



Hann Tucker Associates

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PROJECT TECHNICAL MEMORANDUM

JOB TITLE : The Greenfinch, Didsbury
REF : HT: 28495/PTM2
DATE : 1 September 2022
FROM : Jake Howarth
ISSUED TO : Wren Properties & Paul Butler Associates

RE: CONDITION 15 DISCHARGE NOTE

We understand that an external condenser is proposed at the site of the former Greenfinch Pub in Didsbury, Manchester. The scheme has been granted planning (ref 130831/FO/2021) subject to a number of conditions. One of these conditions, condition 15, relates to the control of noise from externally mounted plant items. The wording of condition 15 is provided below for reference:

“15) Externally mounted ancillary plant, equipment and servicing shall be selected and/or acoustically treated in accordance with a scheme designed so as to achieve a rating level of 5dB (LAeq) below the typical background (LA90) level at the nearest noise sensitive location. The scheme shall be submitted to and approved in writing by the City Council as local planning authority in order to secure a reduction in the level of noise emanating from the site. The approved scheme shall be completed before the premises is occupied. Upon completion of the development a verification report will be required to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic report. The report shall also undertake post completion testing to confirm that the noise criteria has been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.”

Based on the above, an assessment of the proposed condenser would be required to demonstrate that the rating level is no more than 5 dBA below the typical background noise level at the site. This technical memorandum provides details of the proposed plant item and also presents our plant noise assessment:



1.0 Existing Noise Climate and Plant Noise Limits

An environmental noise survey was carried out by Hann Tucker Associates as part of the planning application for the scheme. Full details of the noise survey can be found in Hann Tucker Report 28495-RP-NIA1-Rev2-MFH, however, the results have been summarised below for ease of reference. All results are presented as façade levels.

Position	Measured Sound Pressure Levels (dB)				
	Daytime (07:00–19:00)		Night-time (23:00–07:00)		
	L _{Aeq,16h}	Lowest 'typical' L _{A90,15min}	L _{Aeq,8h}	Lowest 'typical' L _{A90,15min}	L _{Afmax,5min} *
MP1	65	51	59	31	81

Based on the measured noise levels at the site and the requirements of MCC the following plant noise emission criteria should be achieved at 1 metre from the nearest noise sensitive residential window with all plant associated with the proposed development operating simultaneously.

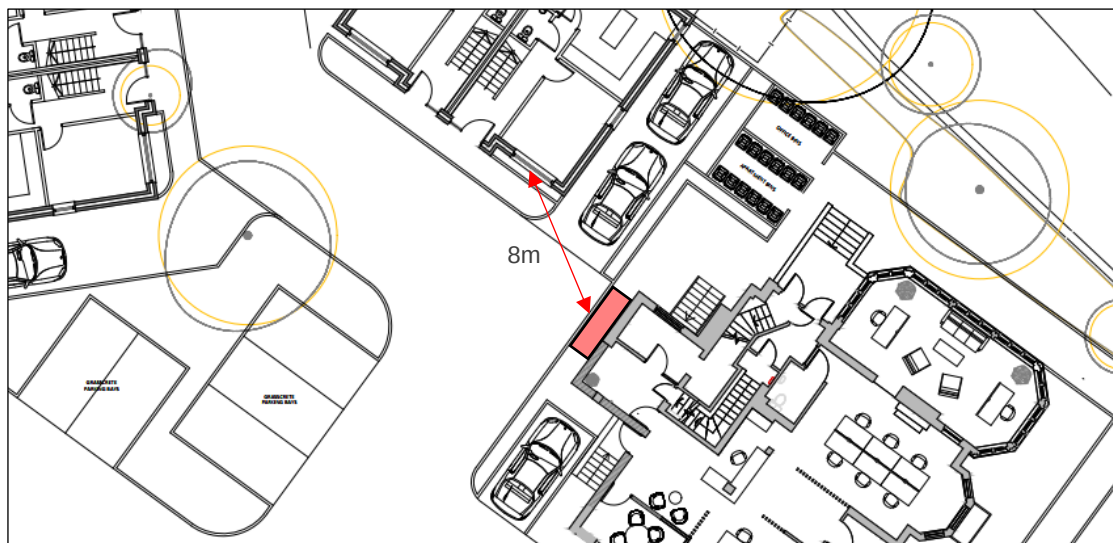
Period	Cumulative Plant Noise Emission Limit (BS 4142:2014 Rating Level)
Daytime (07:00-23:00)	46 dBA
Night-time (23:00-07:00)	30 ¹ dBA

¹Nighttime limit set at a floor level of 30 dB to avoid overly onerous limits due to low background noise at the site.

2.0 Proposed Plant Installations

The condenser is to be installed on the west façade of the Greenfinch building approximately 8m from the nearest window of Plot 9 and 6m from the nearest apartment within the Greenfinch building. The windows of Plot 9 are considered to be the most affected as they have line-of-sight to the condenser whereas the apartment windows are fully screened due to the building massing.

The proposed plant location is highlighted on the plan below.



Plan Showing Location of Condenser (red) and Distance to Plot 9

The condenser itself is a Samsung AM040NXMDER/EU unit with a sound power level of 67 dB L_{WA} .

The condenser will be used by the occupants of the ground floor office. As such, the hours of operation are understood to be between 07:00 to 19:00 (ie typical office hours). As such, the unit will not operate during the night.

3.0 Plant Noise Assessment

The following table summarise our calculations of atmospheric noise emissions to the nearest noise sensitive residential window.

	Daytime (07:00 – 23:00 hours)
Sound Power Level of Samsung AM040NXMDER/EU, L_{WA}	67 dB
Radiation Mode Correction, $Q = 4$	+6 dB
Distance Correction to 8m (Conformal Area)	-33 dB
Barrier Correction	0 dB
BS4142 Correction	+3* dB
Façade Reflection	+3 dB
Calculated Noise Level at Receptor, $L_{A/Tr}$	46 dB

*Unit user controlled so could be intermittent in operation. As such a 3 dB penalty has been applied.



Based on the above our calculations indicate that the proposed plant should be capable of achieving the requirements of the Local Authority as set out in Section 1.0.

Yours sincerely

Jake Howarth

for HANN TUCKER ASSOCIATES