



Reference: Replacement fixed plant equipment, Aldi Vastern Court, Reading

Project No: 2321946

Technical note

Re: 230584 – Unit 1A, Vastern Court, Cavenham Road, Reading

Introduction

- This technical note is provided in response to the planning consultation comments received from Environmental Health Officer (EHO) Ms Rebecca Moon at Reading Borough Council (RBC), in relation to planning application 230584 for replacement fixed plant equipment at the Aldi store at Vastern Court, Reading.
- The replacement fixed plant equipment at the Aldi store has recently been installed and is understood to be operational, such that planning application 230584 is retrospective.
- An initial Sharps Redmore (SR) noise assessment report, dated 14th July 2023, was issued to Planning Potential (PP) and subsequently submitted to Reading Borough Council to accompany the planning application. Subsequently consultation comments were received from Ms Moon, EHO at RBC. These comments required the consideration of a future residential development to the south of the Aldi store; a revised SR noise assessment was issued dated 18th July 2023, to address Ms Moon's comments.
- This Technical Note is presented to address the latest set of consultation comments from Ms Moon, which are considered to seek to grossly mis applied policy EN17 of the Reading Borough Local Plan.

Responses to queries raised

1. The SR noise report, reference 2321946 dated 18th July 2023, provides, as requested, predicted plant noise levels to the future residential development at 80 Cavenham Road, Reading. It is understood that Ms Moon was involved with the review of this planning application (reference 182252), and as such is presumably fully converse with the contents of the noise assessment report prepared by dBX Acoustics that accompanied the planning application.
2. The comments received from Ms Moon on 20th July 2023 state:

"At night time, the noise levels from the plant will be 4 dB greater than the background noise levels, which means that they will not comply with policy EN17 and will cause an increase in the background noise at that location."

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I appreciate their point that the new residential development will seek to protect against the noise climate of the area, however, to worsen that climate is not something we want to do as it is better to reduce noise at source therefore people's external environment is as good as it can be.

Can they consider what mitigation they could employ to reduce the noise level from the proposed plant e.g. acoustic screen, quieter equipment, re-siting?"

3. For the avoidance of doubt, I have absolutely no technical issue with regard to the fair and reasonable application of Policy EN17 for existing residential receptors. My concern, as set out in my latest noise report (18th July 2023), is that it is not fair, nor reasonable to apply this policy to future residential receptors, which will require to be mitigated through the design of the future development.
4. Policy EN17 states:

"EN17: NOISE GENERATING EQUIPMENT Where noise generating equipment is proposed, the noise source specific⁶¹ level (plant noise level) should be at least 10 dBA below the existing background level as measured at the nearest noise sensitive receptor."
5. The explanatory notes to EN17 at paragraphs 4.2.92 to 4.2 place emphasis on both the desire to not increase the background noise climate over time, and the need to avoid significant adverse impact. However, these two aims, of both local policy EN17, and national planning policy, as outlined in the NPPF, are not necessarily aligned. Both the Planning Practice Guidance (at policy level) and BS 4142:2014+A1:2019, at a technical level, strongly imply that the threshold for noise from fixed plant to avoid significant adverse impact are considerably less onerous than the blanket application of a background minus 10 dB criteria, as sought by RBC.
6. Paragraph 4.16 of the SR noise report (18th July 2023) seeks to concisely set out why the requirement for the background minus 10 dB plant noise criterion is technically completely unnecessary in order to protect the residents of the future development at 80 Cavenham Road. It is objectively demonstrated by the dBX noise assessment that there can be absolutely no adverse impact (let alone a significant adverse impact) to the future residents of 80 Cavenham Road by reason of noise from the replacement fixed plant equipment at Aldi Vastern Court, as the building envelope will be designed to protect against noise levels at least 10 dB higher (than those from the Aldi plant).
7. The SR noise report is prepared on the basis of the baseline noise survey carried out at a position representative of the noise climate at the closest residential properties on Vastern Road. The dBX Acoustics noise report is based on a baseline noise survey covering some 7 positions around the site. dBX measurement location 6 is to the rear of the Aldi store and is representative of the noise climate in the vicinity of the closest residential block to the Aldi plant equipment. Appendix B of the dBX report presents the measured noise levels at location

6. The lowest daytime background noise level was 57 dB L_{A90} , and the lowest night time background noise level was 51 dB L_{A90} .
8. Therefore, in relation to the noise climate in the vicinity of the closest future residential block, Aldi plant rating noise (43 dB $L_{A,r,Tr}$) is 14 dB below the daytime background noise climate, and 8 dB below the night time background noise climate. This supersedes the assessment at Table 4 of the SR report (dated 18th July 2023), and is therefore considerably closer to the requirement of EN17, than previously reported.
9. Notwithstanding the comparison of rating level and background noise level above, Aldi's refrigeration consultants (K2 Engineering (Cooling) Limited) have confirmed that the source noise levels of the equipment that was replaced was the same as the recently installed replacement plant. The Table below shows the comparison of the source noise levels of the replaced, and replacement plant equipment.

TABLE 1: Comparison of source noise levels, refrigeration plant equipment at Aldi Vastern Court, Reading

Plant equipment			
Old plant replaced	Source noise level dB at 10 metres	New replacement plant	Source noise level dB at 10 metres
1x Hubbard HT4 refrigeraton pack	45 dBA	TJ 9 Comp Refrigeration pack	45 dBA
1x Searle MGA 134-AV8	39 dBA	LT condenser #1	27 dBA
		LT condenser #2	27 dBA
		Toshiba AC unit	39 dBA
Combined overall	46 dBA	Combined overall	46 dBA

10. Table 1 above demonstrates that there has been no change in source noise levels from the Aldi refrigeration plant equipment as a result of the installation of the replacement plant equipment. To this end there has been no worsening of noise output from the Aldi plant.
11. The noise survey work that unpinning the dBX noise assessment would have included noise measurements of the existing noise climate, including Aldi plant equipment, and therefore it is inherent within that assessment that by designing the envelope of the building to control noise ingress, the noise from the Aldi development is adequately addressed.

In summary, both the technical and contextual noise assessment presented within the SR objective noise report and this technical note are indicative of a low noise impact situation, which is compliant with the requirements of both local and national planning policy.

Keith Metcalfe

Director, 25th July 2023