Horse Hospital
Stables Market, Chalk Farm Road, Camden NW1
Noise Impact Assessment

Prepared by: Richard Vivian, Big Sky Acoustics Ltd
On behalf of: Camden Market Estate Holdings Limited
Document Ref: 20110972r1
Date: 3rd December 2020

Big Sky Acoustics document control sheet

Project title:	Horse Hospital Stables Market, Chalk Farm Road, Camden NW1 Noise Impact Assessment
Technical report number:	20110972r1
Submitted to:	Anna Gargan Gerald Eve LLP 72 Welbeck Street London W1G 0AY acting on behalf of Camden Market Estate Holdings Limited
Submitted by:	Richard Vivian Big Sky Acoustics Ltd 60 Frenze Road Diss IP22 4PB 020 7617 7069 info@bigskyacoustics.co.uk
Prepared by:	Richard Vivian BEng(Hons) MIET MIOA MAES MIOL Principal Acoustic Consultant

Document status and approval schedule

Revision	Description	Date	Approved
0	Approved for issue	30/11/2020	RV
1	Reworked version for planning application for terrace only	3/12/2020	RV

Contents

1.0 Qualifications and experience

1.1 My name is Richard Vivian. I am the founder and director of Big Sky Acoustics Ltd. Big Sky Acoustics is an independent acoustic consultancy that is engaged by local authorities, private companies, public companies, residents' groups and individuals to provide advice on the assessment and control of noise.

1.2 I have a Bachelor of Engineering Degree with Honours from Kingston University, I am a Member of the Institution of Engineering & Technology, the Institute of Acoustics, the Audio Engineering Society and the Institute of Licensing.

1.3 I have thirty years of experience in the acoustics industry and have been involved in acoustic measurement and assessment throughout my career. My professional experience has included the assessment of noise in connection with planning, licensing and environmental protection relating to sites throughout the UK. I have given expert evidence in the courts, in licensing hearings, in planning hearings and at public inquiries on many occasions.

2.0 Introduction

2.1 Big Sky Acoustics Ltd was instructed to carry out an assessment of the impact of noise for the proposed *"installation of canopy structure across the terrace at first floor level, new plant equipment enclosure, new flooring, lighting, signage and all associated works. Use of the terrace as a restaurant and drinking establishment (sui generis)."*

2.2 This report was prepared following detailed discussions with the management team at Camden Market and a technical discussion with the incoming operator for the application site.

2.3 I have carried out numerous noise measurement surveys and observations in the market area (pre-Covid19) and am familiar with the area, the existing horse hospital building, and the previous operation of Fest at this site including the sound system configuration and internal sound levels during trading as a nightclub.

2.4 A glossary of acoustical terms used in this report is provided in Appendix A.

2.5 All sound pressure levels in this report are given in dB re: 20μPa.

3.0 Site and surrounding area

3.1 The location of the site is shown in Appendix B.

3.2 The application site is part of the former Horse Hospital building. Separate planning applications have been submitted for other areas of the building.

3.3 The noise climate at this location is characterised by continuous traffic, rail noise, commercial aircraft and significant pedestrian footfall as well as general activity in the market area. Daytime and early evening activity on the market site is primarily retail and food led, and in the summer there is significant footfall from visitors to Camden. The commercial office space in the area also contributes to daytime footfall. There is activity in the evening associated with restaurants, bars and other leisure uses both on the market estate and in the wider Camden area.

3.4 It is important when assessing the impact of noise from a new activity in an area that the concept of *additional* noise associated with the new activity is taken into account. The incremental change to noise levels caused by the normal operation of a restaurant and drinking establishment where it replaces the already established noise and activity of a nightclub is, on balance, likely to result in a net reduction of noise at the site. There is substantial shielding provided by the structure of the market buildings and the additional works as proposed in this application, and all noise from the proposed use, when correctly controlled, would not be detectable at residential properties.

4.0 Criteria

NPPF

4.1 The revised National Planning Policy Framework (NPPF) was published by the Ministry of Housing, Communities and Local Government on 24 July 2018 (last updated 19 February 2019) and sets out the government's planning policies for England and how these are expected to be applied. This revised Framework replaces the previous NPPF published in March 2012.

