REGAL LONDON Ryder

100-100A Chalk Farm Road
Planning prior to above ground works - Condition Variation
Amendment to Condition 21 B

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Contents

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Checked by
Amanda Whittington

This document has been designed to be viewed / printed A3 double sided.

Introduction

This information was previously granted approval on 27 November 2025, in accordance with the requirements outlined in the planning conditions of the planning application referenced as 2024/0479/P.
The following document has been prepared by Ryder Architecture on behalf of Regal London to illustrate the details in pursuance of discharging the planning condition noted below under planning application reference number 2024/0479/P.

This information is issued following discussions with the Planning Officer with regards to amending the planning conditions.

Prior to Above ground Planning condition 21 - Sound insulation and noise protection

Prior to above ground works (other than demolition, site clearance and preparation), details shall be submitted to and approved in writing by the Council, of the sound insulation and vibration protection measures in the buildings, both for the student living accommodation and the housing block approved. Details shall demonstrate:

a.) that the design and structure of the development shall be of such a standard that all rooms within the flats are not exposed to levels indoors of more than 35 dB LAeq 16 hrs daytime (07:00 to 23:00 hours) and more than 30 dB LAeq 8 hrs at night (23:00 to 07:00 hours the next day).

b.) that the sound insulation ensures that noise levels from music/ entertainment noise in the 63Hz and 125Hz octave centre frequency bands (Leq) should be controlled so as not to exceed 47dB and 41dB (Leq) respectively in bedrooms, and 51dB and 46dB (Leq) respectively within other habitable rooms.

c.) that the vibration dose values do not exceed 0.4m/s1.75 between 07.00 and 23.00 hours, and 0.26m/s1.75 between 23.00 and 07.00 hours, as calculated in accordance with BS 6472-1:2008, entitled “Guide to Evaluation of Human Exposure to Vibration in Buildings”, [1Hz to 80Hz] within any residential habitable room.

The approved details shall be implemented prior to occupation of the development and thereafter be permanently retained. The building and abatement measures as implemented shall ensure music noise levels in the 63Hz and 125Hz octave centre frequency bands (Leq) from any entertainment premises do not to exceed 47dB and 41dB (Leq) respectively in bedrooms, and 51dB and 46dB (Leq) respectively within other habitable rooms.

Reason: To ensure that the amenity of future occupiers of the development are not adversely affected by noise and vibration from nearby entertainment venues, mechanical installations, rail and traffic, and to protect the long term viability and operation of music venues in the area, in accordance with the requirements of policies A1 and A4 of the London Borough of Camden Local Plan 2017.

The development shall thereafter be carried out in accordance with the approved design and method statements, and all structures and works shall be completed in accordance with the approved details in their entirety, before any part of the building hereby permitted is occupied.

Reason: To ensure that the development does not impact on existing London Underground transport infrastructure, in accordance with policy T3 of the London Borough of Camden Local Plan 2017.

Information

Evidence	Consultant
Cover letter in pursuant to amendment of Planning codition 21b	Regal
CHALF-SOL-XX-XX-RP-Y-XX-0013.P02 Facade Planning Note	Sol acoustics

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FAO Kristina Smith
Planning Department
Camden Council
5 Pancras Square
London N1C 4AG

13 March 2025

Dear Kristina

VARIATION OF CONDITION 21 PART B OF PLANNING PERMISSION 2024/0479/P AT 100 CHALK FARM ROAD, NW1 8EH

Planning Permission (reference 2024/0479/P) was granted on 27 November 2024 for:

> *Demolition of existing buildings and redevelopment of the site to provide two new buildings of between 6-12 storeys: one containing affordable homes (Class C3) and one (with three cylindrical volumes) containing purpose-built student accommodation with associated amenity and ancillary space (Sui Generis), a ground floor commercial space (Class E) together with public realm, access, plant installation, and other associated works.*

Condition 21 attached to the Planning Permission states:

