

FAO Josh Rowlands
Connecting Dots Group Limited
Grosvenor House
Downcast Way
Swinton
Manchester
M27 8UW.

07 August 2025

Dear Josh,

Re: Music Sound Level Testing, Burstock Street, Manchester.

Further to the request for additional testing of the Bustrock Street music venue, we can confirm that the works took place on 02/03 August 2025.

As requested, a full sound installation was provided and operated by AudioServ, and continuously monitored for sound levels at key locations:

1. Internal sound levels within the sound field,
2. Measurements at the southeast façade facing Sudell Street,
3. Measurements and observations at key receptor locations as agreed with the Manchester EHO.

The purpose of the testing was to confirm the impact assessment prepared in the Enviroconsult noise management plan dated 26.10.24, and where necessary, update that plan in light of any observations made.

Methodology

Three sound level meters were time synchronized and deployed as noted above.

The continuously recorded levels were observed as measurements were conducted at receptor locations in the presence of the Manchester EHO.

Subjective evaluation supported by measurement data was used to determine the acceptability of perceived music noise at each receptor location. Where music was identified as excessive, the Acoustic Engineer reduced or adjusted levels within the venue until acceptable levels were achieved.

The internally measured music noise level was then set as the acceptable level for the venue. The exercise was repeated at each of the three primary receptors.

The acoustic settings for the 'acceptable' levels were then noted, and sound system optimised to ensure the perception of the music inside the venue was suitable for performance. The results and observations are provided below.

The results summarise the outcomes of the perception testing, and verify the internal sound levels that are indicative of 'acceptable' sound levels which should not cause complaint at receptor locations.

The same music track with a very heavy base beat was used continuously during testing as a worst case, and the internal levels identified should be conservative.

The results of testing are provided in Appendices 1 – 3 below for each monitoring location. The observations made are provided in Appendix 3, but are summarised below:

Summary of Results

The weather conditions during monitoring were ideal for noise assessment, clear, cool, with no wind. There were no other music events noted during the testing (though some music was audible from the town centre at the Bustock Street site until ~11pm.)

Music Noise levels were tested at 100 dB LAeq in sound field (noted as too loud by engineer), 98 dB (preferred level) and 95 dB. In each case perceived impact was assessed at receptors and 100 dB was considered too loud internally, 98 dB was considered borderline* at Sudell Street but excessive at Gould Street, and 95 dB was acceptable* at all locations. *subject to low frequency components being limited (see below).

Music noise levels at Ellerdine Apartments were barely audible. There was no significant music perceived and only a low base beat. It was agreed with the EHO that the impact was negligible even with music noise levels played at 100 dB LAeq and with no controls on 63 or 125 Hz.

Music noise at Sudell Street was noted to be clearly perceptible where music noise levels were 100 dB and required general reduction to ~98 dB with significant reduction in low frequency 63 Hz. Further reductions in internal level to 95 dB were required when two of the doors on the SE elevation were opened. The perceived sound was then noted to be audible but acceptable. A notable improvement occurred when only one door was left open.

At 1.12am the DJ subs were added to the sound field, and were immediately noticeable at Sudell Street, the 63 Hz increase was perceptible and required significant reduction in that frequency band ~ 10 dB to ensure acceptability.

Music noise levels at Gould Street may have been influenced slightly by a party in one of the apartments, but the initial observations were that music noise was significant and unacceptably high with the DJ subs active. DJ subs/tops were an additional sound source that had a significant impact on Gould Street, the orientation of these speakers (at 90° to the axis of the building) means that sound from the subs strikes the rear wall directly (and not as a reverberant field) and that the wall not able to effectively prevent transmission of the sound. The music played through these speakers was both *clearly audible and very intrusive at the Gould Street receptor* location. Music levels were adjusted and the DJ subs/tops trimmed to acceptable levels.

Controls

The outcome of the testing is that the NMP needs to be updated with the following controls

- Music Noise level internal should not exceed 95 dB LAeq,5mins.
- Low frequency noise components should not exceed 103 dBZ in the 63 Hz frequency and 93* dBZ in the 125 Hz band (*this recommendation is based on perceived impact of music at Gould Street, there is a perceptible resonance above these levels that, based on the testing was noted to significantly reduce where 125 Hz was further controlled, this may be a function of the music being played which was a particularly – worst case base track).
- ***No more than two doors should be opened on the southeast façade*** facing Burstock Street, ***preferably only a single door should be open***. Management of this is considered essential to avoid complaint.

