 | 6816187.9 | 2.5 | 21 |
| Road truck | 553836.7 | 6816175.8 | 2.5 | 21.1 |
| Road truck | 553846.2 | 6816167.5 | 2.5 | 18.2 |
| HAUL TRUCK | 553266.2 | 6816135.4 | 2.5 | 9.9 |
| HAUL TRUCK | 553261.5 | 6816122.3 | 2.5 | 9.9 |
| HAUL TRUCK | 553256.9 | 6816109.2 | 2.5 | 5.5 |
| HAUL TRUCK | 553252.3 | 6816096.1 | 2.5 | 5.5 |
| HAUL TRUCK | 553247.6 | 6816082.9 | 2.5 | 4.5 |
| HAUL TRUCK | 553243 | 6816069.8 | 2.5 | 4.6 |
| HAUL TRUCK | 553238.4 | 6816056.7 | 2.5 | 5.3 |
| HAUL TRUCK | 553233.7 | 6816043.5 | 2.5 | 5.6 |
| HAUL TRUCK | 553229.1 | 6816030.3 | 2.5 | 5.6 |
| HAUL TRUCK | 553224.4 | 6816017.1 | 2.5 | 5.6 |
| HAUL TRUCK | 553219.7 | 6816003.8 | 2.5 | 5.5 |
| HAUL TRUCK | 553215 | 6815990.5 | 2.5 | 5.5 |
| HAUL TRUCK | 553210.3 | 6815977.1 | 2.5 | 5.5 |
| HAUL TRUCK | 553205.5 | 6815963.6 | 2.5 | 5.5 |
| HAUL TRUCK | 553200.7 | 6815950.1 | 2.5 | 3.7 |
| HAUL TRUCK | 553195.9 | 6815936.5 | 2.5 | 3.7 |
| HAUL TRUCK | 553192.9 | 6815928 | 2.5 | -2.5 |
| HAUL TRUCK | 553468.1 | 6816195.7 | 2.5 | 15.2 |
| HAUL TRUCK | 553439.5 | 6816201.1 | 2.5 | 15.1 |
| HAUL TRUCK | 553408.3 | 6816206.9 | 2.5 | 15 |
| HAUL TRUCK | 553374.3 | 6816213.3 | 2.5 | 14.9 |
| HAUL TRUCK | 553337.1 | 6816220.3 | 2.5 | 14.9 |
| HAUL TRUCK | 553296 | 6816228 | 2.5 | 14.8 |
| HAUL TRUCK | 553262.6 | 6816234.3 | 2.5 | 11.7 |
| HAUL TRUCK | 553468.1 | 6816179.7 | 2.5 | 11.5 |
| HAUL TRUCK | 553459.6 | 6816171.9 | 2.5 | 11.5 |
| HAUL TRUCK | 553451 | 6816164 | 2.5 | 11.5 |
| HAUL TRUCK | 553442.3 | 6816156 | 2.5 | 11.5 |
| HAUL TRUCK | 553433.5 | 6816148 | 2.5 | 11.5 |
| HAUL TRUCK | 553424.6 | 6816139.8 | 2.5 | 11.5 |
| HAUL TRUCK | 553415.5 | 6816131.6 | 2.5 | 11.5 |
| HAUL TRUCK | 553406.4 | 6816123.2 | 2.5 | 11.4 |
| HAUL TRUCK | 553397.2 | 6816114.8 | 2.5 | 11.4 |

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|---|---|---|---|---|
| HAUL TRUCK | 553387.8 | 6816106.2 | 2.5 | 11.4 |
| HAUL TRUCK | 553378.2 | 6816097.5 | 2.5 | 11.4 |
| HAUL TRUCK | 553368.5 | 6816088.6 | 2.5 | 11.3 |
| HAUL TRUCK | 553358.7 | 6816079.6 | 2.5 | 6.9 |
| HAUL TRUCK | 553348.7 | 6816070.4 | 2.5 | 6.7 |
| HAUL TRUCK | 553338.5 | 6816061.1 | 2.5 | 6.6 |
| HAUL TRUCK | 553328.1 | 6816051.6 | 2.5 | 4.9 |
| HAUL TRUCK | 553317.5 | 6816041.9 | 2.5 | 5.9 |
| HAUL TRUCK | 553306.7 | 6816032 | 2.5 | 6.5 |
| HAUL TRUCK | 553295.6 | 6816021.9 | 2.5 | 6.7 |
| HAUL TRUCK | 553284.3 | 6816011.6 | 2.5 | 6.7 |
| HAUL TRUCK | 553272.7 | 6816001 | 2.5 | 6.6 |
| HAUL TRUCK | 553260.9 | 6815990.2 | 2.5 | 6.6 |
| HAUL TRUCK | 553248.8 | 6815979.1 | 2.5 | 6.6 |
| HAUL TRUCK | 553236.3 | 6815967.7 | 2.5 | 6.6 |
| HAUL TRUCK | 553223.5 | 6815956.1 | 2.5 | 6.6 |
| HAUL TRUCK | 553210.4 | 6815944 | 2.5 | 4.7 |
| HAUL TRUCK | 553198.6 | 6815933.3 | 2.5 | 3.5 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 29 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R3 | 553634.8 | 6815756.9 | 1.8 | 3.3 | 36.3 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 29.4 |
| Generator | 553406.4 | 6816251.5 | 1 | 21.4 |
| LOADER | 553346 | 6816172.7 | 2.5 | 20.4 |
| LOADER | 553327.3 | 6816183.6 | 2.5 | 20.4 |
| LOADER | 553307 | 6816195.3 | 2.5 | 20.4 |
| LOADER | 553296.1 | 6816201.6 | 2.5 | -1.4 |
| LOADER | 553271.8 | 6816231.8 | 2.5 | 24.7 |
| Road truck | 553384 | 6816257.2 | 2.5 | 9.9 |
| Road truck | 553372.1 | 6816258.9 | 2.5 | 9.9 |
| Road truck | 553359.9 | 6816260.6 | 2.5 | 9.9 |
| Road truck | 553347.4 | 6816262.4 | 2.5 | 9.9 |
| Road truck | 553334.5 | 6816264.2 | 2.5 | 9.9 |
| Road truck | 553321.3 | 6816266.1 | 2.5 | 9.9 |
| Road truck | 553307.6 | 6816268 | 2.5 | 9.9 |
| Road truck | 553294.4 | 6816269.9 | 2.5 | 9.4 |
| Road truck | 553289.4 | 6816259.2 | 2.5 | 12 |
| Road truck | 553291 | 6816245.4 | 2.5 | 5.9 |
| Road truck | 553297.6 | 6816242.9 | 2.5 | 9.7 |
| Road truck | 553309.8 | 6816243.2 | 2.5 | 9.7 |
| Road truck | 553321.8 | 6816243.4 | 2.5 | 9.7 |
| Road truck | 553333.5 | 6816243.7 | 2.5 | 9.7 |
| Road truck | 553345 | 6816243.9 | 2.5 | 9.7 |
| Road truck | 553356.3 | 6816244.1 | 2.5 | 9.7 |
| Road truck | 553364.6 | 6816244.3 | 2.5 | 6.7 |
| Road truck | 553373 | 6816244.1 | 2.5 | 9.8 |
| Road truck | 553384.2 | 6816243.6 | 2.5 | 9.8 |
| Road truck | 553395.1 | 6816243.1 | 2.5 | 9.8 |
| Road truck | 553405.7 | 6816242.6 | 2.5 | 9.8 |
| Road truck | 553416.2 | 6816242.2 | 2.5 | 9.7 |
| Road truck | 553426.5 | 6816241.7 | 2.5 | 9.7 |
| Road truck | 553436.7 | 6816241.2 | 2.5 | 10 |
| Road truck | 553446.7 | 6816240.8 | 2.5 | 10 |
| Road truck | 553456.5 | 6816240.3 | 2.5 | 10 |
| Road truck | 553466.2 | 6816239.9 | 2.5 | 10 |
| Road truck | 553475.7 | 6816239.5 | 2.5 | 10 |
| Road truck | 553485.1 | 6816239.1 | 2.5 | 10 |
| Road truck | 553494.4 | 6816238.6 | 2.5 | 10 |
| Road truck | 553503.6 | 6816238.2 | 2.5 | 10 |
| Road truck | 553512.7 | 6816237.8 | 2.5 | 10 |
| Road truck | 553519.7 | 6816237.5 | 2.5 | 7.6 |
| Road truck | 553528.7 | 6816244.5 | 2.5 | 9.9 |
| Road truck | 553537.8 | 6816243.2 | 2.5 | 9.8 |
| Road truck | 553546.8 | 6816242 | 2.5 | 10.2 |
| Road truck | 553555.7 | 6816240.9 | 2.5 | 10.2 |
| Road truck | 553564.6 | 6816239.7 | 2.5 | 10.3 |
| Road truck | 553573.3 | 6816238.5 | 2.5 | 10.3 |
| Road truck | 553581.9 | 6816237.4 | 2.5 | 10.2 |
| Road truck | 553590.5 | 6816236.2 | 2.5 | 10.1 |

