

# Porsche and Bentley, High Wycombe

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## **Supplementary Acoustic Assessment**

This statement should be read in conjunction with Jacobs Acoustic Assessment Ref. BPP 04 F8 dated May 2012 submitted under condition 29 of Outline consent Ref. 12/06261/R4OUT

The original Acoustic Assessment was a site wide appraisal encompassing this proposed application site. The purpose of this supplementary document is to cover the change in development type from Offices to Sui Generis Motor retail.

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## 1.0 Introduction

Dealership Developments Ltd are making a planning application for a new Porsche Centre and Bentley Dealership at the site of the former Sports Centre, Marlow Hill, High Wycombe. This Assessment reviews any potential impact caused by the change in development type to that considered under the original site wide Acoustic Assessment submitted as part of the outline consent Ref. 12/06261/R4OUT.

The closest existing residential dwellings to this proposed development are to the North East, On Fair Ridge Further residential properties lie further toward the East but are shielded behind the recent Hungry Caterpillar Day Nursery.

Residential properties are shown in red



## 2.0 BS4142: 2014 Methods for rating and assessing industrial and commercial sound

BS4142: 2014 has been used to assess the plant items and the workshop associated with the new development.

BS4142 provides a way of assessing noise from new noise sources against the existing noise climate.

This document requires that where possible, background noise levels be measured at the assessment location. The guidance points out that 'the objective is not simply to ascertain

a lowest measured background sound level, but rather to quantify what is typical during particular time periods.

BS4142 defines the noise source assessed as the 'specific' noise. This would be any new external plant

When comparing the specific noise against existing background levels, BS4142 highlights that certain acoustic features (tonality, impulsivity, intermittency etc) can increase any significance of impact and penalties should be applied to the specific noise level, in accordance with the guidance in BS4142, to provide the Rating Level of the noise source.

As the plant is unknown at this stage, no acoustic features can be taken into consideration, this will have to be reviewed once plant details are available.

A comparison of Rating Level to background noise level indicates how significant the impact of a new noise source is, or will be, at a receptor under assessment. If the Rating Level is higher than the background noise level, then there may be an impact:

- A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.
- A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context.
- The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.

### **3.0 World Health Organisation (WHO)**

WHO 1999 document 'Guidelines for Community Noise' (WHO) proposes guideline values for noise both inside and outside dwellings. The WHO document identifies a reasonable external noise climate over the period of 07:00 to 23:00hrs as  $L_{Aeq,T}$  50-55dB.

Based on guidance in the WHO document, the attenuation of external to internal noise levels provided by a window partially open for ventilation is up to 15dB, therefore the internal noise levels would be around  $L_{Aeq,T}$  35-40dB. This aligns with the BS8233 guidance on resting activity in living rooms ( $L_{Aeq,T}$  35dB) and dining activity in dining rooms ( $L_{Aeq,T}$  40dB).

### **4.0 Noise Survey and Data**

Please refer to Jacobs Acoustic Assessment for tables of recorded Noise levels. These are relatively high with daytime levels ranging between circa 60 and 70+ dB. As stated in the original report the noise climate is dominated by road traffic noise from the M40 to the South of the site and the A404 to the North West.

## 5.0 Assessment of Plant items and Workshop using BS4142

The 'Noise Design Advice' document states that assessments will be in accordance with BS4142: 2014 and that the rating level should be 5dB below background (LA90).

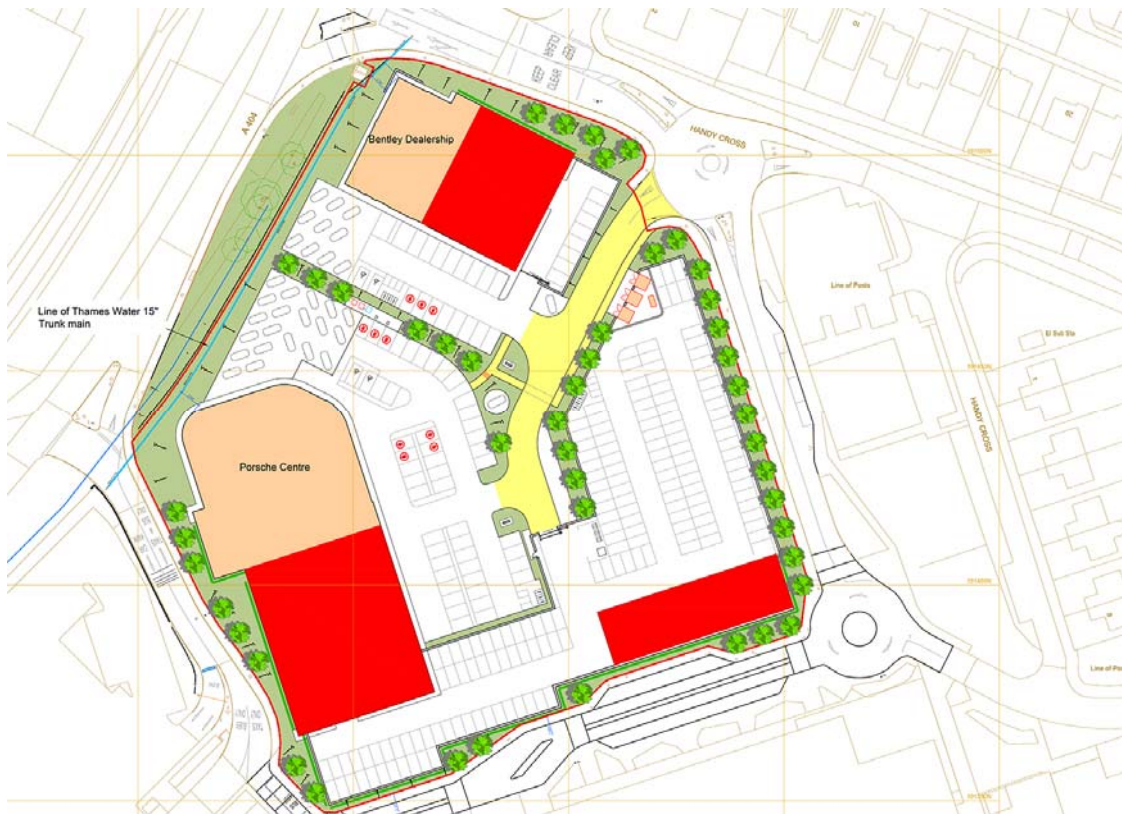
Opening and operating hours of the showroom for all the staff and general public will be:

Monday - Friday: 07:00 - 19:00

Saturday: 08:00 - 17:00

Sunday: 11:00 - 16:00

Site layout with Workshop and Car Valeting areas shown in red.



## 6.0 Plant Noise Limits

The development will only operate during the daytime period. However, if any plant items are to operate during the night time, then the plant noise limit at the red line boundary for night time will have to be adhered to.