> *Sound insulation and noise protection*
>
> *Prior to above ground works (other than demolition, site clearance and preparation), details shall be submitted to and approved in writing by the Council, of the sound insulation and vibration protection measures in the buildings, both for the student living accommodation and the housing block approved. Details shall demonstrate:*
>
> *a.) that the design and structure of the development shall be of such a standard that all rooms within the flats are not exposed to levels indoors of more than 35 dB LAeq 16 hrs daytime (07:00 to 23:00 hours) and more than 30 dB LAeq 8 hrs at night (23:00 to 07:00 hours the next day).*
> *b.) that the sound insulation ensures that noise levels from music/ entertainment noise in the 63Hz and 125Hz octave centre frequency bands (Leq) should be controlled so as not to exceed 47dB and 41dB (Leq) respectively in bedrooms, and 51dB and 46dB (Leq) respectively within other habitable rooms.*
> *c.) that the vibration dose values do not exceed 0.4m/s1.75 between 07.00 and 23.00 hours, and 0.26m/s1.75 between 23.00 and 07.00 hours, as calculated in accordance with BS 6472-1:2008, entitled "Guide to Evaluation of Human Exposure to Vibration in Buildings", [1Hz to 80Hz] within any residential habitable room.*

The approved details shall be implemented prior to occupation of the development and thereafter be permanently retained. The building and abatement measures as implemented shall ensure music noise levels in the 63Hz and 125Hz octave centre frequency bands (Leq) from any entertainment premises do not to exceed 47dB and 41dB (Leq) respectively in bedrooms, and 51dB and 46dB (Leq) respectively within other habitable rooms.

Reason: To ensure that the amenity of future occupiers of the development are not adversely affected by noise and vibration from nearby entertainment venues, mechanical installations, rail and traffic, and to protect the long term viability and operation of music venues in the area, in accordance with the requirements of policies A1 and A4 of the London Borough of Camden Local Plan 2017.

Camden's Local Plan 2017 and the Draft Camden Local Plan 2024 both require entertainment noise not to exceed NR35 within habitable rooms during the daytime (07:00 – 23:00, i.e. when the Roundhouse is operational). NR35 equates to a permissible octave band sound pressure level of 63dB $L_{eq,63Hz}$ and 52dB $L_{eq,125hz}$.

In contrast, the noise level limits currently enforced in the planning permission equate to NR5 within bedrooms and NR10 within all other habitable rooms – this is significantly lower than required under the Local Plan and also significantly lower than the noise level from the MEP systems within the apartments which will provide a level of masking noise.

Following our correspondence and as discussed, the technical advice received from Sol Acoustics states that the development would not be able to comply with the onerous low-frequency performance criteria currently set out in the condition whilst maintaining a ventilated terracotta façade. This is summarised in detail in a technical note accompanying this submission.

As such, the following variation to condition 21 part b is proposed:

b.) that the sound insulation ensures that noise levels from music / entertainment noise should be controlled so as not to exceed NR25 ($L_{eq, 15min}$) in bedrooms (23:00 to 07:00 hours), and NR35 ($L_{eq, 15min}$) within all habitable rooms (07:00 to 23:00 hours).

This amendment to the condition wording allows for compliance with Camden's policy and is fully achievable with the consented façade. Correspondence with Kristina Smith has concluded previously that this amendment would be acceptable.

This application is accompanied by a Sol Acoustics technical note, application form and payment via the Planning Portal. Should you have any further queries, please contact Charlotte Wheeler at these offices (charlotte.wheeler@regal.co.uk).