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| Road truck | 553599 | 6816235.1 | 2.5 | 10.1 |
| Road truck | 553607.5 | 6816233.9 | 2.5 | 10.1 |
| Road truck | 553615.9 | 6816232.8 | 2.5 | 10.2 |
| Road truck | 553624.2 | 6816231.7 | 2.5 | 10.2 |
| Road truck | 553632.5 | 6816230.6 | 2.5 | 10.2 |
| Road truck | 553640.8 | 6816229.5 | 2.5 | 10 |
| Road truck | 553649 | 6816228.4 | 2.5 | 10.1 |
| Road truck | 553657.2 | 6816227.3 | 2.5 | 10.2 |
| Road truck | 553665.3 | 6816226.2 | 2.5 | 10.3 |
| Road truck | 553673.5 | 6816225.1 | 2.5 | 10.3 |
| Road truck | 553681.6 | 6816224 | 2.5 | 10.4 |
| Road truck | 553689.7 | 6816223 | 2.5 | 10.5 |
| Road truck | 553697.8 | 6816221.9 | 2.5 | 10.5 |
| Road truck | 553706 | 6816220.8 | 2.5 | 10.5 |
| Road truck | 553714.1 | 6816219.7 | 2.5 | 9.9 |
| Road truck | 553722.2 | 6816218.6 | 2.5 | 8.8 |
| Road truck | 553730.4 | 6816217.5 | 2.5 | 15.7 |
| Road truck | 553738.5 | 6816216.4 | 2.5 | 15.7 |
| Road truck | 553746.7 | 6816215.3 | 2.5 | 15.8 |
| Road truck | 553755 | 6816214.2 | 2.5 | 15.8 |
| Road truck | 553763.2 | 6816213.1 | 2.5 | 15.8 |
| Road truck | 553771.5 | 6816212 | 2.5 | 15.8 |
| Road truck | 553779.9 | 6816210.9 | 2.5 | 15.8 |
| Road truck | 553788.3 | 6816209.8 | 2.5 | 15.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 15.5 |
| Road truck | 553803.8 | 6816205.2 | 2.5 | 16 |
| Road truck | 553810.5 | 6816199.2 | 2.5 | 16 |
| Road truck | 553817 | 6816193.4 | 2.5 | 16 |
| Road truck | 553823.5 | 6816187.6 | 2.5 | 16 |
| Road truck | 553829.9 | 6816181.9 | 2.5 | 16.1 |
| Road truck | 553836.3 | 6816176.3 | 2.5 | 16.1 |
| Road truck | 553842.6 | 6816170.7 | 2.5 | 16.1 |
| Road truck | 553847.4 | 6816166.3 | 2.5 | 13.6 |
| HAUL TRUCK | 553266.7 | 6816137.1 | 2.5 | 7.8 |
| HAUL TRUCK | 553263.3 | 6816127.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553260 | 6816118 | 2.5 | 8.7 |
| HAUL TRUCK | 553256.7 | 6816108.6 | 2.5 | 8.7 |
| HAUL TRUCK | 553253.5 | 6816099.4 | 2.5 | 8.7 |
| HAUL TRUCK | 553250.3 | 6816090.4 | 2.5 | 8.7 |
| HAUL TRUCK | 553247.1 | 6816081.4 | 2.5 | 8.7 |
| HAUL TRUCK | 553244 | 6816072.6 | 2.5 | 8.7 |
| HAUL TRUCK | 553240.9 | 6816063.9 | 2.5 | 8.6 |
| HAUL TRUCK | 553237.9 | 6816055.3 | 2.5 | 8.6 |
| HAUL TRUCK | 553234.9 | 6816046.8 | 2.5 | 8.4 |
| HAUL TRUCK | 553231.9 | 6816038.3 | 2.5 | 8.5 |
| HAUL TRUCK | 553228.9 | 6816030 | 2.5 | 8.5 |
| HAUL TRUCK | 553226 | 6816021.7 | 2.5 | 8.5 |
| HAUL TRUCK | 553223.1 | 6816013.5 | 2.5 | 8.5 |
| HAUL TRUCK | 553220.2 | 6816005.3 | 2.5 | 8.4 |
| HAUL TRUCK | 553217.4 | 6815997.2 | 2.5 | 8.4 |
| HAUL TRUCK | 553214.5 | 6815989.2 | 2.5 | 8.3 |
| HAUL TRUCK | 553211.7 | 6815981.2 | 2.5 | 8.3 |
| HAUL TRUCK | 553208.9 | 6815973.3 | 2.5 | 8.2 |
| HAUL TRUCK | 553206.1 | 6815965.3 | 2.5 | 8.2 |
| HAUL TRUCK | 553203.3 | 6815957.5 | 2.5 | 8.1 |
| HAUL TRUCK | 553200.6 | 6815949.6 | 2.5 | 8 |
| HAUL TRUCK | 553197.8 | 6815941.8 | 2.5 | 13.1 |
| HAUL TRUCK | 553195 | 6815934 | 2.5 | 13.1 |
| HAUL TRUCK | 553193 | 6815928.2 | 2.5 | 9.9 |
| HAUL TRUCK | 553477 | 6816194 | 2.5 | 9 |
| HAUL TRUCK | 553467.7 | 6816195.8 | 2.5 | 9 |
| HAUL TRUCK | 553458.1 | 6816197.6 | 2.5 | 9 |
| HAUL TRUCK | 553448.4 | 6816199.4 | 2.5 | 8.7 |
| HAUL TRUCK | 553438.4 | 6816201.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553428.1 | 6816203.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553417.7 | 6816205.2 | 2.5 | 8.7 |
| HAUL TRUCK | 553406.9 | 6816207.2 | 2.5 | 8.8 |
| HAUL TRUCK | 553395.8 | 6816209.3 | 2.5 | 8.8 |
| HAUL TRUCK | 553384.5 | 6816211.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553372.8 | 6816213.6 | 2.5 | 8.8 |
| HAUL TRUCK | 553360.7 | 6816215.9 | 2.5 | 9.2 |
| HAUL TRUCK | 553348.3 | 6816218.2 | 2.5 | 9.2 |
| HAUL TRUCK | 553335.4 | 6816220.6 | 2.5 | 9.2 |

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| HAUL TRUCK | 553322.2 | 6816223.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553308.4 | 6816225.7 | 2.5 | 9.2 |
| HAUL TRUCK | 553294.2 | 6816228.3 | 2.5 | 9.2 |
| HAUL TRUCK | 553279.5 | 6816231.1 | 2.5 | 9.2 |
| HAUL TRUCK | 553264.1 | 6816234 | 2.5 | 9.2 |
| HAUL TRUCK | 553253.6 | 6816235.9 | 2.5 | 4.4 |
| HAUL TRUCK | 553469.2 | 6816180.7 | 2.5 | 8.7 |
| HAUL TRUCK | 553463 | 6816175 | 2.5 | 8.8 |
| HAUL TRUCK | 553456.8 | 6816169.3 | 2.5 | 8.5 |
| HAUL TRUCK | 553450.8 | 6816163.8 | 2.5 | 8.5 |
| HAUL TRUCK | 553444.7 | 6816158.3 | 2.5 | 8.6 |
| HAUL TRUCK | 553438.8 | 6816152.8 | 2.5 | 8.6 |
| HAUL TRUCK | 553432.9 | 6816147.4 | 2.5 | 8.6 |
| HAUL TRUCK | 553427 | 6816142.1 | 2.5 | 8.7 |
| HAUL TRUCK | 553421.3 | 6816136.8 | 2.5 | 8.7 |
| HAUL TRUCK | 553415.5 | 6816131.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553409.8 | 6816126.3 | 2.5 | 8.8 |
| HAUL TRUCK | 553404.2 | 6816121.2 | 2.5 | 8.8 |
| HAUL TRUCK | 553398.5 | 6816116 | 2.5 | 8.8 |
| HAUL TRUCK | 553392.9 | 6816110.9 | 2.5 | 8.8 |
| HAUL TRUCK | 553387.4 | 6816105.8 | 2.5 | 8.8 |
| HAUL TRUCK | 553381.8 | 6816100.8 | 2.5 | 8.8 |
| HAUL TRUCK | 553376.3 | 6816095.7 | 2.5 | 8.8 |
| HAUL TRUCK | 553370.8 | 6816090.7 | 2.5 | 8.8 |
| HAUL TRUCK | 553365.3 | 6816085.7 | 2.5 | 8.8 |
| HAUL TRUCK | 553359.8 | 6816080.7 | 2.5 | 8.6 |
| HAUL TRUCK | 553354.4 | 6816075.7 | 2.5 | 8.5 |
| HAUL TRUCK | 553348.9 | 6816070.7 | 2.5 | 8.4 |
| HAUL TRUCK | 553343.4 | 6816065.7 | 2.5 | 8.1 |
| HAUL TRUCK | 553338 | 6816060.7 | 2.5 | 8.1 |
| HAUL TRUCK | 553332.5 | 6816055.6 | 2.5 | 9.1 |
| HAUL TRUCK | 553327 | 6816050.6 | 2.5 | 9.1 |
| HAUL TRUCK | 553321.5 | 6816045.6 | 2.5 | 9.1 |
| HAUL TRUCK | 553316 | 6816040.6 | 2.5 | 9.1 |
| HAUL TRUCK | 553310.4 | 6816035.5 | 2.5 | 9.1 |
| HAUL TRUCK | 553304.9 | 6816030.4 | 2.5 | 9.1 |
| HAUL TRUCK | 553299.3 | 6816025.3 | 2.5 | 9.1 |
| HAUL TRUCK | 553293.7 | 6816020.2 | 2.5 | 9 |
| HAUL TRUCK | 553288 | 6816015 | 2.5 | 9 |
| HAUL TRUCK | 553282.3 | 6816009.8 | 2.5 | 8.8 |
| HAUL TRUCK | 553276.6 | 6816004.6 | 2.5 | 8.9 |
| HAUL TRUCK | 553270.8 | 6815999.3 | 2.5 | 8.9 |
| HAUL TRUCK | 553265 | 6815993.9 | 2.5 | 8.9 |
| HAUL TRUCK | 553259.1 | 6815988.6 | 2.5 | 8.8 |
| HAUL TRUCK | 553253.2 | 6815983.1 | 2.5 | 8.8 |
| HAUL TRUCK | 553247.2 | 6815977.6 | 2.5 | 8.8 |
| HAUL TRUCK | 553241.1 | 6815972.1 | 2.5 | 8.7 |
| HAUL TRUCK | 553234.9 | 6815966.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553228.7 | 6815960.8 | 2.5 | 8.6 |
| HAUL TRUCK | 553222.4 | 6815955 | 2.5 | 8.5 |
| HAUL TRUCK | 553216 | 6815949.2 | 2.5 | 8.4 |
| HAUL TRUCK | 553209.5 | 6815943.2 | 2.5 | 8.3 |
| HAUL TRUCK | 553202.9 | 6815937.2 | 2.5 | 13.5 |
| HAUL TRUCK | 553196.5 | 6815931.4 | 2.5 | 13.1 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 28.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4A | 552797.6 | 6815469.6 | 1.8 | 16.9 | 34.6 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 29.1 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.8 |
| LOADER | 553348 | 6816171.5 | 2.5 | 16.9 |
| LOADER | 553334.5 | 6816179.3 | 2.5 | 16.9 |
| LOADER | 553321 | 6816187.2 | 2.5 | 16.9 |
| LOADER | 553307.5 | 6816195 | 2.5 | 16.9 |
| LOADER | 553298.4 | 6816200.3 | 2.5 | 12.4 |
| LOADER | 553291 | 6816208 | 2.5 | 17.1 |
| LOADER | 553280.8 | 6816220.7 | 2.5 | 17.1 |
| LOADER | 553270.4 | 6816233.6 | 2.5 | 17.1 |
| LOADER | 553259.9 | 6816246.6 | 2.5 | 17.1 |
| LOADER | 553249.3 | 6816259.8 | 2.5 | 17.1 |