### Proposed plant noise limits

Period	Typical lowest measured at red line boundary	Highest Allowable Rating Level at red line boundary
Daytime (07:00-23:00)	55dB	50dB
Night time (23:00-07:30)	43dB	38dB

All combined plant items associated with this proposed development should therefore be limited to a Rating Level of 50dB at the boundary during the daytime. If any plant items are to operate during the night time, then the Rating Level for these items of plant will need to be limited to 38dB.

### 7.0 Workshop Noise Assessment

The proposed workshop areas are where most of the noise associated with the development is likely to be generated.

The residential dwellings to the North East of the Bentley workshop are the nearest noise sensitive receptors, 70m away. The residential properties further to the East are screened by the Day Nursery development and much further away. Therefore, we have assessed the predicted noise impact from the workshop upon the dwellings to the NE.

To predict noise levels breaking out of this area, we have used previously measured noise levels from car garage activities, such as, wheels being changed with impact wrenches and tyres being removed and refitted to the rims. These previously measured noise levels from car garage activities are contained in Appendix E

Average noise levels from workshop activities predicted at the façades of the closest residential dwellings would be around 51dB  $L_{Aeq}$  with corresponding maximum levels up to 60dB  $L_{AFmax}$ , but this would only be for short periods and during the daytime only. This is lower than the current background noise level.

The measurements of the car garage activities were obtained in an open bay garage with its roller shutter in the up position. Therefore, this is an example of a worst-case assessment. The noise at the houses would be much lower with the doors shut. The proposal does include full automated operation of workshop doors so noise outbreak will be much lower.

At the site boundary there is significant tree planting proposed, This should give further attenuation of circa 8 decibel reduction.



The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.

Given that the predicted rating level is well below the background sound level, this is a strong indication that workshop noise will have a low impact upon the existing nearest noise sensitive receptors.

**8.0 Customer Parking and Staff / Visitor Parking**

The following example has been done by using measured noise levels of vehicles manoeuvring, including pass byes, reversing, and parking, as well as doors and car boots slamming.

Noise source location	Distance between noise and receptor (m)	Predicted L <sub>Seq</sub> at receptor
Customer Parking	28	44
Staff / Visitor Parking	30	39

Worst case predicted noise levels from vehicle activities in the car parks are significantly lower than both the WHO guideline values (LA<sub>eq,T</sub> 50-55dB) and the current ambient noise levels. Distance to sensitive receptors is more than double the test example and car park areas have other screening features will attenuate noise further.

This is therefore a very strong indication that car park activities will have no impact upon the existing nearest noise sensitive receptors, and therefore, we do not believe that the location of the Staff/Visitor Parking or the Customer Parking will give rise to adverse noise complaints.

Also, the nearest noise sensitive receptors re already subject to road traffic noise. Therefore, the location of the new car parks would not be changing the character of the noise. It should also be considered that with the change to Electric vehicles engine start up and running noise will be negated reducing noise impact further.

**9.0 Transporter vehicles**

Parts transporter vehicle, (possibly a light goods vehicle (LGV) or a heavy goods vehicle (HGV)) will arrive and depart 5 days per week and that the vehicle transporter vehicle, (a HGV) will arrive and depart 6 times per week.

Parts delivery occurs overnight, this is done by specialist vehicles with night silenced reverse alarms. Drop off point and turning are within the site.

It is worth noting that the established Waitrose development already attracts considerable HGV traffic. Including out of hours deliveries

Therefore, HGV's and LGV's associated with the proposed development are likely to have a low noise impact upon the closest residential dwellings.

### ***10.0 External display parking***

Most of the noise from the display areas will be from doors being opened and closed, rather than engine noise.

Noise levels associated with the display areas are likely to have a very low noise impact upon the closest residential dwellings as they will be even less noticeable than the general car park activities assessed above.

### ***11.0 Conclusion***

The existing noise climate is dominated by road traffic noise from the M40 and A404. The previous Acoustic Assessment concluded that for properties considered in the vicinity of the development, the impact of traffic noise will range from minor benefit to no change. The conclusion of this supplementary assessment is that the change from office development to Sui Generis Motor retail has no impact on the original conclusions.



# Acoustic Assessment

WYCOMBE SPORTS CENTRE SITE REDEVELOPMENT



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25th May 2012





**Wycombe District Council**

**Handy Cross Site**

**Noise Assessment**

**May 2012**





**Document Control Sheet**

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It is proposed to develop a site in High Wycombe currently being used as a Sports Centre. The development would consist of a Coachway / park and ride facility, a food store and offices together with the relocation of the Sports Centre.

The proposed site is triangular in shape, and is bounded by the M40 to the south, a highway depot and residential area to the east and north east, and the A404 Marlow Hill road along the north western edge of the site. There are four schools in the immediate vicinity of the site, as well as a number of large open areas made up of school playing fields. To the south west of the site, the area is mixed commercial.

A 2009 Planning Application for the development site was previously approved and it was considered that overall there was a negligible noise impact for properties as a consequence of the increased road traffic with the development. However, the internal layout of the site has changed to incorporate a food store and a new proposed year of opening, prompting a revised planning application. The application is being made by Wycombe District Council (WDC).

The development will have an effect on the noise climate of the area. Jacobs was commissioned to undertake a noise assessment of the proposed development. Consideration has been given to the effects of road traffic movements on the highway network and on the proposed site. The traffic movements are not significantly different from those reported in 2009. Given the location of the food store it is not considered that noise as a consequence of its operation will be an issue.

To aid understanding of this report, Appendix A details some definitions of the terms used.

## 2 Assessment Criteria

### 2.1 IOA/IEMA Draft Guidance

The Institute of Acoustics and Institute of Environmental Management and Assessment have produced draft guidance on noise impact assessment (Guidelines for Noise Impact - Consultation Draft, prepared jointly by the Institute of Environmental Management and Assessment (IEMA) and the Institute of Acoustics (IOA), 2002). An example of how the noise impact at a property/location may be categorised according to the changes in noise level are reproduced in Table 2-A below. Table 2-A also provides descriptions of the subjective response associated with the noise changes.

Noise Change	Subjective Response	Category
0	Imperceptible	Negligible
0.1 – 2.9	Barely perceptible	Slight
3 – 4.9	Noticeable	Moderate
5 – 9.9	Up to a doubling or halving of the perceived loudness	Substantial
10.0 or more	A doubling or more of the perceived loudness	Severe

**Table 2-A Noise change criteria**

In order to determine the significance of an impact, the sensitivity of the receptor should also be taken into account. Table 2-B details the categories of sensitivity adopted in this assessment.

Receptor	Sensitivity
Dwellings, hospitals, schools, churches and open spaces where existing ambient noise levels are low	High
Commercial premises	Moderate
Industrial premises and warehouses	Low

**Table 2-B Sensitivity of Receptor**

Table 2-C details a matrix to give an indication of the significance of the predicted noise impact. Various factors such as time of day, nature of the noise source and frequency of occurrence must also be considered to determine whether the impact should be placed in a higher or lower category. From a summary of the effects at relevant receptors, a judgement is made of the overall noise impact.