Yours faithfully

C Wheeler

Charlotte Wheeler
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Project	100 Chalk Farm Road
Location	London Borough of Camden
Sol Project Reference	P2345
Document Reference	CHALF-SOL-XX-XX-RP-Y-XX-0013
Revision	P02
Date	21/02/2025
Prepared By	Thomas Leach MIOA

Acoustic Design Note – Planning Condition 21

1 Introduction

1.1 Planning Condition 21 of the Chalk Farm Road planning permission states:

> *Sound insulation and noise protection*
>
> *Prior to above ground works (other than demolition, site clearance and preparation), details shall be submitted to and approved in writing by the Council, of the sound insulation and vibration protection measures in the buildings, both for the student living accommodation and the housing block approved. Details shall demonstrate:*
>
> *a.) that the design and structure of the development shall be of such a standard that all rooms within the flats are not exposed to levels indoors of more than 35 dB $L_{Aeq\ 16\ hrs}$ daytime (07:00 to 23:00 hours) and more than 30 dB $L_{Aeq\ 8\ hrs}$ at night (23:00 to 07:00 hours the next day).*
>
> *b.) that the sound insulation ensures that noise levels from music/ entertainment noise in the 63Hz and 125Hz octave centre frequency bands (L_{eq}) should be controlled so as not to exceed 47dB and 41dB (L_{eq}) respectively in bedrooms, and 51dB and 46dB (L_{eq}) respectively within other habitable rooms.*
>
> *c.) that the vibration dose values do not exceed 0.4m/$s^{1.75}$ between 07.00 and 23.00 hours, and 0.26m/$s^{1.75}$ between 23.00 and 07.00 hours, as calculated in accordance with BS 6472-1:2008, entitled "Guide to Evaluation of Human Exposure to Vibration in Buildings", [1Hz to 80Hz] within any residential habitable room.*
>
> *The approved details shall be implemented prior to occupation of the development and thereafter be permanently retained. The building and abatement measures as implemented shall ensure music noise levels in the 63Hz and 125Hz octave centre frequency bands (L_{eq}) from any entertainment premises do not to exceed 47dB and 41dB (L_{eq}) respectively in bedrooms, and 51dB and 46dB (L_{eq}) respectively within other habitable rooms.*
>
> ***Reason:** To ensure that the amenity of future occupiers of the development are not adversely affected by noise and vibration from nearby entertainment venues, mechanical installations, rail and traffic, and to protect the long term viability and operation of music venues in the area, in accordance with the requirements of policies A1 and A4 of the London Borough of Camden Local Plan 2017.*

1.1 Baseline Noise Assessment

1.1.1 As part of the planning application for the development a baseline noise survey and acoustic assessment was undertaken by Sandy Brown Acoustics[1]. Baseline noise measurements were undertaken between the 21st and 24th of October 2023 including at a measurement position on the roof of the existing 100 Chalk Farm Road overlooking the façade of the adjacent Camden Roundhouse during which the following performances were captured:

- Larkin Poe, acoustic folk music;
- Thy Art is Murder, metal music;
- Kaarija, pop music; and
- Ellie Goulding, pop music.

1.1.2 Section 6.1.1 of the Sandy Brown report provides the following qualitative statement regarding noise egress from the Camden Roundhouse:

> Music noise egress from performances at the Roundhouse was not observed during installation at the unattended measurement positions, or during attended measurements around the site. This is understood to be because the Roundhouse building envelope is suitable controlling noise egress to the surrounding environment. *Vibration*

Figure 1

1.1.3 As part of the planning stage acoustic assessment of the proposed development façade, the Sandy Brown report refers to the specific internal noise level limits from entertainment noise sources guidance within the London Borough of Camden Local Plan (2017), as reproduced below:

Table 2 Summary of Camden Local Plan 2017 guidance on entertainment noise

Room	Period	Noise limit
Bedrooms	23:00-07:00	NR 25 ($L_{eq,15min}$) Approximately equivalent to L_{Aeq} 30 dB
All habitable rooms	07:00-23:00	NR 35 ($L_{eq,15min}$) Approximately equivalent to L_{Aeq} 40 dB

Figure 2

1.1.4 As part of the RIBA Stage 3 design of the development, a secondary baseline noise survey was undertaken by Sol Acoustics between the 13th and 18th of June 2024. The measurement positions replicated the Sandy Brown baseline noise survey and included an event by Faithless (dance music) in the Camden Roundhouse.