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| Road truck | 553380.2 | 6816257.7 | 2.5 | 10.7 |
| Road truck | 553361.1 | 6816260.4 | 2.5 | 10.7 |
| Road truck | 553342.4 | 6816263.1 | 2.5 | 10.8 |
| Road truck | 553324 | 6816265.7 | 2.5 | 10.8 |
| Road truck | 553305.9 | 6816268.3 | 2.5 | 10.8 |
| Road truck | 553292.5 | 6816270.2 | 2.5 | 7.9 |
| Road truck | 553289.6 | 6816257.8 | 2.5 | 12.6 |
| Road truck | 553291.2 | 6816244 | 2.5 | 2.3 |
| Road truck | 553301 | 6816243 | 2.5 | 11.4 |
| Road truck | 553320.8 | 6816243.4 | 2.5 | 11.4 |
| Road truck | 553341 | 6816243.8 | 2.5 | 11.3 |
| Road truck | 553359.3 | 6816244.2 | 2.5 | 10.2 |
| Road truck | 553377.5 | 6816243.9 | 2.5 | 11.1 |
| Road truck | 553398.2 | 6816243 | 2.5 | 11 |
| Road truck | 553419.4 | 6816242 | 2.5 | 11 |
| Road truck | 553441.1 | 6816241 | 2.5 | 10.9 |
| Road truck | 553463.4 | 6816240 | 2.5 | 10.9 |
| Road truck | 553486.3 | 6816239 | 2.5 | 10.9 |
| Road truck | 553509.9 | 6816237.9 | 2.5 | 10.8 |
| Road truck | 553522.1 | 6816237.4 | 2.5 | 8.6 |
| Road truck | 553535.4 | 6816243.6 | 2.5 | 10.4 |
| Road truck | 553558.6 | 6816240.5 | 2.5 | 10.4 |
| Road truck | 553582.4 | 6816237.3 | 2.5 | 10.3 |
| Road truck | 553606.9 | 6816234 | 2.5 | 10.3 |
| Road truck | 553632 | 6816230.7 | 2.5 | 10.2 |
| Road truck | 553657.9 | 6816227.2 | 2.5 | 10.2 |
| Road truck | 553684.6 | 6816223.6 | 2.5 | 10.1 |
| Road truck | 553712.1 | 6816220 | 2.5 | 10.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 10 |
| Road truck | 553770 | 6816212.2 | 2.5 | 10 |
| Road truck | 553792.8 | 6816209.2 | 2.5 | 6.9 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 8.4 |
| Road truck | 553825.5 | 6816185.9 | 2.5 | 8.4 |
| Road truck | 553841.5 | 6816171.6 | 2.5 | 7.9 |
| HAUL TRUCK | 553259.9 | 6816117.6 | 2.5 | 14.8 |
| HAUL TRUCK | 553244.1 | 6816073 | 2.5 | 15 |
| HAUL TRUCK | 553230 | 6816033.1 | 2.5 | 15.1 |
| HAUL TRUCK | 553217.4 | 6815997.3 | 2.5 | 15.2 |
| HAUL TRUCK | 553206 | 6815965 | 2.5 | 15.2 |
| HAUL TRUCK | 553196.4 | 6815937.9 | 2.5 | 14.5 |
| HAUL TRUCK | 553471.5 | 6816195.1 | 2.5 | 8.7 |
| HAUL TRUCK | 553451.7 | 6816198.8 | 2.5 | 8.8 |
| HAUL TRUCK | 553432.2 | 6816202.4 | 2.5 | 8.8 |
| HAUL TRUCK | 553413.1 | 6816206 | 2.5 | 8.8 |
| HAUL TRUCK | 553394.4 | 6816209.5 | 2.5 | 8.8 |
| HAUL TRUCK | 553376.1 | 6816213 | 2.5 | 8.9 |
| HAUL TRUCK | 553358.1 | 6816216.3 | 2.5 | 8.9 |
| HAUL TRUCK | 553340.4 | 6816219.7 | 2.5 | 9 |
| HAUL TRUCK | 553322.9 | 6816222.9 | 2.5 | 9 |
| HAUL TRUCK | 553305.8 | 6816226.2 | 2.5 | 9 |
| HAUL TRUCK | 553288.9 | 6816229.3 | 2.5 | 9 |
| HAUL TRUCK | 553272.2 | 6816232.4 | 2.5 | 9 |
| HAUL TRUCK | 553257.5 | 6816235.2 | 2.5 | 8.1 |
| HAUL TRUCK | 553394.8 | 6816112.7 | 2.5 | 19.3 |
| HAUL TRUCK | 553280.6 | 6816008.2 | 2.5 | 19.7 |
| HAUL TRUCK | 553214.4 | 6815947.7 | 2.5 | 17.9 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 28.3 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R4B | 552865.6 | 6815421 | 1.8 | 18.9 | 34.5 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 29 |
| Generator | 553406.4 | 6816251.5 | 1 | 15.7 |
| LOADER | 553348.1 | 6816171.4 | 2.5 | 16.8 |
| LOADER | 553334.6 | 6816179.3 | 2.5 | 16.8 |
| LOADER | 553321.2 | 6816187.1 | 2.5 | 16.8 |
| LOADER | 553307.7 | 6816194.9 | 2.5 | 16.8 |
| LOADER | 553298.5 | 6816200.2 | 2.5 | 12.4 |
| LOADER | 553290.8 | 6816208.2 | 2.5 | 17.1 |
| LOADER | 553280.1 | 6816221.5 | 2.5 | 17.1 |
| LOADER | 553269.2 | 6816235.1 | 2.5 | 17.1 |

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| LOADER | 553258.2 | 6816248.8 | 2.5 | 17.1 |
| LOADER | 553248.3 | 6816261.1 | 2.5 | 15.9 |
| Road truck | 553380.6 | 6816257.7 | 2.5 | 10.4 |
| Road truck | 553362.2 | 6816260.3 | 2.5 | 10.5 |
| Road truck | 553344.1 | 6816262.9 | 2.5 | 10.5 |
| Road truck | 553326.2 | 6816265.4 | 2.5 | 10.5 |
| Road truck | 553308.6 | 6816267.9 | 2.5 | 10.5 |
| Road truck | 553293.9 | 6816270 | 2.5 | 8.9 |
| Road truck | 553289.7 | 6816256.6 | 2.5 | 12.8 |
| Road truck | 553300.6 | 6816243 | 2.5 | 11.1 |
| Road truck | 553319.3 | 6816243.4 | 2.5 | 11 |
| Road truck | 553338.5 | 6816243.8 | 2.5 | 11 |
| Road truck | 553357.7 | 6816244.2 | 2.5 | 10.8 |
| Road truck | 553377 | 6816243.9 | 2.5 | 10.8 |
| Road truck | 553396.6 | 6816243 | 2.5 | 10.7 |
| Road truck | 553416.6 | 6816242.1 | 2.5 | 10.7 |
| Road truck | 553437 | 6816241.2 | 2.5 | 10.7 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 10.6 |
| Road truck | 553479.1 | 6816239.3 | 2.5 | 10.6 |
| Road truck | 553501 | 6816238.3 | 2.5 | 10.6 |
| Road truck | 553517.2 | 6816237.6 | 2.5 | 7.1 |
| Road truck | 553534.8 | 6816243.7 | 2.5 | 10.2 |
| Road truck | 553556.5 | 6816240.7 | 2.5 | 10.2 |
| Road truck | 553578.8 | 6816237.8 | 2.5 | 10.1 |
| Road truck | 553601.6 | 6816234.7 | 2.5 | 10.1 |
| Road truck | 553624.9 | 6816231.6 | 2.5 | 10.1 |
| Road truck | 553648.8 | 6816228.4 | 2.5 | 10 |
| Road truck | 553673.3 | 6816225.1 | 2.5 | 9.9 |
| Road truck | 553698.5 | 6816221.8 | 2.5 | 9.9 |
| Road truck | 553724.4 | 6816218.3 | 2.5 | 9.9 |
| Road truck | 553751.1 | 6816214.8 | 2.5 | 9.8 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 9.8 |
| Road truck | 553796.5 | 6816208.7 | 2.5 | 4.2 |
| Road truck | 553808.5 | 6816201 | 2.5 | 8.5 |
| Road truck | 553824.7 | 6816186.6 | 2.5 | 8.5 |
| Road truck | 553841 | 6816172.1 | 2.5 | 8.5 |
| HAUL TRUCK | 553255 | 6816103.8 | 2.5 | 16.7 |
| HAUL TRUCK | 553231.6 | 6816037.6 | 2.5 | 16.9 |
| HAUL TRUCK | 553212 | 6815982 | 2.5 | 17 |
| HAUL TRUCK | 553197.7 | 6815941.5 | 2.5 | 15.6 |
| HAUL TRUCK | 553472.1 | 6816195 | 2.5 | 8.5 |
| HAUL TRUCK | 553453.2 | 6816198.5 | 2.5 | 8.5 |
| HAUL TRUCK | 553434.7 | 6816202 | 2.5 | 8.6 |
| HAUL TRUCK | 553416.5 | 6816205.4 | 2.5 | 8.6 |
| HAUL TRUCK | 553398.6 | 6816208.7 | 2.5 | 8.6 |
| HAUL TRUCK | 553380.9 | 6816212.1 | 2.5 | 8.6 |
| HAUL TRUCK | 553363.5 | 6816215.3 | 2.5 | 8.7 |
| HAUL TRUCK | 553346.4 | 6816218.5 | 2.5 | 8.7 |
| HAUL TRUCK | 553329.4 | 6816221.7 | 2.5 | 8.7 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 8.7 |
| HAUL TRUCK | 553296.1 | 6816228 | 2.5 | 8.7 |
| HAUL TRUCK | 553279.8 | 6816231 | 2.5 | 8.8 |
| HAUL TRUCK | 553263.6 | 6816234.1 | 2.5 | 8.8 |
| HAUL TRUCK | 553253.3 | 6816236 | 2.5 | 3.4 |
| HAUL TRUCK | 553434.6 | 6816149 | 2.5 | 16 |
| HAUL TRUCK | 553369.6 | 6816089.6 | 2.5 | 16.2 |
| HAUL TRUCK | 553315.8 | 6816040.4 | 2.5 | 16.4 |
| HAUL TRUCK | 553270.4 | 6815998.9 | 2.5 | 16.5 |
| HAUL TRUCK | 553231.6 | 6815963.5 | 2.5 | 16.7 |
| HAUL TRUCK | 553203.6 | 6815937.9 | 2.5 | 14.9 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 28.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5A | 552762.8 | 6815886.6 | 1.8 | 24 | 38 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 32.8 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.1 |
| LOADER | 553348.9 | 6816171 | 2.5 | 18.9 |
| LOADER | 553337.2 | 6816177.8 | 2.5 | 18.9 |
| LOADER | 553325.7 | 6816184.4 | 2.5 | 18.9 |
| LOADER | 553314.5 | 6816191 | 2.5 | 18.9 |