4.2 Paragraph 80 of the NPPF requires significant weight to be placed on the need to support economic growth and productivity for local business needs.

4.3 References to noise can be found in Section 15 titled "Conserving and enhancing the natural environment". The NPPF states at Paragraph 170 sub-paragraph (e) *"Planning policies and decisions should contribute to and enhance the natural and local environment by preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans".*

4.4 The NPPF states at Paragraph 180 that *"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 and 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".

4.5 The comments about *adverse impacts on health and quality of life* are referenced[1] to the Noise Policy Statement for England (NPSE) published by the Department for Environment, Food & Rural Affairs in 2010. The NPSE is intended to apply to all forms of noise, including environmental noise, neighbour noise and neighbourhood noise.

4.6 The NPSE sets out the Government's long-term vision 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'* which is supported by the following aims:

- *Avoid significant adverse impacts on health and quality of life;*
- *Mitigate and minimise adverse impacts on health and quality of life.*

4.7 The NPSE defines the concept of a 'significant observed adverse effect level' (SOAEL) as *'the level above which significant adverse effects on health and quality of life occur'*. The following guidance is provided within the NPSE: *'It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available.'*

4.8 The Planning Practice Guidance (PPG) on Noise published by Ministry of Housing, Communities & Local Government in March 2014 (last updated 22 July 2019) is written to support the NPPF with more specific planning guidance on how planning can manage potential noise impacts in new development.

4.9 The PPG reflects the NPSE and states at Paragraph 001 that noise needs to be considered when development may create additional noise, or would be sensitive to the prevailing acoustic environment (including any anticipated changes to that environment from activities that are permitted but not yet commenced).

4.10 The PPG clarifies at Paragraph 002 that it is important to look at noise in the context of the wider characteristics of a development proposal, its likely users and its surroundings, as these can have an important effect on whether noise is likely to pose a concern.

4.11 The PPG expands upon the concept of SOAEL (together with Lowest Observed Adverse Effect Level, LOAEL and No Observed Effect Level, NOEL) as introduced in

[1] NPPF at footnote 60

the NPSE and provides a table of noise exposure hierarchy for use in noise impact assessments in the planning system.

Perception	Examples of Outcomes	Increasing Effect Level	Action
No Observed Effect Level (NOEL)			
Not present	No Effect	No Observed Effect	No specific measures required
No Observed Adverse Effect Level (NOAEL)			
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 (LOAEL)			
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 (SOAEL)			
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

Figure 1: PPG Noise Exposure Hierarchy Table (revision date: 22.07.2019)

4.12 Figure 1 is reproduced from PPG Paragraph 005 and summarises the noise exposure hierarchy, based on the likely average response.

4.13 The PPG at Paragraph 005 considers that a noise impact with an effects level which is lower than SOAEL is acceptable but that consideration needs to be given to mitigating and minimising those effects (taking account of the economic and social benefits being derived from the activity causing the noise). When the significant observed adverse effect level boundary is crossed noise causes a material change in behaviour such as keeping windows closed for most of the time or avoiding certain activities during periods when the noise is present. If the exposure is predicted to be above this level the planning process should be used to avoid this effect occurring, for example through the choice of sites at the plan-making stage, or by use of appropriate mitigation such as by altering the design and layout. While such decisions must be made taking account of the economic and social benefit of the activity causing or affected by the noise, it is undesirable for such exposure to be caused. At the highest extreme, noise exposure would cause extensive and sustained adverse changes in behaviour and/or health without an ability to mitigate the effect of the noise. The impacts on health and quality of life are such that regardless of the benefits of the activity causing the noise, this situation should be avoided.

The London Plan - Intend to Publish version December 2019

4.14 Policy HC5 supports London's culture and creative industries and specifically supports the development of new cultural venues in town centres and places with good public transport connectivity.

