

Danielle Gillespie 47 Boucher Road Belfast Co Antrim BT12 6HR 12 March 2021 **Ref: 18/0466/L3**

Dear Danielle,

Canalside, Woking – Red Phase COND/2020/0167 Further Local Authority Response on noise

Further to our letter (reference 18/0466/L2 – local authority response on noise), additional comments have been made by ASDA and their representatives to the Local Authority. The Local Authority Planning Officer has requested a response to these; our comments are set out below. It is noteworthy that our position remains unchanged.

When planning permission was granted for the wider Sheerwater Regeneration scheme, planning conditions were applied to identify what issues need to be considered for each phase. Condition 63 states:

"Prior to the commencement of development (save for demolition and below ground works), in any phase containing residential development full details of a scheme for protecting the proposed residential units in that phase from road traffic noise and plant noise in the vicinity of Asda for phases Purple and Red (as relevant) for that phase shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall comprise acoustic façade treatment including acoustic double and/or triple glazing with mechanical ventilation where necessary and any other means to protect the buildings from noise, in accordance with the principles detailed in Chapter 8 of the Addendum to the Environmental Statement dated October 2018. The approved scheme shall be carried out concurrently with the development of the residential units in that phase and shall be completed fully in accordance with the approved details. The development shall thereafter be retained and maintained in accordance with the approved details."

This directly refers to the ASDA plant and a basis for how it is required to be considered, namely through a scheme of façade acoustic treatment in accordance with the principles detailed in Chapter 8 of the Environmental Statement.

The principles detailed in Chapter 8 of the Environmental Statement require internal noise criteria taken from BS 8233:2014 to be met when windows are closed and trickle ventilators are open, the night time internal noise target is 30dB(A).

Façade acoustic requirements as necessary to meet the internal noise targets are set out in Cole Jarman report 18/0466/R1 (revision 4) and have been implemented in the design of the scheme, as required by the planning condition.



ASDA's noise consultant have now visited the store and measured the ASDA plant noise in isolation and advise the rating level of the plant to be 36 dB(A) outside the nearest proposed façade within red phase at night.

As set out in our previous letter, 18/0466/L2, Cole Jarman estimated noise from the ASDA plant in isolation to be 36 dB(A) at night outside the nearest proposed residence. This forms a minor contribution to the overall noise climate in the context of other noise sources, which is predominantly traffic noise.

Assessing the ASDA plant noise in isolation against the internal limits required by the condition is estimated to result in an internal noise level of approximately 7dB(A) with windows closed and trickle ventilators open, significantly below the night time limit of 30 dB(A). This is due to the acoustic façade requirements being driven by the higher traffic noise levels. Furthermore, during times when windows are partially open, taken to provide a noise reduction of 13dB from outside to inside, internal noise levels from ASDA plant in isolation are estimated to be 23 dB(A), still comfortably below the 30 dB(A) target. The requirements of the planning condition with respect to ASDA plant noise are therefore clearly fulfilled.

Within the recent ASDA representations to the Local Authority BS 4142:2014 is also referenced, so is discussed here for completeness.

The following extract of the standard is relevant, and is consistent with the approach defined by the LPA within planning condition 63 attached to the Sheerwater Regeneration consent:

"Where a new noise-sensitive receptor is introduced and there is extant industrial and/or commercial sound, it should be recognized that the industrial and/or commercial sound forms a component of the acoustic environment. In such circumstances other guidance and criteria in addition to or alternative to this standard can also inform the appropriateness of both introducing a new noise-sensitive receptor and the extent of required noise mitigation."

In summary, BS 4142:2014 provides an assessment methodology and criteria relating to sound from industrial sources. The procedure involves calculating a rating level of noise from the industrial facility at a position outside nearby noise sensitive locations, which is then compared with the existing background sound level. The following guidance is provided on determining an initial assessment of the impact:

- a) Typically, the greater this difference [between industrial site noise rating level and baseline background level], the greater the magnitude of the impact.
- b) A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.
- c) A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context.
- d) The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact.



Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.

ASDA representations confirm a rating level from their plant of 36dB(A).

The minimum night-time background noise measured by Cole Jarman at 3m above local ground level at the relevant position MP1 was 35 dB $L_{\rm A90}$ (refer to Cole Jarman report 18/0466/R1 revision 4). The planning consent for the ASDA scheme (reference PLAN/2013/0647) included condition 20 relating to ASDA plant noise, which defined minimum background noise levels during the night time period to be 30dB $L_{\rm A90}$ (the condition has since been discharged).

We would note that BS 4142:2014 states that it is a typical background level that should be used in assessments, not simply a minimum. It also states that although the middle of the night (when we measured the minimum $35 \, \text{dB} \, L_{\text{A90}}$) can be a distinctly different noise level to the start and end of the night period, it is of lesser importance due to sleep disturbance reasons. We have not analysed background levels to determine a 'typical' level, but it would clearly be higher than the minimum.

Accounting for the above, an initial BS 4142 assessment would indicate an adverse impact, depending on context. As stated in BS 4142, context includes the façade acoustic treatment.

Depending on which minimum background survey results are used, a 1-6 dB reduction would be required to reduce plant noise to a 'low impact'. As a partially open window typically provides 13 dB reduction from outside to inside, and closed windows provide in the region of 30dB reduction from outside to inside, it can be seen that internal noise levels from the ASDA plant are clearly acceptable.

Yours sincerely

Ben Holcombe