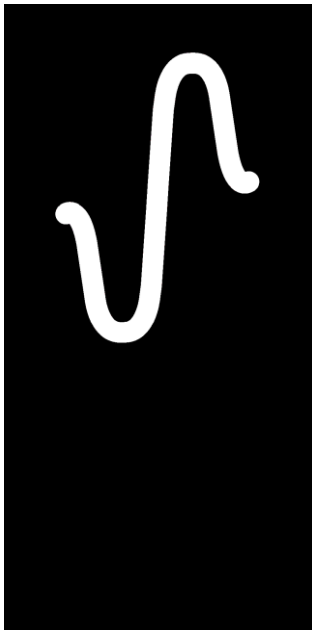
# Belstaff, 48 King St Manchester

Noise Impact Assessment Report

**Client:**
Belstaff
c/o SmartJone Limited
Quantum House, 32 Mellor Road
Cheadle Hulme, SK8 5AU

**Date:**
24 July 2025

**Our Ref:**
22149-RP-1-R2



JAMESON ACOUSTICS

Consultants in acoustics,
noise and vibration

JAMESON
ACOUSTICS

# Document Control

| Revision | Date | Author | Description |
|---|---|---|---|
| 0 | 23-06-2024 | AJ | First issue |
| 1 | 10-07-2024 | AJ | Updated plant selections/layout |
| 2 | 24-07-2025 | AJ | Updated to latest design proposals |

This report has been prepared with all reasonable skill, care and diligence for the sole benefit, use and information of the aforementioned Client in accordance with the purposes and terms agreed between ourselves and the Client. The liability of Jameson Acoustics Limited in respect of the information contained within this report will not extend to any third party.

| | |
|---|---|
| **Author** | [redacted] |
| **Position** | |
| **Qualifications** | |
| **Signature** | [redacted] |
| **Date** | 24-07-2025 |

JAMESON
ACOUSTICS

## Executive Summary

Planning permission is sought for the fitout of 48 King Street in Manchester for Belstaff, comprising a basement & ground floor retail space and first floor offices. The works will include the installation of new items of external plant.

Jameson Acoustics Limited has been commissioned to undertake a plant noise assessment to supplement the planning application.

Our assessment demonstrates that noise mitigation measures will be required to ensure noise contributions from external plant achieves appropriate noise emission limits in line with BS 4142 and Manchester City Centre requirements.

An acoustic specification for acoustic enclosure to the lightwell condenser units has been provided. The proposed acoustic enclosure has been reviewed and found to satisfy the acoustic specification.

JAMESON
ACOUSTICS

# Contents


1.0 Introduction ..... 4

2.0 Objectives ..... 4

3.0 Site Description ..... 4

4.0 Project Proposal ..... 7

5.0 Planning Policy, Legislation & Assessment Guides ..... 7

6.0 Baseline Noise Survey ..... 9

7.0 Plant Noise Limits ..... 12

8.0 Plant Noise Assessment ..... 13

9.0 Conclusions ..... 15

Appendix A – Acoustic Terminology ..... 17

Appendix B – Planning Policy & Assessment Guides ..... 18

Appendix C – Noise Survey Time History Graph ..... 21

# 1.0 Introduction

Planning permission is sought for the fitout of 48 King Street in Manchester for Belstaff, comprising a basement & ground floor retail space and first floor offices. The works will include the installation of new items of external plant.

Jameson Acoustics Limited has been commissioned to undertake a plant noise assessment to supplement the planning application.

The assessment seeks to demonstrate that noise generated from the operation of the new plant installation can be suitably controlled to mitigate the risk of adverse noise impacts onto nearby noise sensitive properties.

Our findings are presented herein.

NB: For a description of the acoustic terminology used herein, please see Appendix A.

# 2.0 Objectives

To review national and local planning policies/requirements and relevant design standards and good practice guides that will inform the noise impact assessments.

To carry out a baseline environmental noise survey at the site over a minimum 24-hour period, capturing continuous daytime and night-time noise levels, in accordance with BS 7445 and BS 4142.