4.15 Policy HC6 promotes the night-time economy[2], where appropriate, particularly in the Central Activities Zone, strategic areas of night-time activity, and town centres where public transport such as the Night Tube and Night Buses are available. It protects and supports evening and night-time cultural venues such as pubs, night clubs, theatres, cinemas, music and other arts venues, and encourages the management of the night-time economy through an integrated approach to planning and licensing.

Camden Local Plan Policies A4 and A1

4.16 The Local Plan was adopted by Camden Council on 3 July 2017 and has replaced the Core Strategy and Camden Development Policies documents as the basis for planning decisions and future development in the borough. Noise and vibration can have a significant impact on amenity, quality of life and well being. Local Plan Policies A4 (Noise and vibration) and A1 (Managing the impact of development)

[2] The night-time economy refers to all economic activity taking place between the hours of 6pm and 6am, and includes evening uses. Night-time economic activities include eating, drinking, entertainment, shopping and spectator sports, as well as hospitality, cleaning, wholesale and distribution, transport and medical services, which employ a large number of night-time workers - paragraph 7.6.1 The London Plan – Intend to Publish version.

seek to protect residents of both existing and new residential developments and the occupiers of other noise-sensitive developments from the adverse effects of noise and vibration.

4.17 Appendix 3 of the Local Plan supports these policies and sets out expected standard in terms of noise and vibration. Table D proposes noise levels applicable to proposed entertainment premises and indicates that night time noise levels in gardens that does not exceed the higher of 45dB $L_{AEq,5mins}$ or 10dB below the existing $L_{Aeq,5mins}$ would be rated as LOAEL (see Figure 1) and noise that does not exceed the higher of 46-50dB $L_{AEq,5mins}$ or 9-3dB below the existing $L_{Aeq,5mins}$ would be rated as LOAEL to SOAEL. It also proposes internal levels in bedrooms at night (23:00-07:00hrs) that do not exceed NR25 when measured as a 15-min L_{eq}.

Licensing Act 2003

4.18 There is an existing premises licence (PREM-LIC\2974) for the Horse Hospital site. It allows the premises to function as a nightclub. A new premises licence is currently being applied for to authorise licensable activities at the application site.

Other relevant legislation

4.19 In addition to the protection afforded under planning controls, and the Licensing Act 2003, members of the public are protected from noise that is a nuisance.

4.20 The Environmental Protection Act 1990 part III deals with statutory nuisance which includes noise. This Act allows steps to be taken to investigate any complaints which may then result in the issuing of an abatement notice and a subsequent prosecution of any breach of the notice. A statutory nuisance is a material interference that is prejudicial to health or a nuisance.

4.21 The Clean Neighbourhoods and Environment Act 2005 deals with many of the problems affecting the quality of the local environment and provides local authorities with powers to tackle poor environmental quality and anti-social behaviour in relation to litter, graffiti, waste and noise. A fixed penalty notice can be issued when noise exceeds the permitted level as prescribed under the Noise Act 1996 as amended by the Clean Neighbourhoods and Environment Act 2005. The permitted noise level using A-weighted decibels (the unit environmental noise is usually measured in) is 34dBA if the underlying level of noise is no more than 24dBA, or 10dBA above the underlying level of noise if this is more than 24dBA.

British Standard 8233

4.22 BS8233:2014 states that for steady external noise sources, it is desirable that the internal ambient noise level in dwellings does not exceed the guideline values in the table shown below.

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq,16hour}$	-
Dining	Dining room/area	40 dB $L_{Aeq,16hour}$	-
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,16hour}$	30dB $L_{Aeq,8hour}$

Figure 2: Indoor ambient noise levels for dwellings (from BS8233 Table 4)

4.23 Annex G of BS8233 informs that windows, and any trickle ventilators, are normally the weakest part of a brick and block façade. Insulating glass units have an insulation of approximately 33 dB R_w and, assuming suitable sound attenuating trickle ventilators are used, the resulting internal noise level ought to be determined by the windows. If partially open windows are relied upon for background ventilation, the insulation would be reduced to approximately 15 dB.

