

Q002581-L01-SW

Brian Westhead
Senior Project Manager
The TSK Group Ltd
130 Metroplex Business Park
Salford M50 2UK

01/06/2026

Dear Brian,

145306/FO/2026 – 24 MOUNT STREET MANCHESTER

We have reviewed details of the proposed installation of 2no. condensers at roof level at the above premises with reference to the requirements of Manchester City Council.

Local Authority Requirements

Manchester City Council requires that cumulative noise emissions from building services plant should be controlled to achieve a rating level ($dB_{LA,r,Tr}$) of 5dB below the typical background (dB_{LA90}) level at the nearest noise sensitive location when assessed in accordance with BS4142:2014 + A1:2019.

The nearest noise sensitive receptor is an office building approximately 25m to the west on Museum Street. 24 Mount Street is several metres taller than this building, and as such there is no direct line of sight from the plant to the receptor.

As detailed below, the noise impact of roof plant at 24 Mount Street was previously assessed at the nearest residential receptor, the Radisson Blu Edwardian Hotel, approximately 40m to the west.

This building is of a similar height to 24 Mount Street and, as such, is more likely to be exposed to noise from roof mounted plant. As such, the Radisson Blu has been used as the receptor in the following assessment of the current proposals.

Assessment Methodology

It would be typical for a plant noise impact assessment to be supported by an environmental noise survey to quantify the background noise level at the residential receptors. In this case, this is not practical due to access restrictions. Measurements made at the roof of 24 Mount Street would be affected by existing building services plant, and measurements made at street level would be affected by road traffic and pedestrian noise. Access to the Hotel is not available.

As such, this assessment is based on the cumulative building services noise emission limits agreed for the refurbishment of 24 Mount Street under planning application 112455/FO/2016.

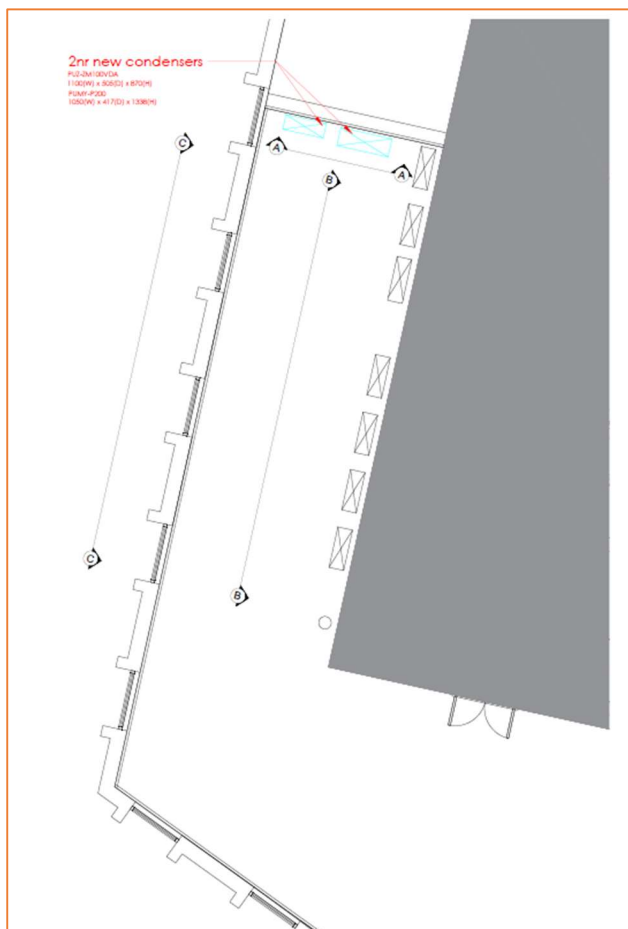
Proposals

Two new condensers are located adjacent to 7no. existing units as shown in Figure 1, on the following page.

The new units comprise;

- Mitsubishi PUZ-ZM-100VDA – 63dBL_{WA}
- Mitsubishi PUMY-P200 – 75dBL_{WA}

Figure 1: Plant Location



Noise Climate

A noise impact assessment for the refurbishment of the building and installation of roof plant was undertaken by Hoare Lea Associates, report reference *REP-1006149-SM-20160523-Environmental Report-Rev 1f* dated 10th June 2016. This was submitted in support of planning application reference 112455/FO/2016.

The lowest measured background noise level was 46dBL_{A90,T} during the daytime and 45dBL_{A90,T} at night. As such, cumulative plant noise emission limits were set at 41dBL_{A,r,Tr} during the daytime and 40dBL_{A,r,Tr} at night when assessed at 1m from the façade of the Midland Hotel, the nearest residential receptor which is located to the east of 24 Mount Street.

In support of discharge of Condition 19 of that application, a report including assessment of noise from the proposed building services was produced by Lighthouse Acoustics, report reference *0216/BAR1* dated 5th November 2018.

The assessment presented by Lighthouse Acoustics determined cumulative plant noise levels at the Radisson Blu Edwardian Hotel to be 39dBL_{A,r,Tr}.

Assessment

Table 1, below, details the calculated noise level from the two new condensing units arising at the Radisson Blu Hotel.

The proposed condensing units are 90° off axis to the receptor, and screened by the roof parapet, and as such a conservative -5dB correction for partial screening has been included.

Table 1: Predicted Noise Impact

Item	Commentary	Result
Cumulative sound power level of proposed plant	75dBL _{WA} + 63dBL _{WA}	75dBL _{WA}
Distance correction to 40m	-20 x log (40)	-32dB
Directivity, hemispherical radiation	-8dB	-8dB
Partial screening	-5dB	-5dB
Resultant rating level at receptor	No correction required for acoustic characteristics	30dBL_{A,r,Tr}

Given the noise level for the currently installed plant of 39dBL_{A,r,Tr} determined by Lighthouse Acoustics as detailed above, the cumulative plant noise level at the Radisson Blu hotel with the addition of the proposed new condensing units would be 40dBL_{A,r,Tr}.

This therefore complies with the cumulative plant noise emission limits determined under planning application reference 112455/FO/2016 and as such the proposed plant would be compliant with MCC requirements.

It should be noted that the cumulative plant noise level of 40dBL_{A,r,Tr} is based on all installed plant operating simultaneously and at maximum design capacity, and as such represents a worst case for noise impact.

Yours Sincerely,



Susan Witterick

Director, dBx Acoustics Ltd