



Ref: P4659/L01/NRS

28 May 2024

To:	Kevin Ma	of:	TADW Architects
From:	Naveen Simha	of:	AEC
Check:	David Terry	of:	AEC

3-9 Hyde Road, Manchester – Review of Planning Condition

Further to the noise measurements undertaken at the above premises by AEC on Friday 17 May 2024, please find the results below.

Criteria

It is understood that the following Planning Conditions (6 and 7) from Manchester City Council (MCC) needs to be satisfied:

'6) The premises shall be acoustically insulated and treated to limit the break out of noise in accordance with the recommendations contained within the AEC Noise Assessment Report dated 6 January 2023 (ref: P4659/R1a/NRS) and stamped as received by the City Council, as Local Planning Authority, on 6 January 2023. The scheme shall be implemented in full before the use commences.

Prior to occupation 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 consultant's report. The report shall also undertake post completion testing to confirm that acceptable criteria have 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.

Reason - To safeguard the amenities of the occupiers of the building and occupiers of nearby properties, pursuant to policies SP1 and DM1, of the Manchester Core Strategy and saved policy DC26 of the Unitary Development Plan for the City of Manchester.

7) a) Any 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 (L_{Aeq}) below the typical background (L_{A90}) level at the nearest noise sensitive location. Prior to commencement of the use hereby approved 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 scheme shall be implemented in full before the use commences or as otherwise agreed in writing by the City Council as local planning authority.

b) Prior to the operation of the scheme a verification report shall be submitted to and approved in writing by the City Council as local planning authority 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 have 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.

Reason - To minimise the impact of the development and to prevent a general increase in pre-existing background noise levels around the site, pursuant to policies SP1 and DM1, of the Manchester Core Strategy and saved policy DC26 of the Unitary Development Plan for the City of Manchester.'

AEC's noise assessment report (ref: P4659/R1a/NRS) has set out the following criteria for noise breaking out of the snooker venue.

'For noise break-out from the snooker club, AEC proposes that the ambient and maximum noise levels at the nearest noise sensitive receptors should be controlled to no greater than 5dB below the measured night-time background noise level.'

The measured night-time background noise levels referenced in AEC's noise assessment report are 56dBL_{A90,T} and 47dBL_{A90,T}, external to the nearest residences on the A6 and Higher Ardwick, respectively.

Test Results and Assessment

Planning Condition 6

In order to demonstrate compliance with Planning Condition 6, internal noise level measurements were undertaken in the snooker club between 1600h and 1730h on a busy Friday afternoon.

Calibration certificates relating to the sound level meter and microphone used for the measurements are presented at the end of this letter.

Internal ambient and maximum noise levels of approximately 69dBL_{Aeq,T} and 88dBL_{Amax} were measured at 2m from the snooker tables. The measured ambient noise levels were due to people talking and background music being played in the venue. The measured maximum noise levels were due to the impact between the snooker balls (particularly during break-off).

It was observed on site that about 75-80% of the venue was occupied at the time of measurements and hence the measured noise levels are representative of the typical noise level at the snooker club.

AEC also undertook noise level measurements external to the nearest residences on the A6 (south-west) and Higher Ardwick (north-west).

AEC measured background noise levels of approximately 65dBL_{A90,T} and 57dBL_{A90,T} external to the residences on the A6 and Higher Ardwick, respectively. It was observed on site that the measured background noise levels at both locations were completely due to road traffic and noise from the snooker club was not audible external to both residences.

In addition, noise from the snooker club was still not audible at about 3m from the external façade of the building.

Therefore, based on the above, it is recommended that planning Condition 6 can be discharged.

Planning Condition 7

Please note that Planning Condition 7a has been addressed in AEC's noise assessment report P4659/R1a/NRS.

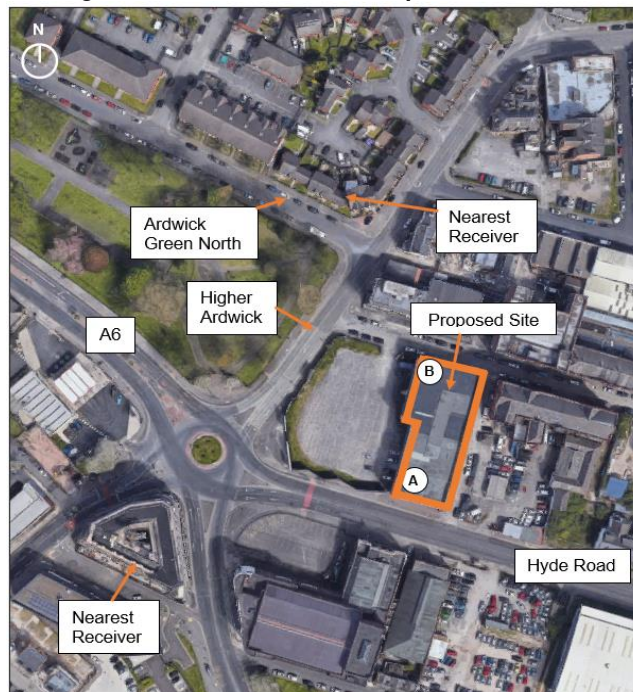
With respect to Planning Condition 7b, there is a supply and extract fan, relating to the kitchen extract system, mounted on the roof top, as seen in Figure 1, below.

AEC measured noise levels of approximately 62dBL_{Aeq,T} and 57dBL_{Aeq,T} at Locations, A (roof edge closer to residence on A6) and B (roof edge closer to residence on Higher Ardwick), respectively. The measurement locations are indicated in Figure 2, below. Noise levels measured at both locations were due to the plant noise from the kitchen extract system.

