

PROOF OF EVIDENCE ON NOISE DANI FIUMICELLI

SITE AT FORMER B&Q, GREATSTONE ROAD, TRAFFORD, M32 0YP

PLANNING APPEAL

PINS REF: APP/Q4245/W/20/3258552

LPA REF: 100400/OUT/20

RULE 6 PARTY – LANASHIRE COUNTY CRICKET CLUB

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SUMMARY

Vanguardia Ltd has been appointed to advise Lancashire County Cricket Club (LCCC) in relation to the noise issues arising from the following planning application made to Trafford Council:

100400/OUT/20 | The demolition of existing retail unit and associated structures; erection of buildings for a mix of use including: 333 apartments (use class C3) and communal spaces ancillary to the residential use; flexible space for use classes A1, A3, D1 and/or D2; undercroft car parking; new public realm; and associated engineering works and infrastructure | Former B&Q Site Great Stone Road Stretford M32 0YP

Following the refusal of a similar application in 2018, Accrue Capital submitted the above revised planning application, which was validated on 16 April 2020. The revised application proposed a reduction in the height of the development from the 2018 Application by proposing two residential blocks of apartments between four and nine storeys in height above basement parking, adjacent to the LCCC cricket ground.

Accrue have submitted an appeal to the Planning Inspectorate ("PINS") for non-determination of the revised application before it had been determined by the Council.

LCCC was founded 157 years ago and the Old Trafford cricket ground is an essential part of the UK's sporting infrastructure with four day county and five day test matches, one day games and floodlit T20 and 100 ball games in the evening. However, the LCCC site is not exclusively used for sport and the site hosts a number of large concerts with loud amplified music every year, and other noise generating non-sporting uses such as conferences, exhibitions and social functions. Consequently, the proposed development site's close proximity to the ground means it is inappropriate for large scale residential development, as there will be conflicts in relation to noise, lighting etc. that could result in LCCC being constrained from carrying out its existing activities and any future expansion or changes to its operations.

Consequently, the Agent of Change principle from the National Planning Policy Framework (NPPF), as expanded upon in the National Planning Practice Guidance (NPPG), applies to the proposed scheme. The Agent of Change principle places the responsibility for mitigating impacts from existing noise-generating activities or land uses on the proposed new noise-sensitive development. In other words, the person or business responsible for the change is also responsible for managing the impact of the change so that established noise generating land uses can continue and potentially expand without hinderance.

This document provides a review and responses to the noise impact assessment submitted in support of the proposed development. A summary of the review is provided below.

- The noise assessment accompanying the application does not appropriately assess all sources of sound emitted from LCCC. For example, the surveying of noise emissions from LCCC only covers one form of cricket and was carried out in a location where screening meant the measured levels would underestimate the likely impacts on the proposed scheme. In addition, the assessment only mentions 1 to 2 large noisy concerts a year and on that basis considers that no mitigation of the loud music noise levels that would affect the proposed scheme need be incorporated into the scheme. Whereas the LCCC is permitted to have up to 7 large scale concerts and year, and it is vital that the scheme includes mitigation in its design and construction to avoid significant adverse effects from the resulting loud music noise levels that would affect the proposed scheme.
- The proposed mitigation is inadequate to meet the policy aims of avoiding significant adverse effects, mitigating and minimising adverse effects and ensuring new noise sensitive uses can integrate effectively with existing noise generating activities and land uses without prejudicing the on-going operation and future development of those sources. As a result, the Agent of Change principle from national and local planning policy and guidance has not been satisfied.
- The main means of mitigation suggested in the noise impact assessment is for the proposed scheme to provide acoustic glazing so that windows can be kept closed against road traffic and tram noise. This will inevitably compromise ventilation and make overheating likely. However, no assessment is made of

ventilation and overheating and no mitigation measures for these issues are discussed in the noise report or provided in a standalone report in the documents listed for the scheme on Trafford Council's website. Due to the noise mitigation being based on windows being kept closed, alternative means of ventilation and control of overheating will need to be provided for residents to be protected and the risk to LCCC suitably managed. However, it is considered inappropriate that there is no comprehensive assessment of these factors and their interaction accompanying the application or submitted to this appeal.

- The initial Holtz noise report says it is not possible to wholly mitigate the concert noise, in which case the scheme should not go ahead. However, it is not correct to say the concert noise cannot be mitigated. As it could be mitigated by implementing more robust measures than the Holtz reports envisages, such as acoustic double and triple glazing, wintergardens, and mechanical ventilation and means of controlling overheating, as carried out in housing schemes constructed near to Wembley Stadium. There will be significant minimum construction standards and therefore additional costs for acoustics to allow the scheme to mitigate these impacts adequately, particularly as the concert and floodlit cricket activities at LCCC are likely to increase rather than decrease in future.
- Basing mitigation on keeping windows closed is a significant adverse effect on quality of life, even if alternative means of ventilation and control of overheating are provided, as it reduces the connection to the outdoor environment which for most of the time when there is no noise generating activity at the LCCG is typical of a relatively quiet sub-urban location, and would limit resident's choice in the ways in which they can use their homes for the substantial majority of the time when there is noise generating activity at the LCCG. Relying on closed windows for acceptable internal noise conditions may be acceptable in circumstances where noise levels are constantly high such as city centres and near major transport infrastructure where residents are aware that acoustic conditions are poor and trade off the adverse effect of keeping windows closed with benefits of central urban living and access to transport infrastructure. However, in this case, for most of the time there will be no, or very little, noise emitted from LCCG and the location has the acoustic characteristics of a relatively quiet sub-urban district. But for a substantial minority of the time moderate to very high levels of various noises are emitted from LCCG i.e. there would

be a substantial change in the acoustic character of the locality, and residents would need to keep windows closed to achieve acceptable acoustic conditions indoors.