Achieving control of these stated sound levels could be facilitated by use of continuous logging of music noise level inside the venue.

An NTi XL2 sound level meter with logging function connected to a laptop via projector pro software allows the instantaneous sound levels to be displayed for the acoustic engineer and a ‘traffic light’ system can be set to warn of excessive music noise. The image below provides an example of the system as displayed. The device can be set to display average LAeq, 63 Hz and 125 Hz simultaneously.



Figure 1 Library Picture

The EHO was happy with the proposed controls identified and the final internal sound levels.

Operation of the venue would need to use a device such as the XL2 to provide comfort that controls are in place, and continuous monitoring (logging) and display of music sound level in the sound field. The logging element would provide evidence of compliance with the NMP. The technical specifications of the equipment are provided below:

- [XL2 Audio & Acoustic Analyzer with M4262 Measurement Microphone – NTi Audio UK Limited](#)
- [ASD Cable 20m – NTi Audio UK Limited](#)
- [XL2 Projector PRO Option – NTi Audio UK Limited](#)
- [XL2 Data Explorer](#)

The results of the testing were also stored as an operational technical file for the 'acceptable' set up and it is noted that this can be reloaded for each event as a starting point for music set up, and then verified against displayed levels for the installed sound level monitoring/display system.

Conclusion

The testing was exhaustive and provided sufficient comfort that music from the venue can be controlled. This aligns with the historic use of the site since September 2024 where ~ 20 events have been conducted and there has been only one complaint that was resolved.

Neither Licensing nor Environmental Health has sought to take any action in respect of the operation of the venue.

This additional testing has established conservative sound levels that have been verified to be compliant with acoustic requirements.

It is considered that the revised Noise Management Plan including the above controls is sufficient to provide assurance that the venue can be operated without any significant adverse impact on residential amenity.

Notwithstanding that there may be a duplication of controls between Planning regime and the Licensing Regime, the applicant is happy to accept a condition that would require compliance with a noise management plan to be agreed with the regulator.

Additional Recommendations

The site survey conducted on 02 August 2025 noted that the doors on the venue building are old, relatively light weight and ill fitting. It is recommended that these are repaired or replaced to avoid gaps and improve structural integrity. Notwithstanding the primary sound level controls within the building, ensuring good acoustic containment is considered essential.

The doors on the southeast elevation should be kept closed as much as possible, and at no time should more than two doors be open.

It is my opinion that, subject to compliance with the Noise Management Plan (see below), that the site is a suitable venue for late night entertainment.

Yours sincerely



Tony Higgins
Director

1 Noise Management Plan

The receptor impact assessment is outlined in section above. The outcome of that assessment concludes that the impact of the event can be managed within the guideline levels provided that the noise management plan control measures are in place and maintained throughout the event. These control measures and physical infrastructure are listed below and constitute sensible noise management controls for the site, along with a reporting and compliance recording plan.

1.1 Physical infrastructure

1.1.1 Building Integrity

The proposed activities to be carried out on site will be identified at the planning stage. All music to be played within the main building.

The building construction features a concrete floor, 100mm concrete panels, and a roof comprising partly obscured reinforced safety glass, and a corrugated 6mm fireboard cement roof.

Other than management of the Music Noise Level (MNL) control at the desk, the main control mechanism is the building fabric.

The doors are standard exterior fire doors. These should be kept closed when not in use.

Demonstrating compliance

The basic structure of the building should be checked for damage, holes, or gaps prior to events taking place. Doors and windows should be verified to be closed during performances, with the exception of the door used for access to smoking areas.

Except in an emergency, all doors and windows to be kept closed (without the exception of doors to access smoking area).

1.2 Control at the mixing desk

The principal control of the event is control of noise at source. The music sound level is controlled by the acoustic engineer at the mixing desk. Each acoustic engineer is responsible for the sound quality, and sound level for the event he/she is managing. (If engaged) An acoustic consultant will liaise with the sound engineer to ensure that, during sound checks, the music noise levels offsite are acceptable.

Given the nature of music events, the sound engineer may change dependent on the band/performance. It is essential that:

- All sound engineers are aware of the site constraints on music noise.
- All sound engineers comply with the levels set within the Noise Management Plan (see 1.2.1 below).
- All sound engineers have regard to the active noise management system provided by periodic sound level meter measurement of the internal music noise level within the dance area or a fixed noise management system (see below).
- All sound engineers have awareness of the issues caused by music noise in the environment and can actively manage the event to ensure that music noise, particularly low frequency music noise, is mitigated and reduced to a minimum.