Figure 1 – Roof Top Mounted Supply and Extract Ducts



Figure 2 – Location of Roof Top Measurements



Based on the above measured noise levels from the extract system, distance attenuation to the residences (120m to the residence on the A6 and 100m to the residence on Higher Ardwick) and screening obtained from the roof edge (at least 10dB) the noise levels external to the residences on the A6 and Higher Ardwick will be less than or equal to 51dBL_{Aeq,T} and 42dBL_{Aeq,T}, respectively.

In addition, ambient noise levels of about 67dBL_{Aeq,T} and 68dBL_{Aeq,T} were measured external to the nearest residences on A6 and Higher Ardwick, respectively. It was observed on site that the measured ambient noise levels at both locations were completely due to road traffic and plant noise from the kitchen extract system was not audible external to both residences.

Therefore, based on the above, planning Condition 7 can be discharged.

CERTIFICATE OF CALIBRATION

ISSUED BY **Cirrus Research**

DATE OF ISSUE **06 September 2023** CERTIFICATE NUMBER **198670**



**Cirrus Research
Acoustic House
Bridlington Road
Hunmanby
North Yorkshire
YO14 0PH
United Kingdom**

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Approved signatory

R.Thomas

Electronically signed:



Sound Level Meter : IEC 61672-3:2013

Instrument information

Manufacturer: Cirrus Research plc
Model: CR:171B
Serial number: G056597
Class: 1
Firmware version: 3.2.3254

Notes:

Test summary

Date of calibration: 04 September 2023

The calibration was performed respecting the requirements of ISO/IEC 17025:2017.

Periodic tests were performed in accordance with procedures from IEC 61672-3:2013.

The sound level meter submitted for testing successfully completed the class 1 periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed.

However, no general statement or conclusion can be made about conformance of the sound level meter to the full specifications of IEC 61672-1:2013 because (a) evidence was not publicly available, from an independent testing organisation responsible for pattern approvals, to determine that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013 or correction data for acoustical test of frequency weighting were not provided in the Instruction Manual and (b) because the periodic tests of IEC 61672-3:2013 cover only a limited subset of the specifications in IEC 61672-1:2013.

Notes

This certificate provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory. The results within this certificate relate only to the items calibrated. The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a coverage probability of approximately 95%.

CERTIFICATE OF CALIBRATION

Certificate Number:
198670

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Environmental conditions

The following conditions were recorded at the time of the test:

Before Pressure: 101.79 kPa Temperature: 21.6 °C Humidity: 46.6 %
After Pressure: 101.76 kPa Temperature: 21.2 °C Humidity: 43.2 %

Test equipment

Equipment	Manufacturer	Model	Serial number
Signal Generator	KEYSIGHT	33511B	MY58001681
Attenuator	Cirrus Research	ZE:952	64370
Environmental Monitor	Comet	T7510	16966334

Additional instrument information

Instruction manual:

Reference level range: Single range

Pattern approval: No

Source of pattern approval: -

Preamplifier

Model: MV:200F

Serial number: 3277F

Microphone

Model: MK:224

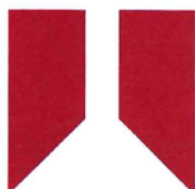
Serial number: 216585D

Test results summary

Test	Result
Toneburst response	Complies
Electrical noise-floor	Complies
Linearity	Complies
Electrical Frequency weightings	Complies
Frequency and time weightings at 1 kHz	Complies
C-weighted peak	Complies
Overload indication	Complies
High level stability	Complies
Long-term stability	Complies
Acoustic Frequency weightings	Complies

CERTIFICATE OF CALIBRATION

ISSUED BY **Cirrus Research**
DATE OF ISSUE **24 August 2023** CERTIFICATE NUMBER **198672**



Cirrus Research
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Test engineer:
D.Swalwell
Electronically signed:



Microphone

Microphone capsule

Manufacturer: Cirrus Research plc

Model: MK:224

Serial Number: 216585D

Calibration procedure

Date of calibration: 24 August 2023

Open circuit: 49.5 mV/Pa

Sensitivity at 1 kHz: -26.1 dB rel 1 V/Pa

The microphone capsule detailed above has been calibrated to the published data as described in the operating manual of the associated sound level meter (where applicable).

The frequency response was measured using an electrostatic actuator in accordance with BS EN 61094-6:2005 with the free-field response derived via standard correction data traceable to a National Measurement Institute.

The absolute sensitivity at 1 kHz was measured using an acoustic calibrator conforming to IEC 60942:2003 Class 1.

Environmental conditions

Pressure: 100.40 kPa

Temperature: 23.0 °C

Humidity: 62.0 %

CERTIFICATE OF CALIBRATION

Certificate Number:

198672

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Free-Field Frequency Response : Tabular

Frequency (Hz)	Free-Field Sensitivity (dB rel 1 kHz)	Actuator Response (dB)
63	0.17	-0.06
80	0.17	0.04
100	0.15	0.07
125	0.13	0.10
160	0.13	0.13
200	0.12	0.13
250	0.10	0.12
315	0.12	0.12
400	0.09	0.11
500	0.08	0.09
630	0.03	0.04
800	0.04	0.04
1 000	0.00	-0.01
1 250	-0.04	-0.07
1 600	-0.09	-0.19
2 000	-0.15	-0.34
2 500	-0.24	-0.54
3 150	-0.39	-0.88
4 000	-0.54	-1.35
5 000	-0.70	-1.93
6 300	-0.76	-2.70
8 000	-0.58	-3.64
10 000	-0.28	-4.97
12 500	0.24	-6.26
16 000	0.32	-7.62
20 000	-1.39	-10.43

Free-Field Frequency Response : Graphical