- Another drawback with relying on keeping windows closed in this case is that if residents open windows the internal noise level from activity at the LCCG will rise above design thresholds and the risk of legal nuisance based action restricting operations at the LCCG will be high.
- In circumstances where the Agent of Change policy applies it is common that the developer offers the established noise source a deed of easement via a section 106 agreement. This is a legal mechanism written into the deeds for a development that means residents near a venue agree to a certain level of noise, protecting the venue from future noise based legal action, in line with the agent of change principle. Such an agreement would protect LCCG against residents not using or bypassing noise mitigation incorporated into the scheme and provide security regarding the uncertainties inherent in the design and construction of noise mitigation.

1. INTRODUCTION AND SCOPE OF EVIDENCE

1.1. This proof of evidence is submitted to the inquiry on behalf of the Lancashire County Cricket Club (LCCC) regarding an appeal by Acrue (Forum) Ltd pursuant to section 78 of the Town and Country Planning Act 1990 against the non-determination of an application for the demolition of existing retail unit and associated structures; erection of buildings for a mix of use including: 333 apartments (use class C3) and communal spaces ancillary to the residential use; flexible space for use classes A1, A3, D1 and/or D2; undercroft car parking; new public realm; and associated engineering works and infrastructure.

SCOPE OF EVIDENCE

1.2. This evidence covers the potential noise impacts of the proposals and their potential effects upon the health and quality of life of future residents of the proposed scheme and the Agent of Change principle regarding the encroachment of new noise sensitive receptors in close proximity to the Lancashire County Cricket Ground (LCCG) which is a long established land use from which noise from Cricket, large scale outdoor concerts and commercial activities is emitted which would affect any future occupiers of the proposed scheme.

1.3. This evidence includes review of the relevant national and local noise and planning policy and guidance, critical review of noise reports submitted in support of the proposed scheme, details of noise surveying during large scale concerts at LCCG and calculation and evaluation of the resulting noise levels at the worst affected façades of the scheme.

2. QUALIFICATIONS & PERSONAL STATEMENT

2.1. Qualifications and Experience

2.2. I am a technical director of Vanguardia Limited, a company whose services include specialising in the field of acoustics, noise, and vibration. I was awarded the Chartered Institute of Environmental Health's Diploma in 1986 and a Master of Science (MSc) in Environmental Acoustics from the Southbank University in 1999; and have over 30 years of experience in the field of acoustics having worked as an Environmental Health Officer in London from 1986 until 2002, and as an acoustic consultant in the private sector since then. I am a corporate member of the Institute of Acoustics (IoA) and the Chartered Institute of Environmental Health Officers (CIEH), and I am a member of the IoA Environmental Noise Committee. I was chair of a committee set up by the Institute of Acoustics the Association of Noise Consultants and the Chartered Institute of Environmental health which published good practice guidance regarding noise sensitive development in May 2017 and am a member of a working groups revising the IOA Good Practice Guide to Noise from Place of Entertainment and Noise Council Code of Practice on Environmental Noise from Outdoor Concerts. I have a wide range of experience in all technical aspects related to acoustics and have managed numerous projects as well as presenting evidence at planning committees and appeals, legal proceedings, public inquiries and House of Commons and Scottish Parliament Scrutiny Committees. I have presented technical papers and written articles nationally and internationally on noise and acoustics covering a wide range of aspects. My overall project experience includes being the project director or manager and participant in Environmental Impact Assessments for residential schemes, schools, airports, road transport, guided transport (trams and buses), light and heavy railway projects, renewable energy, hospital development, mixed developments, harbour developments, leisure developments, sport stadiums, and commercial and industrial developments. Since 1996 I have monitored and managed the noise from over 100 large scale

outdoor concerts including events at the Lancashire County Cricket Ground, as recently as September 2021.

2.3. I have visited the vicinity of the proposed scheme and viewed the existing layout and the relationship with the LCCG. I have also been responsible for monitoring and managing the noise from several large concerts at the LCCG over the last ten years, including as recently as September 2021.

2.4. Personal Statement

I, Dani Fiumicelli declare that:

2.5. The evidence which I have prepared and provide in this proof of evidence is true and has been prepared and is given in accordance with the guidance of my professional institutions, and I confirm that the opinions expressed are my true and professional opinions.

2.6. I understand that my duty in providing this statement and giving evidence is to help the Inquiry, and that this duty overrides any obligation to the party by whom I am engaged or the person who has paid or is liable to pay me or my employers. I confirm that I have complied and will continue to comply with my duty.

2.7. I confirm that insofar as the facts stated in this statement are within my own knowledge I have made clear which they are, and I believe them to be true, and that the opinions I have expressed represent my true and complete professional opinion.

