

Ref: VA5623.241206.L1



06 December 2024

Synergy Elite

Dear Sir/Madam

Oak Office, Unit 1
Gander Down Barns
Rodfield Lane
Ovington
Alresford
SO24 0HS

VA5623 LONGACRE HOUSE, WINCHESTER ROAD, BOTLEY

01962 461016

EH Comments

0203 8650332

Following submission of the VA noise impact assessment report, ref VA5623.241125.NIA1.1, the following comments have been received.

The report refers to hours of operation as Monday to Friday until 21:30 hours but the application states also Weekends 09:30 to 16:00 hours; this is further mentioned in the report.

Thus, the reliance on Entertainment Value noise is not valid as the proposed use is every day, it being a new noise source a BS 4142 calculation is appropriate.

The existing Noise Sensitive Receptors [NSR] are the residential houses bounding the site, they will be primarily affected to their private amenity spaces [gardens], the noise levels generated by the test were not given but assumed to be similar to the presumptive levels elsewhere [over 80 dB] with a 22 dB drop off, would leave the garden spaces well above BS8233 guidelines.

The BS 4142 calculation will show the mitigation required in addition noise reduction construction, supporting control of music noise by AVC unit to demonstrate levels at the NSR lower than the 37dB current background.

Therefore, I suggest the applicant provides the additional information to protect existing occupiers from excessive noise.

It has not been possible to make contact with the EH Officer to discuss the comments. BS4142 states in para 1.3 that:

The standard is not intended to be applied to the rating and assessment of sound from:

b) music and other entertainment;

However, as this has been specifically requested and it has not been possible to discuss this, an assessment has been undertaken against these requirements so as to not delay the application.

Where the comments refer to the 22dB loss from the building, this relates to the current sound insulation performance offered by the structure, as measured during the tests. However, section 6 of the report provides recommendations for mitigation works to be undertaken to improve the sound insulation of the structure, which would be expected to increase the single figure value sound insulation performance to 48dB.

A BS4142 assessment has been undertaken based upon this uprated structure, against the background noise level of the proposed operation hours of weekdays 16:00 – 21:30 and weekends of 09:30 – 16:00, which is L_{A90} 38dB.

As the end of the adjacent garden was noted to house a shed and compost heap, the assessment has been undertaken to 5m within the garden, which is considered reasonable for the enjoyment of the use of the gardens, as they are approximately 25m long, with patios by the houses rather than at the end of the gardens.

Due to the spectral shape of the music, it is not considered suitable to assess the losses using single figure values, as this will underrepresent the noise level at the receiver. Instead, a spectral assessment has again been undertaken (as previously in Appendix B of the report) to provide a more robust assessment. The full assessment is attached to this letter in Appendix A.

The subjective method of allocating corrections to the sound source has been used following the methodology provided in BS4142:2014.

Noise Source	Subjective Description	Allocated Corrections
Music noise	Sound will be slightly tonal and impulsive, although low in relation to the ambient noise levels in the area. Music will likely be played intermittently.	Tonality: +2 dB Impulsivity: +3 dB Intermittency: +3 dB

Table 1 – Acoustic character corrections

The calculated Rating Level 5m from the end of the garden is predicted to L_{Ar} 39dB, which is 1dB above the background noise level during the proposed operational hours. This would be in the range that would be considered a low impact by BS4142, and considering it is towards the bottom of the garden, and ambient noise level during these hours, which is L_{Aeq} 50dB, is considered unlikely to cause impact on the neighbours.

The EH comments mention an AVC system, assumed to be in reference to a noise limiter (automatic volume control). However, it is assumed that this relates to an assessment of the premises without the improvement to the sound insulation, and hence this could be considered no longer necessary. However, should the Council still wish for such a control to be included, it is recommended that this is set up once the works have been completed to allow for fine tuning to minimise the risk for potential impact.

We trust the above to be of assistance. Please do not hesitate to contact us with any queries you may have.

Yours faithfully
on behalf of Venta Acoustics

Jamie Duncan

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APPENDIX A

VA5623 - Longacre House, Winchester Road, Botley

Noise Impact Assessment

		40	50	63	80	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	dB(A)
Music Internal	L _{eq}	50	66	70	71	78	80	78	78	74	74	73	73	70	70	70	67	67	64	66	64	63	63	79
Building envelope loss		-16	-18	-18	-16	-18	-24	-30	-35	-41	-45	-50	-54	-54	-58	-61	-64	-66	-68	-67	-62	-67	-70	
Distance Loss	To 5m	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	
Specific Sound Level	L _{eq}	20	34	38	41	46	42	34	29	19	15	9	5	2	-2	-5	-11	-13	-18	-15	-12	-19	-21	31
Acoustic feature correction																								
Tonality		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Impulsivity		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Intermittency		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Rating Level	L _{Ar}	28	42	46	49	54	50	42	37	27	23	17	13	10	6	3	-3	-5	-10	-7	-4	-11	-13	39
Background	L ₉₀	37	41	34	31	39	28	36	30	30	32	32	31	29	30	30	29	26	26	20	19	18	18	38
		Difference between Rating Level and Background																						1