Overall responsibility for music noise levels rests with the event acoustic engineer (as opposed to visiting performers).

A briefing note should be provided for the visiting performers to explain the reasons for acoustic controls and the liaison function with the acoustic consultant (if engaged).

Demonstrating Compliance

Periodic noise measurement of sound levels within the sound field are recommended to ensure levels are below the target music noise level. Measurements at 'offsite' control points will be carried out by external acoustic consultants if required.

Copies of briefing notes shall be retained for inspection by the regulator. The briefing note shall (as a minimum) contain the information in section 1.2.1 below.

Continuous monitoring of auditorium sound field shall be carried out by use of an NTi XL2 sound level meter connected to a laptop via the XL2 Projector PRO Option. The levels for LAeq, 63 and 125 Hz can then be displayed continuously to the sound engineer to provide comfort that control of internal levels can be secured. The sound level meter should also log the results continuously to provide a record of performance using the XL2 Data Explorer software.

The period measurements during the course of an event are also considered suitable for compliance purposes, a minimum of 5mins measurement within the sound field should be carried out and the results recorded.

Where complaints arise, the data for the recordings should be made available to verify compliance for the music sound field.

1.2.1 Set Music Noise Limits

As a result of testing and modelling, the MNL for the event space should be restricted to:

- Less than 95 dB average LAeq,5mins in the sound field,
- L_{Z63.5} Hz (ref: ~103 dB),
- L_{Z125} Hz (ref: ~ 93 dB).

1.3 Other Operational Measures

The following measures are management controls intended to minimise potential noise impacts;

1.3.1 Deliveries/vehicle movements

Deliveries of goods to, as far as practicable, occur only during the normal working day 8am – 8pm, and should only occur prior to the event commencing.

Collection of equipment following an event will take place in the early hours of the morning, following the closing of the event.

There should be no operational deliveries or other vehicle movements during events.

Staff responsible for demounting equipment, and packing into vehicles should:

- Be aware of the noise implications in collection and delivery of plant or equipment,
- Ensure that no music is played during collection or delivery of plant or equipment,
- Ensure that ancillary behavioural noise, talking, shouting, etc. is avoided or minimised.

Demonstrating Compliance

1.4 Site management to consider necessary vehicle movements during the music event. Transport management plans for parking and event safety need to consider vehicle movements and are separate to this document. **Staff Training**

All event staff or volunteers concerned with delivery of all events should receive a noise awareness on occupational and environmental noise awareness. Staff or volunteers should be provided with basic noise awareness briefings, booklets or other correspondence so that they understand and minimise the extent of the acoustic impact of those activities on the site and are aware of potential health and safety implications of working in noisy environments. In summary this means staff/volunteers are briefed on:

- Understand basic noise awareness and control principles,
- Where noisy activities are carried out on site,
- Noise and limiting occupational exposure,
- The complaints process.

Sound engineers will also require:

- Understanding of the active noise management system,
- Compliance with operational noise limits and time constraints.

Demonstrating Compliance

Event management should ensure that all operational staff are provided with noise awareness briefings so that any report of noise or nuisance can be properly reported to the event organiser.

All records associated with abnormal events should be recorded and actions taken to investigate/resolve recorded.

All staff to be made aware of the complaint process and their role within any investigation as required.

1.5 Complaints Procedures

Any noise complaints received shall be logged, recorded and retained for inspection in a complaint log. The details of the complaint must include:

- Time and date of notification,
- Name of complainant,
- Address of complainant,
- Nature of incident (identifying equipment or machines or people if possible),
- Time incident occurred.

The complaint log should be completed by the individual receiving the complaint and then immediately brought to the attention of the event organiser (or their representative).

The event organiser (or any person delegated by them – for example, the acoustic consultant) will then conduct an investigation of the incident(s) leading to the complaint. The outcome of the investigation shall be recorded by the operator in the complaint log, along with any measures taken to reduce or eliminate the noise. Ideally the complainant shall then be notified of the outcome of the complaint, though this may not always be possible during the event.

If a complainant is not satisfied with the outcome of the investigation, the event organiser or their representative should advise the complainant of what further measures are to be taken. If no other measures are possible or appropriate, the operator should advise the complainant of their right to make a formal complaint to the regulator (MCC Regulatory Services).

There will be circumstances where no immediate mitigation measures are possible. In such cases the event organiser or their representative will record the reasons for this and ensure that all noisy activities are kept to an absolute minimum.

Demonstrating compliance

A formal written complaint procedure is maintained.