2.8. I have endeavoured to include in my statement those matters, of which I have knowledge or which I have been made aware, that might adversely affect the validity of my opinion. I have clearly stated any qualifications to my opinion.

2.9. I have shown the sources of all information I have used.

2.10. I have not without forming an independent view included or excluded anything which has been suggested to me by others, including my instructing clients and their lawyers.

2.11. I will notify those instructing me immediately and confirm in writing if for any reason my statement requires any correction or qualification.

3. NOISES GENERATED AT LCCC

- 3.1. LCCC is an established nationally significant sports ground with a long history of hosting Cricket and other events for the last 157 years.
- 3.2. In the last 10 to 15 years the LCCC ground has undergone substantial changes with old facilities and buildings demolished, and new buildings and stands erected.
- 3.3. There has also been a parallel change in how the ground is used when cricket is not underway, with many activities other than cricket taking place.
- 3.4. The gentle sound of willow on leather is synonymous with cricket, but modern cricket in a 20,000-capacity stadium is not a quiet activity. The list below provides an outline of the sources of noise emitted from the LCCC ground:

- **Concerts** - 7 concerts a year at 55,000-person capacity are authorised by the premises licence until 2230 hrs. Historically, only 2 or 3 a year have occurred, but next year up to 5 are already planned, and the long-term plan is for more concerts than in the past. These concerts consist of around 8 or 9 hours of amplified music at audience levels of up to around 103 dBA until 2230 hrs, plus crowd noise during the event and dispersal after the event finishes. In addition, normally, sound checks and rehearsals take place on the day before a concert with various sounds (often called “beeps and squeaks”) played intermittently and unpredictably through the PA as it is set up and fine-tuned, then once the PA is ready the performers usually play so at show noise levels to ensure the sound is of suitable quality and magnitude. The permitted music noise level (MNL) under the premises licence at existing noise receptors is 80 dB LAeq,15 min, which was set by the Magistrates court following an appeal against a lower level initially set by the licensing authority, as it was the minimum that would allow viable concert entertainment at LCCG. However, due to attenuation from the relatively new stands and buildings plus temporary screening being installed between the new stands and buildings, in practice MNLs are rarely more than around 75 dBA at the worst affected properties along Trent Bridge Walk, which are no more than two storeys high. It is predicted that the noise level from concerts at the north-eastern façade and the northern façade of the proposed appeal scheme i.e. facing and parallel to the cricket ground, will exceed

80 dB LAeq,T above the 2nd storey up to the top floor, as there will be no screening of the stage and PA at these heights, and the proposed scheme will be closer than the existing houses on Trent Bridge Walk to the stage and PA (as discussed further on in this report).

- **International T20** – Late afternoon and evening games. 10,000 to 15,000 crowd. Increased crowd noise, regular use of PA for musical “stings” i.e. 30 second bursts of music for boundaries, wickets etc. to around 85 dBA in the stands. However, some games can be louder as the crowd are enthusiastic supporters of their particular team and bring horns and musical instruments to generate near constant loud noise e.g. the recent England Vs Pakistan game on the 20th July 2021 – see coverage of the game at <https://www.youtube.com/watch?v=VuoSaVFds-g> , or download the footage at <https://wettransfer.com/downloads/01b768f4c106804d7e9a5344819bb89d20210803115414/548237f1fe2fc6064d52cf05d631f51f20210803115440/08ef7b>
- **International one day** – 1 game per year into the early evening. 15,000 to 20,000 crowd. Increased crowd noise, regular use of PA musical “stings” i.e. 30 second bursts of music for boundaries, wickets etc. to around 85 dBA in the stands.
- **I day 50 over** - 4 games per year into the early evening. Average crowd 10,000. Medium crowd noise, regular use of PA musical “stings” i.e. 30 second bursts of music for boundaries, wickets etc. to around 85 dBA in the stands.
- **20/20** - 7 home games including against Yorkshire with a full house at 20,000, average crowd 10,000 for other games. Increased crowd noise, regular use of PA musical “stings” i.e. 30 second bursts of music for boundaries, wickets etc to around 85 dBA in the stands.
- **100** - Double headers (men’s and women’s games one after the other) that run from around 2.30pm to about 9.00pm. 5000 to 10,000 crowd. Moderate crowd noise, regular use of PA musical “stings” i.e. 30 second bursts of music for boundaries, wickets etc. to around 85 dBA in the stands
- **Test games** - 1 per year of at least 4 days but could be up to five days. 20,000 capacity crowd. Maximum crowd noise, with occasional PA use to around 75 dBA in the stands at fall of wicket etc.
- **County cricket games** - 7 home games of 4 days each into the early evening. Crowd noise from with occasional PA use to around 75 dBA in the stands at fall of wicket etc.

- **Women's cricket games** - 3 to 4 days of either 50 over or T20 cricket each into the early evening. Crowd noise with occasional PA use to around 75 dBA in the stands at fall of wicket etc.
- **Reserve/Second Eleven** - 3 home games of 4 days each into the early evening. reduced crowd noise with occasional PA use to around 75 dBA in the stands at fall of wicket etc.

3.5. In addition to the above activities, various parts of the LCCC are used to hold conferences, workshops, exhibitions, work based social events and family celebrations etc. These take place inside different buildings, some of which are not particularly well noise insulated and can "leak" noise from parties etc. Noise is also generated when those attending such functions leave the premises and disperse, which can be late in the evening and into the night period.