1.1.5 It was noted on site that music noise from the Roundhouse was not audible on the road in front of the building, and was not clearly identifiable from the microphone position on the roof of the existing building due to the masking noise from constant road traffic on Chalk Farm Road.

[1] Noise and vibration planning report 22483-R03-C, dated February 2024

1.1.6 Noise from the Camden Roundhouse was not considered to be onerous on the design of the scheme in accordance with the daytime (07:00 – 23:00) criteria identified in the Camden Local Plan (2017), as adopted for the basis of design of the façade in the Sandy Brown planning report.

1.1.7 On receipt of the draft planning conditions, it was noted that Condition 21, Limb B included a specific requirement for entertainment noise that was different from, and more onerous than, the guidance in the Camden Local Plan, namely:

> *b.) that the sound insulation ensures that noise levels from music/ entertainment noise in the 63Hz and 125Hz octave centre frequency bands (L_{eq}) should be controlled so as not to exceed 47dB and 41dB (L_{eq}) respectively in bedrooms, and 51dB and 46dB (L_{eq}) respectively within other habitable rooms.*

1.1.8 An additional noise survey was undertaken by Sol Acoustics on the 27th and 29th of September 2024 to capture music noise and vibration from the operation of the Roundhouse to inform both the façade and vibration mitigation design of the proposed building in line with Condition 21.

1.1.9 The baseline noise survey during the Diplo & Friends event (dance music) on the 27th of September identified high levels of bass music egressing from the structure of the Roundhouse (75dB $L_{eq,63Hz}$ event time-average) as measured on the flat roof of 100A Chalk Farm Road in a position not affected by road traffic noise.

1.1.10 Music noise from the second evening (29th, Cannibal Corpse, metal) was not as subjectively significant, and masked by the residual acoustic environment.

2 Building Façade Performance

2.1 The external façades of Blocks A, B, and C comprise a ventilated terracotta rainscreen cladding on an internal SFS system as shown in the example detail below:

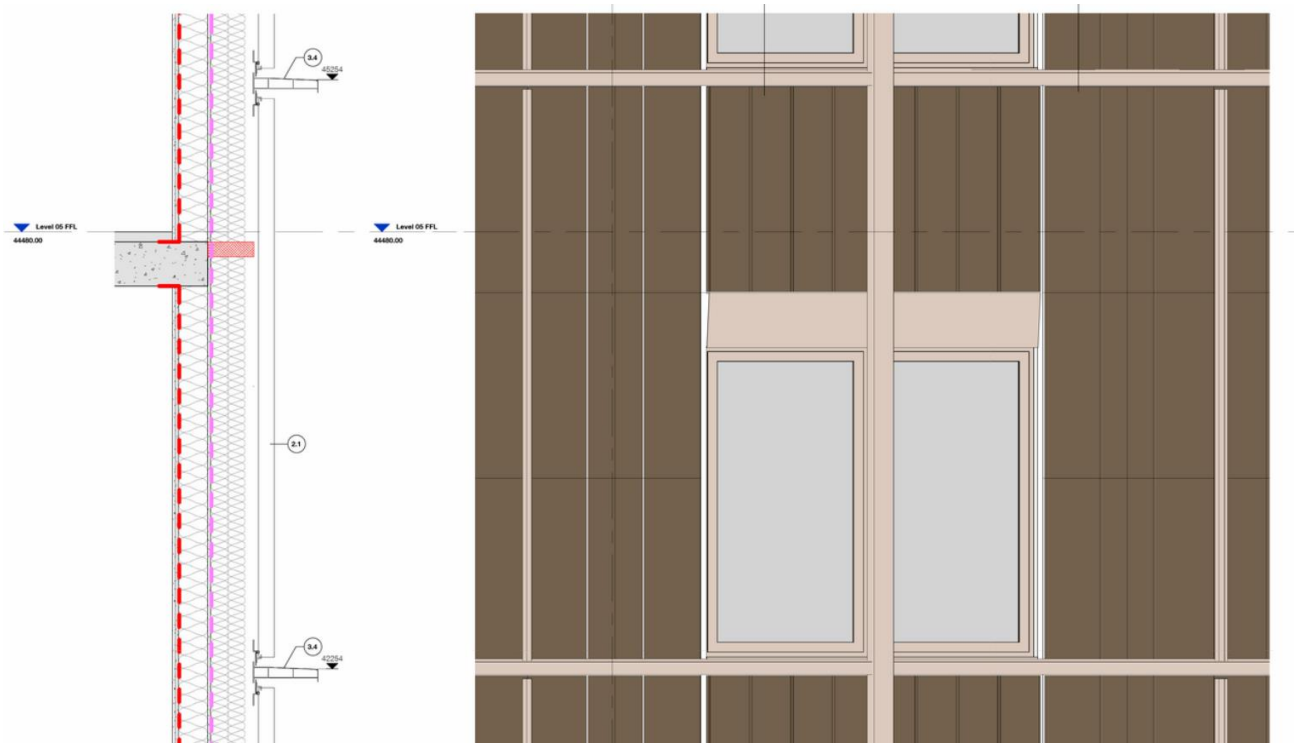

Figure 3

2.2 The façade performance design constraint will be achieving the low frequency 63Hz octave band sound insulation performance. Based on the measured event noise level of 75dB $L_{eq,63Hz}$ and the planning condition criteria of 47dB $L_{eq,63Hz}$, the Stage 3 acoustic façade calculations indicate that the façade needs to provide a **minimum sound reduction of 31dB at 63Hz**.

2.3 The proposed façade makes use of a ventilated terracotta cladding and therefore the composite acoustic performance is difficult to model accurately due to limitations in the acoustic modelling software, Insul, and lack of available laboratory test data/product information.

2.4 Modelling the 'sealed' inner layers of the construction (12mm sheathing board, 150mm SFS with mineral wool, 2x 15mm SoundBloc) provides a minimum sound reduction performance of only 15dB (63Hz).

2.5 Following discussions with Rockwool's technical department, the terracotta cladding was modelled as a fully sealed system to give an indication of maximum theoretical performance. Based on a 40kg/m^2 40mm thick terracotta tile results in a predicted performance of 33dB (63Hz). Please note that this is considered very optimistic and the ventilated gaps in the terracotta cladding panels will reduce the airborne sound insulation performance by c.5 – 10dB depending on the area ratio of the panel.

2.6 As the mass of the Rockwool is not considered within the Insul programme, empirical calculations based on classic 'mass law' (20*log*(f m)-47dB) have been undertaken to estimate the performance of the system with and without the terracotta cladding based on the system mass/unit area:

Build-up	Mass per unit area (kg/m^2)	Estimated sound reduction dB (63Hz)
12m Sheathing Board (12kg/m^2) 150mm FrameSlab (7.2kg/m^2) 30mm SoundBloc (25kg/m^2)	44.2	22
Above + 180mm Nyrock rainscreen (18kg/m^2)	62.2	25
Above + 40mm terracotta cladding (40kg/m^2)	102.2	29

Table 1

2.7 It is considered that based on the above, the sound insulation performance of the exterior façade build-up is likely to achieve around **25dB at 63Hz** and is therefore unlikely to be suitable for compliance with the technical acoustic requirements of Condition 21.