Industry guidance on noise from outside areas

4.24 The British Beer & Pub Association document titled: *"Effective Management of Noise from Licensed Premises"* provides the following guidance:

Use of Outside Areas

This noise source, usually shouting or loud voices, is likely to be especially noticeable at night, when noise levels in the external environment are relatively low. In most circumstances people arriving at and leaving the premises will not cause any disturbance, but it does happen and must be acknowledged. It is not only people that cause a disturbance. Their vehicles can also create noise through stereos, slamming doors, revving engines, the horn or screeching tyres for example. Noise can also arise from beer gardens and play areas.

How to control this type of noise:

- *For new-builds and refurbishments consider the positioning of exits from the building and outside areas such as car parks in relation to noise-sensitive premises.*
- *Where noise-sensitive premises may overlook the frontage of a licensed premises then an alternative exit-route possibly onto a rear or side street may minimise disturbance.*
- *Post notices close to exit doors advising that there are residential properties nearby and asking patrons to leave quickly and quietly.*
- *If music has been playing consider reducing the volume and/or playing slower, more mellow music as the evening draws to a close. This often quietens people down before they leave.*
- *For new-builds access roads, car parks and play areas should be kept as far away as possible from noise sensitive properties.*

• Natural screening should be used and, where appropriate, screening provided by the premises should be utilised.

Operational objectives

4.25 The management team of the incoming operator, Hartshorn Hook Enterprises Limited, are keen to promote good relationships with all commercial and residential neighbours. Therefore, in addition to all statutory obligations, it is a primary operational objective that noise from the normal operation of the entire site, including the terrace, does not have a detrimental impact on the neighbourhood.

4.26 To this end operational procedures have been reviewed by the applicant's team and are presented at Appendix C (Noise Management Policy) and Appendix D (Dispersal Policy).

5.0 Balancing planning and licensing noise conditions

5.1 The guidance issued under Section 182 of the Licensing Act 2003 is clear in its general principles (Para 1.16) that *"[licence conditions] should not duplicate other statutory requirements or other duties or responsibilities placed on the employer by other legislation"*. Therefore if the objective of the prevention of public nuisance is satisfactorily upheld because there already exist tests of nuisance through The Environmental Protection Act 1990; The Noise Act 1996; and The Clean Neighbourhoods and Environment Act 2005, then additional conditions on a premises licence that merely duplicates these statutory requirements should not be necessary according to Home Office guidance.

5.2 Similarly planning guidance has, for a long time, stated that additional planning conditions which duplicate the effect of other legislation should not be imposed, and current planning practice guidance is clear that conditions requiring compliance with other regulatory requirements will not meet the test of necessity and may not be relevant to planning. It is a material consideration for planning the the application site is regulated as a licensed premises and is subject to the swift and powerful enforcement regime of Camden Council in its role as licensing authority.

5.3 The House of Lords in its 2017 post-legislative scrutiny of the Licensing Act found that it is not only permissible, but logical, to look at licensing as an extension of the planning process.

5.4 The pragmatic approach to specifying noise control conditions would be that the more general criteria relating to the principle of use of the site are applied under the planning regime and more specific requirements relating to the operational control of licensable activities such as hours of operation, the requirement for controls on regulated entertainment, or the need for a noise management policy, are more effectively implemented and enforced through the licensing process.

6.0 Predicted noise of patrons using the outside terrace area

6.1 In order to assist in the understanding of actual noise levels produced by people outdoors on the terrace it is important to understand the effects of the noise source (i.e. people talking) and how that noise level increases as the number of people talking increases.

6.2 Referring to data held in our own library; normal conversation is typically in the range of 55-60dBA when measured at 1 metre. In assessing typical conditions then I have considered that the average number of people in the terrace area could be up to 100.

6.3 In normal conversation no more than 50% of them would be talking (there will be at least one listener for each talker). If we now consider people to be talking at the upper end of the normal speaking range, and look at a worst case scenarios of half of the people talking concurrently at 60dBA then in order to calculate the total noise level we logarithmically sum 50 sources of 60dB as follows:

$$\sum = 10\log\left(n \times 10^{\left(\frac{60}{10}\right)}\right)$$

where n is the number of people talking

6.4 The formula above gives a value for total sound pressure level for a group of 100 people to be 77dBA[3].

6.5 It is important to remember that this is a worst-case value, when 50% of the people are talking simultaneously and loudly. In reality general lulls in the conversation, stopping talking to eat or drink, or conversations where there are more than one listener to each talker mean that less than 50% of an average group will be talking simultaneously. I have also observed that groups in close proximity to each other when dining talk with more hushed voices than groups of people spread out when, for example, seated at large tables in an unsupervised pub beer garden.