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|---|---|---|---|---|
| LOADER | 553303.5 | 6816197.3 | 2.5 | 18.9 |
| LOADER | 553297.1 | 6816201.1 | 2.5 | 11.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.4 |
| LOADER | 553285.8 | 6816214.4 | 2.5 | 18.4 |
| LOADER | 553279.1 | 6816222.8 | 2.5 | 18.4 |
| LOADER | 553272.3 | 6816231.2 | 2.5 | 18.4 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 18.4 |
| LOADER | 553258.8 | 6816248 | 2.5 | 18.4 |
| LOADER | 553252.1 | 6816256.3 | 2.5 | 18.4 |
| LOADER | 553246.4 | 6816263.5 | 2.5 | 17 |
| Road truck | 553379.9 | 6816257.8 | 2.5 | 14.1 |
| Road truck | 553360.6 | 6816260.5 | 2.5 | 14.1 |
| Road truck | 553342 | 6816263.1 | 2.5 | 14.2 |
| Road truck | 553324.2 | 6816265.7 | 2.5 | 14.2 |
| Road truck | 553307.1 | 6816268.1 | 2.5 | 14.3 |
| Road truck | 553293.4 | 6816270 | 2.5 | 12.5 |
| Road truck | 553288.8 | 6816264.4 | 2.5 | 13.4 |
| Road truck | 553290.3 | 6816251.7 | 2.5 | 13.4 |
| Road truck | 553291.2 | 6816244.1 | 2.5 | 6.7 |
| Road truck | 553301.8 | 6816243 | 2.5 | 15.5 |
| Road truck | 553323.5 | 6816243.5 | 2.5 | 15.5 |
| Road truck | 553346.4 | 6816243.9 | 2.5 | 15.4 |
| Road truck | 553362.9 | 6816244.3 | 2.5 | 11 |
| Road truck | 553378.7 | 6816243.8 | 2.5 | 14.8 |
| Road truck | 553402.4 | 6816242.8 | 2.5 | 14.8 |
| Road truck | 553427.4 | 6816241.7 | 2.5 | 14.7 |
| Road truck | 553453.9 | 6816240.5 | 2.5 | 14.6 |
| Road truck | 553482.1 | 6816239.2 | 2.5 | 14.5 |
| Road truck | 553509.4 | 6816238 | 2.5 | 13.6 |
| Road truck | 553537.7 | 6816243.3 | 2.5 | 13.6 |
| Road truck | 553566.1 | 6816239.5 | 2.5 | 13.6 |
| Road truck | 553596.1 | 6816235.5 | 2.5 | 13.5 |
| Road truck | 553628.1 | 6816231.2 | 2.5 | 13.4 |
| Road truck | 553662 | 6816226.7 | 2.5 | 13.3 |
| Road truck | 553698.3 | 6816221.8 | 2.5 | 13.2 |
| Road truck | 553737 | 6816216.6 | 2.5 | 13.1 |
| Road truck | 553778.6 | 6816211.1 | 2.5 | 13 |
| Road truck | 553808.8 | 6816200.8 | 2.5 | 9.9 |
| Road truck | 553825.7 | 6816185.7 | 2.5 | 9.8 |
| Road truck | 553841.7 | 6816171.5 | 2.5 | 9.1 |
| HAUL TRUCK | 553266.1 | 6816135.3 | 2.5 | 12.8 |
| HAUL TRUCK | 553261.5 | 6816122.3 | 2.5 | 12.8 |
| HAUL TRUCK | 553257.1 | 6816109.8 | 2.5 | 12.8 |
| HAUL TRUCK | 553252.8 | 6816097.6 | 2.5 | 12.8 |
| HAUL TRUCK | 553248.7 | 6816085.8 | 2.5 | 12.9 |
| HAUL TRUCK | 553244.6 | 6816074.4 | 2.5 | 12.9 |
| HAUL TRUCK | 553240.7 | 6816063.4 | 2.5 | 12.9 |
| HAUL TRUCK | 553236.9 | 6816052.6 | 2.5 | 12.9 |
| HAUL TRUCK | 553233.2 | 6816042.2 | 2.5 | 12.9 |
| HAUL TRUCK | 553229.6 | 6816032 | 2.5 | 12.9 |
| HAUL TRUCK | 553226.1 | 6816022.1 | 2.5 | 13 |
| HAUL TRUCK | 553222.7 | 6816012.4 | 2.5 | 13 |
| HAUL TRUCK | 553219.4 | 6816003 | 2.5 | 13 |
| HAUL TRUCK | 553216.2 | 6815993.8 | 2.5 | 13 |
| HAUL TRUCK | 553213 | 6815984.7 | 2.5 | 13 |
| HAUL TRUCK | 553209.9 | 6815975.9 | 2.5 | 13 |
| HAUL TRUCK | 553206.8 | 6815967.3 | 2.5 | 13 |
| HAUL TRUCK | 553203.8 | 6815958.8 | 2.5 | 13 |
| HAUL TRUCK | 553200.9 | 6815950.5 | 2.5 | 13.1 |
| HAUL TRUCK | 553198 | 6815942.3 | 2.5 | 13.1 |
| HAUL TRUCK | 553195.2 | 6815934.3 | 2.5 | 13.1 |
| HAUL TRUCK | 553193.1 | 6815928.3 | 2.5 | 10.2 |
| HAUL TRUCK | 553469.7 | 6816195.4 | 2.5 | 11.9 |
| HAUL TRUCK | 553446.8 | 6816199.7 | 2.5 | 11.9 |
| HAUL TRUCK | 553424.9 | 6816203.8 | 2.5 | 12 |
| HAUL TRUCK | 553404.1 | 6816207.7 | 2.5 | 12 |
| HAUL TRUCK | 553384.2 | 6816211.4 | 2.5 | 12 |
| HAUL TRUCK | 553365.2 | 6816215 | 2.5 | 12.1 |
| HAUL TRUCK | 553347 | 6816218.4 | 2.5 | 12.2 |
| HAUL TRUCK | 553329.5 | 6816221.7 | 2.5 | 12.2 |
| HAUL TRUCK | 553312.7 | 6816224.9 | 2.5 | 12.2 |
| HAUL TRUCK | 553296.5 | 6816227.9 | 2.5 | 12.3 |
| HAUL TRUCK | 553280.9 | 6816230.8 | 2.5 | 12.3 |

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|---|---|---|---|---|
| HAUL TRUCK | 553265.9 | 6816233.6 | 2.5 | 12.3 |
| HAUL TRUCK | 553254.7 | 6816235.7 | 2.5 | 9.6 |
| HAUL TRUCK | 553458.1 | 6816170.4 | 2.5 | 14.1 |
| HAUL TRUCK | 553431.3 | 6816146 | 2.5 | 14.2 |
| HAUL TRUCK | 553406.9 | 6816123.7 | 2.5 | 14.3 |
| HAUL TRUCK | 553384.5 | 6816103.2 | 2.5 | 14.3 |
| HAUL TRUCK | 553363.8 | 6816084.3 | 2.5 | 14.4 |
| HAUL TRUCK | 553344.7 | 6816066.8 | 2.5 | 14.4 |
| HAUL TRUCK | 553327 | 6816050.6 | 2.5 | 14.5 |
| HAUL TRUCK | 553310.4 | 6816035.5 | 2.5 | 14.5 |
| HAUL TRUCK | 553295 | 6816021.3 | 2.5 | 14.6 |
| HAUL TRUCK | 553280.5 | 6816008.1 | 2.5 | 14.6 |
| HAUL TRUCK | 553266.9 | 6815995.7 | 2.5 | 14.6 |
| HAUL TRUCK | 553254.1 | 6815984 | 2.5 | 14.7 |
| HAUL TRUCK | 553242 | 6815972.9 | 2.5 | 14.7 |
| HAUL TRUCK | 553230.5 | 6815962.4 | 2.5 | 14.7 |
| HAUL TRUCK | 553219.7 | 6815952.5 | 2.5 | 14.8 |
| HAUL TRUCK | 553209.4 | 6815943.1 | 2.5 | 14.8 |
| HAUL TRUCK | 553199.5 | 6815934.1 | 2.5 | 14.8 |
| HAUL TRUCK | 553194.1 | 6815929.2 | 2.5 | 6.5 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 31.9 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R5B | 552747.8 | 6815977.7 | 1.8 | 26.9 | 38.2 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 33 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.3 |
| LOADER | 553348.4 | 6816171.3 | 2.5 | 19.5 |
| LOADER | 553335.8 | 6816178.6 | 2.5 | 19.5 |
| LOADER | 553323.5 | 6816185.7 | 2.5 | 19.5 |
| LOADER | 553311.7 | 6816192.6 | 2.5 | 19.5 |
| LOADER | 553300.9 | 6816198.8 | 2.5 | 18.8 |
| LOADER | 553292.7 | 6816205.9 | 2.5 | 18.7 |
| LOADER | 553286 | 6816214.2 | 2.5 | 18.7 |
| LOADER | 553279.4 | 6816222.4 | 2.5 | 18.7 |
| LOADER | 553272.8 | 6816230.6 | 2.5 | 18.7 |
| LOADER | 553266.3 | 6816238.7 | 2.5 | 18.7 |
| LOADER | 553259.8 | 6816246.7 | 2.5 | 18.7 |
| LOADER | 553253.4 | 6816254.7 | 2.5 | 18.7 |
| LOADER | 553247.1 | 6816262.6 | 2.5 | 18.6 |
| Road truck | 553378.5 | 6816258 | 2.5 | 15 |
| Road truck | 553356.6 | 6816261.1 | 2.5 | 15.1 |
| Road truck | 553335.9 | 6816264 | 2.5 | 15.2 |
| Road truck | 553316.2 | 6816266.8 | 2.5 | 15.2 |
| Road truck | 553297.4 | 6816269.5 | 2.5 | 15.3 |
| Road truck | 553288.2 | 6816270.8 | 2.5 | -1.2 |
| Road truck | 553288.7 | 6816265.1 | 2.5 | 13.4 |
| Road truck | 553290 | 6816253.8 | 2.5 | 13.4 |
| Road truck | 553291 | 6816245.5 | 2.5 | 10.3 |
| Road truck | 553304.2 | 6816243.1 | 2.5 | 16.9 |
| Road truck | 553331.3 | 6816243.6 | 2.5 | 16.8 |
| Road truck | 553356.4 | 6816244.1 | 2.5 | 15.3 |
| Road truck | 553381.1 | 6816243.7 | 2.5 | 16 |
| Road truck | 553410.2 | 6816242.4 | 2.5 | 15.9 |
| Road truck | 553441.5 | 6816241 | 2.5 | 15.8 |
| Road truck | 553475.5 | 6816239.5 | 2.5 | 15.7 |
| Road truck | 553507.7 | 6816238 | 2.5 | 14.4 |
| Road truck | 553540.2 | 6816242.9 | 2.5 | 14.5 |
| Road truck | 553574.3 | 6816238.4 | 2.5 | 14.5 |
| Road truck | 553611 | 6816233.5 | 2.5 | 14.4 |
| Road truck | 553650.6 | 6816228.2 | 2.5 | 14.2 |
| Road truck | 553693.7 | 6816222.4 | 2.5 | 14.1 |
| Road truck | 553740.6 | 6816216.2 | 2.5 | 14 |
| Road truck | 553782.8 | 6816210.5 | 2.5 | 12.1 |
| Road truck | 553809.2 | 6816200.4 | 2.5 | 10.1 |
| Road truck | 553827 | 6816184.5 | 2.5 | 10.1 |
| Road truck | 553842.6 | 6816170.6 | 2.5 | 8.5 |
| HAUL TRUCK | 553266.5 | 6816136.4 | 2.5 | 12.3 |
| HAUL TRUCK | 553262.6 | 6816125.5 | 2.5 | 12.3 |
| HAUL TRUCK | 553258.9 | 6816114.8 | 2.5 | 12.3 |
| HAUL TRUCK | 553255.2 | 6816104.3 | 2.5 | 12.3 |