All complaints (or notifications from staff of events) to be investigated and actioned, as necessary.

At the conclusion of any investigation, all complainants to be notified of the outcome of the investigation as soon as is practicable.

All information to be recorded.

1.6 Community Liaison

At the request of the regulator or following justified complaint, the Event Organiser (or their representative) will engage in community liaison meetings as may be required.

The value of good community relations is considered paramount and a good standard of communication between the event organiser and potentially affected parts of the community is considered necessary if site-based activities become noticeable in the community.

1.7 Formal noise monitoring and compliance

Formal noise monitoring and assessment is to be carried out periodically. Formal off-site monitoring will occur at one or more of the key locations identified in the Noise Model or as required by the regulator and specifically when:

- Sound checks are being conducted.
- The venue is in operation (measurements will occur for some or all of the time and will normally be taken over a minimum time period of 15 minutes for sample checks, or up to 4 hours for compliance checks (as a result of complaints).
- As a result of complaint at specific locations.

Quantitative noise assessment will be performed if required (e.g. in response to complaints).

Qualitative assessment of noise at sensitive receptor locations will be carried out during the course of the event. Qualitative reporting will accompany any technical reports quoting quantitative data. In practice this will amount to an evaluation of the level of disturbance likely at the monitoring position and a description of the impact.

Details of these incidents and complaint are available for inspection at any time by the regulator.

Any detailed logs can be analysed and used to detect common failure points will be used to update management or control measures as necessary for future years.