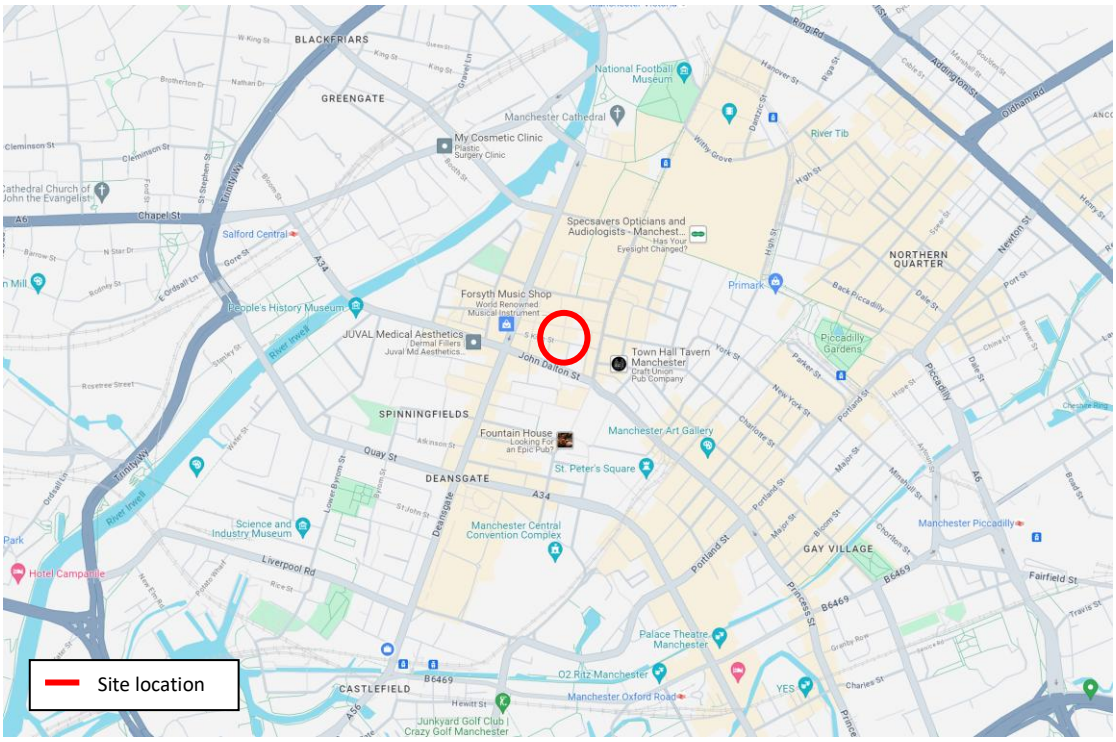
To assess the noise emissions from the proposed items of external plant in accordance with BS 4142 and based upon data with which we are provided.

To provide limiting noise specifications and advise on noise mitigation measures as necessary to bring plant noise emissions in line with the proposed criteria.

# 3.0 Site Description

## 3.1 Location

The site is located at 48 King Street in Manchester City Centre and falls under the jurisdiction of Manchester City Council. See Location Plan below.




Location Plan (© maps.google.co.uk)

## 3.2 Description

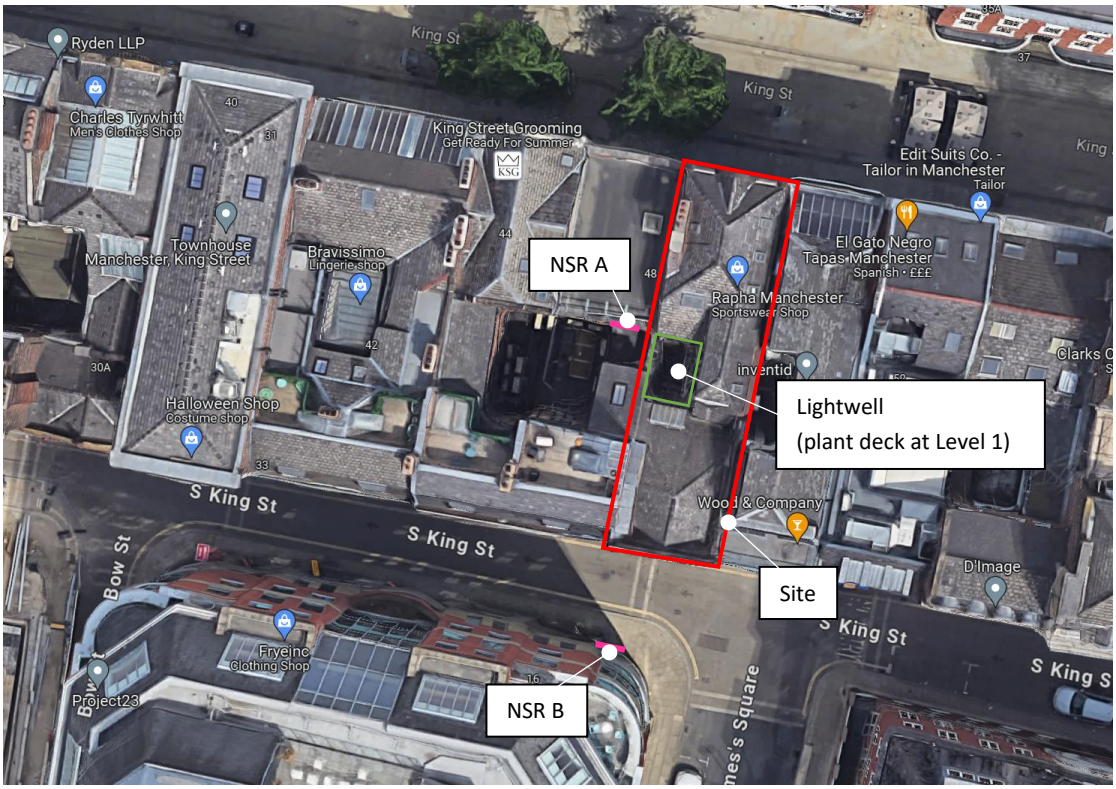
The site comprises a listed terrace retail/office building located between King Street and South King Street. The neighbouring buildings are all generally of the same usage, with basement/ground floor retail onto King Street and upper floor office space.