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|---|---|---|---|---|
| HAUL TRUCK | 553251.6 | 6816094.1 | 2.5 | 12.3 |
| HAUL TRUCK | 553248.1 | 6816084.2 | 2.5 | 12.4 |
| HAUL TRUCK | 553244.6 | 6816074.4 | 2.5 | 12.4 |
| HAUL TRUCK | 553241.2 | 6816064.8 | 2.5 | 12.4 |
| HAUL TRUCK | 553237.9 | 6816055.5 | 2.5 | 12.4 |
| HAUL TRUCK | 553234.7 | 6816046.3 | 2.5 | 12.4 |
| HAUL TRUCK | 553231.5 | 6816037.2 | 2.5 | 12.4 |
| HAUL TRUCK | 553228.4 | 6816028.3 | 2.5 | 12.4 |
| HAUL TRUCK | 553225.3 | 6816019.6 | 2.5 | 12.4 |
| HAUL TRUCK | 553222.2 | 6816011 | 2.5 | 12.4 |
| HAUL TRUCK | 553219.3 | 6816002.5 | 2.5 | 12.5 |
| HAUL TRUCK | 553216.3 | 6815994.2 | 2.5 | 12.5 |
| HAUL TRUCK | 553213.4 | 6815986 | 2.5 | 12.5 |
| HAUL TRUCK | 553210.5 | 6815977.8 | 2.5 | 12.5 |
| HAUL TRUCK | 553207.7 | 6815969.8 | 2.5 | 12.5 |
| HAUL TRUCK | 553204.9 | 6815961.9 | 2.5 | 12.5 |
| HAUL TRUCK | 553202.1 | 6815954 | 2.5 | 12.5 |
| HAUL TRUCK | 553199.4 | 6815946.3 | 2.5 | 12.5 |
| HAUL TRUCK | 553196.7 | 6815938.6 | 2.5 | 12.5 |
| HAUL TRUCK | 553194 | 6815930.9 | 2.5 | 12.5 |
| HAUL TRUCK | 553192.5 | 6815926.7 | 2.5 | 2.9 |
| HAUL TRUCK | 553467.4 | 6816195.8 | 2.5 | 12.8 |
| HAUL TRUCK | 553440.4 | 6816200.9 | 2.5 | 12.9 |
| HAUL TRUCK | 553415 | 6816205.7 | 2.5 | 12.9 |
| HAUL TRUCK | 553391.2 | 6816210.1 | 2.5 | 13 |
| HAUL TRUCK | 553368.7 | 6816214.4 | 2.5 | 13 |
| HAUL TRUCK | 553347.5 | 6816218.3 | 2.5 | 13.1 |
| HAUL TRUCK | 553327.4 | 6816222.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553308.3 | 6816225.7 | 2.5 | 13.2 |
| HAUL TRUCK | 553290.2 | 6816229.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553273 | 6816232.3 | 2.5 | 13.3 |
| HAUL TRUCK | 553257.7 | 6816235.2 | 2.5 | 12.6 |
| HAUL TRUCK | 553461.7 | 6816173.8 | 2.5 | 13 |
| HAUL TRUCK | 553441.5 | 6816155.3 | 2.5 | 13 |
| HAUL TRUCK | 553422.5 | 6816137.9 | 2.5 | 13.1 |
| HAUL TRUCK | 553404.7 | 6816121.6 | 2.5 | 13.1 |
| HAUL TRUCK | 553387.9 | 6816106.3 | 2.5 | 13.2 |
| HAUL TRUCK | 553372 | 6816091.8 | 2.5 | 13.2 |
| HAUL TRUCK | 553357.1 | 6816078.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553342.9 | 6816065.1 | 2.5 | 13.2 |
| HAUL TRUCK | 553329.4 | 6816052.8 | 2.5 | 13.3 |
| HAUL TRUCK | 553316.6 | 6816041.1 | 2.5 | 13.3 |
| HAUL TRUCK | 553304.3 | 6816029.9 | 2.5 | 13.3 |
| HAUL TRUCK | 553292.7 | 6816019.2 | 2.5 | 13.4 |
| HAUL TRUCK | 553281.5 | 6816009 | 2.5 | 13.4 |
| HAUL TRUCK | 553270.8 | 6815999.3 | 2.5 | 13.4 |
| HAUL TRUCK | 553260.5 | 6815989.9 | 2.5 | 13.5 |
| HAUL TRUCK | 553250.7 | 6815980.9 | 2.5 | 13.5 |
| HAUL TRUCK | 553241.2 | 6815972.2 | 2.5 | 13.5 |
| HAUL TRUCK | 553232.1 | 6815963.8 | 2.5 | 13.5 |
| HAUL TRUCK | 553223.2 | 6815955.8 | 2.5 | 13.6 |
| HAUL TRUCK | 553214.7 | 6815948 | 2.5 | 13.6 |
| HAUL TRUCK | 553206.5 | 6815940.5 | 2.5 | 13.6 |
| HAUL TRUCK | 553198.5 | 6815933.2 | 2.5 | 13.6 |
| HAUL TRUCK | 553194.1 | 6815929.1 | 2.5 | 5.5 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 32.2 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6A | 552849.5 | 6816597 | 1.8 | 7.7 | 36.2 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 27.4 |
| Generator | 553406.4 | 6816251.5 | 1 | 19.7 |
| LOADER | 553327.9 | 6816183.2 | 2.5 | 26.2 |
| LOADER | 553299.7 | 6816199.6 | 2.5 | 18.3 |
| LOADER | 553277.6 | 6816224.6 | 2.5 | 26.9 |
| LOADER | 553252.2 | 6816256.2 | 2.5 | 24.5 |
| Road truck | 553376.6 | 6816258.2 | 2.5 | 17.4 |
| Road truck | 553351.6 | 6816261.8 | 2.5 | 17.5 |
| Road truck | 553328.4 | 6816265.1 | 2.5 | 17.5 |
| Road truck | 553306.7 | 6816268.2 | 2.5 | 17.6 |
| Road truck | 553292.2 | 6816270.2 | 2.5 | 13.9 |

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| Road truck | 553288.8 | 6816264.2 | 2.5 | 15.9 |
| Road truck | 553290.4 | 6816250.7 | 2.5 | 15.9 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 4.4 |
| Road truck | 553299.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553315.2 | 6816243.3 | 2.5 | 16.1 |
| Road truck | 553332 | 6816243.6 | 2.5 | 16.1 |
| Road truck | 553349.6 | 6816244 | 2.5 | 16 |
| Road truck | 553363 | 6816244.3 | 2.5 | 12.7 |
| Road truck | 553378 | 6816243.9 | 2.5 | 16.4 |
| Road truck | 553400 | 6816242.9 | 2.5 | 16.3 |
| Road truck | 553423.4 | 6816241.8 | 2.5 | 7.9 |
| Road truck | 553448.3 | 6816240.7 | 2.5 | 16.1 |
| Road truck | 553474.9 | 6816239.5 | 2.5 | 16.1 |
| Road truck | 553503.4 | 6816238.2 | 2.5 | 16 |
| Road truck | 553520.3 | 6816237.5 | 2.5 | 6.9 |
| Road truck | 553543.9 | 6816242.4 | 2.5 | 16.8 |
| Road truck | 553586.5 | 6816236.7 | 2.5 | 16.7 |
| Road truck | 553633.8 | 6816230.4 | 2.5 | 16.6 |
| Road truck | 553686.7 | 6816223.4 | 2.5 | 16.3 |
| Road truck | 553746.3 | 6816215.4 | 2.5 | 16.2 |
| Road truck | 553789.6 | 6816209.6 | 2.5 | 11.1 |
| Road truck | 553821.1 | 6816189.8 | 2.5 | 14.8 |
| Road truck | 553845.9 | 6816167.7 | 2.5 | 6.3 |
| HAUL TRUCK | 553266.4 | 6816136.2 | 2.5 | 8.1 |
| HAUL TRUCK | 553262.3 | 6816124.5 | 2.5 | 8 |
| HAUL TRUCK | 553258.1 | 6816112.5 | 2.5 | 8 |
| HAUL TRUCK | 553253.7 | 6816100.3 | 2.5 | 8 |
| HAUL TRUCK | 553249.3 | 6816087.8 | 2.5 | 8 |
| HAUL TRUCK | 553244.8 | 6816075 | 2.5 | 8 |
| HAUL TRUCK | 553240.2 | 6816062 | 2.5 | 8 |
| HAUL TRUCK | 553235.5 | 6816048.6 | 2.5 | 8 |
| HAUL TRUCK | 553230.7 | 6816034.9 | 2.5 | 8 |
| HAUL TRUCK | 553225.7 | 6816020.8 | 2.5 | 8 |
| HAUL TRUCK | 553220.6 | 6816006.3 | 2.5 | 8 |
| HAUL TRUCK | 553215.3 | 6815991.5 | 2.5 | 8 |
| HAUL TRUCK | 553209.9 | 6815976.2 | 2.5 | 8.1 |
| HAUL TRUCK | 553204.4 | 6815960.4 | 2.5 | 8.1 |
| HAUL TRUCK | 553198.7 | 6815944.2 | 2.5 | 8 |
| HAUL TRUCK | 553194 | 6815931.1 | 2.5 | 5.5 |
| HAUL TRUCK | 553464.8 | 6816196.3 | 2.5 | 14.4 |
| HAUL TRUCK | 553433.1 | 6816202.3 | 2.5 | 14.5 |
| HAUL TRUCK | 553403.9 | 6816207.7 | 2.5 | 14.6 |
| HAUL TRUCK | 553376.9 | 6816212.8 | 2.5 | 14.7 |
| HAUL TRUCK | 553351.8 | 6816217.5 | 2.5 | 14.8 |
| HAUL TRUCK | 553328.3 | 6816221.9 | 2.5 | 14.9 |
| HAUL TRUCK | 553306.4 | 6816226 | 2.5 | 15 |
| HAUL TRUCK | 553285.9 | 6816229.9 | 2.5 | 15 |
| HAUL TRUCK | 553266.6 | 6816233.5 | 2.5 | 15.1 |
| HAUL TRUCK | 553254.1 | 6816235.8 | 2.5 | 10.7 |
| HAUL TRUCK | 553467.4 | 6816179 | 2.5 | 10.3 |
| HAUL TRUCK | 553457.6 | 6816170 | 2.5 | 10.3 |
| HAUL TRUCK | 553447.8 | 6816161.1 | 2.5 | 10.3 |
| HAUL TRUCK | 553438.1 | 6816152.2 | 2.5 | 10.4 |
| HAUL TRUCK | 553428.5 | 6816143.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553418.9 | 6816134.7 | 2.5 | 10.4 |
| HAUL TRUCK | 553409.4 | 6816125.9 | 2.5 | 10.4 |
| HAUL TRUCK | 553399.9 | 6816117.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553390.4 | 6816108.6 | 2.5 | 10.4 |
| HAUL TRUCK | 553381 | 6816100 | 2.5 | 10.4 |
| HAUL TRUCK | 553371.6 | 6816091.4 | 2.5 | 10.4 |
| HAUL TRUCK | 553362.3 | 6816082.9 | 2.5 | 10.3 |
| HAUL TRUCK | 553352.9 | 6816074.3 | 2.5 | 10.3 |
| HAUL TRUCK | 553343.6 | 6816065.8 | 2.5 | 10.3 |
| HAUL TRUCK | 553334.2 | 6816057.2 | 2.5 | 10.3 |
| HAUL TRUCK | 553324.9 | 6816048.7 | 2.5 | 10.3 |
| HAUL TRUCK | 553315.5 | 6816040.1 | 2.5 | 6.9 |
| HAUL TRUCK | 553306.1 | 6816031.6 | 2.5 | 6.9 |
| HAUL TRUCK | 553296.7 | 6816023 | 2.5 | 6.9 |
| HAUL TRUCK | 553287.3 | 6816014.4 | 2.5 | 6.9 |
| HAUL TRUCK | 553277.9 | 6816005.7 | 2.5 | 6.9 |
| HAUL TRUCK | 553268.4 | 6815997.1 | 2.5 | 6.9 |
| HAUL TRUCK | 553258.9 | 6815988.3 | 2.5 | 6.9 |
| HAUL TRUCK | 553249.3 | 6815979.6 | 2.5 | 6.9 |