4. POLICY

NATIONAL

NOISE POLICY STATEMENT FOR ENGLAND (NPSE)

- 4.1. NPSE seeks to clarify the underlying principles and aims in existing policy documents, legislation and guidance that relate to noise. The statement applies to all forms of noise, including environmental noise, neighbour noise and neighbourhood noise.
- 4.2. The statement sets out the long term vision of the Government’s noise policy, which is to “promote good health and a good quality of life through the effective management of noise within the context of policy on sustainable development”.
- 4.3. The policy promotes the effective management and control of noise, within the context of Government policy on sustainable development and thereby aims to:
- avoid significant adverse impacts on health and quality of life;
 - mitigate and minimise adverse impacts on health and quality of life; and
 - where possible, contribute to the improvements of health and quality of life.
- 4.4. The statement adopts established concepts from toxicology that are currently being applied to noise impacts. The concept details noise levels, at which the effects of an exposure may be classified into a specific category. The classification categories as detailed within the NPSE are as follows:
- 4.5. No Observed Effect Level (NOEL) - the level below which no effect can be detected. Below this level no detectable effect on health and quality of life due to noise can be established;
- 4.6. Lowest Observable Adverse Effect Level (LOAEL) - the level above which adverse effects on health and quality of life can be detected; and

- 4.7. Significant Observed Adverse Effect Level (SOAEL) - the level above which significant adverse effects on health and quality of life occur.
- 4.8. It is recognised that SOAEL does not have a single objective noise-based level that is applicable to all sources of noise in all situations and therefore the SOAEL is likely to be different for different sources, receptors and at different times of the day.
- 4.9. No guidance has been issued at the time of writing to identify the noise levels that represent SOAEL and LOAEL for typical noise sources and receptors. Instead, sound level values must be derived for these policy concepts for each noise source, and justified in terms of existing standards and guidance, and the core principles of acoustics.

NATIONAL PLANNING POLICY FRAMEWORK (NPPF) (JULY 2021)

- 4.10. The NPPF applies to the proposed appeal scheme in two ways e.g.
- Noise impacts on the new residents from existing noise sources e.g. road traffic and LCCC cricket ground.
 - Risks to the continued operation of the cricket club should the new residents raise complaints of noise disturbance.
- 4.11. The parts of the NPPF that cover these considerations are discussed below.

Noise impacts on the new residents from existing noise sources

- 4.12. Paragraph 185 of the NPPF July 2021 advises that:

185. 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 life⁶⁵;

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; and

c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

Footnote 65 - See Explanatory Note to the Noise Policy Statement for England (Department for Environment, Food & Rural Affairs, 2010).

Risks to the continued operation of the LCCC

4.13. Paragraph 187 of the NPPF July 2021 advises that:

"187. Planning policies and decisions should ensure 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."

NATIONAL PLANNING PRACTICE GUIDANCE (NPPG)

4.14. The NPPG at Paragraph: 003 Reference ID: 30-003-20190722 Revision date: 22 07 2019 advises that when dealing with noise aspects of planning applications Local Planning Authorities should "consider:

- whether or not a significant adverse effect is occurring or likely to occur;
- whether or not an adverse effect is occurring or likely to occur; and
- whether or not a good standard of amenity can be achieved".

4.15. Like the NPPF and NPSE, the NPPG does not contain any noise level decibel based standards or guidelines.

4.16. At Paragraph: 006 Reference ID: 30-006-20190722 Revision date: 22 07 2019, the NPPG recognises that “The subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected. This will depend on how various factors combine in any particular situation.” And that,

“These factors include:

- *The source and absolute level of the noise together with the time of day it occurs. Some types and level of noise will cause a greater adverse effect at night than if they occurred during the day – this is because people tend to be more sensitive to noise at night as they are trying to sleep. The adverse effect can also be greater simply because there is less background noise at night;*
- *for a new noise making source, how the noise from it relates to the existing sound environment;*
- *for non-continuous sources of noise, the number of noise events, and the frequency and pattern of occurrence of the noise;*
- *the spectral content of the noise (i.e. whether or not the noise contains particular high or low frequency content) and the general character of the noise (i.e. whether or not the noise contains particular tonal characteristics or other particular features), and;*
- *the local arrangement of buildings, surfaces and green infrastructure, and the extent to which it reflects or absorbs noise.*

More specific factors to consider when relevant include:

- *the cumulative impacts of more than one source of noise;*
- *whether any adverse internal effects can be completely removed by closing windows and, in the case of new residential development, if the proposed mitigation relies on windows being kept closed most of the time (and the effect this may have on living conditions). In both cases a suitable alternative means of ventilation is likely to be necessary. Further information on ventilation can be found in the Building Regulations.*