The building has a central lightwell at first floor level, which is used as a plant deck. Currently, there are 4nr condensers in the lightwell, providing heating and cooling to the building's ground floor and basement levels.

The nearest noise sensitive windows to this plant area were considered to be rear upper-level windows of the adjacent buildings: 44 and 46 King Street. The nearest and most exposed window being at second floor level, approximately 5 metres from the lightwell's plant deck (labelled NSR A on the Figures below).

The proposals show an internally-mounted heat recovery unit with atmospheric inlet/outlet grilles at street level onto South King Street, the building's rear elevation. The nearest noise sensitive property to this new plant will be Dalton Place offices (labelled NSR B on the Figures below).

The environmental noise climate in the area of the lightwell was noted to be dominated by distant road traffic, occasional aircraft passbys and plant serving neighbouring buildings.

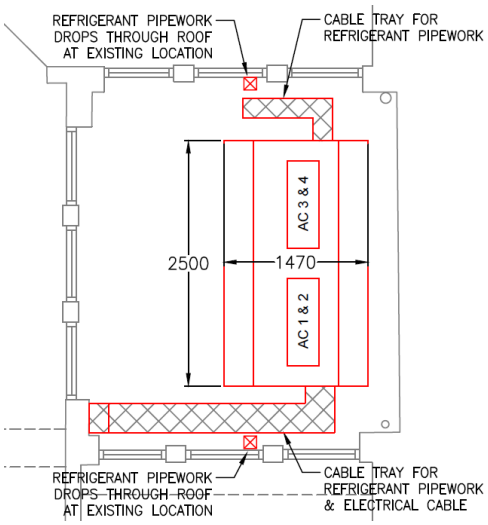



Site Plan (© maps.google.co.uk)

3D View showing lightwell and NSR A location (© maps.google.co.uk)

# 4.0 Project Proposal

The proposal is to fit out the building for basement/ground floor retail space and first floor office accommodation. The new plant will be installed in the lightwell. The proposals will see the replacement of all condensers for 4nr new units in a 2 x 2 stack arrangement with an acoustic enclosure capturing all four units, as shown below.




Plan

Section

# 5.0 Planning Policy, Legislation & Assessment Guides

## 5.1 National Planning Policy

National planning policies are set out in the following:

- Noise Policy Statement for England [NPSE], 2010;
- National Planning Policy Framework [NPPF], 2024;
- National Planning Practice Guidance – Noise [PPGN], 2019.

These documents provide a qualitative approach to noise assessments. See Appendix B for a detailed description of each.

## 5.2 Local Planning Requirements

### 5.2.1 Local Authority Development Plan

Manchester City Council's [MCC] Core Strategy was adopted on the 11 July 2012 and is the key document in the Manchester Local Plan. It sets the out the long-term strategic policies for Manchester's future development and will form the framework that planning applications will be assessed against.

The Core Strategy requests that all new developments follow the 'Development Principles' and accord with the design guidance set out in the Supplementary Planning Documents. In accordance with Policy DM1, this includes the effects on amenity due to noise generated by a new development and, conversely for noise sensitive uses (e.g. residential), the effects of environmental noise onto the new development.

MCC's Supplementary Planning Document relating to noise is their 'Planning & Noise, Technical Guidance' published in October 2022 by their Environmental Protection Team. This document provides guidance to applicants and consultants concerning the assessment and prediction of environmental noise associated with a particular development. The key elements relevant to this development are summarised below.

### 5.2.2 Specific Guidance on Noise

In relation to commercial noise, MCC's guidance advises that "*BS 4142 should be used to assess the likely impact of noise from industrial and commercial sources at noise sensitive premises*".

The Council consider that new developments should contribute and enhance the area in which they are located and where possible, i.e. prevent 'noise creep', contribute to the improvement of people's health and quality of life as per the NPSE. With this in mind, the design objective should be:

**'The development should be 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.'**

For fixed plant, the Council advises a BS 4142 assessment that demonstrates that:

**'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'.**

## 5.3 BS 4142: 2014+A1: 2019

British Standard BS 4142 looks at the assessment of noise of a commercial / industrial nature. It describes methods for rating and assessing outdoor sound of an industrial and/or commercial nature "*on people who might be inside or outside a dwelling or premises used for residential purposes upon*

*which sound is incident".* In relation to this development, this includes sound from fixed installations, comprising M&E plant and equipment.

