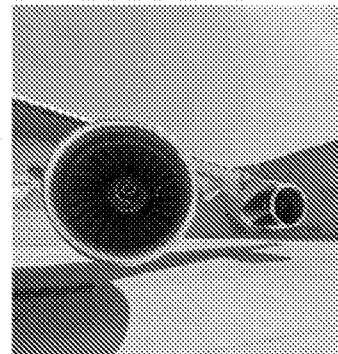




REPORT AS10284.180326.RA



LAND TO THE WEST OF CHURCH LANE NURSERY YAPTON



STAGE 1 RISK ASSESSMENT



Prepared: 11 April 2018



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AS10284/TH1-TH8	Environmental Noise Time Histories
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Executive Summary:

A survey of the existing background noise levels was undertaken at the locations shown between 14:20 hours on Friday 16th March and 14:00 hours on Tuesday 20th March 2018.

The site is affected mainly by road traffic noise using North End Road as well as a contribution from industrial noise from Orchard Business Park.

Daytime and night-time noise levels are considered to be a low to medium risk of adverse effect, primarily a result of road traffic noise from North End Road during this period.

A detailed Acoustic Design Statement outlining appropriate measures, where necessary, to mitigate the noise impact will be required in order to demonstrate that the site would be suitable for residential development.

Project: Land to the West of Church Lane Nursery, Yapton

Figure: AS10284/PPG01

Date: 05/04/2018

clarke saunders associates | acoustics

Report Ref: AS10284/PPG01
Project: Land to the West of Church Lane Nursery, Yapton
Date: 05/04/2018
Author: [Name Redacted]
Reviewer: [Name Redacted]

1.0 INTRODUCTION

It is proposed to develop land to the west of Church Lane Nursey, Yapton for residential use to accommodate 6 new detached houses.

Clarke Saunders Associates has been commissioned by Crayfern Homes Ltd to undertake an assessment of the current environmental noise impact on the site. Noise will be assessed in accordance with the National Planning Policy Framework, the recently published *ProPG: Planning and Noise*¹ for new residential developments and with reference made to the relevant guidance set out in BS8233: 2014 *Guidance on sound insulation and noise reduction for buildings*.

This report presents the results of the Stage 1 Risk Assessment which will be used to inform the requirement for a subsequent Stage 2 Acoustic Design Statement.

2.0 SITE DESCRIPTION

The greenfield site is bounded by Orchard Business Park to the north, Church Lane Nursery to the East, existing residential properties on Church Lane to the south, and North End Road to the west.

3.0 ENVIRONMENTAL NOISE SURVEY

3.1 Procedure and Equipment

A survey of the existing background noise levels was undertaken at the location shown in Figure AS10284/PPG01. Measurements of consecutive 5-minute L_{Aeq} , L_{Amax} , L_{A10} and L_{A90} sound pressure levels were taken between 14:20 hours on Friday 16th March and 14:00 hours on Tuesday 20th March 2018.

Short term manual measurements were also undertaken on Friday 16th March 2018 in order to assess the noise from Orchard Business Park in accordance with BS4142:2014 *Methods for rating and assessing industrial and commercial sound*. Further manual measurements were undertaken at the western site boundary, at the same distance from the road as measurement Position 1, to verify that noise levels were consistent at both positions.

Measurements were witnessed on Friday 16th March by Fiona Fitzgerald of Arun District Council.

¹ <http://ica.org.uk/publications/propg>

The following equipment was used during the course of the survey:

- Rion data logging sound level meter type NA28;
- NTi data logging sound level meter type XL2;
- Rion sound level calibrator type NC74.

The calibration of the sound level meters was verified before and after use. No significant calibration drift was detected.

The weather during the survey was mainly dry with light winds, which made the conditions suitable for the measurement of environmental noise. There were some snow showers on Saturday evening and Sunday morning, however this has not been deemed to have a significant effect on the noise environment over the measurement period but has been omitted from the data analysis.

Measurements were made following procedures in BS 7445:1991 (ISO1996-2:1987) *Description and measurement of environmental noise Part 2- Acquisition of data pertinent to land use*.

Please refer to Appendix A for details of the acoustic terminology used throughout this report.