3 Planning Condition

3.1 Condition 21, Limb B included a specific requirement for entertainment noise, as stated previously that:

> *b.) that the sound insulation ensures that noise levels from music/ entertainment noise in the 63Hz and 125Hz octave centre frequency bands (L_{eq}) should be controlled so as not to exceed 47dB and 41dB (L_{eq}) respectively in bedrooms, and 51dB and 46dB (L_{eq}) respectively within other habitable rooms.*

3.2 It is noted that the specific entertainment noise criteria are significantly more onerous than the planning guidance criteria for entertainment noise within Annex 3 of both the Camden Local Plan 2017 and the Draft Camden Local Plan 2024. Both the current and draft Local Plans require entertainment noise not to exceed NR35 within habitable rooms during the daytime (07:00 – 23:00, i.e. when the Camden Roundhouse is operational), and NR25 within bedrooms during the night time (23:00 – 07:00).

3.3 NR35 equates to a permissible octave band sound pressure level of 63dB $L_{eq,63Hz}$ and 52dB $L_{eq,125hz}$.

3.4 The noise level limits in the planning condition equate to NR5 within bedrooms and NR10 within all other habitable rooms. Significantly lower than required under both the existing Local Plan and draft Local Plan.

3.5 The noise level limits within the planning condition appear to be based upon the criteria curve within NANR45 *'Procedure for the assessment of low frequency noise disturbance'*. The NANR45 document provides a framework for Environmental Health practitioners to assess complaints of low-frequency noise, particularly as the frequencies under consideration may not be audible or detectable to all listeners.

3.6 It is noted in the NANR45 document that the criterion curve below 32Hz is based on the average threshold of audibility and is therefore extremely low, but does not provide specific comment on the threshold of audibility for 'higher' frequencies (32Hz – 160Hz).

3.7 Section 1.1 of the NANR45 document is clear in its intended scope that:

> *"The guidance given applies to low frequency noise, excluding traffic noise and entertainment noise. It is not appropriate to include traffic noise because this is not specifically a low frequency issue and in any case is not generally actionable by local authorities. Low frequency noise from entertainment was not considered in the development of the method and is outside the scope of this document."*

3.8 The document goes on to state that:

> *"The procedure is intended to assist in the evaluation of existing problems. It is not intended as a means of predicting when disturbance might occur, for example in a planning situation, and would not be reliable to use as such."*

3.9 It is therefore considered that the specific requirements of the planning condition are likely to be overly onerous on the development and may fail the planning test of being 'Reasonable in all other respects'.

3.10 With regards to considering suitable noise limits from entertainment noise within residential development, DEFRA NANR92 (Literature review) and NANR163 (Methodology Testing) *'Noise from Pubs and Clubs'* provides a review of different methods for assessing the impact of entertainment noise from pubs and clubs to develop an appropriate rating method.

3.11 It should be noted that the primary objective of the research was to provide Environmental Health Practitioners with a method to assess noise complaints and disturbance from licenced premises late at night when considering enforcement action or licence agreements.

3.12 The assessment methods presented in NANR163 are based solely on the impact of entertainment noise as egressing from within a licenced premises and as assessed within a listener's bedroom during the more sensitive night time period (23:00 – 07:00) when people are trying to sleep.

3.13 Of all the methods presented in NANR 92, the noise metric that provided the best overall prediction of subjective ratings of all entertainment noise types was the absolute L_{Aeq}.

3.14 NANR 163 states that based on laboratory testing a level of 34dB $L_{Aeq,5min}$ was considered to be "just unacceptable" (LOAEL) and a level of 47.5dB $L_{Aeq,5min}$ was considered to be "clearly unacceptable" (SOAEL).

3.15 Again, it is important to note that this research is based on intrusive noise during the night time when people are trying to sleep, where the threshold for annoyance is lower than during the daytime when the Camden Roundhouse is permitted to operate. However, the results of the laboratory testing do indicate that levels that do not exceed the daytime guidance levels in BS 8233 (35dB $L_{Aeq,T}$) are below the LOAEL and therefore considered acceptable in planning terms in accordance with National Planning Policy, and local Planning Policy.