The assessment method is based on the difference between the measured 'background sound level' without the influence of any industrial noise source, and the 'rating level' of the industrial source, at the receiver location. The standard states that:

- "*a difference of around +10 dB or more is likely to be an indication of a significant adverse impact*";
- "*a difference of around +5 dB is of marginal significance is likely to be an indication of an adverse impact*";
- "*where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact*".

# 6.0 Baseline Noise Survey

## 6.1 Procedure

Automated noise level measurements were taken from 11:00 hours on Wednesday 29 May 2024 to 11:00 hours on Thursday 30 May 2024 at a single on-site position [ref. Position 1] selected to establish prevailing background noise levels in the area. The microphone was protruding 1-metre out of a second-floor window over the central lightwell. The 4nr existing condenser units were switched off for the duration of the survey.

The equipment was programme to continuously log all relevant A-weighted broadband (dBA) and linear spectral noise level indices, including $L_{eq}$, $L_{90}$, and $L_{max}$, over 15-minute and 1-hour intervals.

The below Figure illustrates the monitoring position.

Site Plan showing measurement position (© maps.google.co.uk)

Additional manned noise level measurements were taken within the lightwell with all 4nr condenser units operating at full duty (under a test run) in cooling and heating modes. The measurements were taken in the centre of the lightwell, approximately 1 metre from the face of all side discharge condensers at a height of approximately 1.2 metres. See below Photograph.

All measurements were taken in general accordance with BS 7445-1: 2003 '*Description and Measurement of Environmental Noise*'.

## 6.2 Instrumentation

The instrumentation used for the survey is summarised below. The sound level meters were hand-calibrated at the beginning and end of the survey period. No significant deviations in calibration level were noted (not more than +/- 0.05 dB).

| Description | Equipment | Serial Nr | Lab Calibration Expiry | Lab Calibration Certificate Nr |
|---|---|---|---|---|
| Class 1 sound level meter [Position 1] | Svantek 971A (with Type 7152 microphone) | 124663 (82835) | 11 Aug 2024 | 12 Aug 2022 |
| Class 1 sound calibrator [manned] | Cirrus CR:515 | 57570 | 28 Nov 2024 | 1153776 |
| Class 1 sound calibrator | Cirrus CR:515 | 57570 | 28 Nov 2024 | 1153776 |

## 6.3 Weather Conditions

Due to the nature of the automated survey, i.e. unmanned, it is not possible to describe the weather conditions throughout the duration of the survey period. However, on install and collection (and during the manned survey), weather conditions were considered suitable for obtaining representative readings. The sky was overcast (patchy cloud cover), road surfaces were dry and wind speeds were low (below 3 m/s). Based on internet weather reports for the full duration of the survey, conditions remain commensurate with those described, and there were no periods of rainfall.

## 6.4 Observed Noise Climate

Due to the nature of the automated survey, i.e. unmanned, it is not possible to describe the noise climate throughout the duration of the survey period. However, on install and collection the noise climate at the measurement position was noted to be dominated by distant road traffic, occasional aircraft pass-overs and plant serving neighbouring building. NB: Existing condenser units were switched off for the duration of the automated survey.

## 6.5 Survey Results & Analysis

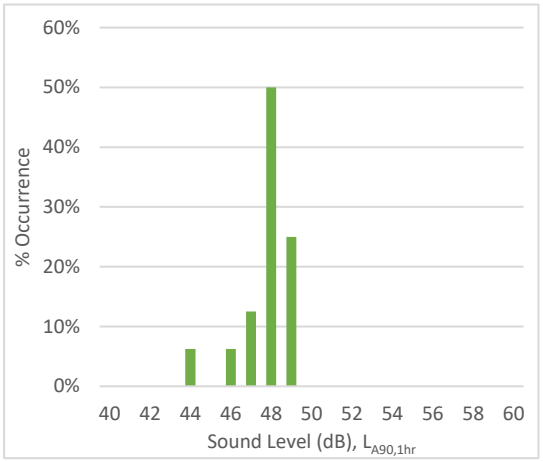
### 6.5.1 Automated Noise Survey

The results of the automated survey, suitably corrected for façade reflections, have been plotted on Time History Graph 22149-G1 enclosed in Appendix C. The graph presents the $L_{A90}$, $L_{Aeq}$ and $L_{Amax}$ noise levels logged at 15-minute intervals.

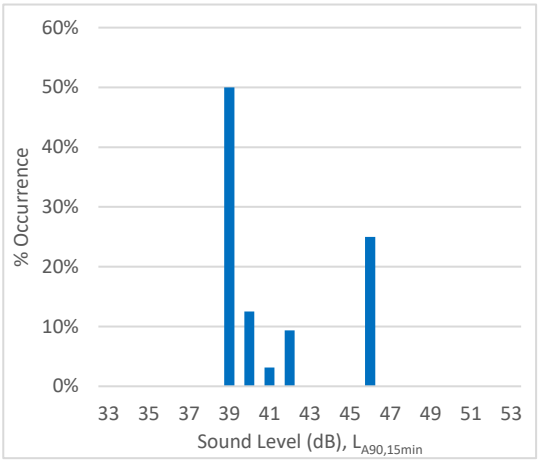
The representative background noise levels (as defined in BS 4142) have been determined through statistical analysis as follows.

| Position | Free-Field Background Noise Level (dB) | |
|---|---|---|
| | Daytime $L_{A90,1hr}$ (07:00-23:00) | Night-time $L_{A90,15min}$ (23:00-07:00) |
| 1 | 48 | 39 |

See below graphs showing the % distribution of background noise levels during daytime and night-time periods.