3.2 Results

Figures AS10284/TH1-TH8 show the L_{Aeq} , L_{Amax} , L_{A10} and L_{A90} sound pressure levels as time histories at the measurement positions.

The site is affected mainly by road traffic noise using North End Road with sporadic industrial noise from Orchard Business Park. The average noise levels for the 'Daytime' and 'Night-time' periods are shown in Table 3.1, as well as the typical L_{AFmax} , defined as the 10th percentile of the night-time L_{AFmax} dataset.

Daytime L_{Aeq} , 16 hour	Night-time, L_{Aeq} , 8 hour	Typical Night-time, L_{AFmax}
Position 1: 63dB Position 2: 50dB	Position 1: 55dB Position 2: 42dB	Position 1: 76dB Position 2: 63dB

Table 3.1 Daytime and night-time average; and typical night-time maximum noise levels [dB ref. 20µPa]

4.0 CONCLUSION

This Stage 1 Risk Assessment has identified the development area as a low to medium risk area in terms of noise impact. The Pro PG guidance recommends that a Stage 2 Acoustic Design

Statement be prepared to consider the noise impact of the site in detail and to address the requirement for any outline mitigation measures as appropriate for the proposed residential development.

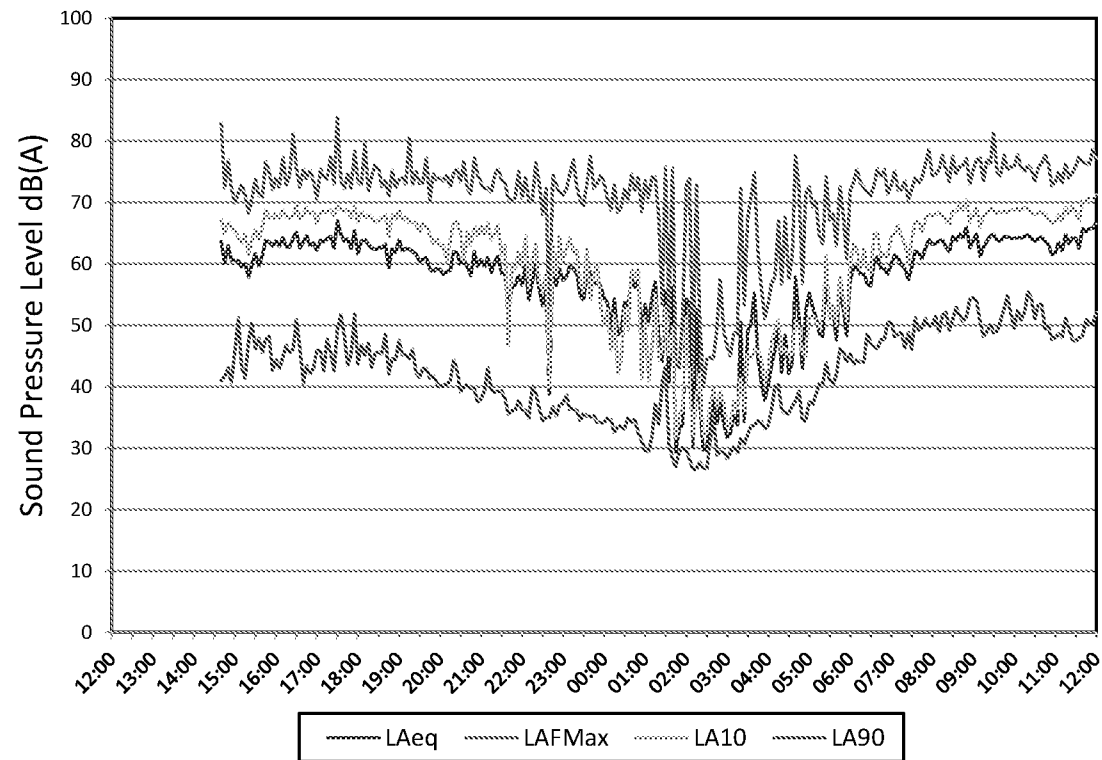


Daniel Saunders MIOA

CLARKE SAUNDERS ASSOCIATES

Land to the West of Church Lane Nursery, Yapton

Environmental Noise Time History: 1

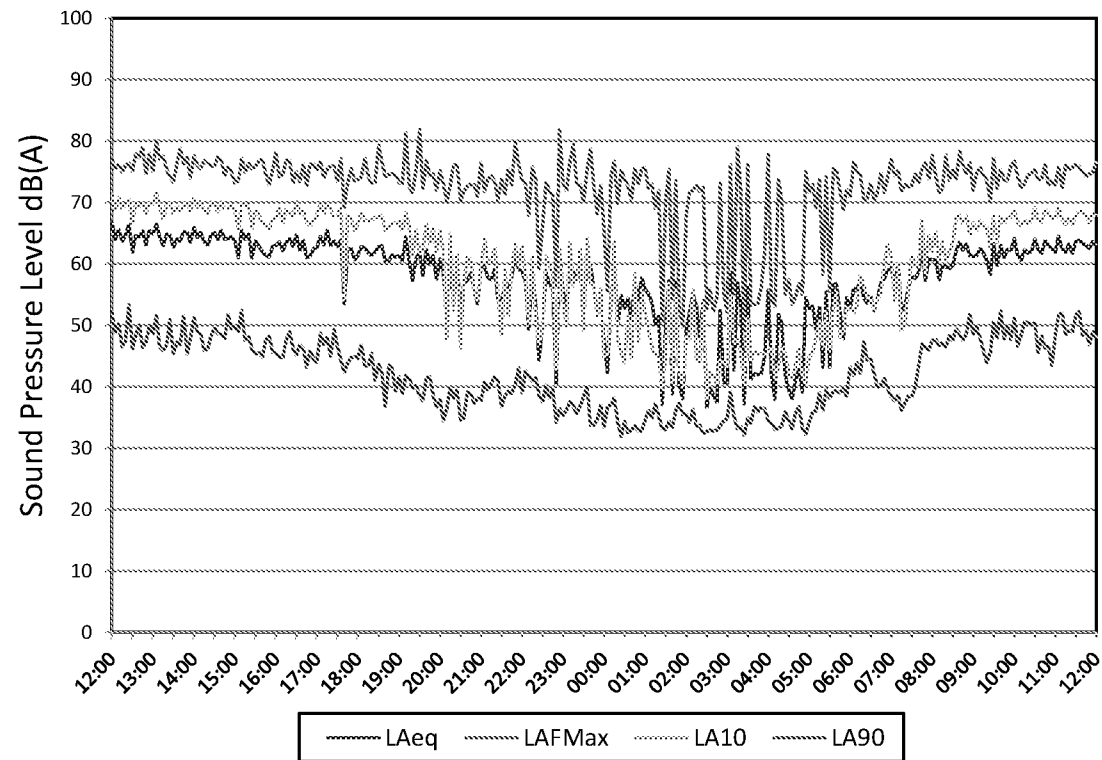