- *In cases where existing noise sensitive locations already experience high noise levels, a development that is expected to cause even a small increase in the overall noise level may result in a significant adverse effect occurring even though little to no change in behaviour would be likely to occur.*
- *Noise Action Plans (where these exist), and, in particular the Important Areas identified through the process associated with the Environmental Noise Directive and corresponding regulations should be taken into account. Defra’s website has information on Noise Action Plans and Important Areas. Local authority environmental health departments will also be able to provide information about Important Areas.*
- *the effect of noise on wildlife. Noise can adversely affect wildlife and ecosystems. Particular consideration needs to be given to the potential effects of noisy development on international, national and locally designated sites of importance for biodiversity;*
- *where external amenity spaces are an intrinsic part of the overall design, the acoustic environment of those spaces should be considered so that they can be enjoyed as intended.*
- *some commercial developments including restaurants, hot food takeaways, night clubs and public houses can have particular impacts, not least because activities are often at their peak in the evening and late at night. Local planning authorities will wish to bear in mind not only the noise that is generated within the premises but also the noise that may be made by customers in the vicinity. “*

4.17. The NPPG discusses at paragraph: 007 Reference ID: 30-007-20190722 whether LPAs can set noise standards and advises the following:

“Plans may include specific standards to apply to various forms of proposed development and locations in their area. Care should be taken, however, to avoid these being applied as rigid thresholds, as specific circumstances may justify some variation being allowed.”

4.18. The NPPG provides advice on how the risk of conflict between new development and existing businesses or facilities be addressed in Paragraph: 009 Reference ID: 30-009-20190722 as follows:

“Development proposed in the vicinity of existing businesses, community facilities or other activities may need to put suitable mitigation measures in place to avoid those activities having a significant adverse effect on residents or users of the proposed scheme.

In these circumstances the applicant (or ‘agent of change’) will need to clearly identify the effects of existing businesses that may cause a nuisance (including noise, but also dust, odours,

vibration and other sources of pollution) and the likelihood that they could have a significant adverse effect on new residents/users. In doing so, the agent of change will need to take into account not only the current activities that may cause a nuisance, but also those activities that businesses or other facilities are permitted to carry out, even if they are not occurring at the time of the application being made.

The agent of change will also need to define clearly the mitigation being proposed to address any potential significant adverse effects that are identified. Adopting this approach may not prevent all complaints from the new residents/users about noise or other effects, but can help to achieve a satisfactory living or working environment, and help to mitigate the risk of a statutory nuisance being found if the new development is used as designed (for example, keeping windows closed and using alternative ventilation systems when the noise or other effects are occurring).

It can be helpful for developers to provide information to prospective purchasers or occupants about mitigation measures that have been put in place, to raise awareness and reduce the risk of post-purchase/occupancy complaints.”

4.19. The Noise Exposure Hierarchy Table in paragraph 005 Reference ID: 30-005-20190722 provides qualitative definitions of LOAEL and SOAEL which include the following:

- LOAEL - “Affects the acoustic character of the area such that there is a small actual or perceived change in the quality of life.”.
- SOAEL – “Quality of life diminished due to change in acoustic character of the area.”.

LOCAL PLAN

4.20. The Trafford Council Local Plan considers noise with reference to this case in, as follows.

L5.14 Where development is proposed close to existing sources of pollution, noise or vibration, developers will be required to demonstrate that it is sited and designed in such a way as to confine the impact of nuisance from these sources to acceptable levels appropriate to the proposed use concerned.

14.18 The Borough generally possesses a good quality environment which the Council intends to retain and improve wherever possible. Pollution, noise and vibration damage the environment and should be prevented or mitigated. The Council will use its planning powers as the most effective mechanism to control pollution, noise and vibration at source. Proposals for development close to sources of pollution, noise or vibration will be required to ensure an acceptable environment for users of the development."

L7.3 In relation to matters of amenity protection, development must:

- *Be compatible with the surrounding area; and*
- *Not prejudice the amenity of the future occupiers of the development and/or occupants of adjacent properties by reason of overbearing, overshadowing, overlooking, visual intrusion, noise and/or disturbance, odour or in any other way.*

4.21. The Trafford Local Plan is undergoing revision and the February 2021 Regulation 18 Consultation Draft included the following relevant proposed policy:

"EP2.1 Development which is considered to be noise sensitive, such as housing, which will be adjacent to major sources of noise such as roads, railways and industrial premises, must be accompanied by a noise assessment as part of the planning application process. This should include a demonstration of how mitigation measures will be put in place without putting unreasonable restrictions on existing businesses."

TRAFFORD COUNCIL NOISE STANDARDS

4.22. Trafford Council also have a document called "Planning Guidance – Noise Standards" which sets the noise levels the Council wishes to see achieved for new residential housing.

4.23. The document uses the Noise Exposure Categories (NECs) from the now cancelled PPG 24 advice note. The NECs only apply to transportation noise sources or mixture of transportation and industrial noise where neither is dominant. LCCG does not emit transportation like sounds or a mixture of transportation and industrial noise where neither is dominant.

4.24. The document also sets noise levels in living rooms and bedrooms. The quoted range reflects now superseded advice and is higher than current recommendations from the WHO and British

Standards, reflecting the age of the document (approved in April 1995). 'Modern good practice'¹ would be to aim for levels approximately 5 to 10 decibels below those quoted in the Trafford Council document.