Position 1 – Daytime




Position 1 – Night-time

### 6.5.2 Manned Survey Results

The following table summarises the measured noise levels at 1 metre from the 4nr existing condensers in cooling and heating mode (full duty test runs for both).

| Unit(s) | Mode | Linear Sound Level, $L_{eq}$ (dB) at OBCF (Hz) | | | | | | | (dB) $L_{Aeq}$ |
|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | |
| All 4nr condenser | Cooling | 64 | 67 | 64 | 59 | 58 | 55 | 50 | **64** |
| | Heating | 68 | 72 | 70 | 63 | 61 | 56 | 50 | **67** |

## 7.0 Plant Noise Limits

Based on the above surveyed existing background noise levels and the MCC plant noise requirements detailed in Section 5.2.2, we propose the following plant noise limits to be achieved at 1m from the nearest noise sensitive residential windows. Plant noise shall be assessed in accordance with BS 4142: 2014+A1: 2019.

| Location | Maximum Plant Noise Rating Level, $L_{Ar,Tr}$ (dB) | |
|---|---|---|
| | Daytime (07:00-23:00) | Night-time (23:00-07:00) |
| Nearby noise sensitive receptors | 43 | 34 |

# 8.0 Plant Noise Assessment

## 8.1 Condensers Assessment

The proposed units will operate (at 100% duty) at the following sound pressure levels (SPL), taken as representative of 'worst-case' operational duties.

| Unit | Index | (dB) $L_A$ |
|---|---|---|
| 4nr Toshiba RAV-GM1401ATP-E | SPL @ 1m | **57** |

Spectral data is unavailable. However, all condenser units will be new and therefore expected to operate free from tonality, intermittency or impulsivity. In accordance with BS 4142, no acoustic feature correction shall be applied.

The above noise levels are taken as measured in free-field conditions (hemi-spherical with hard ground). All units are understood to only operate during daytime hours only (07:00-23:00hr).

Our pre-mitigation assessment of noise levels to NSR A is presented below.

**Receptor: NSR A**

| Description | C1 | C2 | C3 | C4 |
|---|---|---|---|---|
| **Source Sound Level (dB)** | **57** | **57** | **57** | **57** |
| *Index* | *SPL@1m* | *SPL@1m* | *SPL@1m* | *SPL@1m* |
| *Nr of Units* | *1* | *1* | *1* | *1* |
| Correction for Nr of Units (dB) | 0 | 0 | 0 | 0 |
| *Distance (m)* | *5* | *5* | *5* | *5* |
| Distance Loss - standard (dB) | -14 | -14 | -14 | -14 |
| *Directionality ?* | *N/A* | *N/A* | *N/A* | *N/A* |
| Directionality Correction (dB) | 0 | 0 | 0 | 0 |
| *Reflections - Q factor (ref=1)* | *4* | *4* | *4* | *4* |
| Directionality/Reflection Correction (dB) | 9 | 9 | 9 | 9 |
| *Screening?* | *Just visible* | *Just visible* | *Just visible* | *Just visible* |
| Screening Loss (dB) | -5 | -5 | -5 | -5 |
| Specific Noise Level at NSR, $L_{Aeq}$ (dB) | 47 | 47 | 47 | 47 |
| Acoustic Feature Correction, re. BS 4142 (dB) | 0 | 0 | 0 | 0 |
| Noise Rating Level at Receptor, $L_{Ar,Tr}$ (dB) | 47 | 47 | 47 | 47 |
| **Cumul. Rating Level at Receptor, $L_{Ar,Tr}$ (dB)** | **53** | | | |
| Plant Noise Limit (day), $L_{Ar,Tr}$ (dB) | 43 | | | |
| Compliance/Exceedance? | 10 | | | |

The BS 4142 assessment demonstrates that without additional noise mitigation, the resultant noise rating level at NSR A would be +12 dB in excess of the daytime plant noise limit.

Additional noise mitigation would be required with either option taken forward. The additional treatment shall be in the form of an acoustic louvred enclosure capturing all condensers.