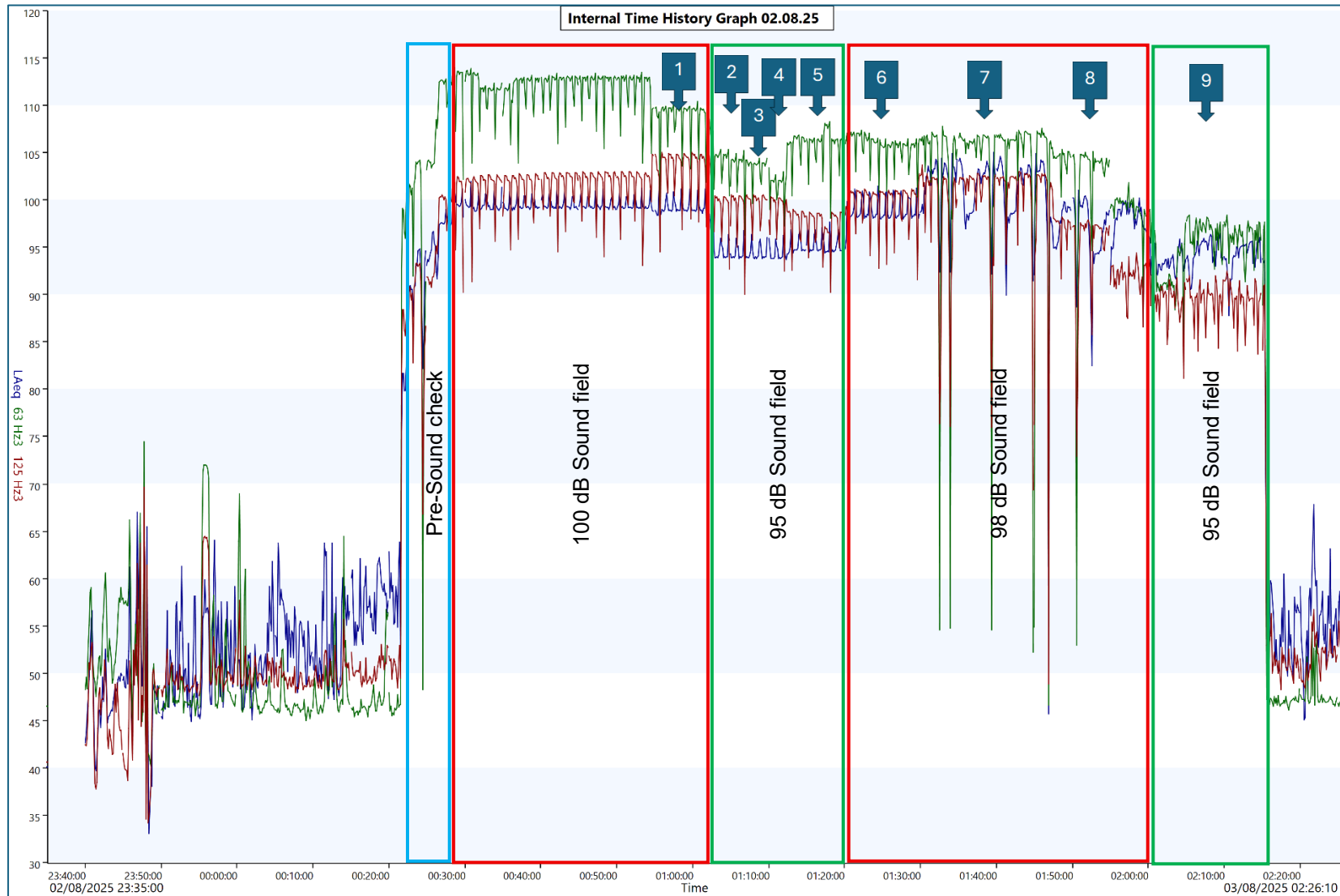
1.8 Review of noise Management Plan

This noise management plan (NMP), will be formally reviewed every 4 years and updated where:

- Justified complaint indicates a need to change controls or management practice,
- Any new sensitive receptors are identified locally (within 200m of the site),
- The regulator requests a review or sets new limits or targets,
- A New or different configuration of the site is used.

END OF NOISE MANAGEMENT PLAN

Appendix 1 – Internal music sound field 02.08.25



Key

Number	Action	Results
Pre-test	Equipment set up and verification	NA
100 dB	100 dB stable sound field	Sound field used to set a base level. DJ reports unacceptably high internal level.
98 dB	98 - 100 dB sound field	Sound field varied due to testing and instructions (see numbers below).
95 dB	95 dB stable sound field	Sound field stabilized at 95 dB with minor modification (final test result).
1	100 dB stable 2 doors opened Reduced 63 Hz 5dB	Monitoring at Ellerdine Flats, no issues/observations with door facing them open, no impact when opening SW doors. Monitoring at Sudell Street 12.50 hrs low frequency 63 Hz prominent reduced by 5 dB still prominent, music noise still evident 63 Hz still dominant. Increase in 125 Hz noted but likely a balancing issue?
2	2 doors open reduced overall levels 5 dB	Sudell Street music noise is now quieter but audible above traffic, LF components still noticeable. 63 Hz observed to be between 70 – 80 dB Lin. Levels reduced by 7 dB dynamic EQ @ 55 Hz.
3	Closing 1 door (one door only open) and reduce 63 Hz by another 3 dB 1.04 am	Closing one door 5 dB (slight perceived) reduction in 63 Hz, similar result for LAeq at Sudell Street. 3 dB off 63 Hz reduced sound at Sudell to acceptable level. <i>Internal level 95 dB, 63 Hz internal 108 dB</i>
4	Centre Frequency change to 63 Hz 1 door closed 1.08 am	? slight dB change in results (slight increase in 63 Hz by 1 dB?). Note: remaining test was conducted at 61 Hz centre frequency Minor reduction in low frequency at receptor (3 dB).
5	DJ Subs added 1.12am 2 nd door open 1.15am Door shut at 1.25am DJ subs now reduced significantly 1.27am	No observed increase LAeq (masked by road traffic?), 63 Hz slight increase. Perceptibly louder 5 dB increase in 63 Hz at receptor levels are in the ~70 dB. Perceptible reduction in 63 Hz with door closed ~5 dB reduction.
6	98 dB variable	No receptor testing during 6 relocating to Gould Street.
7	Source levels increased to 100 dB	Loud perceivable music (high and low frequency) at Gould Street.