POLICY AND GUIDANCE CONCLUSIONS

4.25. In summary National and local planning policy and guidance require that:

- Planning decisions shall ensure that the continued operation and future development of existing noise generating businesses should not be prejudiced by the introduction of new noise sensitive development. Because future occupiers may raise noise complaints that might lead to imposition of unreasonable restrictions on the existing business. Instead, the "Agent of Change" principle places the responsibility for mitigating impacts from existing noise-generating activities or uses on the proposed new noise-sensitive development. In other words, the person or business responsible for the change must also be responsible for managing the impact of the change.
- The worst unacceptable, effects of noise on its own that remain despite mitigation must be prevented e.g. by refusing planning permission; and,
- That the lesser significant effects of noise should be avoided e.g. by using conditions to require noise control measures; and,
- The least effects of adverse impacts should be mitigated and minimised;
- Consideration of the acoustic character of an area and how it might be changed by a development proposal is important.
- A good standard of amenity shall be achieved.
- Residential amenity shall be protected.

¹ E.g. the ProPG guidance of noise and noise sensitive development published by the Institute of Acoustics, Chartered Institute of Environmental Health and Association of Noise Consultants, and referenced in the NPPG.

5. AGENT OF CHANGE

- 5.1. As described in the previous section, the 'Agent of Change principle' encapsulates the position that a person or business (i.e. the agent) introducing a new noise sensitive land use is responsible for managing the impact of noise from existing land uses on that change.
- 5.2. The practical issue is that in circumstances where residents move into properties affected by noise e.g. from a long-standing licensed sports stadium or music venue, this may result in the Local Licensing Authority (LPA) imposing additional licensing restrictions on the established licensed venue; and/or being forced to take statutory nuisance enforcement action as Councils have a legal duty under the Environmental Protection Act 1990 to investigate complaints and serve abatement notices if satisfied a nuisance exists or is likely to recur. Examples of potential constraints that might arise from these forms of enforcement activity include the following (in isolation and combination):
- a) Sports events could be prohibited, reduced in type, capacity or terminal hour.
 - b) The permitted concert music noise level off site could be reduced thereby rendering concerts unviable.
 - c) The permitted number of concerts and the terminal hour could be reduced.
 - d) Non-sporting activities that include regulated entertainment and/or supply of alcohol could be prohibited, reduced in capacity or terminal hour.
- 5.3. The Supreme Court case of *Coventry v Lawrence [2014] UKSC 13* confirms the long-held principle that there would be no defence to say that the new residents had moved to the nuisance i.e. that the noise generating land use at the LCCG was present before the proposed new housing and therefore took precedence. Furthermore, the agent of change principle is not a defence to proceedings in statutory nuisance under the Environmental Protection Act 1990 Section 80 or 82 by Local Authorities or aggrieved individuals respectively, or in common law nuisance. Neither the Agent of Change principle a defence against the review, modification or

revocation of a premises licence for regulated entertainment and provision of alcohol or associated conditions setting permitted noise limits under the Licensing Act 2003.

- 5.4. Consequently, existing long established noise generating activities at LCCC are at risk from planning permission granting change of use to allow noise sensitive development on nearby land.
- 5.5. Although not described as "Agent of Change" until the NPPF was revised in 2018, the concept existed in planning policy since at least 1994, as the old PPG 24 referred to ensuring new noise sensitive and noise generating land uses could integrate effectively with existing receptors.
- 5.6. The formalisation of the Agent of Change principle as a standalone policy came about with the revision of the NPPF in 2018. Prior to this there was extensive debate of the principle following the introduction of government policy allowing permitted development rights for the change of use of office buildings to residential. This policy was first introduced in the context of an economy struggling to recover and the government's desire to stimulate development rapidly. Early in 2017 the Select Committee on the Licensing Act 2003 recommended "*that a full 'Agent of Change' principle be adopted in both planning and licensing guidance to help protect both licensed premises and local residents from consequences arising from any new built development in their nearby vicinity. (Paragraph 553)*".
- 5.7. A proposal to amend the NPPF to emphasise that planning policies and decisions should take account of existing businesses and other organisations when locating new development nearby and, where necessary, to mitigate the impact of noise and other potential nuisances arising from existing development, was included in the Housing White Paper 'Fixing our Broken Housing Market' (published for consultation in February 2017).
- 5.8. Subsequently, in January 2018 the Ministry of Housing, Communities and Local Government made a statement confirming that the framework would be clarified to include detailed reference to the agent of change principle.

5.9. The Government's response to the consultation published at the same time as the NPPF welcomed the "strong support" for the agent of change principle. In response to consultation the Government changed the term "statutory nuisance" in the NPPF to "significant adverse effects", and the footnote to paragraph 185 of the NPPF July 2021 refers to the 'Explanatory Note to the Noise Policy Statement for England (Department for Environment, Food & Rural Affairs, 2010' which provides further guidance on the phrase "significant adverse".

5.10. It is well established that an entertainment venue moving into an area adjacent to residents must take measures to ensure that the activities in the new building will not cause noise problems for those living nearby. Paragraph 185 of NPPF July 2021 provides that both planning policies and decisions should ensure that new development is appropriate for its location considering 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 mitigate and reduce to a reasonably practicable 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.