The acoustic louvred enclosure to the Air Source Heat Pump shall be at least 300 mm deep and provide, in their as-installed condition, the following minimum sound reduction indices when tested in accordance with BS EN ISO 10140-2:2010:

| Minimum Sound Reduction Index (dB) at Octave Band Centre Frequency (Hz) | | | | | | |
|---|---|---|---|---|---|---|
| 63 | 125 | 250 | 500 | 1k | 2k | 4k |
| 3 | 5 | 10 | 12 | 15 | 16 | 13 |

The enclosure(s) will introduce impendence to the flow rates, and this should be suitably designed to ensure the unit(s) do not need to 'run harder', resulting in higher noise output. The enclosure(s) shall not produce self-noise that may degrade the overall sound reduction offered.

Contact details for suitable suppliers of acoustic enclosures are provided in Section 8.3.

The following table confirms that, for a typical noise spectrum (taken from our site measurements of the existing units), the insertion loss of the enclosure would result in 11 dB of overall (dBA) sound reduction.

| Description | 63 | 125 | 250 | 500 | 1k | 2k | 4k | dBA |
|---|---|---|---|---|---|---|---|---|
| Source Sound Level (dB), 4nr condensers - measured | 68 | 72 | 70 | 63 | 61 | 56 | 50 | **67** |
| **Acoustic Treatment (300mm acoustic louvred enclosure)** | **-3** | **-5** | **-10** | **-12** | **-15** | **-16** | **-13** | - |
| Resultant Sound Level (dB) | 65 | 67 | 60 | 51 | 46 | 40 | 37 | **56** |

The following table summarises our post-mitigation assessment demonstrating the enclosure(s) achieving the above insertion loss values would be sufficient to achieve the daytime plant noise limit.

**Receptor: NSR A**

| Description | C1 | C2 | C3 | C4 |
|---|---|---|---|---|
| **Source Sound Level (dB)** | **57** | **57** | **57** | **57** |
| *Index* | *SPL@1m* | *SPL@1m* | *SPL@1m* | *SPL@1m* |
| *Nr of Units* | *1* | *1* | *1* | *1* |
| Correction for Nr of Units (dB) | 0 | 0 | 0 | 0 |
| *Distance (m)* | *5* | *5* | *5* | *5* |
| Distance Loss - standard (dB) | -14 | -14 | -14 | -14 |
| *Directionality ?* | *N/A* | *N/A* | *N/A* | *N/A* |
| Directionality Correction (dB) | 0 | 0 | 0 | 0 |
| *Reflections - Q factor (ref=1)* | *4* | *4* | *4* | *4* |
| Directionality/Reflection Correction (dB) | 9 | 9 | 9 | 9 |
| *Screening?* | *Just visible* | *Just visible* | *Just visible* | *Just visible* |
| Screening Loss (dB) | -5 | -5 | -5 | -5 |
| **Acoustic Enclosure Loss (dB)** | **-11** | **-11** | **-11** | **-11** |
| Specific Noise Level at NSR, $L_{Aeq}$ (dB) | 36 | 36 | 36 | 36 |
| Acoustic Feature Correction, re. BS 4142 (dB) | 0 | 0 | 0 | 0 |
| Noise Rating Level at Receptor, $L_{Ar,Tr}$ (dB) | 36 | 36 | 36 | 36 |
| **Cumul. Rating Level at Receptor, $L_{Ar,Tr}$ (dB)** | **42** | | | |
| Plant Noise Limit (day), $L_{Ar,Tr}$ (dB) | 43 | | | |
| Compliance/Exceedance? | -1 | | | |

## 8.2 Review of Proposed Acoustic Enclosure

The proposed acoustic enclosure shall capture all 4nr condenser units in one ‘shell’ as shown below.

The enclosure will be provided by Ambient Acoustics Ltd, who have confirmed the following minimum insertion losses.

| Minimum Sound Reduction Index (dB) at Octave Band Centre Frequency (Hz) | | | | | | |
|---|---|---|---|---|---|---|
| 63 | 125 | 250 | 500 | 1k | 2k | 4k |
| 3 | 5 | 10 | 12 | 15 | 16 | 13 |

A comparison of these figures against our specification confirm compliance with the minimum performance requirements, thus the proposal should be considered acceptable.

# 9.0 Conclusions

Planning permission is sought for the fitout of 48 King Street in Manchester for Belstaff, comprising a basement & ground floor retail space and first floor offices. The works will include the installation of new items of external plant.

Jameson Acoustics Limited has been commissioned to undertake a plant noise assessment to supplement the planning application.

Our assessment demonstrates that noise mitigation measures will be required to ensure noise contributions from external plant achieves appropriate noise emission limits in line with BS 4142 and Manchester City Centre requirements.

An acoustic specification for acoustic enclosure to the lightwell condenser units has been provided. The proposed acoustic enclosure has been reviewed and found to satisfy the acoustic specification.

# Appendix A – Acoustic Terminology

**dB** Decibel - Used as a measurement of sound level. Decibels are not an absolute unit of measurement but an expression of ratio between two quantities expressed in logarithmic form.

