noma | architects

14 Guinea Street
Redcliffe, Bristol BS1 6SX

T 0117 929 2041
E mail@noma-uk.com
www.noma-uk.com

Planning Note
Ashley Grange Care Home Application

Project	Ashley Grange	**No./Rev**	D1_003/Rev01
Job No.	2255	**Date**	09.04.24
Client	Hartford Care	**By/ Checked**	RM/SD

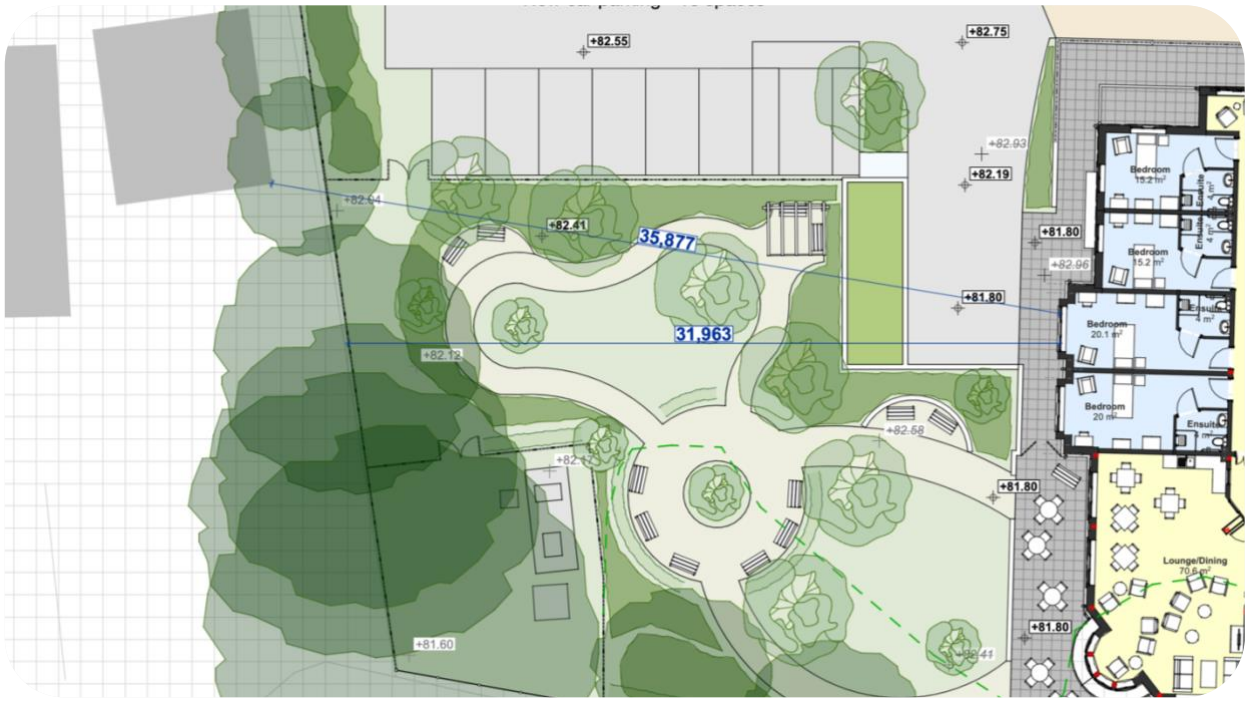
PL/2023/ New care home with associated landscaping and car parking, Land West Of Ashley Grange Nursing home, Lode Hill, Downton, SP5 3PP

Further to comments received regarding noise transfer of resident voices across the site from the care home to neighbouring properties we include the following information for consideration alongside the application.

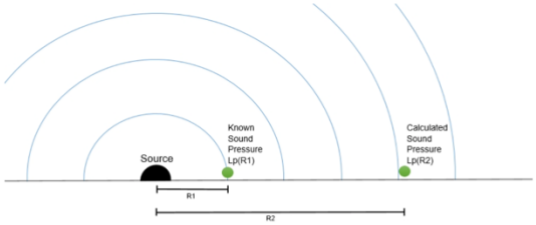
Concerns have been raised regarding the proximity of the new care home building to existing dwellings for passage of sound from resident accommodation.

