

## Appendix 2.4

### Intra-development noise assessment

## Introduction

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Operational noise for this development could result from mechanical services plant. The nearest existing noise sensitive receptors are some distance from the development site, however future developments are proposed for adjacent plots immediately to the north-east, south-east and north-west.

Importantly, noise control for mechanical services plant is uncontroversial and can be secured by a suitably worded planning condition.

The assessment of noise of a commercial/industrial nature, including noise from building services plant is commonly based on *British Standard 4142 (2014) - Methods for rating and assessing industrial and commercial sound* as described in Section 2.4.1 of this EIA.

Consistent with many schemes, details of new sources of commercial/industrial noise are unknown at this stage, but noise emission limits can be specified through a planning condition and controlled by design.

Noise limits have therefore been defined following the principles of BS4142, with regard to the requirements of the Local Planning Authority.

Liverpool City Council have advised that new noise sources of an industrial nature should not exceed a rating level of parity with the background noise level. This has therefore been adopted as a significance threshold.

## Proposed noise limits

The measured background ( $L_{A90}$ ) noise levels, reproduced in Table D1, have been used to derive noise limits for commercial/industrial sources noise.

Noise sensitive receptor	Noise level (dB), $L_{A90,T}$		
	Day (07:00 – 23:00)	Evening (19:00 – 23:00)	Night (23:00 – 07:00)
4 - William Jessop Way	55	55	46
3 - Bath Street	60	57	50

Table D1: Background ( $L_{A90}$ ) noise levels

Table D2 suggests noise limits for individual plots, as a rating level according to BS4142. The value is equal to the background noise level ( $L_{A90}$ ) at representative measurement locations.

Committed development plots	Noise limits in decibels (dB), $L_{Ar,Tr}$		
	Day (07:00 – 23:00)	Evening (19:00 – 23:00)	Night (23:00 – 07:00)
North-east (south-western elevations)	60	57	50
South-east (north-western elevations)*	55	-	-
North-west (south-eastern elevations)*	55	-	-

Table D2: Noise limits for commercial/industrial noise

\* The outline planning permission for these plots are for commercial property, which are not expected to be occupied during evening the time periods.

The details of sources of commercial/industrial noise cannot currently be defined in detail. However the mitigation of this type of noise is uncontroversial and can therefore be secured by a suitably worded planning condition to ensure the designs comply with the assessment criteria.