**dB(A)** The human ear is more susceptible to mid-frequency noise than the high and low frequencies. The 'A'-weighting scale approximates this response and allows sound levels to be expressed as an overall single figure value in dBA. The $_A$ subscript is applied to an acoustical parameter to indicate the stated noise level is A-weighted (e.g. $L_{Aeq,T}$ in dB). Noise levels in dBA do not have a linear relationship to each other; for similar noises, a change in noise level of 10dBA represents a doubling or halving of subjective loudness. A change of 3dBA is only just perceptible.

**$L_{Aeq,T}$** $L_{Aeq,T}$ is the equivalent continuous sound pressure level. It is an average of the total sound energy measured over a specified time measurement period, *T*.

**$L_{10,T}$** $L_{10}$ is the noise level exceeded for 10% of the measurement period *T* (i.e. the quietest 10% of the measurement) and has, for many years, been used in the assessment of road traffic noise.

**$L_{90,T}$** $L_{90}$ is the noise level exceeded for 90% of the measurement period *T* (i.e. the quietest 10% of the measurement) and is often used to describe the 'background' noise level.

**$L_{max}$** $L_{max}$ is the maximum sound pressure level recorded over the measurement period, *T*. $L_{max}$ is often used in assessing scheduled environmental noise 'events' (such as train passbys), particularly at night where such events may cause sleep disturbance.

**$R_w$** The weighted sound reduction index, $R_w$, is a single figure description of sound reduction as defined in BS EN ISO 717-1. It is single-number quantity which characterizes the airborne sound insulating properties of a material or building element over a range of frequencies. The $R_w$ is calculated from sound insulation measurements taken in an acoustic laboratory. Sound insulation ratings derived from site measurements are invariably lower than the laboratory figures and are referred to as the apparent weighted sound reduction index, $R'_w$.

**$D_{n,e,w}$** The weighted element-normalised level difference, $D_{n,e,w}$, is a single figure description of the sound insulation performance of small building elements, such as a trickle ventilator.

**$C_{tr}$** $C_{tr}$ is correction term applied against the sound insulation single-number values (e.g. $R_w$) to provide a weighting against low frequency performance. The reference values used within the $C_{tr}$ calculation are based on urban traffic noise.

# Appendix B – Planning Policy & Assessment Guides

## Planning Policy

- **Noise Policy Statement for England (NPSE)**

  The Noise Policy Statement for England (NPSE) launched in March 2010 states the long-term vision of Government noise policy is to "*promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development*".

  The long-term vision is supported by the following aims; through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

  - Avoid significant adverse impacts on health and quality of life;
  - Mitigate and minimise adverse impacts on health and quality of life;
  - Where possible, contribute to the improvement of health and quality of life.

  The intention is that the NPSE should apply to all types of noise apart from noise in the workplace (occupational noise).

  The NPSE introduces a three-tier concept for the assessment of noise impacts onto a receptor:

  - **NOEL – No Observed Effect Level:** The level below which no effect can be detected and below which there is no detectable effect on health and quality of life due to noise.

  - **LOAEL – Lowest Observable Adverse Effect Level:** The level above which adverse effects on health and quality of life can be detected.

  - **SOAEL – Significant Observed Adverse Effect Level:** The level above which significant adverse effects on health and quality of life occur.

  There are no numeric thresholds relating to each of the above. The NPSE acknowledges that the severity of noise impacts vary depending upon the type of noise, the type of receptor, the duration (on-time) of the noise, the characteristics of the noise, the time of day, the day of the week, etc.. As a result, the definition of what constitutes an SOAEL is somewhat flexible.

- **National Planning Policy Framework (NPPF)**

  The National Planning Policy Framework (NPPF) was first published in 2012 and sets out the government's planning policies for England and how these are expected to be applied.

  The latest revision of the NPPF (December 2024) states that the planning system should **contribute to, and enhance**, the natural and local environment by (amongst others) "*preventing both new and existing*

*development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, water or* ***noise pollution*** *or land stability*."

The express inclusion of noise in the NPPF means that it is a material planning consideration for local planning decisions. Paragraph 187 of the NPPF document states *"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:*

*(a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health & the quality of life;*

*(b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason."*

The NPPF recognises that "*…new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed*."

- **Planning Practice Guidance on Noise (PPG)**

The National Planning Practice Guidance (PPG) is a web-based resource, launched by the Department for Communities and Local Government (DCLG) in March 2014 to support the NPPF and make it more accessible. It advises on how planning can manage potential noise impacts in new development. The guidance is regularly reviewed and updated and noise is listed as a specific category. The guidance is for ad hoc developments, as major infrastructure is covered by overarching National Policy Statements.

