

Our ref: JAJ03857-LET01-R0

5 New York Street
Manchester, M1 4JB
T +44 161 228 1800

Date: 18 December 2023

East Herts District Council
Wallfields
Pegs Lane
Hertford
SG13 8EQ

Dear Mr. Allen,

Land East of the A10, Buntingford, Hertfordshire – Acoustics

I am writing to you regarding the internal memo dated 26th October 2023 pertinent to the outline planning application 3/23/1447/OUT for:

“up to 350 dwellings, up to 4,400 sqm of commercial and services floorspace (Class E and B8), and up to 500 sqm of retail floorspace (Use Classes E) and other associated works including draining, access into the site form the A10 and Luynes Rise (but not access within the site), allotments public open space and landscaping at Land East Of The A10, Buntingford, Hertfordshire”

It is noted that East Herefordshire District Council (EHDC) does not object to the proposal on noise matters subject to a number of Planning Conditions. I have reviewed these conditions and would be grateful for your consideration of the responses detailed below. Any conditions not included below are agreeable.

Separation of noise sensitive rooms in neighbouring flats

“Prior to erection of above ground superstructure of the proposed development, details shall be submitted to and approved in writing by the Local Planning Authority, of an enhanced sound insulation value $D_{nT,w}$ and $L_{nT,w}$ of at least 5 dB above the Building Regulations value for the wall and floor structures separating different types of rooms / uses in adjoining dwellings e.g. between the kitchen / living areas of one dwelling and the bedroom of a separate dwelling. Approved details shall be implemented prior to occupation of the development and thereafter be permanently retained.

Reason: *In order to ensure an adequate level of amenity for future occupiers of the proposed development in accordance with Policy EQ2 Noise Pollution and DES4 Design of Development of the adopted East Herts District Plan 2018.”*

The condition above relates to the sound insulation performance between adjacent rooms and dwellings and is justified in the context of ‘converted premises’ in the justification for the condition in the internal memo. The proposed development comprises up to 350 new dwellings with no proposals for the conversion of existing properties for residential use.

It is acknowledged that Policy EQ2 refers to the use of construction methods to minimise noise impacts from surrounding sources. However, a review of the planning conditions for recently approved residential developments do not appear to include any similar conditions relating to enhanced sound insulation performances for partitions and floors.

The minimum sound insulation performance will be met in line with the requirements of Approved Document E to ensure that the transmission of sound between dwellings is sufficiently controlled.

Separation of commercial and noise sensitive premises

“Prior to erection of above ground superstructure of the development, details shall be submitted to and approved in writing by the Council, of the sound insulation of the wall & floor / ceiling separating the commercial part(s) of the premises from dwellings. Details shall demonstrate that the sound insulation value $D_{nT,w}$ is enhanced by at least 10 dB above the Building Regulations value and, where necessary, additional mitigation measures are implemented to contain commercial noise within the commercial premises and to achieve the criteria of BS 8233:2014 within the dwellings. Approved details shall be implemented prior to occupation of the development and thereafter be permanently retained.

Reason: *In order to ensure an adequate level of amenity for future occupiers of the proposed development in accordance with Policy EQ2 Noise Pollution of the adopted East Herts District Plan 2018.”*

This condition applies to the Local Centre proposed as part of the development. This planning application does not currently include proposals for residential dwellings above the commercial premises and thus the condition above is neither necessary nor relevant to this application.

External noise from air source heat pumps

“Prior to erection of above ground superstructure of the development hereby approved, a report must be submitted to and approved in writing by the Local Planning Authority, demonstrating that the noise from air source heat pumps does not exceed 35 dB at the nearest and / or at the most affected noise sensitive premises inclusive of a 6 dB tonal penalty. The guidance published by the Institute of Acoustics and Chartered Institute of Environmental Health should be used to determine appropriate mitigation measures.

Reason: *In order to ensure an adequate level of amenity for occupiers in the vicinity of the proposed development in accordance with Policy EQ2 Noise Pollution of the adopted East Herts District Plan 2018.”*

The Institute of Acoustics' Professional Advice Note recommends that noise from air source heat pumps (ASHPs) should not exceed a rating level of 35 dB $L_{A,T}$, where it is practical to do so.

However, the acoustic characteristics of ASHPs vary dependent upon the type and models installed. Not all ASHPs are distinctly and perceptibly tonal and thus the requirement of a 6 dB tonal penalty may result in unnecessary mitigation measures being applied which conflicts with the requirements of Policy DES4 which outlines the need for sustainable design.

It is considered more appropriate to undertake an assessment of noise from the ASHPs in line with the guidance in BS 4142:2014+A1:2019 and apply character corrections, where deemed necessary, based on the professional judgement of a suitably qualified acoustician.

External noise from other plant/machinery

“The rating level of noise emitted from all external fixed plant and equipment at the development hereby approved shall not exceed 10 dB below the background noise level when measured or calculated at 1 metre from the façade of the nearest noise sensitive property. The measurements and assessment shall be made according to BS 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound' at the nearest and / or most affected noise sensitive premises, with all plant / equipment operating together at maximum capacity and inclusive of any penalty for tonal, impulsive, or other distinctive acoustic characteristics.

Reason: *In order to ensure an adequate level of amenity for occupiers in the vicinity of the proposed development in accordance with Policy EQ2 Noise Pollution of the adopted East Herts District Plan 2018.”*

It is noted that Policy EQ2 Noise Pollution of the adopted East Herts District Plan 2018 only refers to the need for new developments to:

“be designed and operated in a way that minimise the direct and cumulative impact of noise on the surrounding environment [...].”

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This policy aligns with national planning policy, in particular Noise Policy Statement for England (NPSE, 2010) which states the following:

“Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

- *avoid significant adverse impacts on health and quality of life;*
- *mitigate and minimise adverse impacts on health and quality of life; and*
- *where possible, contribute to the improvement of health and quality of life.”*

The guidance in BS 4142:2014+A1:2019 outlines that a difference between the rating level of all plant operating simultaneously and the representative background sound level of +5 dB is indicative of an ‘adverse impact’ depending on the context. As such, it follows that a rating level which exceeds the representative background sound level by less than 5 dB is indicative that adverse impacts are minimised in line with Policy EQ2 and the requirements of NPSE.

The condition outlined above is more onerous than the requirements of the local and national planning policies and thus the following revised condition is recommended:

“The difference between the cumulative rating level of all external fixed plant and equipment, and the representative background sound level should be less than +5 dB.

The measurements and assessment shall be made according to BS 4142:2014+A1:2019 – ‘Methods for rating and assessing industrial and commercial sound’ at the nearest and / or most affected noise sensitive premises, with all plant / equipment operating together at maximum capacity and inclusive of any penalty for tonal, impulsive, or other distinctive acoustic characteristics.

Reason: *In order to ensure an adequate level of amenity for occupiers in the vicinity of the proposed development in accordance with Policy EQ2 Noise Pollution of the adopted East Herts District Plan 2018.”*

I trust the above to be clear however if you’ve any queries or wish to discuss the above responses further, please do not hesitate to contact me using either of the details below. Thank you in advance for your time and consideration of the above responses and I look forward to hearing from you.

Yours sincerely,
for RPS Consulting Services Ltd

Dr. Alex Stronach
Principal Consultant - Acoustics
alex.stronach@rpsgroup.com
+44 161 874 3738