Site: Flats Development - Durston House, 21 Chesterfield Road, Worthing, West Sussex BN12 6BY

Our Ref: 22087-003 *(page 1 of 3)*

Date: February 2024

SUPPLEMENTARY INFORMATION TO PHILIP ACOUSTICS REPORT REFERENCE 22087-002 OCTOBER 2022

COMPLIANCE WITH BUILDING REGULATIONS APPROVED DOCUMENT O NOISE CRITERIA

1. INTRODUCTION

Worthing Borough Council as Local Planning Authority granted planning approval in 2018 for a new residential flats' development application at Durston House, 21 Chesterfield Road, Worthing, West Sussex BN12 6BY.

Application for the planning approval has expired before commencement and therefore is resubmitted.

As part of the planning application resubmission process Worthing Borough Council has requested information relating to compliance with the noise criteria of Building Regulations Approved Document O.

This is as additional / supplementary information to the development's submitted acoustic (noise assessment) report, Philip Acoustics reference 22087-002 dated October 2022.

Part excerpt from the Council's additional information request is reproduced below. This sets out the relevant Building Regulations Approved Document O noise criteria indicated applicable by the Council:

> *"I have referred to this acoustic report* (Philip Acoustics reference 22087-002 dated October 2022).
>
> *From what I can gauge from the acoustic information in the report windows will need to be closed to meet the BS8233 noise standards and the acoustician is recommending passive ventilation.*
>
> *The question is whether windows can be open to counteract overheating at night. Approved Document O, which applies here as it is a new build set two indoor noise criterias.*
>
> *40dBLAeq 8 hours and 55dB(A) Lmax level not to be exceeded more than 10 times in any night. APO assumes a 9dB(A) reduction from external to internal noise levels."*

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2. SUMMARY STATEMENT

I advise the new residential flats' development at Durston House is compliant with the Building Regulations Approved Document O noise criteria, i.e. allowing that windows can be open to counteract overheating at night.

Evidence for this advice is provided in Section 3.

3. EVIDENCE

Table 1 provides an assessment of the development as per the required Building Regulations Approved Document O noise criteria.

Parameter ***(night period 23:00 – 07:00)***	**External Noise Level**	**Approved Document O External To Internal Noise Reduction (open windows)**	**Internal Noise Level**	**Approved Document O Internal Noise Level Criteria**	**Comment**
$L_{Aeq,8hour}$	48dB	-9dB	39dB	≤40dB	Complies
L_{AFmax} ***(1)***	63dB		54dB	≤55dB	

Table Notes:

(1): *As per the requirement of Building Regulations Approved Document O & guidance of other noise assessment standards, the night period L_{AFmax} dB value is the typical / regular occurring high L_{AFmax} value, defined as the level exceeded more than 10 times during the night period. See noise survey analysis detailed below.*

Table 1: Building Regulations Approved Document O noise criteria assessment

The external noise levels night period value $L_{Aeq,8hour}$ 48dB is as detailed in the submitted acoustic report.

The external noise levels night period value L_{AFmax} 63dB, exceeded more than 10 times during the night is established by histogram analysis of the acoustic report's noise survey raw data results detailed in Figure 1 on the following page.

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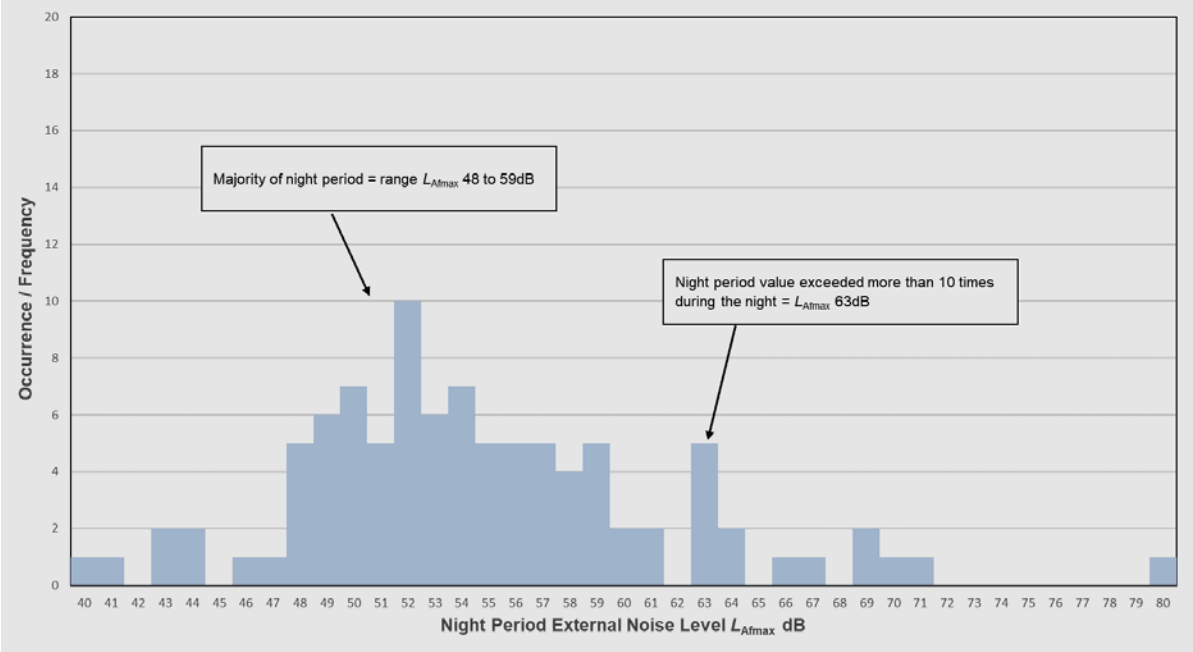

Figure 1: Analysis of night period L_{AFmax} external noise levels

David R Philip BEng (Hons) MIOA
Director