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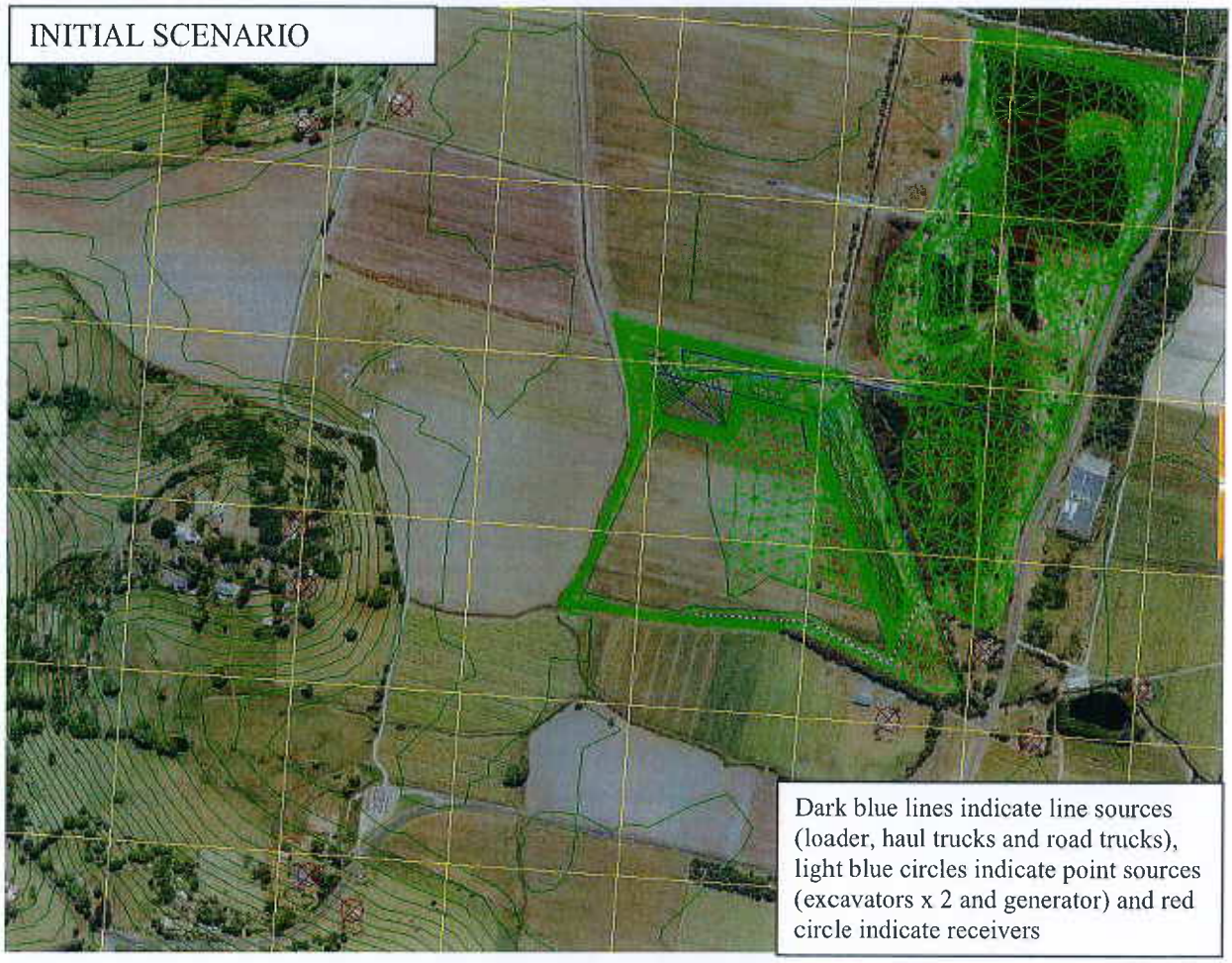
| HAUL TRUCK | 553239.6 | 6815970.8 | 2.5 | 6.9 |
| HAUL TRUCK | 553229.9 | 6815961.9 | 2.5 | 6.9 |
| HAUL TRUCK | 553220.2 | 6815953 | 2.5 | 6.9 |
| HAUL TRUCK | 553210.3 | 6815944 | 2.5 | 6.9 |
| HAUL TRUCK | 553200.4 | 6815934.9 | 2.5 | 6.8 |
| HAUL TRUCK | 553194.4 | 6815929.4 | 2.5 | -0.3 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 28.1 |

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R6B | 552715.7 | 6816554.2 | 1.8 | 10.6 | 36.5 |

| Source | X Posn (m) | Y Posn (m) | Height (m) | Noise Level (dB(A)) |
|---|---|---|---|---|
| EXCAVATOR | 553236.5 | 6816087.4 | 2.5 | 30.2 |
| Generator | 553406.4 | 6816251.5 | 1 | 18.3 |
| LOADER | 553324.1 | 6816185.4 | 2.5 | 25.5 |
| LOADER | 553285.4 | 6816214.9 | 2.5 | 23.1 |
| LOADER | 553265.6 | 6816239.6 | 2.5 | 23.1 |
| LOADER | 553250 | 6816258.9 | 2.5 | 21.6 |
| Road truck | 553367.1 | 6816259.6 | 2.5 | 18.1 |
| Road truck | 553325.5 | 6816265.5 | 2.5 | 18.2 |
| Road truck | 553297.1 | 6816269.5 | 2.5 | 15.4 |
| Road truck | 553288.8 | 6816264.2 | 2.5 | 14.1 |
| Road truck | 553290.4 | 6816250.6 | 2.5 | 14.1 |
| Road truck | 553291.3 | 6816243.3 | 2.5 | 2.4 |
| Road truck | 553303.1 | 6816243 | 2.5 | 16.2 |
| Road truck | 553327.7 | 6816243.5 | 2.5 | 16.1 |
| Road truck | 553353.8 | 6816244.1 | 2.5 | 16 |
| Road truck | 553383.9 | 6816243.6 | 2.5 | 16.6 |
| Road truck | 553419.2 | 6816242 | 2.5 | 16.4 |
| Road truck | 553457.8 | 6816240.3 | 2.5 | 16.3 |
| Road truck | 553499.8 | 6816238.4 | 2.5 | 16.1 |
| Road truck | 553557.8 | 6816240.6 | 2.5 | 17.4 |
| Road truck | 553633.7 | 6816230.4 | 2.5 | 17.2 |
| Road truck | 553723.4 | 6816218.5 | 2.5 | 16.9 |
| Road truck | 553787.5 | 6816209.9 | 2.5 | 10.5 |
| Road truck | 553819.1 | 6816191.6 | 2.5 | 13 |
| Road truck | 553843.8 | 6816169.6 | 2.5 | 7.3 |
| HAUL TRUCK | 553266.4 | 6816136.1 | 2.5 | 10.7 |
| HAUL TRUCK | 553262.1 | 6816124 | 2.5 | 10.7 |
| HAUL TRUCK | 553257.8 | 6816111.9 | 2.5 | 10.6 |
| HAUL TRUCK | 553253.5 | 6816099.6 | 2.5 | 10.6 |
| HAUL TRUCK | 553249.1 | 6816087.1 | 2.5 | 10.6 |
| HAUL TRUCK | 553244.6 | 6816074.4 | 2.5 | 10.6 |
| HAUL TRUCK | 553240.1 | 6816061.6 | 2.5 | 10.6 |
| HAUL TRUCK | 553235.5 | 6816048.5 | 2.5 | 10.6 |
| HAUL TRUCK | 553230.8 | 6816035.3 | 2.5 | 10.6 |
| HAUL TRUCK | 553226.1 | 6816021.8 | 2.5 | 10.5 |
| HAUL TRUCK | 553221.2 | 6816008.1 | 2.5 | 10.5 |
| HAUL TRUCK | 553216.3 | 6815994.1 | 2.5 | 10.5 |
| HAUL TRUCK | 553211.3 | 6815979.9 | 2.5 | 10.5 |
| HAUL TRUCK | 553206.1 | 6815965.3 | 2.5 | 10.5 |
| HAUL TRUCK | 553200.9 | 6815950.5 | 2.5 | 10.5 |
| HAUL TRUCK | 553195.5 | 6815935.3 | 2.5 | 10.4 |
| HAUL TRUCK | 553192.6 | 6815927 | 2.5 | -0.3 |
| HAUL TRUCK | 553453.8 | 6816198.4 | 2.5 | 15.2 |
| HAUL TRUCK | 553403.1 | 6816207.9 | 2.5 | 15.4 |
| HAUL TRUCK | 553358.3 | 6816216.3 | 2.5 | 15.6 |
| HAUL TRUCK | 553318.2 | 6816223.8 | 2.5 | 15.7 |
| HAUL TRUCK | 553282.2 | 6816230.6 | 2.5 | 15.8 |
| HAUL TRUCK | 553258.2 | 6816235.1 | 2.5 | 12.5 |
| HAUL TRUCK | 553466.6 | 6816178.2 | 2.5 | 9.6 |
| HAUL TRUCK | 553455.1 | 6816167.7 | 2.5 | 9.6 |
| HAUL TRUCK | 553443.7 | 6816157.3 | 2.5 | 9.6 |
| HAUL TRUCK | 553432.5 | 6816147.1 | 2.5 | 9.7 |
| HAUL TRUCK | 553421.4 | 6816136.9 | 2.5 | 9.7 |
| HAUL TRUCK | 553410.4 | 6816126.9 | 2.5 | 9.7 |
| HAUL TRUCK | 553399.5 | 6816116.9 | 2.5 | 9.7 |
| HAUL TRUCK | 553388.7 | 6816107.1 | 2.5 | 9.7 |
| HAUL TRUCK | 553378.1 | 6816097.3 | 2.5 | 9.7 |
| HAUL TRUCK | 553367.5 | 6816087.6 | 2.5 | 9.7 |
| HAUL TRUCK | 553356.9 | 6816078 | 2.5 | 9.7 |
| HAUL TRUCK | 553346.5 | 6816068.5 | 2.5 | 9.7 |