5.11. But the position in reverse, where new residential development locates near to a noise source, has not been equally clear. The previous framework stated that planning policies and decisions should "*aim to recognise that (...) existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established;*"

5.12. The inclusion of an explicit reference to the Agent of Change principle in paragraph 187 of NPPF July 2021 clarifies the application of the principle. The paragraph states that both planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (e.g. places of worship, pubs, music venues and sports clubs). "*Unreasonable restrictions*" should not be placed on existing

businesses 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."*

- 5.13. Local Planning Authorities (LPAs) in England must have regard to the policies in NPPF July 2021 when making decisions on applications and in framing their own planning policy. For LPAs this means that they should have regard to the Agent of Change principle in setting their policies.
- 5.14. For developers this means that where they are proposing residential development they should consider if there could be a significant adverse effect on future occupiers of that development from any nearby source(s) of noise such as pre-existing entertainment venue(s) or sports stadia. Where a potential significant adverse effect is identified, developers are required to factor into their planning application suitable mitigation measures to avoid any significant adverse impacts on health and the quality of life for future occupiers.
- 5.15. Whilst there is a balance to be struck between competing policies and with housing supply objectives, policy and guidance are clear that existing noise generating land uses should be protected against encroachment of noise sensitive development that might lead to constraints on the continued operation and future expansion of those uses.
- 5.16. Consequently, the use of conditions and/or planning obligations to mitigate noise impacts and other nuisances is likely where the Agent of Change principle applies, which may result in knock on effects for construction costs and scheme viability. Where the noise is not or cannot be satisfactorily mitigated, this could lead to the agent of change proposal being refused.

6. NOISE FROM CONCERTS AT THE LCCG

- 6.1. Previous information submitted to Trafford Council by Vanguardia used acoustic modelling to predict concert noise at the facade of the Proposed Development.
- 6.2. To provide real world data, measurements were taken near to the boundary of the B&Q site and Lancashire County Cricket Ground (LCCG) at a height of 11 metres during a 50,000 person concert headlined by The Courteeners on Saturday 25th September 2021.
- 6.3. Figure 1 shows the location of the noise measuring equipment and its relationship to the development site.

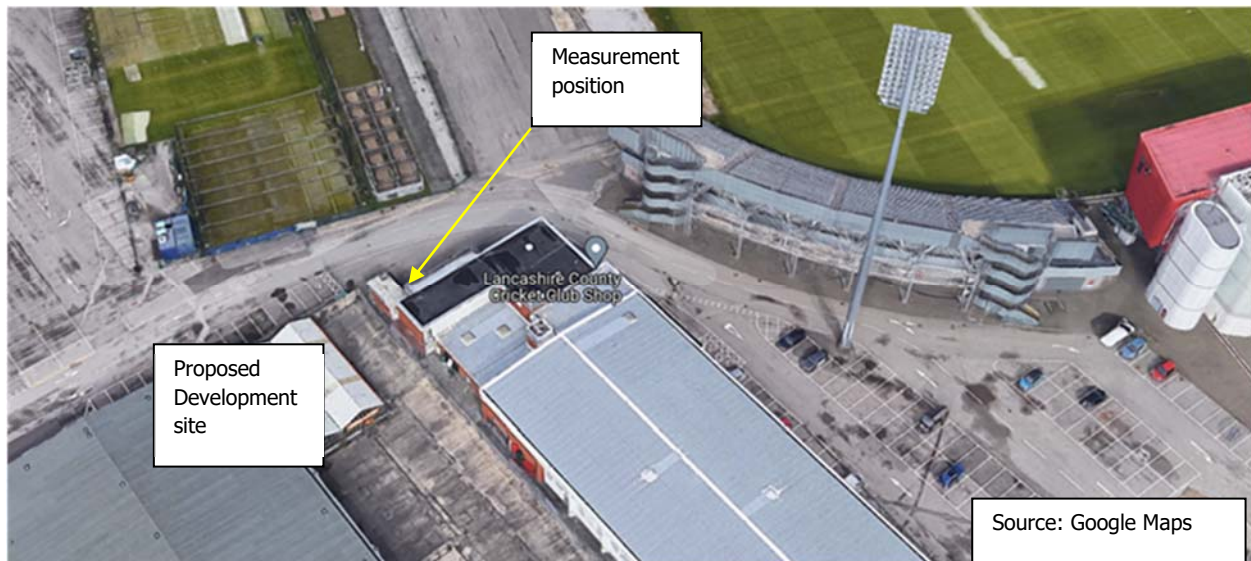


FIGURE 1: MEASUREMENT LOCATION AND DEVELOPMENT SITE

- 6.4. Figure 2 provides a photograph taken during the survey looking towards the venue, showing the measurement microphone mounted on a pole and two of the stage-right PA arrays.