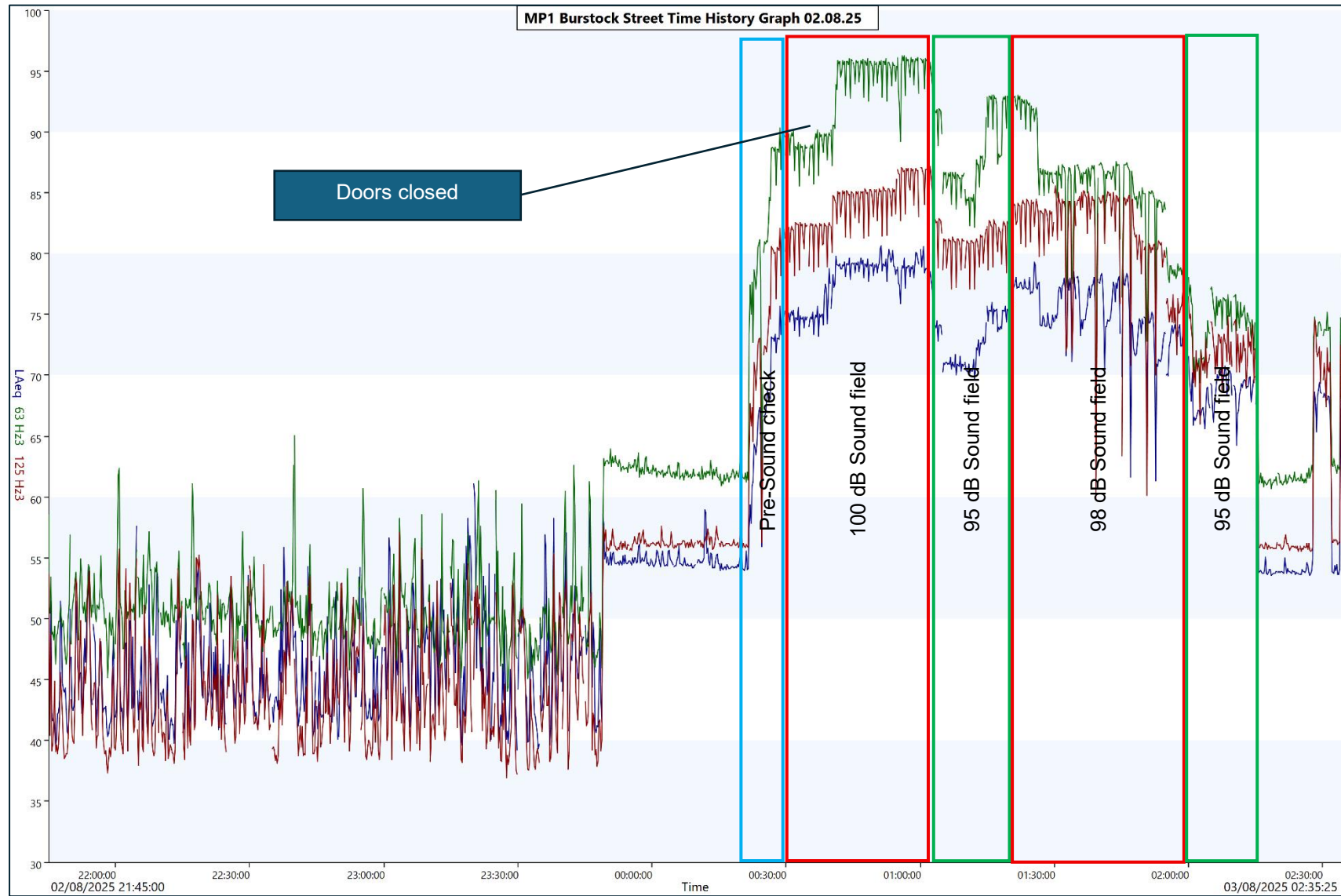
		Line of sight with wall, clearly perceptible music almost as open air. LAeq ~53 dB and 63 Hz and 125 Hz elevated. Structural issue with end of building? 125 Hz is now contributing to excess noise despite 63 being controlled <70 dB.
8	<p>Levels internal noted at 101.8 dB Reduced down to 98 dB 1.47am</p> <p>1.53am levels reduced further, Fader pulled down</p> <p>1.59am song change</p>	<p>Average LAeq dropped by 3 dB 1.47am, 63 dB by 3 dB and 125 Hz by 5 dB (improvement), but still perceptibly loud.</p> <p>63 Hz dropped by 5 dB, 125 Hz dropped by another 5 dB, LAeq remains high 95+ dB internal. Perceived results much better.</p> <p>No significant change in levels (*sanity of engineer preserved?)</p>
9	<p>2.01am DJ monitors turned off Levels reduced to ~95dB dB</p> <p>Internal measured level now 93 dB on meter (low internal level – increase to 95 dB)</p> <p>2.05am DJ monitors added in at reduced level, overall internal level 95 dB</p>	<p>Perceived levels at Gould Street acceptable, significant reduction, but still audible. <i>Insulation of building may be compromised but source control possible.</i></p> <p>Levels too low for performance 90 dB @ 63 & 125Hz, build back up to acceptable levels.</p> <p>LAeq increase to 95 dB, 63 Hz @ 98dB, 125 Hz 90 dB. <i>Internal levels reported by engineer as ‘probably a little low,’ but EHO satisfied that controls would result in acceptable levels.</i></p>