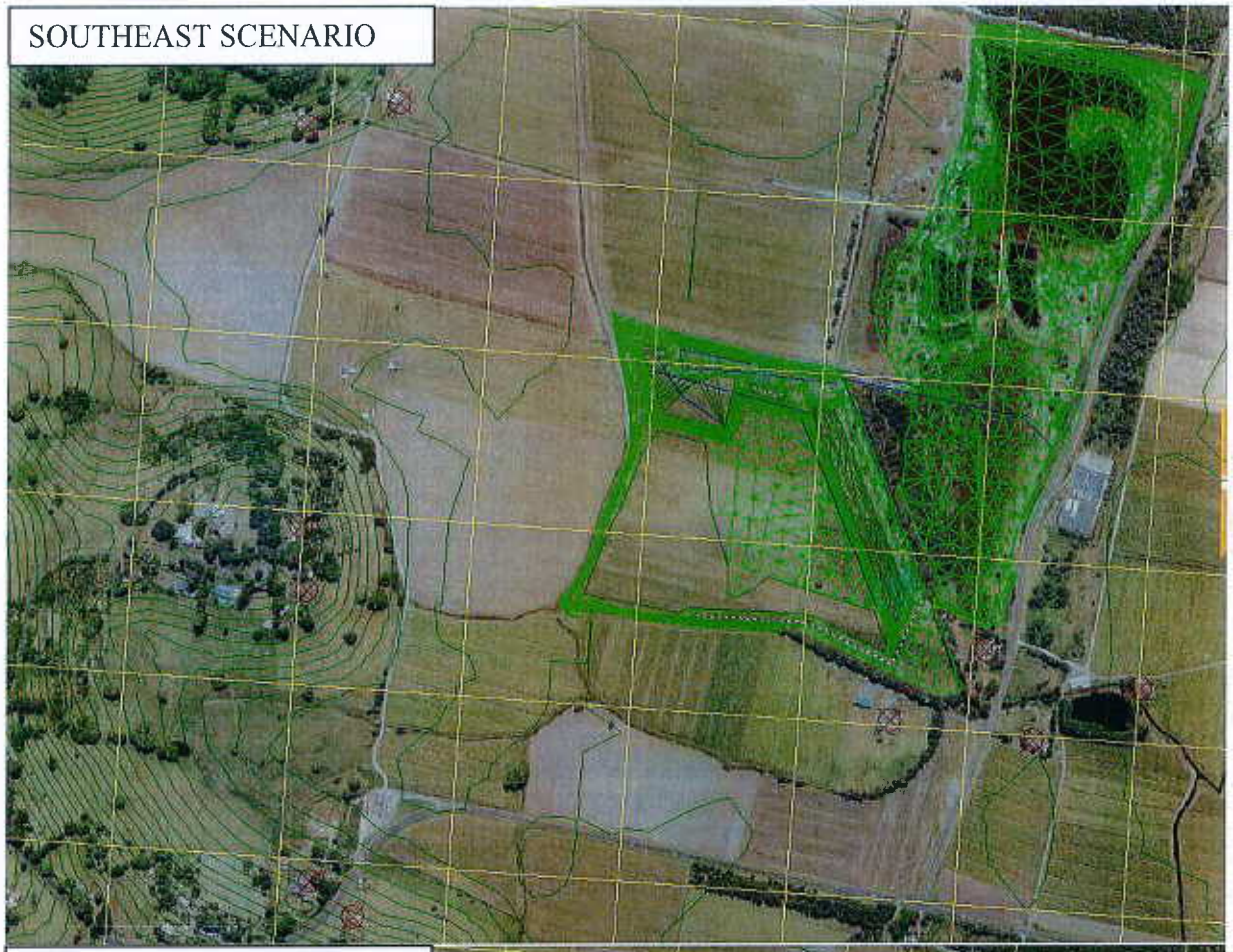
| | | | | |
|---|---|---|---|---|
| HAUL TRUCK | 553336.1 | 6816059 | 2.5 | 9.7 |
| HAUL TRUCK | 553325.8 | 6816049.5 | 2.5 | 9.7 |
| HAUL TRUCK | 553315.5 | 6816040.1 | 2.5 | 9.7 |
| HAUL TRUCK | 553305.3 | 6816030.8 | 2.5 | 9.7 |
| HAUL TRUCK | 553295.1 | 6816021.5 | 2.5 | 9.7 |
| HAUL TRUCK | 553284.9 | 6816012.2 | 2.5 | 9.7 |
| HAUL TRUCK | 553274.8 | 6816002.9 | 2.5 | 9.7 |
| HAUL TRUCK | 553264.7 | 6815993.7 | 2.5 | 9.7 |
| HAUL TRUCK | 553254.6 | 6815984.4 | 2.5 | 9.7 |
| HAUL TRUCK | 553244.5 | 6815975.2 | 2.5 | 9.7 |
| HAUL TRUCK | 553234.4 | 6815965.9 | 2.5 | 9.7 |
| HAUL TRUCK | 553224.3 | 6815956.7 | 2.5 | 9.7 |
| HAUL TRUCK | 553214.1 | 6815947.5 | 2.5 | 9.7 |
| HAUL TRUCK | 553204 | 6815938.2 | 2.5 | 9.7 |
| HAUL TRUCK | 553196.2 | 6815931 | 2.5 | 7 |
| EXCAVATOR | 553260.3 | 6816148.2 | 2.5 | 30.5 |

INITIAL SCENARIO

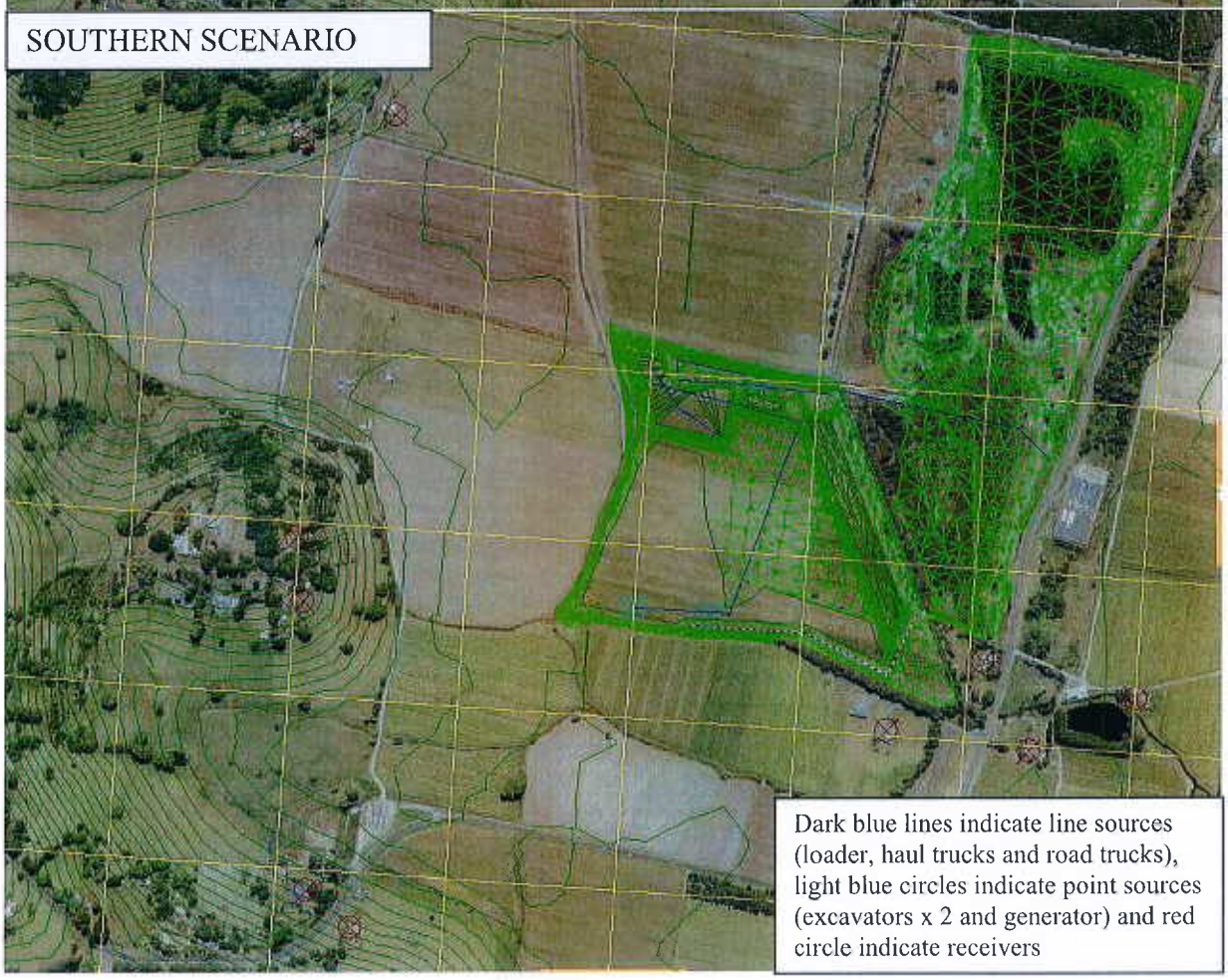


Dark blue lines indicate line sources (loader, haul trucks and road trucks), light blue circles indicate point sources (excavators x 2 and generator) and red circle indicate receivers