We can confirm that:

- The closest distance between the nearest proposed window of the care home and the closest point of the nearest offsite neighbouring building is at least 35.8 metres:



- According to the Noise information, Planning Consultation Guidance Notes on Wiltshire's website wiltshire.gov.uk/article/8699/6-Specific-Guidance-for-Proposed-Developments the noise of a person shouting is typically between 82 decibels for a woman and 88 decibels for a man.
- The website of WKC Environmental Consultants wkcgroup.com/tools-room/inverse-square-law-sound-calculator/ includes a tool to calculate sound attenuation from a point source across a distance.
    - Inputting a maximum of 88 decibels at a distance of 0.01 metres (1 centimetre) from the source of the noise and inputting the distance between window to corner of building – 35.8 metres calculates the resulting sound to be 16.9 decibels loud.
    - The distance from the window to the boundary with the neighbouring garden is 31.9 metres and results in a sound of 17.9 decibels.

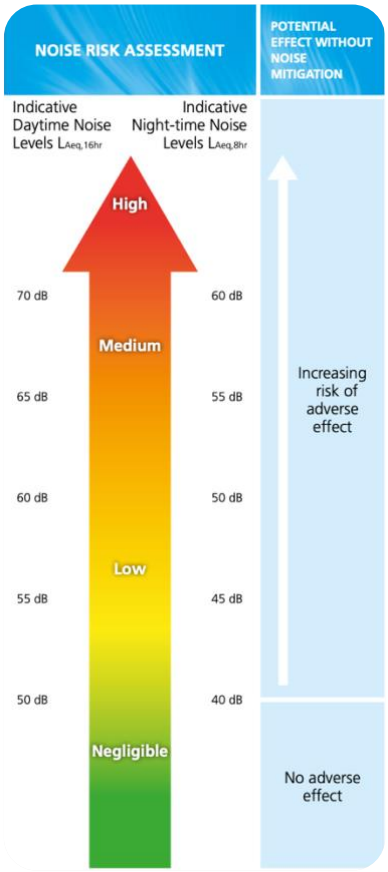


Known sound pressure level (dB(A))
88
Select Metric or Imperial Units:
Metric
Imperial
Distance from source for known sound pressure level (R1) (m)
0.01
Tested sound pressure levels are commonly given at 1m or 3ft (R1)
Distance from source to position R2 (m)
35.8
Attenuated sound pressure level (dB(A))
16.9

Known sound pressure level (dB(A))
88
Select Metric or Imperial Units:
Metric
Imperial
Distance from source for known sound pressure level (R1) (m)
0.01
Tested sound pressure levels are commonly given at 1m or 3ft (R1)
Distance from source to position R2 (m)
31.9
Attenuated sound pressure level (dB(A))
17.9

    - An example of a 20 decibel noise is stated to be rustling leaves, according to various sources, including decibelpro.app/blog/decibel-chart-of-common-sound-sources/
    - The calculations illustrated above assume that a person making a noise is directly adjacent to an open window.
    - The calculations above do not account for any barriers between the person and the neighbouring property. The walls of the building, furnishings and vegetation and boundaries in the gardens between the properties would help absorb sound, even if a resident's window was open.

- Wiltshire's guidance note listed above refers to the document ProPG: Planning & Noise Professional Practice Guidance on Planning & Noise for New Residential Development ioa.org.uk/sites/default/files/14720%20ProPG%20Main%20Document.pdf which includes Figure 1 as below, indicated to show the impact of noise levels and potential effects.



  - The image illustrates Indicative Daytime Noise Levels (LAeq,16hr) and Indicative Night-time Noise Levels (LAeq,8hr), with levels under 50 decibels for day-time and 40 decibels for night-time likely to have no adverse effect.
  - Similar noise level values are also given in the ANC's Acoustic Ventilation and Overheating Residential Design Guide association-of-noise-consultants.co.uk/wp-content/uploads/2019/12/ANC-AVO-Residential-Design-Guide-January-2020-v1.1-1.pdf and Approved Document O of the Building Regulations.
  - The sound level estimated at the boundary and the adjacent property are considerably lower than the values noted above.

- Hartford Care assess the individual care needs of new residents on a case-by-case basis.
- Of the 32 new bedrooms proposed, only eight face west, if required, these could be reserved for residents with a lower care need.
- Hartford Care provide high quality levels of care, and management practices would see any resident in distress attended to. Staff members can close windows in the event of a noise disturbance.
- The building will be constructed to meet Approved Document E of the Building Regulations, for Resistance to the passage of sound, and to Robust Details.

In summary

We believe that the distance of the building to the neighbour will mitigate sound transference across the site and that the noise level of any sound incident from the proposed care home would significantly reduce in impact on the closest offsite neighbour.

Hartford Care will manage the care requirements of the residents appropriately.

The building will be constructed to meet Building Regulations and Robust details.