Conclusions

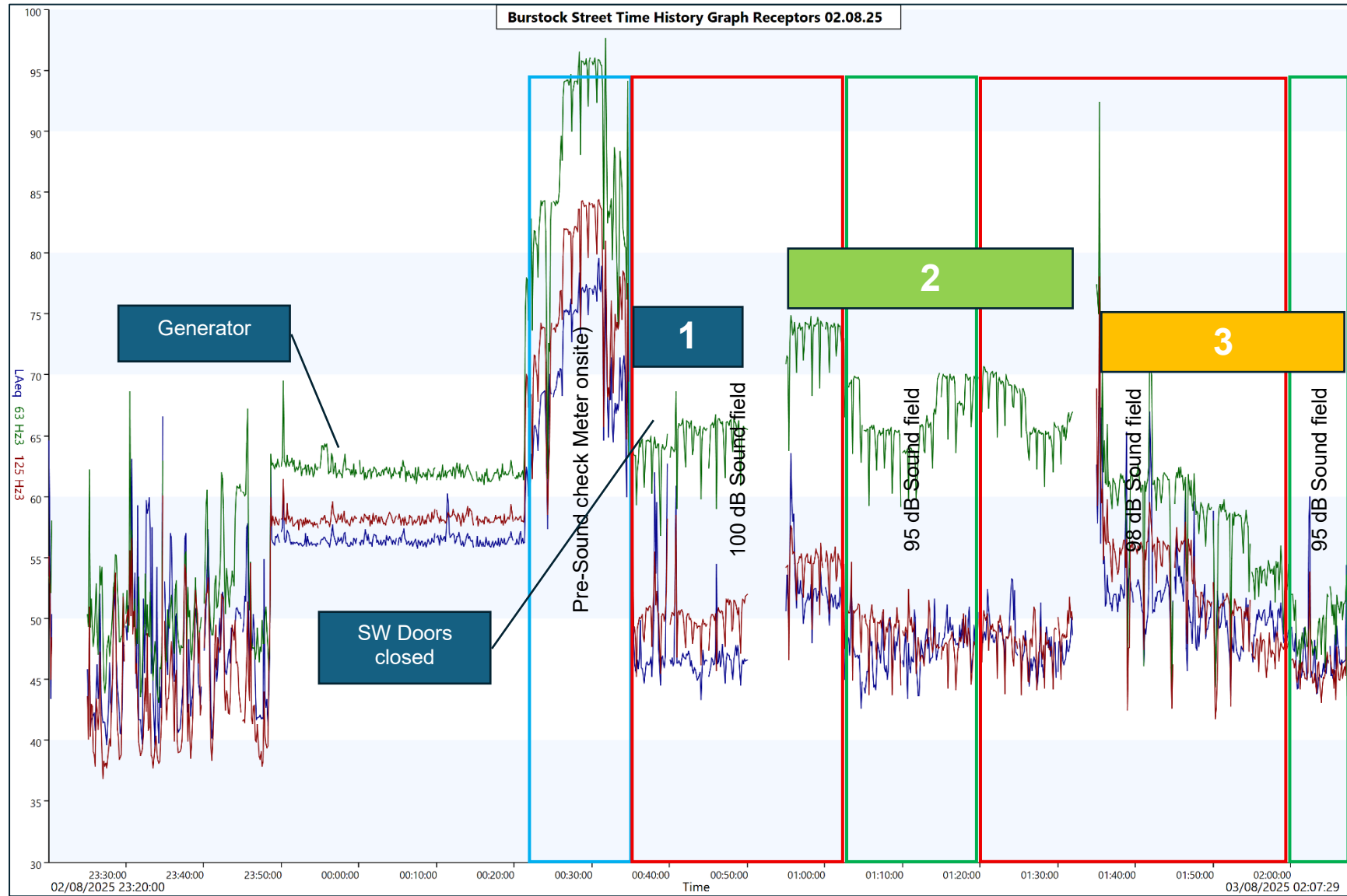
The current structure can contain music noise to acceptable levels where the following controls are in place:

- Music Noise levels tested at 100 dB LAeq in sound field (noted as too loud by engineer), 98 dB and 95 dB,
- Music Noise level internal should not exceed 95 dB LAeq, 5mins,
- Low frequency noise components should not exceed 103 dBZ in the 63 Hz frequency and 93* dBZ in the 125 Hz band (*this recommendation is based on perceived impact of music at Gould Street, there is a perceptible resonance above these levels that, based on the testing was noted to significantly reduce where 125 Hz was further controlled, this may be a function of the music being played which was a particularly – worst case base track),
- No more than two doors should be opened on the south east façade facing Burstock Street, preferably only a single door should be open.