6.6 77dBA is the predicted noise from 100 people talking loudly outside when measured at 1 metre. Sound is attenuated in air and this effect is noticeable as the listener moves away from the source.

6.7 In calculating distance attenuation, the noise of people talking is assumed to be a number of discreet point sources and therefore is attenuated by 6dB with each doubling of distance. So if the noise source is 77dBA at 1 metre then at 2 metres it becomes 71dBA, at 4 metres 65dBA.

[3] Alternative calculation method according to Growcott, D (Consideration of Patron Noise from Entertainment Venues, Australian Association of Acoustical Consultants Guideline, Australia, 2009) using LAeq = 21*log(N)+43 gives 85dBA.

6.8 In a free field for every doubling of distance from a noise source the sound pressure level L_p will be reduced by 6 decibels.

$$L_{p2} - L_{p1} = 10 \log (R_2 / R_1)^2$$
$$= 20 \log (R_2 / R_1)$$

where

L_{p1} = sound pressure level at location 1 (dB)

L_{p2} = sound pressure level at location 2 (dB)

R_1 = distance from source to location 1

R_2 = distance from source to location 2

A "free field" is defined as a flat surface without obstructions.

6.9 Attenuation due to distance means that a separation distance of 40 metres (the approximate distance to nearest flats on Chalk Farm Road) from the noise source to the receiver position will reduce the noise to below the lowest measured background noise level[4] at the receptor position. (Attenuation due to a distance of 40 metres is 32dB).

6.10 A further, and in this case substantial, attenuation of the noise source is achieved by the insertion of any physical barrier that obscures line-of-sight to the receptor position and this is achieved by the perimeter wall to the the market and the proposed new high mass barrier structures that enclose the terrace area. An effective physical barrier will provide typically around 12dB of additional sound attenuation.

6.11 Inside a residential property all external noise sources are attenuated by the glazing, by the distance from the noise source to the window, and by any physical obstruction of clear line of sight to the noise source.

6.12 Noise from a large group of people using the terrace is predicted to be below the Lowest Observed Adverse Effect Level (LOAEL) according to the criteria given in Appendix D, Table 3 of Camden Local Plan 2017 and therefore no specific measures are required.

6.13 Calculations indicate that the resultant noise level will be significantly below the background noise level at all residential properties and comfortably in compliance with the relevant standards and guidance, and subjectively inaudible.

7.0 Recommendations for noise control - operational

7.1 Due to the nature of a restaurant there will be a gradual dispersal of patrons as they finish their meals and the site will not be at capacity at the end of the evening.

[4] Historic surveys in the area indicate background noise levels on Chalk Farm Road in the late evening of 58-61dB L_{A90} (Ref: multiple attended noise surveys by Big Sky Acoustics in previous 5 years covering periods from 22:00-01:00hrs).

7.2 Operational procedures based on industry best practice have been prepared for the entire Horse Hospital site. A separate Noise Management Policy and Dispersal Policy can be found at Appendix C and Appendix D.

7.3 Noise management procedures will be an integral part of all employee training and will be regularly reviewed.

8.0 Recommendations for noise control - sound system

8.1 Sound equipment on the terrace will be low level background sound ancillary to the use as a restaurant and drinking establishment. The sound system will be checked to ensure that the maximum operating level does not impact on residential amenity at the nearest noise sensitive properties. This limiter setting procedure will be carried out in conjunction with a technical officer of Camden Council.