Magnitude of Impact	Sensitivity of Receptor		
	High	Moderate	Low
Severe	Major	Major/Moderate	Moderate/Minor
Substantial	Major/Moderate	Moderate	Minor
Moderate	Moderate	Moderate/Minor	Minor/Negligible
Slight	Minor	Minor/Negligible	Negligible
Negligible	Negligible	Negligible	Negligible

**Table 2-C Significance Matrix**



The significance of impacts will be assigned one of the following categories; major beneficial, moderate beneficial, minor beneficial, negligible effect, minor adverse, moderate adverse or major adverse.

**2.2 BS 4142: 1997**

The likelihood of complaints about noise from industrial establishments, made by persons living in the vicinity, is usually assessed using the procedures laid out in BS 4142: 1997 - ‘Method for rating industrial noise affecting mixed residential and industrial areas’.

In this method, a comparison is made between the noise attributable to the development, expressed as  $L_{Aeq}$  (defined in BS 4142 as the ‘specific noise’), adjusted to take into account of tonal or impulsive characteristics (‘rating level’), and the existing background noise level, expressed as  $L_{A90}$ . Where the characteristics of the operational noise are such that it tends to attract attention (i.e. tonal or impulsive noise), a +5 dB correction is made in the assessment.

The standard states, “A difference of around +10 dB or more indicates that complaints are likely. A difference of around +5 dB is of marginal significance. If the rating level is more than 10 dB below the measured background noise level, this is a positive indication that complaints are unlikely”.

This standard has been used extensively by local authorities to rate noise from fixed installations.

**2.3 Design Manual for Roads and Bridges (DMRB)**

Section 3 of DMRB provides guidance on the magnitude of impacts for traffic noise. Tables 2-D and 2E detail the classification of impacts for traffic noise for short term and long term change provided within DMRB. It is considered that the classifications are appropriate for this scheme. However the different noises change classification to those in Table 2-A should be noted.

Noise Change $L_{A10,18hr}$	Magnitude of Impact
0	No change
0.1 – 0.9	Negligible
1 – 2.9	Minor
3 – 4.9	Moderate
5+	Major

**Table 2-D Noise change criteria, short term**

Noise Change $L_{A10,18hr}$	Magnitude of Impact
0	No change
0.1 – 2.9	Negligible
3 – 4.9	Minor
5 – 9.9	Moderate
10+	Major

**Table 2-E Noise change criteria, long term**

DMRB identifies that a change in traffic flow of +25% (increase) or –20% (decrease) is required to produce a change in noise level of 1 dB(A). The human ear responds to continuous sound sources (such as traffic noise) in the following way:

- *A 1 dB increase is the smallest audible change in level. It would be noticed only if the two sounds were present in quick succession;*
- *A 3 dB increase is the smallest audible change that could be perceived over a period of time;*
- *A 10 dB increase represents a doubling of loudness to the ear. This is true whether the change is from 30 to 40 dB or from 70 to 80 dB and corresponds to a 10-fold increase in sound energy.*

## **2.4 Building Bulletin 93 (BB 93)**

BB 93 provides guidance and recommendations on acoustics for new schools. In respect of playgrounds, it details that noise levels in unoccupied playgrounds, playing fields and other outdoor areas should not exceed 55 dB  $L_{Aeq,30min}$  and there should be at least one area suitable for outdoor teaching activities where noise levels are below 50 dB  $L_{Aeq,30min}$ .

### 3 Noise Survey Results

The noise environment in the vicinity of the site is considered to be dominated by road traffic noise particularly from vehicles on the M40 and A404 Marlow Hill, this has not changed significantly since the previous noise survey was undertaken. The previous noise survey data is therefore considered valid and is reported below.

In order to give an indication of existing background noise levels, noise measurements were undertaken in the vicinity of the site. It had been intended to undertake measurements at the nearest residential receptors to the east of the site. Unfortunately, it was not possible to obtain the necessary permissions to monitor at these locations. Instead, measurements were undertaken at the Highways Depot neighbouring the residential properties. The normal operation of the Depot is 07:00 to 19:00, from Monday to Friday and on Saturday mornings. The depot is also open during the weekend when salt is required, or an incident occurs on the motorway.

Measurements were undertaken continuously between 14:15 on 29 October 2009 and 10:30 on 5 November 2009. A Rion NL-32 integrating logging sound level meter was used for the measurement exercise. The instrument microphone was at a height of approximately 1.5 m above ground level, in a free field location. The instrument was calibrated at the start of the survey and checked at the end. There was no significant change in calibration.

No incidents occurred during this period which required the Depot to open outside normal operating hours.

Weather conditions were generally cloudy with light to moderate winds and occasional rainfall. Rain was noted for the following periods:

- 30<sup>th</sup> October 22:00 – 31<sup>st</sup> October 01:00;
- 1<sup>st</sup> November 06:00 – 1<sup>st</sup> November 14:00;
- 3<sup>rd</sup> November 00:00 – 3<sup>rd</sup> November 15:00;
- 4<sup>th</sup> November 16:00 – 4<sup>th</sup> November 17:00;
- 5<sup>th</sup> November 00:00 – 5<sup>th</sup> November 03:00.

The results of the monitoring for the periods the Depot was not in operation are presented in Appendix B.

The lowest  $L_{A90}$  background noise level recorded was 43 dB for the 03:30 to 03:45 period on the 1<sup>st</sup> November. Inspection of data from weather stations indicates wind speeds in the order of 3 to 5 m/s during that period.

Daytime and evening background levels were generally above 60 dB. The lowest evening  $L_{A90}$  background noise level recorded was 56 dB on the 2<sup>nd</sup> November for the 22:30 to 22:45 period. For the daytime, the lowest  $L_{A90}$  background noise level recorded was 60 dB on Sunday 1<sup>st</sup> November for the 07:00 – 07:15 period.

**4.1 Road Traffic (Highway Network)**

Table 5-A details road traffic flows on the highway network in the vicinity of the development for 2018. The traffic movements are not significantly different from those reported in 2009, varying by less than one percent across the road network with the exception of the Sports Centre Access Road. The highways selected below have greatest change in noise level as a consequence of the development.

Highway	18 hour AAWT Road Traffic Flows	
	Without Development	With Development
A404 N of Handy Cross	29326	33224
A404 at Coachway	29326	31614
Sports Centre Access	5645	11542
A404 N of Sports Centre	31381	38105
Marlow Hill, N of Marlow Road	52797	56332
Marlow Hill, N of Daws Hill	43070	46366
A404S, south of slip	47505	48654
Cressex Road E of Cressex Link	5180	4280
Cressex Road E of New Road	5175	4249
M40 East of J4	120514	121012
M40 West of J4	10762	108399

**Table 5-A Road traffic with and without the development**

Calculation of Road Traffic Noise 1988 (CRTN), produced by the Department of Transport, provides a methodology for predicting noise levels generated by road traffic. The methodology considers a variety of different factors when predicting road traffic noise. Factors include traffic flows, composition of vehicles, topography, type of road and screening.