Appendix 2 – MP1 Offsite results

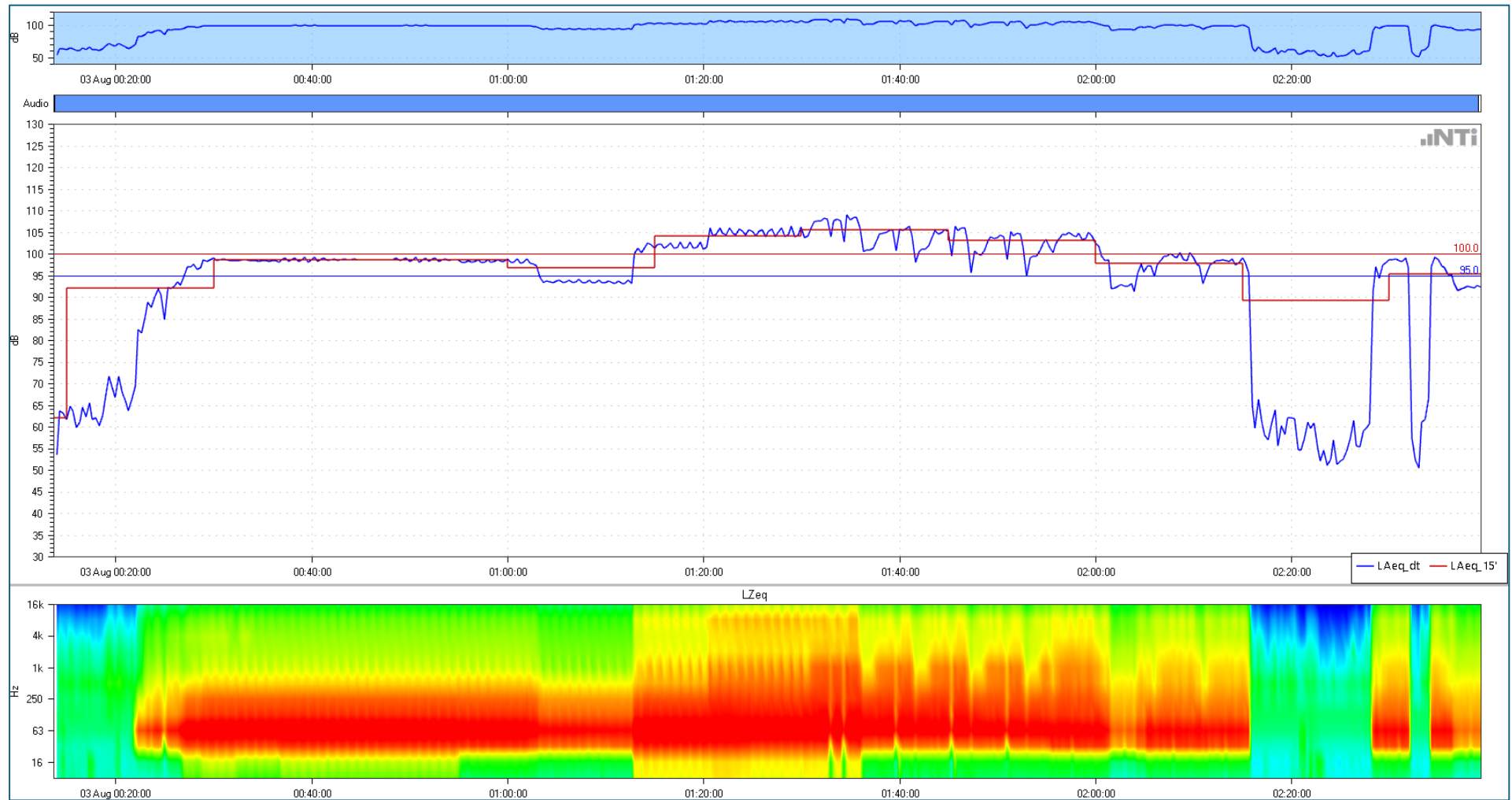


Appendix 3 – Receptor locations 0



Number	Location
1	Ellerdine Apartments Dalton Street
2	Sudell St
3	Gould St

Data from NTi continuous monitor (DJ Subs)



Heat map shows 63 Hz as dominant frequency. Spread of sound until 1.12am was just sound field, 1.12am DJ Subs added. After 2.04am DJ subs reduced significantly. The NTi system has the display function, and this recording facility.