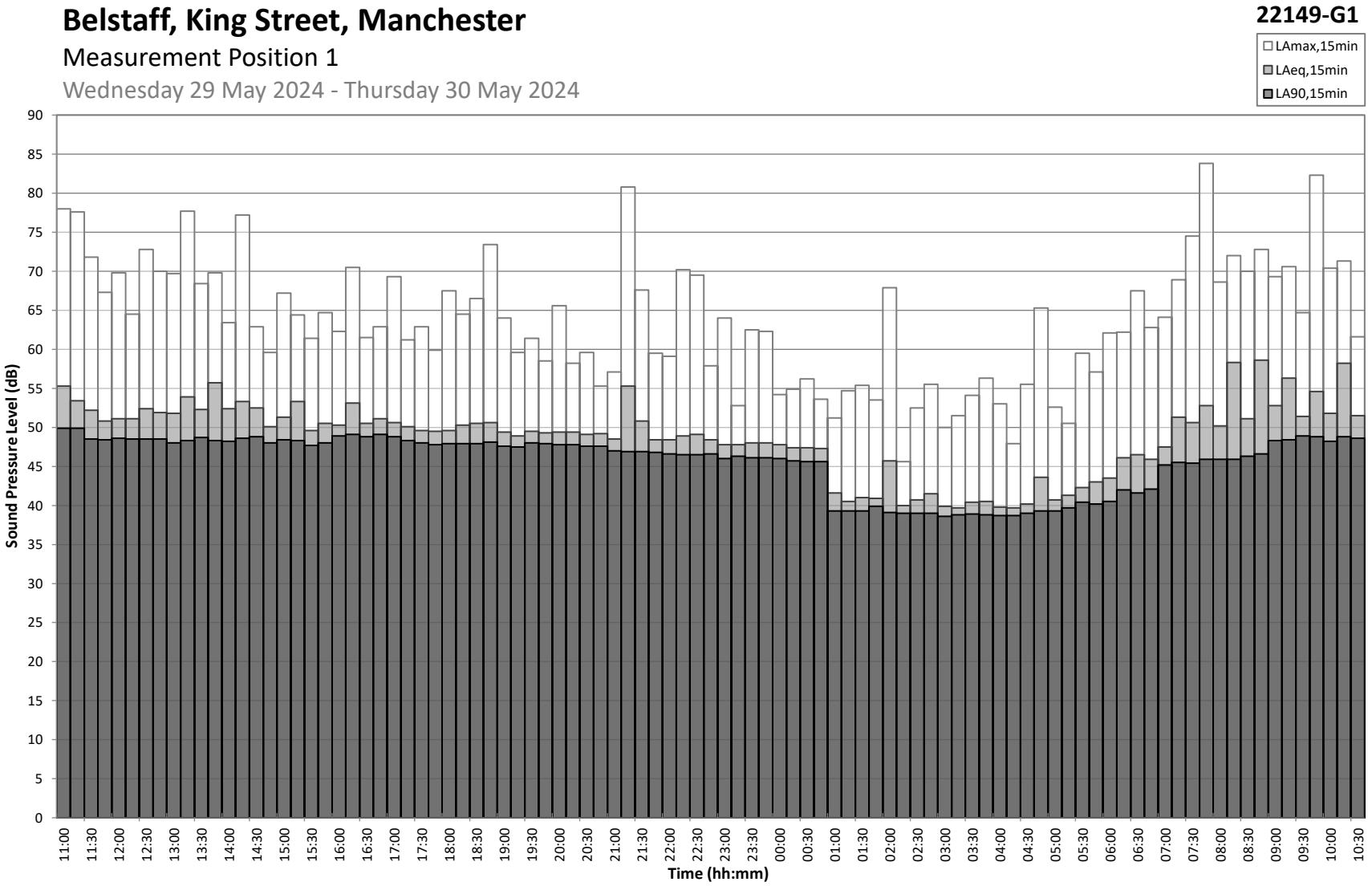
PPG provides the following tabulated summary of the effects of noise exposure (in terms of health and quality of life) associated with noise generating and sensitive developments.

| Response | Examples of Outcomes | Increasing Effect Level | Action |
|---|---|---|---|
| **No Observed Effect Level** | | | |
| Not present | No effect | No Observed Effect | No specific measures required |
| Present and not intrusive | Noise can be heard, but does not cause any change in behaviour, attitude or other physiological response. Can slightly affect the acoustic character of the area but not such that there is a change in the quality of life. | No Observed Adverse Effect | No specific measures required |

| | | | |
|---|---|---|---|
| **Lowest Observed Adverse Effect Level** | | | |
| Present and intrusive | Noise can be heard and causes small changes in behaviour, attitude or other physiological response, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a small actual or perceived change in the quality of life. | Observed Adverse Effect | Mitigate and reduce to a minimum |
| **Significant Observed Adverse Effect Level** | | | |
| Present and disruptive | The noise causes a material change in behaviour, attitude or other physiological response, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area. | Significant Observed Adverse Effect | Avoid |
| Present and very disruptive | Extensive and regular changes in behaviour, attitude or other physiological response and/or an inability to mitigate effect of noise leading to psychological stress, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory. | Unacceptable Adverse Effect | Prevent |

## Appendix C – Noise Survey Time History Graph

## Belstaff, King Street, Manchester

Measurement Position 1

Wednesday 29 May 2024 - Thursday 30 May 2024