Friday 16 March to Saturday 17 March 2018

Figure AS10284/TH1

Land to the West of Church Lane Nursery, Yapton

Environmental Noise Time History: 1

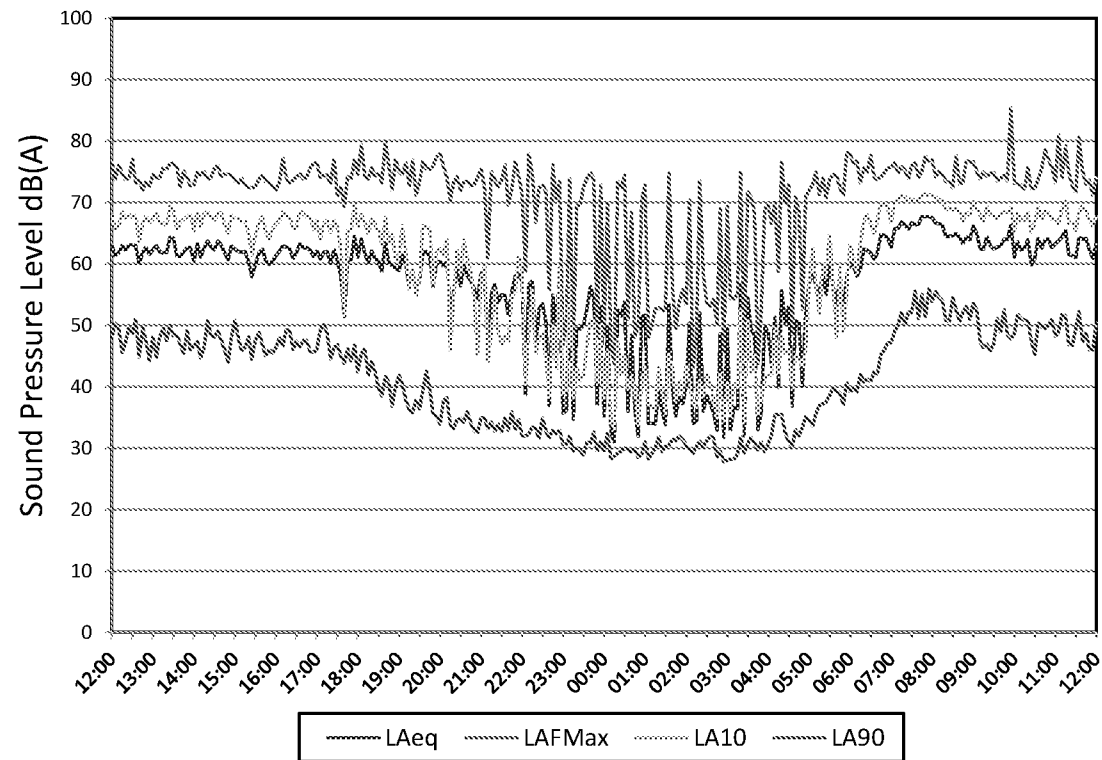


Saturday 17 March to Sunday 18 March 2018

Figure AS10284/TH2

Land to the West of Church Lane Nursery, Yapton

Environmental Noise Time History: 1

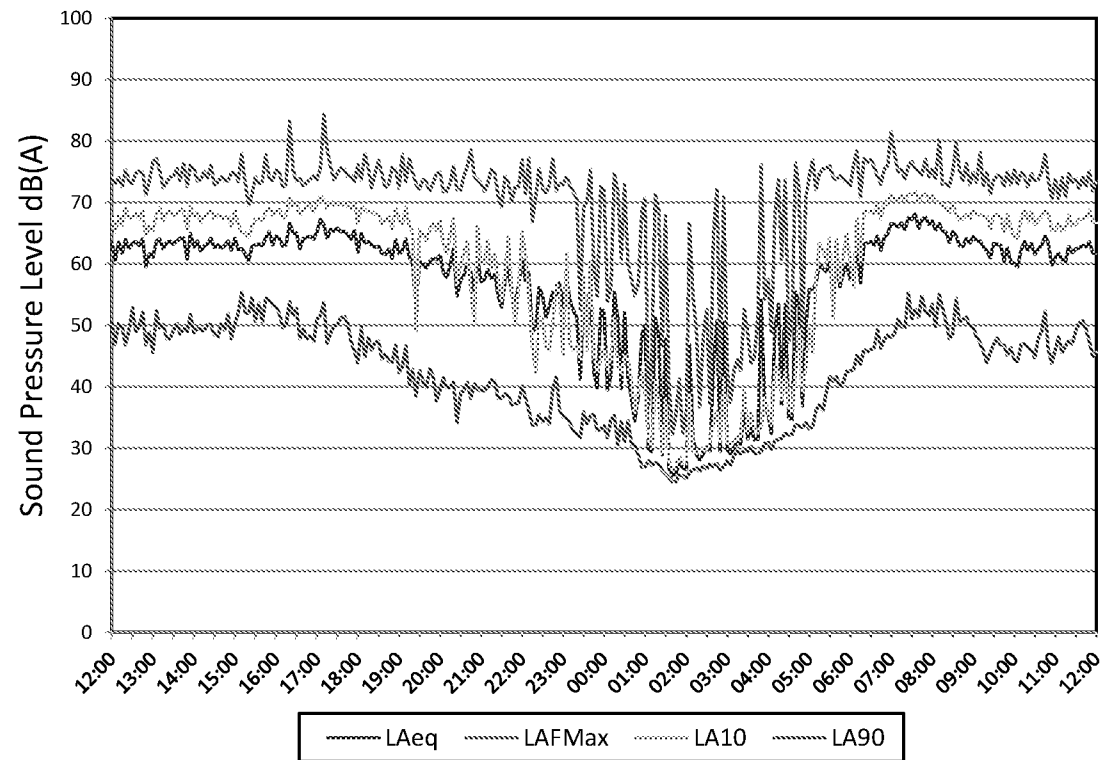


Sunday 18 March to Monday 19 March 2018

Figure AS10284/TH3