3.16 It should be noted that suitable daytime noise level limits in line with the guidance in NANR163 are already controlled under Limb A of Condition 20 which states:

> *a.) that the design and structure of the development shall be of such a standard that all rooms within the flats are not exposed to levels indoors of more than 35 dB $L_{Aeq\ 16\ hrs}$ daytime (07:00 to 23:00 hours) and more than 30 dB $L_{Aeq\ 8\ hrs}$ at night (23:00 to 07:00 hours the next day).*

4 Conclusion

4.1 The façade of the proposed 100 Chalk Farm Road development features a terracotta rainscreen cladding that was developed pre-planning in accordance with the acoustic planning guidance criteria for entertainment noise stated in the Camden Local Plan (2017), specifically a daytime internal noise criteria of NR35.

4.2 Planning Condition 21 imposes significantly more onerous design criteria for entertainment noise within the development (NR5) and as such it is considered that the proposed terracotta façade is unlikely to be able to achieve the technical acoustic performance requirements.

4.3 It is noted that the technical requirements of Limb B of Condition 21 are based upon the guidance presented in NANR45 which is not intended for use for entertainment noise, or to be used within a planning framework, as detailed within the scope of the NANR45 document.

4.4 Research from DEFRA published under NANR163 indicates that within bedrooms at night a level of 34dB L_{Aeq} (c.NR29) was considered to be "just unacceptable" and therefore the Lowest Observable Adverse Effect Level, and a level of 47.5dB L_{Aeq} (c.NR42) was considered to be "clearly unacceptable" (Significant Observable Adverse Effect Level) and therefore the guidance within the Camden Local Plan is considered to be fully compliant with National and Local Planning Policy.

4.5 Going forward, it is recommended that Limb B of Condition 21 is either omitted or amended to state a maximum entertainment noise level of NR35 in line with the specific guidance in the Camden Local Plan 2017 and Draft Camden Local Plan 2024 based on the arguments set out above. The proposed amended wording of the condition is as follows:

> ***Sound insulation and noise protection***
>
> *Prior to above ground works (other than demolition, site clearance and preparation), details shall be submitted to and approved in writing by the Council, of the sound insulation and vibration protection measures in the buildings, both for the student living accommodation and the housing block approved. Details shall demonstrate:*
>
> *a.) that the design and structure of the development shall be of such a standard that all rooms within the flats are not exposed to levels indoors of more than 35 dB $L_{Aeq\ 16\ hrs}$ daytime (07:00 to 23:00 hours) and more than 30 dB $L_{Aeq\ 8\ hrs}$ at night (23:00 to 07:00 hours the next day).*
>
> ***b.) that the sound insulation ensures that noise levels from music/ entertainment noise should be controlled so as not to exceed NR25 ($L_{eq,15min}$) in bedrooms (23:00 to 07:00 hours), and NR35 ($L_{eq,15min}$) within all habitable rooms (07:00 to 23:00 hours).***
>
> *c.) that the vibration dose values do not exceed 0.4m/$s^{1.75}$ between 07.00 and 23.00 hours, and 0.26m/$s^{1.75}$ between 23.00 and 07.00 hours, as calculated in accordance with BS 6472-1 :2008, entitled "Guide to Evaluation of Human Exposure to Vibration in Buildings", [1 Hz to 80Hz] within any residential habitable room.*
>
> *The approved details shall be implemented prior to occupation of the development and thereafter be permanently retained.*
>
> ***Reason:** To ensure that the amenity of future occupiers of the development are not adversely affected by noise and vibration from nearby entertainment venues, mechanical installations, rail and traffic, and to protect the long term viability and operation of music venues in the area, in accordance with the requirements of policies A1 and A4 of the London Borough of Camden Local Plan 2017.*

4.6 It should be noted that without amending the wording of the planning condition, it is considered unlikely that the development would be able to comply with the onerous low-frequency performance criteria whilst maintaining a terracotta, or similar, rainscreen façade.