SOUTHEAST SCENARIO

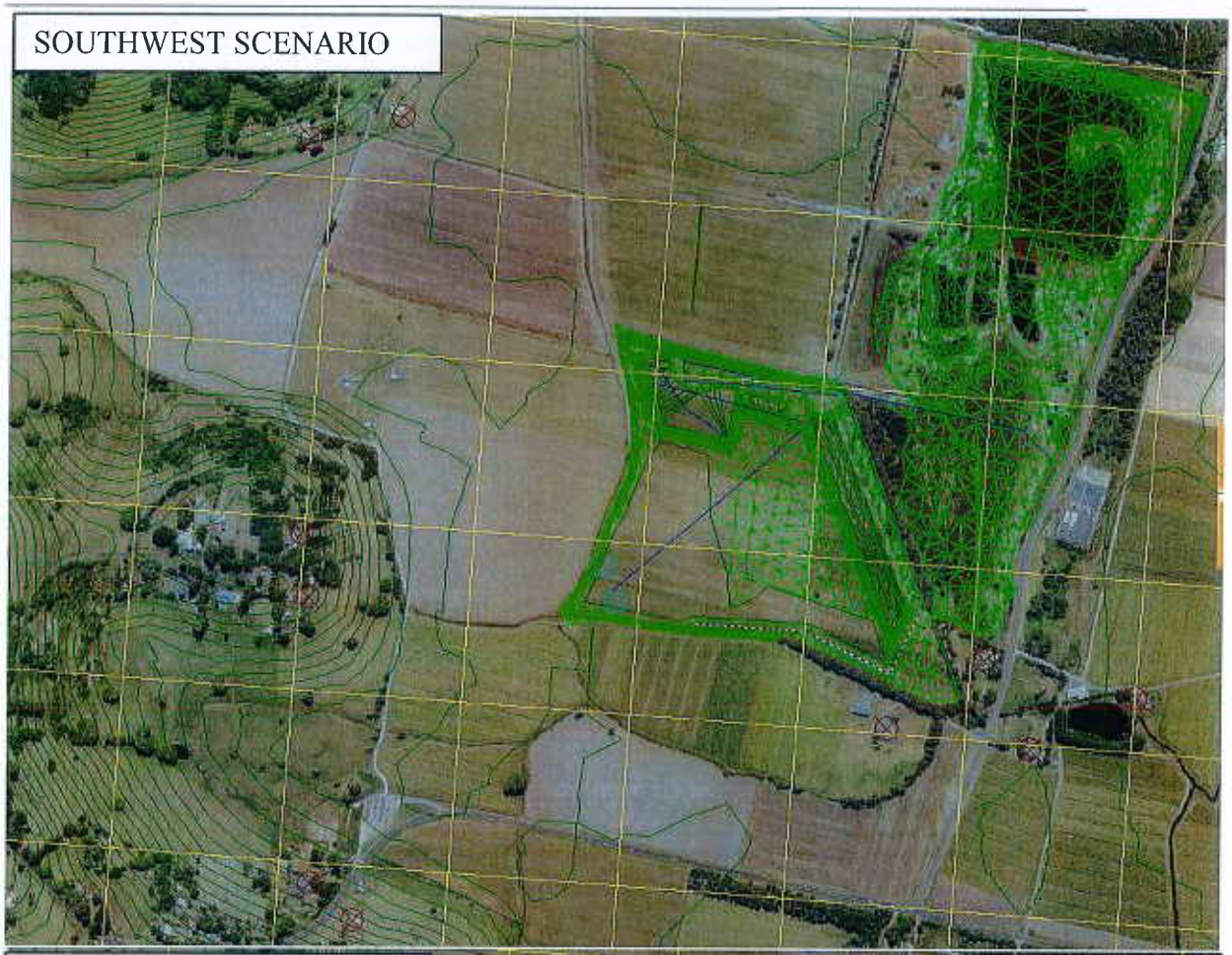


SOUTHERN SCENARIO

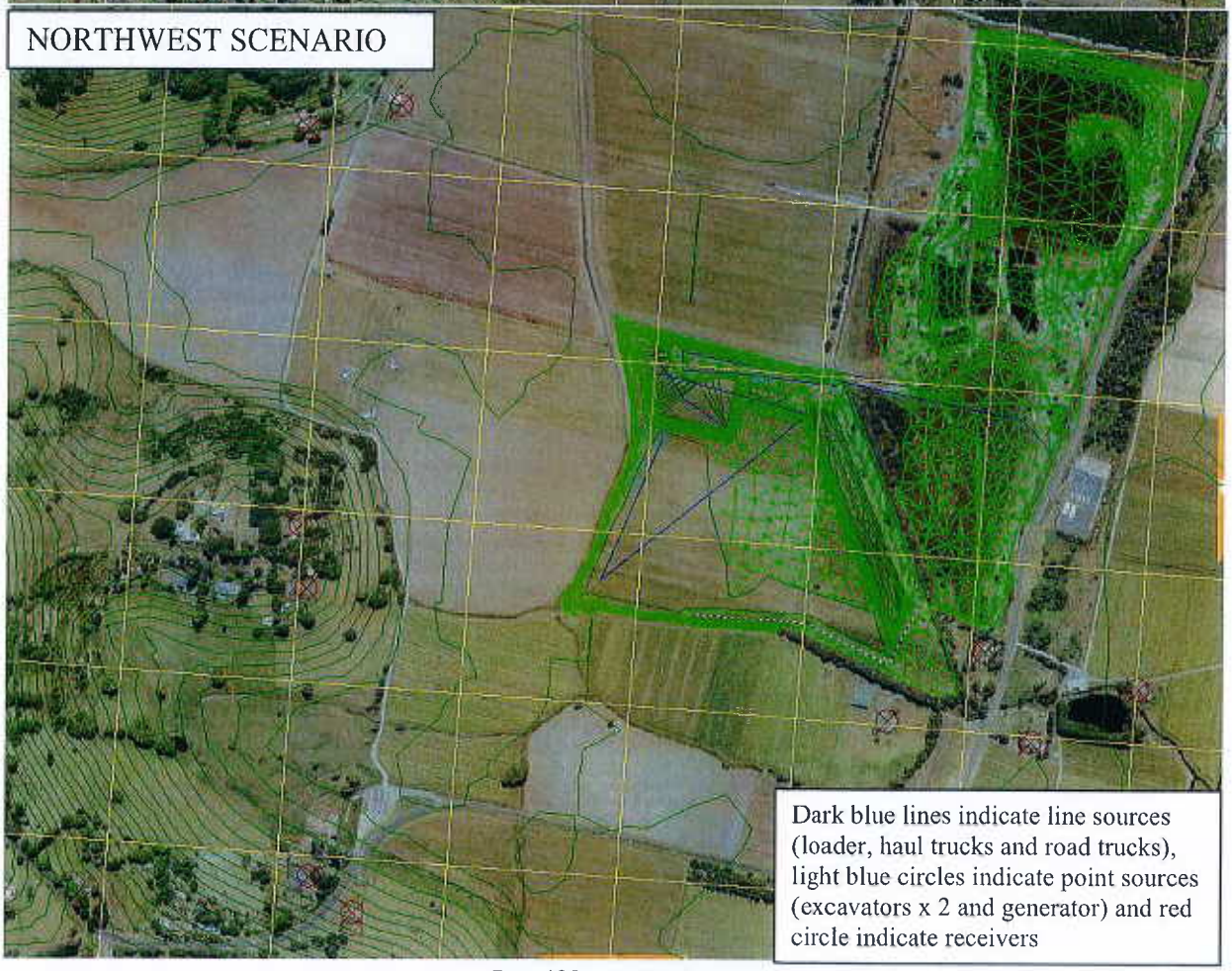


Dark blue lines indicate line sources (loader, haul trucks and road trucks), light blue circles indicate point sources (excavators x 2 and generator) and red circle indicate receivers

SOUTHWEST SCENARIO



NORTHWEST SCENARIO



Dark blue lines indicate line sources (loader, haul trucks and road trucks), light blue circles indicate point sources (excavators x 2 and generator) and red circle indicate receivers

## CONSTRUCTION NOISE IMPACT PREDICTIONS

### SOUTHEAST CORNER

Pen3D2000 V 1.9.11
Project Code:10453a
Project Description:Noise assessment of Newrybar Swamp Rd Quarry
Wednesday 18 Apr, 2012 at 11:21:28
Environmental Calculations
All point and line sources included. Line source segmentation angle: 1 degrees. Calculations for specified meteorology.
Noise level results are the logarithmic addition of all the noise sources
Noise level results incorporate the incoherent ground reflection algorithm
Meteorology :
Wind speed 0.0 (m/s) Wind direction 0 Mast height 10.0 (m)
Temperature 20.0 (C) Temperature Gradient 0.0 (C/100m) Humidity 50.0 (%)
Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R1 | 553772.1 | 6815867.2 | 1.8 | 3 | 52 |
| R2A | 553848.7 | 6815742.3 | 1.8 | 3.6 | 45.8 |
| R2B | 554002.8 | 6815828.9 | 1.8 | 4 | 40.8 |
| R3 | 553634.8 | 6815756.9 | 1.8 | 3.6 | 51.6 |
| R4A | 552797.6 | 6815469.6 | 1.8 | 16.9 | 33 |
| R4B | 552865.6 | 6815421 | 1.8 | 18.9 | 33.3 |
| R5A | 552762.8 | 6815886.6 | 1.8 | 24.1 | 33.7 |
| R5B | 552747.8 | 6815977.7 | 1.8 | 26.9 | 33.5 |
| R6A | 552849.5 | 6816597 | 1.8 | 7.7 | 32.8 |
| R6B | 552715.7 | 6816554.2 | 1.8 | 10.6 | 31.8 |

### SOUTH BOUNDARY

Wednesday 18 Apr, 2012 at 11:20:04
Environmental Calculations
All point and line sources included. Line source segmentation angle: 1 degrees. Calculations for specified meteorology.
Noise level results are the logarithmic addition of all the noise sources
Noise level results incorporate the incoherent ground reflection algorithm
Meteorology :
Wind speed 0.0 (m/s) Wind direction 0 Mast height 10.0 (m)
Temperature 20.0 (C) Temperature Gradient 0.0 (C/100m) Humidity 50.0 (%)
Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R1 | 553772.1 | 6815867.2 | 1.8 | 3 | 50.1 |
| R2A | 553848.7 | 6815742.3 | 1.8 | 3.6 | 45.4 |
| R2B | 554002.8 | 6815828.9 | 1.8 | 4 | 41.4 |
| R3 | 553634.8 | 6815756.9 | 1.8 | 3.6 | 53.9 |
| R4A | 552797.6 | 6815469.6 | 1.8 | 16.9 | 33.4 |
| R4B | 552865.6 | 6815421 | 1.8 | 18.9 | 33.7 |
| R5A | 552762.8 | 6815886.6 | 1.8 | 24.1 | 34.1 |
| R5B | 552747.8 | 6815977.7 | 1.8 | 26.9 | 33.8 |
| R6A | 552849.5 | 6816597 | 1.8 | 7.7 | 32.8 |
| R6B | 552715.7 | 6816554.2 | 1.8 | 10.6 | 31.9 |

### NORTH AT STOCKPILE AND ROAD

Wednesday 18 Apr, 2012 at 11:17:20
Environmental Calculations
All point and line sources included. Line source segmentation angle: 1 degrees. Calculations for specified meteorology.
Noise level results are the logarithmic addition of all the noise sources
Noise level results incorporate the incoherent ground reflection algorithm
Meteorology :
Wind speed 0.0 (m/s) Wind direction 0 Mast height 10.0 (m)
Temperature 20.0 (C) Temperature Gradient 0.0 (C/100m) Humidity 50.0 (%)
Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

| Receptor | X Posn (m) | Y Posn (m) | Height (m) | Ground (m) | Noise Level (dB(A)) |
|---|---|---|---|---|---|
| R1 | 553772.1 | 6815867.2 | 1.8 | 3.2 | 36.4 |
| R2A | 553848.7 | 6815742.3 | 1.8 | 3.4 | 34.8 |
| R2B | 554002.8 | 6815828.9 | 1.8 | 4 | 33.7 |
| R3 | 553634.8 | 6815756.9 | 1.8 | 3.3 | 37.4 |
| R4A | 552797.6 | 6815469.6 | 1.8 | 16.9 | 32.4 |
| R4B | 552865.6 | 6815421 | 1.8 | 18.9 | 32.3 |
| R5A | 552762.8 | 6815886.6 | 1.8 | 24 | 36 |
| R5B | 552747.8 | 6815977.7 | 1.8 | 26.9 | 36.4 |
| R6A | 552849.5 | 6816597 | 1.8 | 7.7 | 37.5 |
| R6B | 552715.7 | 6816554.2 | 1.8 | 10.6 | 35.9 |