Land to the West of Church Lane Nursery, Yapton

Environmental Noise Time History: 1

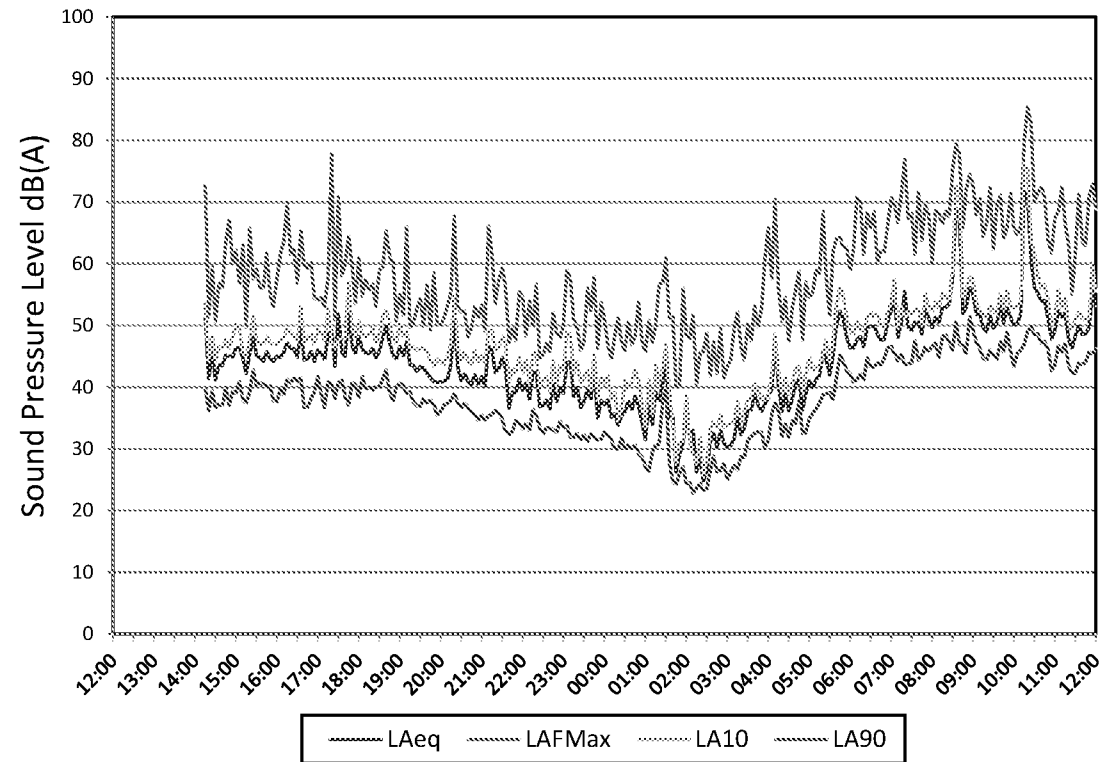


Monday 19 March to Tuesday 20 March 2018

Figure AS10284/TH4

Land to the West of Church Lane Nursery, Yapton

Environmental Noise Time History: 2

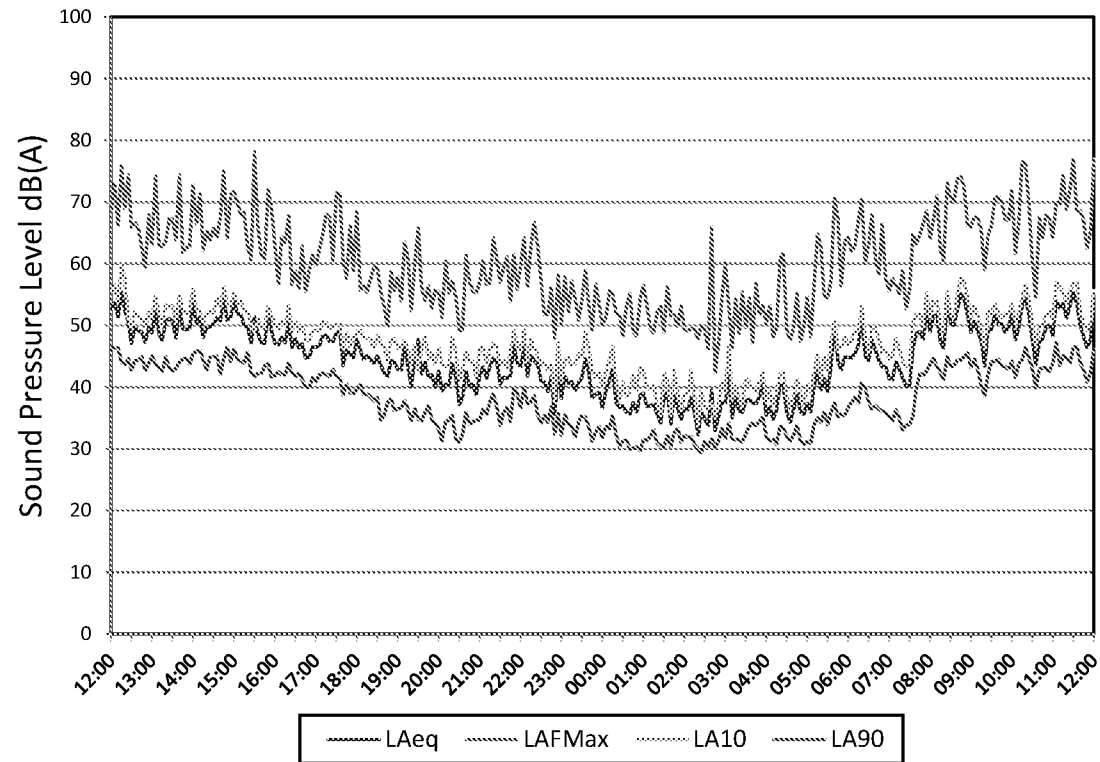


Friday 16 March to Saturday 17 March 2018

Figure AS10284/TH5

Land to the West of Church Lane Nursery, Yapton

Environmental Noise Time History: 2