9.0 Conclusions

9.1 Big Sky Acoustics Ltd was instructed to carry out an assessment of the impact of noise for the proposed *"installation of canopy structure across the terrace at first floor level, new plant equipment enclosure, new flooring, lighting, signage and all associated works. Use of the terrace as a restaurant and drinking establishment (sui generis)."*

9.2 This assessment has considered both national and local planning policy, and other relevant standards and guidance.

9.3 Calculations indicate that noise from patron activity on the terrace will be below the Lowest Observed Adverse Effect Level (LOAEL) at the nearest residential properties and therefore compliant with local and national planning policy.

Richard Vivian BEng(Hons) MIET MIOA MAES MIOL
Principal Acoustic Consultant, Big Sky Acoustics Ltd

Appendix A - Terminology

Sound Pressure Level and the decibel (dB)

A sound wave is a small fluctuation of atmospheric pressure. The human ear responds to these variations in pressure, producing the sensation of hearing. The ear can detect a very wide range of pressure variations. In order to cope with this wide range of pressure variations, a logarithmic scale is used to convert the values into manageable numbers. Although it might seem unusual to use a logarithmic scale to measure a physical phenomenon, it has been found that human hearing also responds to sound in an approximately logarithmic fashion. The dB (decibel) is the logarithmic unit used to describe sound (or noise) levels. The usual range of sound pressure levels is from 0 dB (threshold of hearing) to 140 dB (threshold of pain).

Frequency and Hertz (Hz)

As well as the loudness of a sound, the frequency content of a sound is also very important. Frequency is a measure of the rate of fluctuation of a sound wave. The unit used is cycles per second, or hertz (Hz). Sometimes large frequency values are written as kilohertz (kHz), where 1 kHz = 1000 Hz. Young people with normal hearing can hear frequencies in the range 20 Hz to 20,000 Hz. However, the upper frequency limit gradually reduces as a person gets older.

A-weighting

The ear does not respond equally to sound at all frequencies. It is less sensitive to sound at low and very high frequencies, compared with the frequencies in between. Therefore, when measuring a sound made up of different frequencies, it is often useful to 'weight' each frequency appropriately, so that the measurement correlates better with what a person would actually hear. This is usually achieved by using an electronic filter called the 'A' weighting, which is built into sound level meters. Noise levels measured using the 'A' weighting are denoted dBA. A change of 3dBA is the minimum perceptible under normal everyday conditions, and a change of 10dBA corresponds roughly to doubling or halving the loudness of sound.

C-weighting

The C-weighting curve has a broader spectrum than the A-weighting curve and includes low frequencies (bass) so it i can be a more useful indicator of changes to bass levels in amplified music systems.

Noise Indices

When a noise level is constant and does not fluctuate over time, it can be described adequately by measuring the dB level. However, when the noise level varies with time, the measured dB level will vary as well. In this case it is therefore not possible to represent the noise level with a simple dB value. In order to describe noise where the level is continuously varying, a number of other indices are used. The indices used in this report are described below.

L_{eq} The equivalent continuous sound pressure level which is normally used to measure intermittent noise. It is defined as the equivalent steady noise level that would contain the same acoustic energy as the varying noise. Because the averaging process used is logarithmic the L_{eq} is dominated by the higher noise levels measured.

L_{Aeq} The A-weighted equivalent continuous sound pressure level. This is increasingly being used as the preferred parameter for all forms of environmental noise.

L_{Ceq} The C-weighted equivalent continuous sound pressure level includes low frequencies and is used for assessment of amplified music systems.

