1 Introduction

This report has been prepared to support the applicants application for planning permission for the change of use of Arch N6 within the masterplan development from B1c to B2 use to facilitate the Tenant fit-out of a brewery. The Tenant will need to install new mechanical plant within the arch to facilitate their business. There is a planning condition stipulated within the planning decision notice for the wider scheme (original planning permission ref: 2020/0362/P date 28 October 2020) that is applicable to external noise emission from new building services plant, and as such any brewery tenant would be required to comply with this condition.

"Condition 53.

Noise levels at a point 1 metre external to the sensitive facades shall be at least 5dB(A) less than the existing background measurement (L_{A90}), expressed in dB(A) when all plant/equipment (or any part of it) is in operation unless the plant/equipment hereby permitted will have a noise that has a distinguishable, discrete continuous note (whine, hiss, screech, hum), then the noise levels from that piece of plant/equipment at any sensitive facade shall be at least 10dB(A) below the L_{A90} , expressed in dB(A).

Reason: To safeguard the amenities of [adjoining] premises [and the area generally] in accordance with policy CS5 of the London Borough of Camden Local Development Framework Core Strategy and policies DP26 and DP28 of the London Borough of Camden Local Development Framework Development Policies."

Hoare Lea have previously provided advice pertaining to the above condition, based on the results of an external noise survey they conducted. Their *Acoustics, Stage 3 Acoustic Report* (Revision 01 - 08.03.2018) states the following noise emission limits which have been established in line with Condition 53:

Daytime (07:00-23:00): 42 dB L_{Aeq,T}
Night (23:00-07:00): 40 dB L_{Aeq,T}

These limits apply at the façade of the nearest noise sensitive buildings (assumed to be a calculated theoretical free-field value). It has been assumed that these are based on plant that has no distinguishable, discrete continuous note. If any such note exists, then noise emission from that specific item of plant would need to be 5 dB lower still.

2 Mechanical Plant Proposals

Details of the proposed Tenant plant are currently unknown. It has been assumed that there would need to be some new mechanical plant installed as part of the fit-out (e.g. ventilation / cooling). All new Tenant fit-out plant will be required to be fitted within the Arch, it is not proposed that any additional external plant would be installed. Any Tenant installed internal plant will be ducted to louvres on the southern façade of the Arch. It is expected that the Tenant will assess the risk of odour nuisance when developing their ventilation plant proposals and propose suitable measures to limit the risk of nuisance in accordance with DEFRA and EMAQ guidance.

A drawing showing Arch N6 and the possible ventilation / cooling routes is shown on the following page.

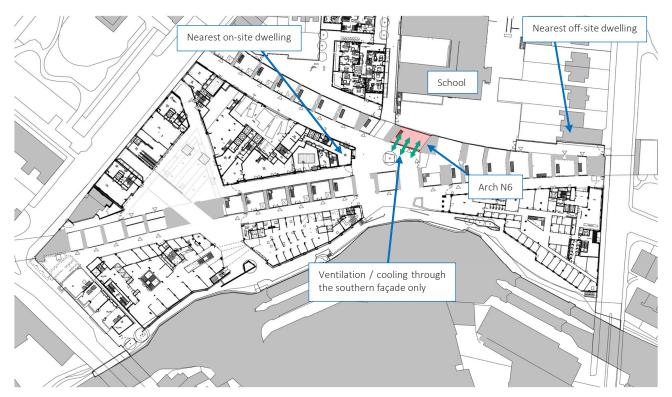


Figure 2-1: Location of Arch N6 within the wider site

3 High-level noise emission assessment

The nearest dwellings to the anticipated ventilation / cooling openings within Arch N6 is a residential apartment within the Hawley Wharf development, some 20m to the west of Arch N6 (the dwelling is at first floor level, above the residential reception at ground floor). The nearest off-site dwellings are properties on Kentish Town Rd, some 70m to the east of Arch N6. There is a school directly to the north of Arch N6.

The off-site dwellings and school will benefit from the effects of acoustic screening such that noise from the new plant will be significantly attenuated to these receivers. Controlling noise to the nearest dwellings within the Hawley Wharf development can therefore be expected to result in acceptable noise levels at other nearby dwellings.

Assuming point source propagation from the new items of mechanical plant, would result in an attenuation of 26 dB to a point 1m just outside the windows of the nearest noise-sensitive receivers (as a theoretical free-field). This assumes no additional attenuation owing to screening, directivity etc, and so can be considered worst-case.

It would be reasonable to assume that the new mechanical plant may have a tonal character to it, in which case the limits would be:

• Noise emission limits (at a point near to the facades of dwellings, as a theoretical free-field)

o Daytime (07:00-23:00): 37 dB $L_{Aeq,T}$ o Night (23:00-07:00): 35 dB $L_{Aeq,T}$ These can be calculated back to a point 1m external to the ventilation / cooling openings of Arch N6. It is considered prudent to target a noise emission level marginally below the limits given above, as they are applicable with all plant operating on the wider Hawley Wharf development. For guidance, an allowance of 5 dB has been made for this purpose. The calculated values are therefore:

• Noise emission limits (at a point 1m external to the ventilation / cooling openings of Arch N6)

o Daytime (07:00-23:00): 58 dB $L_{Aeq,T}$ o Night (23:00-07:00): 56 dB $L_{Aeq,T}$

These limits are combined levels, for all mechanical plant associated with the fit-out of Arch N6.

It is expected that plant will be carefully selected, and attenuators / silencers fitted accordingly so that the noise emission limits are satisfied. From an initial feasibility review of the type of plant that may be installed, it is considered that the limits could be reasonably achieved with suitable selections and attenuation specifications.

Therefore, with carefully selected equipment, and appropriately specified attenuation measures, the noise emission limits required by the Local Authority are expected to be achievable.