The traffic movements are not significantly different from those previously reported varying by less than one percent across the road network with the exception of the Sports Centre Access Road. As a consequence the predicted noise levels are unaltered from those previously reported, with the exception of the Sports Centre Access Road which increases in noise level by 0.2 dB.

Consideration has been given to road traffic movements with and without the development in place for receptors in close proximity to the site. Any noise level increases with the development in place, compared to the situation without the development, are generally less than 1 dB. Some properties experienced decreases with the scheme, due to the screening effects of the large buildings on the development. For the properties considered, the impact will range from a minor benefit, through no change, to a minor adverse impact. It is considered that, overall; there would be a negligible noise impact.

The existing noise climate is dominated by road traffic noise and as the traffic flows have not changed significantly it is considered that the previous noise surveys are still acceptable.

Due to the location of the food store it is not considered that noise as a consequence of its operation will be an issue.

The previous report concluded that for the properties considered in the vicinity of the development the impact of traffic noise will range from a minor benefit, through no change, to a minor adverse impact. With the majority of properties in the vicinity of the site will experience a noise benefit, albeit a negligible one. Based on the criteria detailed in DMRB, it was considered that overall there was a negligible noise impact for properties as a consequence of increased road traffic with the development in place. Based upon the current traffic assessment and revised site layout it is considered that these conclusions are still valid.



## Appendix A Definitions

The sound wave travelling through the air is a regular disturbance in ambient atmospheric pressure. These pressure fluctuations, when of frequencies within the audible range, are detected by the human ear which passes nerve responses to the brain, producing the sensation of hearing. Noise has been defined in a variety of ways and is very much dependant on factors such as the listener's attitude to the source of the sound and their environment, but is essentially any sound that is unwanted by the recipient.

It is impossible to measure the degree of nuisance caused by noise directly, as this is essentially a subjective response of the listener, but it is possible to measure the "loudness" of that noise. Loudness is related to both the sound pressure (the magnitude of the maximum excursion of the pressure wave around the ambient atmospheric pressure) and the frequency, both of which can be measured.

The human ear is sensitive to a wide range of sound levels; the sound pressure level of the threshold of pain is over a million times that of the quietest audible sound. In order to reduce the relative magnitude of the numbers involved, a logarithmic scale of decibels (dB) based on a reference level of the lowest audible sound is used.

Also, the response of the human ear is not constant over all frequencies. It is therefore usual to weight the measured frequency to approximate human response. This is achieved by using filters to vary the contribution of different frequencies to the measured level. The "A" weighting network is the most commonly used and has been shown to correlate closely to the non-linear and subjective response of humans to sound. The use of this weighting is denoted by a capital A in the unit abbreviation (i.e.  $L_{Amax}$ ,  $L_{Aeq}$ ,  $L_{A90}$  etc.) or a capital A in brackets after a dB level (i.e. 3 dB(A)).

**Sound Pressure Level:** The sound pressure level ( $L_p$  or SPL) is the instantaneous acoustic pressure and is measured in decibels (dB). Since the ear is sensitive to variations in pressure, rather than source power or intensity, the measurement of this parameter gives an indication of the impact on people. The SPL is defined as:

$$SPL = 10 \log_{10} \left( \frac{p^2}{p_{ref}^2} \right) \text{ or } SPL = 20 \log_{10} \left( \frac{p}{p_{ref}} \right)$$

where:

$p$  is the rms pressure of the sound in question (in pascals)

$p_{ref}$  is the reference sound pressure, defined as the limit of human audibility ( $2 \times 10^{-5}$  Pa)

**Sound Power Level:** The sound power level ( $L_w$  or PWL) is a measure of the acoustic energy output of a source and is a property of the source itself. The PWL is also measured in dB and is given by:

$$PWL = 10 \log_{10} \left( \frac{W}{W_0} \right)$$

where:

$W$  is the sound power of the source (in watts)  
 $W_0$  is the reference sound power ( $10^{-12}$  watts)

**$L_{eq}$ :** The  $L_{eq}$  is defined as the equivalent continuous sound level and is the most widely used parameter for assessing environmental noise. Since this descriptor is a type of average level, it must by definition have an associated time period over which the measurement is referring to. This is often included in the abbreviation in the form  $L_{eq, T}$ , where  $T$  is the time period (i.e.  $L_{Aeq, 5 \text{ min}}$ ). The formula for calculating the  $L_{eq}$  is:

$$L_{eq} = 10 \log_{10} \left( \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p^2}{p_{ref}^2} . dt \right)$$

In practice, since most modern sound level meters are digital and hence take periodic samples of the sound pressure level, the  $L_{eq}$  will be the logarithmic average of all the SPL samples taken in the measurement period.

**$L_{max}$ :** The  $L_{max}$  is defined as the maximum rms level recorded during a measurement period.

**$L_n$ :** The  $L_n$  is a statistical descriptor and refers to the level that is exceeded for  $n\%$  of the time during a particular measurement period. Again, the measurement period that the descriptor refers to is often included in the abbreviation in the format  $L_{n, T}$ . Two of the most commonly used statistical descriptors used for environmental noise assessments are the  $L_{90}$  and the  $L_{10}$ . These are described in more detail below.

**$L_{10}$ :** The  $L_{10}$  refers to the level exceeded for 10% of the measurement period and is commonly used in assessing road traffic noise as it has been found to give a good indication of the subjective human response to this type of noise.

**$L_{90}$ :** The  $L_{90}$  refers to the level exceeded for 90% of the measurement period and is widely considered to represent background noise, or the underlying noise in an area between noisy events (such as cars passing etc.).

**Free-Field:** The term “free-field” refers to noise levels that have been measured or predicted in the absence of any influence of reflections from nearby surfaces. In practice, a measurement is considered to be free-field if it was taken at a distance of over 3.5 m from any reflecting surfaces.

**Façade Level:** Façade levels refer to levels taken at a distance of between 1 and 3.5 m of the façade of a building. The difference between the façade and free-field level will depend on the distance from the reflecting surface, but is generally accepted to be approximately 2.5 dB(A).