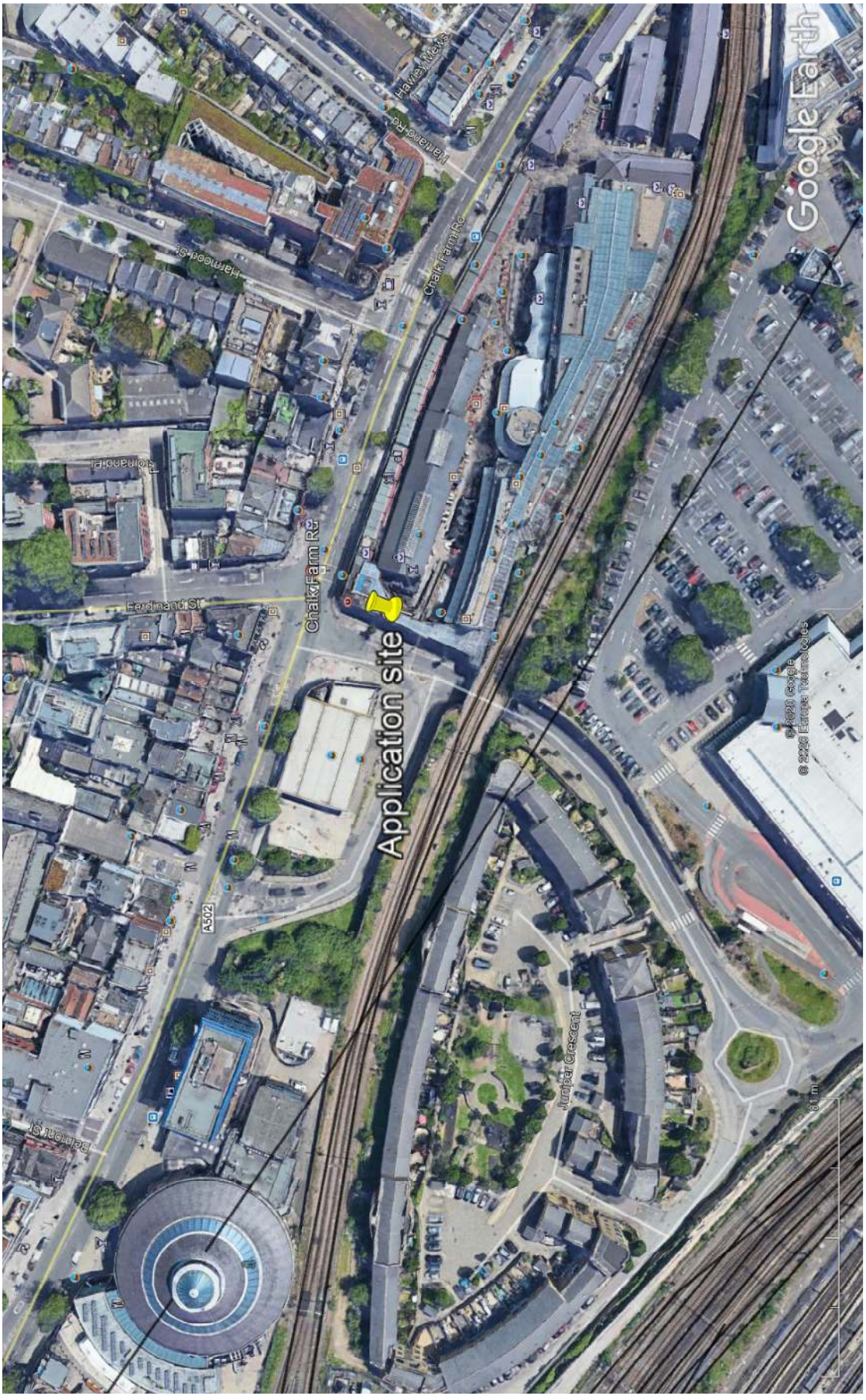
L_{Amax} is the maximum A-weighted sound pressure level during the monitoring period. If fast-weighted it is averaged over 125 ms , and if slow-weighted it is averaged over 1 second. Fast weighted measurements are therefore higher for typical time-varying sources than slow-weighted measurements.

L_{A90} is the A-weighted sound pressure level exceeded for 90% of the time period. The L_{A90} is used as a measure of background noise.

Example noise levels:

Source/Activity	Indicative noise level dBA
Threshold of pain	140
Police siren at 1m	130
Chainsaw at 1m	110
Live music	96-108
Symphony orchestra, 3m	102
Nightclub	94-104
Lawnmower	90
Heavy traffic	82
Vacuum cleaner	75
Ordinary conversation	60
Car at 40 mph at 100m	55
Rural ambient	35
Quiet bedroom	30
Watch ticking	20

Appendix B - Site location



Appendix C - Noise Management Policy

We operate a considerate business. There are both commercial and residential properties in the area around us. We will manage all noise from our premises so we do not disturb people resting and sleeping in their homes or working in their businesses.