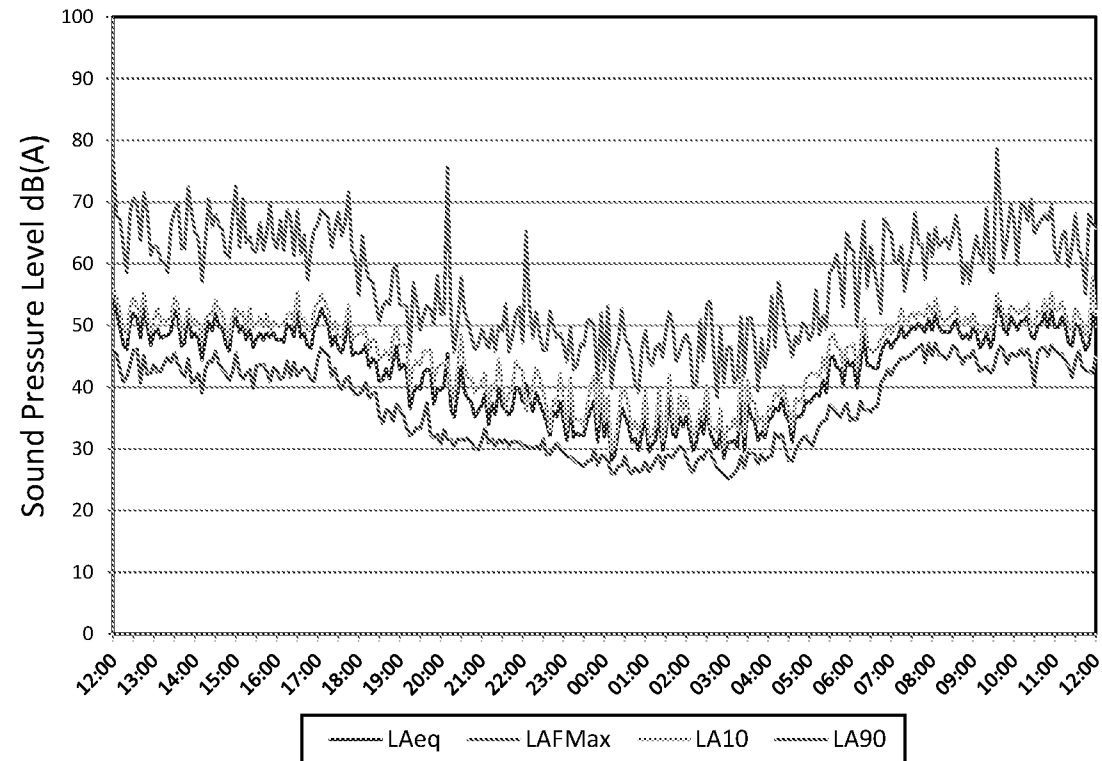


Saturday 17 March to Sunday 18 March 2018

Figure AS10284/TH6

Land to the West of Church Lane Nursery, Yapton

Environmental Noise Time History: 2

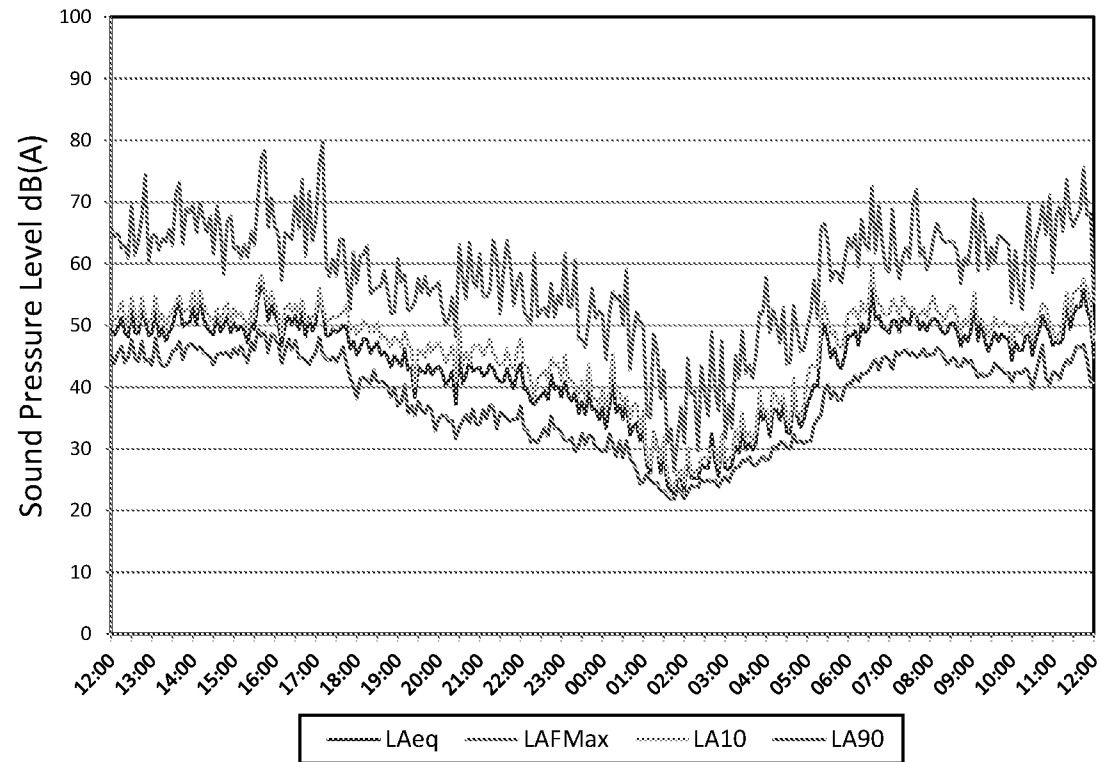


Sunday 18 March to Monday 19 March 2018

Figure AS10284/TH7

Land to the West of Church Lane Nursery, Yapton

Environmental Noise Time History: 2



Monday 19 March to Tuesday 20 March 2018

Figure AS10284/TH8