## Appendix B Noise Monitoring Results

Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Thursday 29.10.09	19:00 – 19:15	67.7	70.4	69.4	65.3
	19:15 – 19:30	67.9	72.7	69.5	65.3
	19:30 – 19:45	68.0	71.1	69.9	65.2
	19:45 – 20:00	67.7	71.1	69.8	64.5
	20:00 – 20:15	67.2	70.3	69.2	63.6
	20:15 – 20:30	67.5	70.7	69.4	64.4
	20:30 – 20:45	67.8	71.0	69.7	64.7
	20:45 – 21:00	67.3	70.7	69.3	64.5
	21:00 – 21:15	67.4	70.6	69.5	63.8
	21:15 – 21:30	66.2	70.4	68.6	62.0
	21:30 – 21:45	66.1	70.6	68.5	61.3
	21:45 – 22:00	65.1	69.6	67.6	60.2
	22:00 – 22:15	64.5	69.7	67.4	59.6
	22:15 – 22:30	64.2	69.0	66.9	59.2
	22:30 – 22:45	64.4	69.3	67.4	59.9
	22:45 – 23:00	64.2	69.2	67.2	58.6
	23:00 – 23:15	63.5	68.3	66.7	57.9
	23:15 – 23:30	63.4	68.9	66.6	57.3
	23:30 – 23:45	63.3	69.2	66.6	57.2
23:45 – 00:00	62.9	69.4	66.6	55.9	
Friday 30.10.09	00:00 – 00:15	61.9	68.2	65.5	54.7
	00:15 – 00:30	61.5	68.2	65.5	53.7
	00:30 – 00:45	61.2	68.4	65.2	52.2
	00:45 – 01:00	60.6	67.8	64.5	52.4
	01:00 – 01:15	60.4	67.8	64.6	52.0
	01:15 – 01:30	60.7	68.2	65.0	50.0
	01:30 – 01:45	60.2	68.1	64.7	49.4
	01:45 – 02:00	60.8	68.7	64.9	50.5
	02:00 – 02:15	60.1	68.3	64.7	49.0
	02:15 – 02:30	59.9	68.0	64.8	48.1
	02:30 – 02:45	60.7	68.8	65.3	48.8
	02:45 – 03:00	59.7	68.0	64.1	49.8
	03:00 – 03:15	61.3	69.0	65.6	50.7
	03:15 – 03:30	60.3	68.2	64.8	49.2
	03:30 – 03:45	59.5	67.8	63.8	48.3
	03:45 – 04:00	60.7	68.5	65.0	50.6
	04:00 – 04:15	61.6	68.7	66.0	51.3
	04:15 – 04:30	62.6	68.9	66.7	53.7
	04:30 – 04:45	62.8	69.3	66.8	53.6
04:45 – 05:00	63.2	69.6	66.9	54.9	
05:00 – 05:15	64.3	69.7	67.7	57.1	
05:15 – 05:30	65.2	70.0	68.2	59.4	
05:30 – 05:45	65.6	70.1	68.5	60.3	

Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Friday 30.10.09	05:45 – 06:00	66.6	71.2	69.3	61.4
	06:00 – 06:15	67.6	71.3	70.0	63.1
	06:15 – 06:30	68.5	72.0	70.4	65.8
	06:30 – 06:45	69.1	72.4	70.9	66.3
	06:45 – 07:00	69.2	71.6	70.7	66.9
	19:00 – 19:15	68.0	71.2	69.9	65.1
	19:15 – 19:30	67.8	71.0	79.8	64.6
	19:30 – 19:45	67.8	71.1	69.6	65.4
	19:45 – 20:00	67.6	70.9	69.5	65.0
	20:00 – 20:15	67.6	71.5	69.4	64.2
	20:15 – 20:30	66.8	70.3	68.8	63.5
	20:30 – 20:45	66.8	70.4	69.1	62.5
	20:45 – 21:00	66.3	70.1	68.3	63.0
	21:00 – 21:15	65.7	69.8	68.1	61.6
	21:15 – 21:30	66.1	69.9	68.6	62.1
	21:30 – 21:45	66.7	70.5	68.9	63.2
	21:45 – 22:00	66.1	70.5	68.3	61.9
	22:00 – 22:15	65.8	70.4	68.2	61.5
	22:15 – 22:30	64.8	69.9	67.8	59.2
	22:30 – 22:45	65.0	70.4	67.7	60.0
	22:45 – 23:00	64.9	69.9	67.7	59.5
	23:00 – 23:15	64.0	68.9	66.8	58.4
	23:15 – 23:30	63.9	68.9	66.8	58.6
23:30 – 23:45	63.8	69.1	66.8	57.4	
23:45 – 00:00	63.4	68.9	66.8	57.7	
Saturday 31.10.09	00:00 – 00:15	62.9	68.7	66.5	55.8
	00:15 – 00:30	62.4	69.1	66.0	55.5
	00:30 – 00:45	61.8	68.5	65.6	54.3
	00:45 – 01:00	61.5	68.5	65.5	52.2
	01:00 – 01:15	61.7	68.1	65.5	53.2
	01:15 – 01:30	60.8	67.8	64.7	52.4
	01:30 – 01:45	60.0	68.0	64.5	49.4
	01:45 – 02:00	61.0	68.7	65.4	48.0
	02:00 – 02:15	61.0	68.7	65.4	51.2
	02:15 – 02:30	60.0	68.9	64.5	47.8
	02:30 – 02:45	60.6	68.9	65.1	49.4
	02:45 – 03:00	60.2	68.0	64.9	47.7
	03:00 – 03:15	60.4	68.2	64.9	49.4
	03:15 – 03:30	59.3	67.9	64.3	47.8
	03:30 – 03:45	60.8	68.4	65.3	49.5
	03:45 – 04:00	60.2	67.7	64.4	49.3
	04:00 – 04:15	61.9	69.3	66.5	50.7
04:15 – 04:30	62.0	68.8	66.6	49.0	
04:30 – 04:45	61.5	68.4	66.0	49.5	
04:45 – 05:00	61.8	68.7	66.0	51.7	

Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Saturday 31.10.09	05:00 – 05:15	62.4	69.0	66.5	51.9
	05:15 – 05:30	63.5	70.0	67.4	53.3
	05:30 – 05:45	62.7	69.0	66.6	54.1
	05:45 – 06:00	63.2	69.2	67.0	54.1
	06:00 – 06:15	63.6	69.5	67.0	56.3
	06:15 – 06:30	64.2	69.7	67.2	58.1
	06:30 – 06:45	65.2	70.0	68.2	59.8
	06:45 – 07:00	64.7	70.4	67.8	58.9
	13:00 – 13:15	69.3	72.2	71.0	66.9
	13:15 – 13:30	69.4	72.4	71.0	66.9
	13:30 – 13:45	69.4	72.5	71.0	66.9
	13:45 – 14:00	69.1	71.8	70.7	66.5
	14:00 – 14:15	69.1	72.0	70.8	66.7
	14:15 – 14:30	69.3	72.1	70.8	66.9
	14:30 – 14:45	69.3	72.1	70.9	66.9
	14:45 – 15:00	69.2	71.7	70.7	66.8
	15:00 – 15:15	69.0	72.2	70.7	66.5
	15:15 – 15:30	69.2	71.9	70.8	67.0
	15:30 – 15:45	69.2	71.8	70.9	66.9
	15:45 – 16:00	69.3	72.1	70.9	66.9
	16:00 – 16:15	69.5	72.1	71.1	67.1
	16:15 – 16:30	69.6	72.1	71.1	67.8
	16:30 – 16:45	69.8	72.1	71.2	67.7
	16:45 – 17:00	69.6	72.3	71.1	67.2
	17:00 – 17:15	69.3	72.1	70.9	66.7
	17:15 – 17:30	69.3	71.7	70.7	67.4
	17:30 – 17:45	69.2	71.6	70.5	67.6
	17:45 – 18:00	69.6	72.6	71.1	67.5
	18:00 – 18:15	69.3	71.9	70.8	66.9
	18:15 – 18:30	69.7	72.0	71.0	67.9
	18:30 – 18:45	69.1	72.0	70.8	66.5
	18:45 – 19:00	68.9	72.0	70.7	65.9
	19:00 – 19:15	68.9	72.0	70.7	65.6
19:15 – 19:30	68.1	71.2	70.1	65.2	
19:30 – 19:45	67.8	71.1	69.8	64.7	
19:45 – 20:00	66.9	70.4	69.0	63.6	
20:00 – 20:15	66.5	70.3	68.7	62.3	
20:15 – 20:30	66.2	70.1	68.6	62.3	
20:30 – 20:45	66.0	70.5	68.6	61.1	
20:45 – 21:00	65.2	69.7	67.7	60.9	
21:00 – 21:15	64.9	70.0	67.6	59.4	



Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Saturday 31.10.09	21:15 – 21:30	64.8	69.8	67.8	58.7
	21:30 – 21:45	64.8	69.6	67.4	59.5
	21:45 – 22:00	64.9	69.5	67.5	60.1
	22:00 – 22:15	64.7	69.5	67.5	60.1
	22:15 – 22:30	64.7	69.6	67.6	59.4
	22:30 – 22:45	64.6	69.2	67.5	58.4
	22:45 – 23:00	64.9	70.0	67.6	59.2
	23:00 – 23:15	64.6	70.0	67.5	59.3
	23:15 – 23:30	64.9	69.9	67.8	60.0
	23:30 – 23:45	64.1	69.8	67.3	58.9
	23:45 – 00:00	63.5	68.8	66.7	57.8
Sunday 01.11.09	00:00 – 00:15	63.6	68.9	66.7	58.1
	00:15 – 00:30	62.9	68.9	66.1	56.9
	00:30 – 00:45	61.2	67.2	64.7	54.0
	00:45 – 01:00	61.8	68.3	65.8	52.5
	01:00 – 01:15	62.8	68.9	65.9	55.4
	01:15 – 01:30	61.7	68.2	65.6	54.9
	01:30 – 01:45	60.9	68.2	65.2	51.1
	01:45 – 02:00	59.1	67.3	63.5	47.1
	02:00 – 02:15	59.8	67.3	64.2	47.3
	02:15 – 02:30	58.9	67.4	63.7	45.5
	02:30 – 02:45	58.2	67.0	62.8	44.5
	02:45 – 03:00	59.0	67.9	63.6	45.6
	03:00 – 03:15	58.1	67.6	62.8	45.8
	03:15 – 03:30	57.7	66.6	62.1	46.1
	03:30 – 03:45	58.1	67.1	62.9	43.0
	03:45 – 04:00	57.3	66.2	61.7	44.2
	04:00 – 04:15	59.4	67.3	64.2	46.9
	04:15 – 04:30	59.2	67.5	63.8	46.7
	04:30 – 04:45	59.2	67.5	63.9	46.5
	04:45 – 05:00	60.5	68.1	64.8	49.0
	05:00 – 05:15	61.2	67.8	65.3	51.5
	05:15 – 05:30	61.0	68.6	65.4	50.1
	05:30 – 05:45	62.1	68.8	66.2	53.2
	05:45 – 06:00	62.4	69.0	66.1	52.4
	06:00 – 06:15	62.7	69.1	66.3	55.0
	06:15 – 06:30	64.3	69.9	67.4	57.0
	06:30 – 06:45	63.8	69.6	67.2	56.7
	06:45 – 07:00	65.1	70.3	68.2	59.6
07:00 – 07:15	65.2	70.9	68.2	59.6	
07:15 – 07:30	65.9	71.3	68.9	60.7	
07:30 – 07:45	65.9	71.1	68.9	60.7	
07:45 – 08:00	65.9	70.3	68.3	61.4	
08:00 – 08:15	65.9	70.4	68.5	61.5	

Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Sunday 01.11.09	08:15 – 08:30	66.0	70.1	68.2	62.9
	08:30 – 08:45	66.8	70.9	69.1	63.5
	08:45 – 09:00	66.2	69.7	68.4	63.1
	09:00 – 09:15	67.4	71.7	69.7	63.9
	09:15 – 09:30	67.6	71.1	69.6	64.9
	09:30 – 09:45	67.9	71.6	69.9	65.2
	09:45 – 10:00	67.1	70.7	69.0	64.2
	10:00 – 10:15	67.3	71.4	69.1	64.9
	10:15 – 10:30	67.9	72.1	69.9	65.3
	10:30 – 10:45	68.6	72.0	70.4	65.9
	10:45 – 11:00	68.4	71.6	70.1	66.3
	11:00 – 11:15	69.1	72.5	70.8	66.9
	11:15 – 11:30	70.2	73.1	71.7	68.4
	11:30 – 11:45	70.9	74.0	72.6	68.6
	11:45 – 12:00	71.4	74.4	72.9	69.5
	12:00 – 12:15	70.5	73.6	72.1	68.7
	12:15 – 12:30	70.9	74.0	72.4	68.9
	12:30 – 12:45	71.6	74.4	73.0	69.6
	12:45 – 13:00	71.7	74.8	73.4	69.5
	13:00 – 13:15	71.6	74.6	73.2	69.5
	13:15 – 13:30	71.7	75.2	73.2	69.3
	13:30 – 13:45	72.1	74.6	73.7	70.2
	13:45 – 14:00	71.4	74.3	73.0	69.0
	14:00 – 14:15	71.8	74.8	73.2	69.8
	14:15 – 14:30	71.8	74.7	73.4	69.7
	14:30 – 14:45	71.8	75.0	73.5	69.7
	14:45 – 15:00	71.9	74.5	73.4	70.0
	15:00 – 15:15	72.0	74.5	73.5	70.0
	15:15 – 15:30	71.8	74.6	73.2	70.1
	15:30 – 15:45	71.7	74.2	73.0	70.0
	15:45 – 16:00	71.7	74.1	73.0	70.1
	16:00 – 16:15	70.2	72.7	71.5	68.7
	16:15 – 16:30	71.1	73.4	72.3	69.5
	16:30 – 16:45	70.2	72.3	71.4	68.6
	16:45 – 17:00	70.9	73.2	72.0	69.6
	17:00 – 17:15	70.3	73.5	71.5	68.8
17:15 – 17:30	70.0	72.5	71.5	68.3	
17:30 – 17:45	69.6	72.0	70.9	68.3	
17:45 – 18:00	69.5	72.2	71.0	67.9	
18:00 – 18:15	68.8	71.4	70.1	67.4	
18:15 – 18:30	69.4	71.9	70.5	68.0	
18:30 – 18:45	69.0	71.9	70.3	67.7	
18:45 – 19:00	69.0	71.0	70.1	67.7	
19:00 – 19:15	69.4	71.7	70.5	68.2	
19:15 – 19:30	69.9	72.1	71.1	68.3	
19:30 – 19:45	69.7	72.2	71.2	67.9	

Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Sunday 01.11.09	19:45 – 20:00	70.1	72.3	71.5	68.1
	20:00 – 20:15	69.5	72.2	71.2	67.1
	20:15 – 20:30	69.1	72.4	71.0	66.3
	20:30 – 20:45	69.4	72.2	71.1	66.9
	20:45 – 21:00	69.3	72.1	71.0	66.9
	21:00 – 21:15	69.5	72.2	71.2	67.2
	21:15 – 21:30	69.1	71.9	70.8	66.4
	21:30 – 21:45	69.0	72.1	70.9	66.2
	21:45 – 22:00	68.6	71.6	70.4	65.4
	22:00 – 22:15	68.3	71.8	70.4	65.1
	22:15 – 22:30	67.6	71.2	69.8	63.8
	22:30 – 22:45	66.8	71.4	69.1	62.6
	22:45 – 23:00	66.5	70.9	69.1	62.1
	23:00 – 23:15	65.9	70.7	68.5	61.3
	23:15 – 23:30	64.9	69.9	68.2	58.8
	23:30 – 23:45	64.1	69.6	67.4	57.8
23:45 – 00:00	63.4	69.5	67.2	56.0	
Monday 02.11.09	00:00 – 00:15	62.3	69.7	65.9	54.6
	00:15 – 00:30	61.6	68.6	65.6	53.3
	00:30 – 00:45	62.0	68.4	65.7	55.1
	00:45 – 01:00	61.0	68.6	65.0	51.8
	01:00 – 01:15	60.7	67.8	65.0	50.1
	01:15 – 01:30	60.4	67.9	64.5	49.5
	01:30 – 01:45	60.4	69.1	64.6	50.4
	01:45 – 02:00	60.2	67.9	64.6	50.1
	02:00 – 02:15	59.4	67.9	63.5	48.4
	02:15 – 02:30	60.1	68.1	64.4	48.9
	02:30 – 02:45	58.9	67.9	63.5	46.6
	02:45 – 03:00	59.4	67.6	63.9	47.6
	03:00 – 03:15	60.0	68.0	64.5	49.3
	03:15 – 03:30	59.3	67.6	63.4	48.5
	03:30 – 03:45	59.7	67.6	64.0	48.2
	03:45 – 04:00	60.4	68.3	64.2	51.7
	04:00 – 04:15	60.3	67.9	64.5	50.8
	04:15 – 04:30	61.5	68.1	65.2	51.7
	04:30 – 04:45	63.3	69.0	66.9	56.2
	04:45 – 05:00	63.6	69.5	67.1	56.5
05:00 – 05:15	64.9	70.1	68.1	58.3	
05:15 – 05:30	66.2	71.0	68.8	61.0	
05:30 – 05:45	67.3	71.0	69.6	63.2	
05:45 – 06:00	68.2	72.1	70.5	64.3	
06:00 – 06:15	69.1	72.2	71.0	66.1	
06:15 – 06:30	70.0	72.7	71.6	67.5	
06:30 – 06:45	70.5	73.1	71.9	68.9	
06:45 – 07:00	70.5	72.5	71.6	69.3	

Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Monday 02.11.09	19:00 – 19:15	68.0	71.1	69.8	65.2
	19:15 – 19:30	67.7	71.2	70.0	64.3
	19:30 – 19:45	67.6	71.0	69.7	64.3
	19:45 – 20:00	67.2	71.1	69.6	63.5
	20:00 – 20:15	66.5	70.3	68.9	62.4
	20:15 – 20:30	66.1	70.0	68.6	62.0
	20:30 – 20:45	66.1	70.0	68.6	61.4
	20:45 – 21:00	65.3	69.6	68.2	60.0
	21:00 – 21:15	65.5	70.8	68.3	60.1
	21:15 – 21:30	65.5	69.9	67.9	60.5
	21:30 – 21:45	64.8	69.5	67.6	59.7
	21:45 – 22:00	64.7	69.6	67.5	59.2
	22:00 – 22:15	64.2	69.8	67.2	58.4
	22:15 – 22:30	63.8	69.5	66.9	57.1
	22:30 – 22:45	63.1	68.7	66.4	55.6
	22:45 – 23:00	63.3	69.5	66.9	55.8
	23:00 – 23:15	63.0	69.3	66.5	55.4
	23:15 – 23:30	62.4	68.6	66.0	54.3
	23:30 – 23:45	62.6	68.6	66.5	54.0
23:45 – 00:00	62.0	68.6	65.8	53.6	
Tuesday 03.11.09	00:00 – 00:15	61.8	69.7	65.8	52.3
	00:15 – 00:30	60.4	67.9	64.6	49.2
	00:30 – 00:45	60.4	67.8	64.4	49.7
	00:45 – 01:00	60.4	68.2	64.9	50.6
	01:00 – 01:15	60.5	68.6	64.8	49.8
	01:15 – 01:30	59.5	68.2	63.8	47.1
	01:30 – 01:45	58.8	68.7	63.3	42.8
	01:45 – 02:00	60.2	69.1	65.0	45.5
	02:00 – 02:15	59.8	68.1	64.1	46.9
	02:15 – 02:30	59.8	68.4	64.5	45.3
	02:30 – 02:45	60.3	68.8	64.8	48.4
	02:45 – 03:00	59.7	68.7	64.1	49.1
	03:00 – 03:15	59.6	68.4	64.0	49.5
	03:15 – 03:30	61.2	69.2	65.8	48.8
	03:30 – 03:45	60.3	68.2	64.7	48.8
	03:45 – 04:00	62.1	69.3	66.8	49.4
	04:00 – 04:15	62.4	70.0	66.8	52.3
	04:15 – 04:30	63.3	70.6	67.2	51.8
	04:30 – 04:45	63.2	69.7	67.5	52.0
04:45 – 05:00	64.1	70.5	68.0	55.4	
05:00 – 05:15	65.8	71.0	69.2	58.1	
05:15 – 05:30	65.6	70.7	68.8	59.4	
05:30 – 05:45	67.2	71.7	69.9	62.4	
05:45 – 06:00	67.7	71.9	70.3	63.2	
06:00 – 06:15	68.4	72.2	70.7	64.7	

Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Tuesday 03.11.09	06:15 – 06:30	69.9	72.7	71.6	67.3
	06:30 – 06:45	70.6	73.1	72.2	68.5
	06:45 – 07:00	70.9	73.2	72.2	69.3
	19:00 – 19:15	69.7	72.4	71.4	67.3
	19:15 – 19:30	69.6	72.3	71.2	67.2
	19:30 – 19:45	69.4	72.3	71.1	67.0
	19:45 – 20:00	69.2	72.5	71.3	66.4
	20:00 – 20:15	68.4	72.0	70.4	65.6
	20:15 – 20:30	68.1	72.0	70.3	64.4
	20:30 – 20:45	67.5	71.2	69.7	64.5
	20:45 – 21:00	67.1	71.4	69.4	63.7
	21:00 – 21:15	66.6	71.0	69.2	62.5
	21:15 – 21:30	66.4	71.1	68.9	62.1
	21:30 – 21:45	66.1	70.5	68.7	61.5
	21:45 – 22:00	65.7	70.2	68.5	60.5
	22:00 – 22:15	65.0	70.4	68.0	60.1
	22:15 – 22:30	65.1	70.3	68.0	60.6
	22:30 – 22:45	64.9	70.1	68.0	59.5
	22:45 – 23:00	65.1	70.3	67.8	60.7
	Wednesday 04.11.09	23:00 – 23:15	64.4	69.4	67.6
23:15 – 23:30		64.0	69.7	67.3	58.0
23:30 – 23:45		63.2	69.7	66.6	57.0
23:45 – 00:00		63.6	69.7	66.9	57.4
00:00 – 00:15		63.2	69.3	66.8	56.8
00:15 – 00:30		63.0	69.9	66.9	54.9
00:30 – 00:45		62.8	68.9	66.6	54.7
00:45 – 01:00		61.7	68.9	65.9	53.6
01:00 – 01:15		61.9	69.8	65.9	53.6
01:15 – 01:30		62.0	69.2	65.9	52.9
01:30 – 01:45		60.9	68.4	65.1	51.9
01:45 – 02:00		61.1	69.6	65.5	48.9
02:00 – 02:15		60.7	68.1	65.2	48.6
02:15 – 02:30		61.4	69.0	65.7	51.3
02:30 – 02:45		61.7	69.9	65.9	50.0
02:45 – 03:00		60.3	67.9	64.8	48.7
03:00 – 03:15		61.6	69.8	66.1	50.4
03:15 – 03:30		61.9	69.5	66.3	48.9
03:30 – 03:45		60.7	68.3	64.8	51.2
03:45 – 04:00		61.7	69.0	66.2	50.5
04:00 – 04:15	62.4	69.7	66.5	52.8	
04:15 – 04:30	63.5	70.2	67.4	55.0	
04:30 – 04:45	63.7	70.2	67.4	56.0	
04:45 – 05:00	64.0	69.9	67.6	55.9	
05:00 – 05:15	65.8	71.2	68.9	59.1	
05:15 – 05:30	66.2	70.7	68.9	60.6	

Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Wednesday 04.11.09	05:30 – 05:45	66.4	71.0	69.1	61.4
	05:45 – 06:00	67.8	71.7	70.3	63.4
	06:00 – 06:15	68.9	72.8	70.9	65.2
	06:15 – 06:30	70.1	72.8	71.7	67.7
	06:30 – 06:45	70.4	73.0	71.9	68.0
	06:45 – 07:00	70.8	73.4	72.2	68.9
	19:00 – 19:15	69.2	71.7	70.8	67.0
	19:15 – 19:30	68.6	71.7	70.4	65.9
	19:30 – 19:45	68.3	71.4	70.2	65.7
	19:45 – 20:00	68.2	71.5	70.2	65.1
	20:00 – 20:15	68.0	71.7	70.1	64.8
	20:15 – 20:30	67.4	70.9	69.5	64.2
	20:30 – 20:45	67.3	71.2	69.6	63.7
	20:45 – 21:00	66.6	70.7	69.0	62.9
	21:00 – 21:15	66.2	70.6	68.7	62.3
	21:15 – 21:30	66.3	70.7	68.7	62.3
	21:30 – 21:45	65.7	69.9	68.3	61.6
	21:45 – 22:00	65.5	69.8	68.2	61.2
	22:00 – 22:15	65.8	70.3	68.4	61.7
	22:15 – 22:30	64.8	69.9	67.6	60.4
22:30 – 22:45	64.6	69.6	67.6	59.3	
22:45 – 23:00	64.3	69.5	67.1	59.7	
23:00 – 23:15	64.9	69.5	67.8	60.3	
23:15 – 23:30	63.9	69.2	67.0	58.7	
23:30 – 23:45	63.6	69.2	66.9	57.3	
23:45 – 00:00	63.3	69.4	66.5	57.5	
Thursday 05.11.09	00:00 – 00:15	63.0	68.8	66.3	56.7
	00:15 – 00:30	62.4	68.7	66.2	55.5
	00:30 – 00:45	63.1	69.8	66.9	55.7
	00:45 – 01:00	62.5	70.0	66.2	55.1
	01:00 – 01:15	60.7	68.2	64.6	51.9
	01:15 – 01:30	61.8	69.0	65.8	53.6
	01:30 – 01:45	62.0	69.6	66.1	53.4
	01:45 – 02:00	61.6	69.9	65.8	51.7
	02:00 – 02:15	61.3	69.0	65.9	50.4
	02:15 – 02:30	61.4	69.3	65.7	48.5
	02:30 – 02:45	62.5	69.7	66.7	52.5
	02:45 – 03:00	61.3	68.8	65.5	51.9
	03:00 – 03:15	61.6	69.6	66.1	51.7
	03:15 – 03:30	61.5	69.2	65.7	50.3
	03:30 – 03:45	61.9	69.2	66.3	52.6
	03:45 – 04:00	61.5	69.6	65.7	48.1
04:00 – 04:15	62.5	69.9	66.6	53.9	
04:15 – 04:30	63.6	69.9	67.6	54.8	
04:30 – 04:45	63.9	70.7	67.7	56.2	

Date	Time Period	Noise Levels dB			
		L <sub>Aeq</sub>	L <sub>A1</sub>	L <sub>A10</sub>	L <sub>A90</sub>
Thursday 05.11.09	04:45 – 05:00	64.9	70.6	68.2	58.6
	05:00 – 05:15	65.8	71.3	68.8	60.3
	05:15 – 05:30	66.2	71.6	69.3	60.2
	05:30 – 05:45	67.3	71.7	70.0	62.4
	05:45 – 06:00	68.0	72.3	70.6	63.8
	06:00 – 06:15	68.8	72.1	70.9	65.2
	06:15 – 06:30	69.9	73.1	71.7	67.1
	06:30 – 06:45	70.1	72.6	71.7	67.7
	06:45 – 07:00	70.6	72.9	72.0	68.7