There are other licensed premises in the area on The Market and on Chalk Farm Road and these may create noise but this is no reason why our operation should not be rigorously controlled so that any noise we or our patrons make is kept to a minimum. We therefore have a comprehensive approach to managing noise from our premises, and from the area outside our premises when they leave. The following points are critical to our Noise Management Policy and are used in conjunction with our end of night Dispersal Policy:

- We will ensure that noise emanating from our premises will not cause a nuisance at all residential properties.
- Doors and windows will be kept closed save for access and egress after 22:30hrs.
- Arrangements are in place to ensure that deliveries will only take place between the hours of 08:00-20:00hrs, Monday-Saturday except where access at other times is unavoidable and specific procedures are in place to limit disturbance.
- Glass recycling can make noise and so all glass handling is controlled so as to minimise noise. No empty bottles are to be tipped or thrown into outside storage receptacles between 23:00 - 08:00hrs.
- Refuse collections are made at the times allocated for the Market. We will ensure that waste is correctly packaged and that refuse can be removed quickly and efficiently.
- Our sound systems include a limiter which is set and locked so that the system cannot operate beyond a preset maximum level.
- No regulated entertainment will take place outside.
- Drinks will not be allowed to be taken outside the premises. Prominent signage is placed to that effect and this will be enforced with vigilant security presence as patrons leave.
- Any glass or bottles in the immediate vicinity of the premises will be cleared from street furniture, walls, pavements and gutters then safely disposed of. Bottles and glasses will not originate from our premises but we still make an effort to keep the public areas tidy and safe. The exit gate onto Chalk Farm Road will be regularly checked and cleared of all glass.
- We are proud of the area we work in. We will endeavour to keep the area clean and attractive for our patrons and our neighbours. This means dealing with debris outside that may have nothing to do with us but in the interests of making this a better area we will still clear it up.
- We will constantly review our Noise Management Policy and respond quickly to the needs of our neighbours.

HHE Camden Management Team, November 2020

Appendix D - Dispersal Policy

The dispersal policy is designed to ensure that the normal commercial operation of the premises does not have a negative impact on neighbouring properties when people leave the premises.

- A clear notice is prominently displayed by the exit points requesting patrons to respect the needs of local residents and businesses and leave the area quietly. We will ensure that there is a management presence at the exits at the end of the evening.
- Given the style of the business it is anticipated that there will be a gradual departure of customers and that the premises will not be at capacity at closing time.
- Internal music levels will be reduced during the last 30 minutes of trading. Lighting levels will be increased during the last 30 minutes of trading to coincide with the music wind-down policy.
- All licensable activity shall cease 30 minutes before closing time.
- Onward transport information will be provided on-line and in the premises.
- Patrons that require a taxi are encouraged to safely walk towards Camden Station where there is a taxi rank. We will recommend Uber pick-ups for our customers at the Morrisons Petrol Station on Chalk Farm Road.
- There will be clearly signed toilet facilities in the building which will be available for patrons at all times. Employee training includes the provision that any patron in the process of leaving the premises that requests re-admission to use the toilets is allowed to do so. Subject to security and other operational considerations non-patrons will also be allowed access to our toilet facilities.
- So as to minimise disturbance to local residents night all employees are given appropriate instructions and training to encourage customers to leave the premises and the area quietly.
- At the end of the shift employees will say goodbye to each other inside the premises and arrange for lifts or taxis to collect them at a convenient and safe stopping point away from residential properties.
- We will attach the utmost importance to the careful investigation and prompt resolution of any complaint made in respect of the running of the premises. Particular emphasis will be placed on building and maintaining close links with local residents including hosting meetings where necessary to allow our neighbours to raise any issues and for those issues to be quickly resolved. The telephone number of the premises is published on our website and will be provided to all our immediate residential neighbours.
- We will constantly review our Dispersal Policy and respond quickly to the needs of our neighbours.

HHE Camden Management Team, November 2020