

11th October 2024

To: Doswell Projects
Units 14-15 Monks Brook Industrial Estate
School Close
Chandlers Ford
Eastleigh
SO53 4RA

Re: APP/19/01226 - Land west of Coldharbour Farm Road, Emsworth

Dear Mr Doswell

I am the Managing Director of Hawkins Environmental Limited and have over 20 years of experience working in the field of noise/acoustics and environmental impact assessment. I am an alumnus of the University of East Anglia and the University of Southampton and hold the Institute of Acoustics' Certificate of Competence in Environmental Noise Measurement and became a full Member of the Institute of Acoustics in 2010, having previously been an Associate Member.

I have worked on a range of projects, including a number of prestigious projects, including the noise impact assessments of the Thameslink railway scheme through central London, the construction of lines BXD of the Luas Light Rail System in Dublin, the expansion of Bournemouth Airport and the M25 widening between junctions 1b to 3 and 5 to 7. I was one of the first acoustic consultants to be given access to the Crossrail tunnels to conduct vibration compliance monitoring. In addition, I regularly conduct acoustic assessments for housing developments, wind turbines, air conditioning units, kitchen extract fans, supermarkets, public houses and other commercial developments.

In relation to Application APP/19/01226 made to Havant Borough Council in relation to the "*construction of 44 dwellings with access, open space, landscaping and associated work and diversion of footpath No. 71 to the west (Approved 22/03/2024)*" at "*Land west of Coldharbour Farm Road, Emsworth*", my understanding is that there are three planning conditions relating to noise:

"Condition 2:

The development hereby permitted shall be carried out in accordance with the following approved plans... (and the Noise Assessment dated August 2020...

Condition 5:

The development hereby approved shall proceed in strict accordance with the Noise Assessment dated 20 August 2020, with the noise mitigation measures (ventilation and glazing scheme) installed, maintained and retained thereafter, unless otherwise agreed in writing with the Local Planning Authority. Reason: In the interests of the amenities of the occupiers of the development and having due regard to policies DM10 and CS16 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.

Condition 21:

Prior to the occupation of the development, the acoustic fence hereby approved under Drawing No. 5314/006 H shall be carried out in accordance with the Acoustic Fence Detail unless otherwise agreed in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details and shall thereafter be retained in a wholly sound and effective condition. Reason: To protect the amenities of the occupiers of the development from noise and disturbance from the A27 to the south having due regard to Policies CS16 and DM10 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework 2021”.

The Noise Assessment Report, prepared by White Young Green (WYG) in August 2020, summarises the result of a comprehensive noise survey, with measurements at eight separate locations. The noise survey clearly incorporates all existing noise sources, including “road traffic noise from the A27 towards the south of the site and Horndean Road to the east of the site, railway noise from the south of the site... (and)... building services plant associated with the services to the west of the site”.

The result of the noise survey was used to model the proposed development, using the well respected CadnaA noise modelling software, to show how noise is expected to affect the site when developed. The noise model considers both L_{Aeq} and L_{Amax} noise levels at the facades of all of the proposed dwellings and also considers external noise within the private external amenity areas. The noise level predictions include the incorporation of a 2.4m high noise barrier, with a minimum density of 15kg/m². The Noise Assessment Report shows, in Drawing SK02 (and replicated below), the proposed extent of the noise barrier.

The results of the modelling show that suitable internal noise levels, as defined in BS 8233: 2014 ‘Guidance on Sound Insulation and Noise Reduction for Buildings’, can be achieved with the installation of the 2.4m high noise barrier and glazing achieving between 30 dB and 37 dB $R_w + C_{tr}$, depending on location, as defined in the noise report.

With regards to external noise levels, with the barrier as shown in SK02, noise levels within the gardens will be between 42.9 dB and 51.3 dB $L_{Aeq,16hours}$, compared to the BS8233: 2014 “upper guideline criteria” of 55.0 dB. On the western fringes of the site, in areas not protected by the noise barrier, external noise levels within the gardens will be in the region of 49/50 dB $L_{Aeq,16hours}$ (G02 and G03 on SK02).

The location and extent of the barrier, as seen in SK02, shows that the barrier is along the whole length of the southern boundary of the site and makes a short return up the western boundary of around 30m. The noise assessment is clear in its conclusion – the extent of the barrier as shown in the noise assessment is the extent that is required to ensure suitable internal and external noise levels.

At housing developments such as at this site, whilst a noise barrier would reduce noise levels within the dwellings themselves and reduce the need for higher specification acoustic glazing, the main function of a noise barrier would be to protect gardens and outdoor amenity space, which cannot otherwise be protected for noise. WYG’s noise assessment

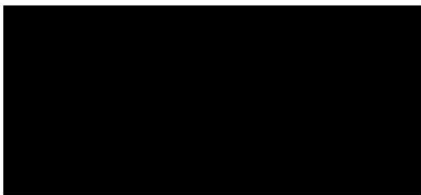
shows that with a 2.4m barrier, all gardens would meet the “*upper guideline criteria*” of 55 dB and all gardens on the western boundary would also meet the “*lower guideline criteria*” of 50 dB. Therefore, it is clear that the extent of the noise barrier on the western barrier of the site has been designed to be the optimum height and length and clear does not need to extend beyond the length identified on SK02.

For whatever reason, it would appear that the structural engineer’s plans (as shown on Drawing 5314/006 – replicated below) unfortunately has misplaced the noise barrier and shows the barrier along the whole length of the western boundary of the site, as well as the southern boundary. This plan is clearly incorrect, as the noise assessment prepared by WYG (who designed the barrier), clearly shows a shorter return on the western boundary.

This error has been compounded by the fact that Condition 2, 5 and 21 requires that the development adheres to both the noise assessment AND Drawing No. 5314/006; however, this is not possible to achieve, as these two documents contradict each other, each showing the barrier in a different location. Clearly one must determine which document has precedence over the other.

Given that the purpose of the noise barrier is for noise protection, it is clear in my view that the recommendations of the noise assessment should take precedence. Given that the modelling demonstrates that a barrier along the full length of the western boundary is not required, there is no reason that the barrier should be along the whole length of the western boundary. Whilst it is clearly unfortunate that this error was not noticed before determination, there is no evidence to suggest that the barrier needs to be extended. Therefore, I conclude that the shortened barrier, as described in Drawing SK02, is the design that should be incorporated into the development.

Kind Regards,



Nick Hawkins MSc BSc MIOA MIAQM MEnvSci
Managing Director
Hawkins Environmental Limited

Drawing No. SK02 from the Noise Assessment



Drawing No. 5314/006