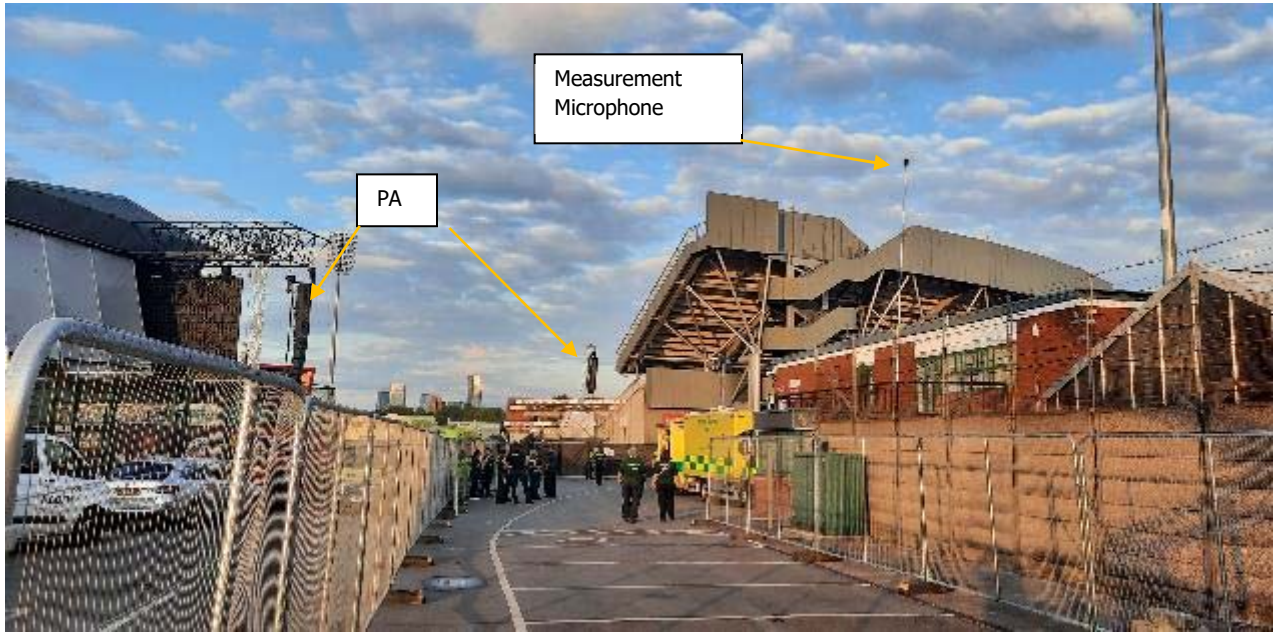


FIGURE 2:VIEW OF MEASUREMENT LOCATION LOOKING TOWARDS THE VENUE

6.5. Figure 3 presents a photograph of the stage and crowd taken from the measurement location.

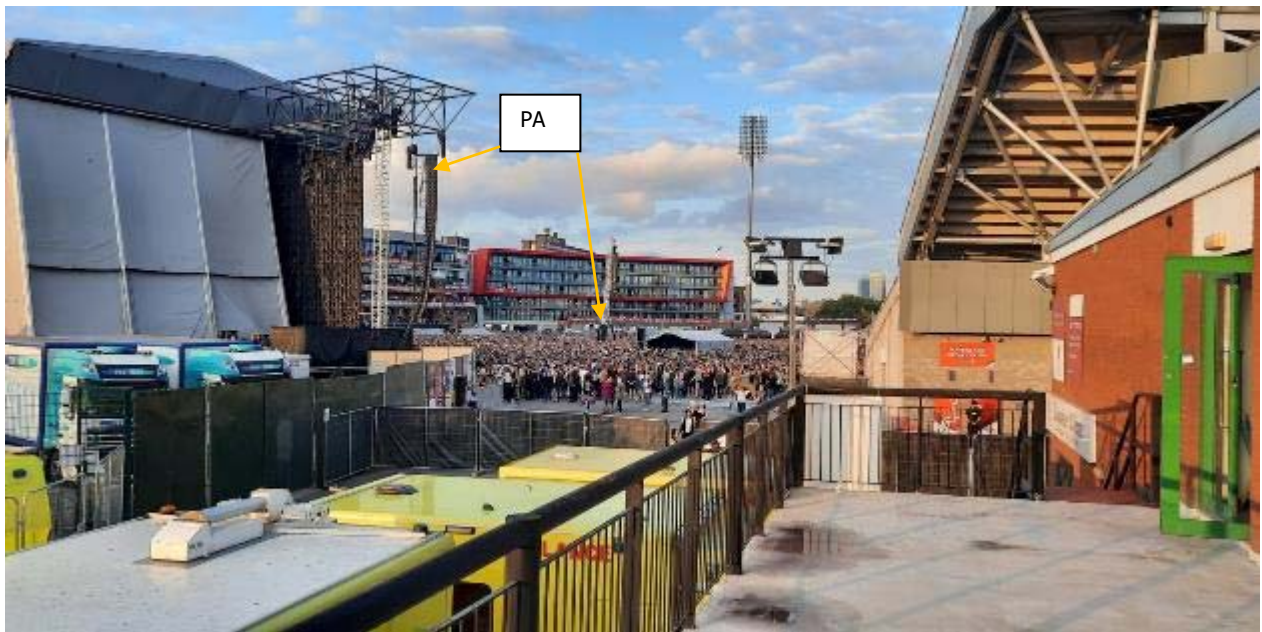


FIGURE 3: VIEW OF STAGE, STAGE RIGHT SIDE HANG AND CROWD FROM MEASUREMENT LOCATION

6.6. Figure 4 presents a view towards the development site taken from the measurement location.



FIGURE 4: VIEW TOWARDS DEVELOPMENT SITE FROM MEASUREMENT LOCATION

6.7. The measurements taken at the front of house mixing desk in the concert arena and at the above location (described as Boundary with Development) are shown in Table 1 and 0 below. The corresponding level at the existing off-site critical control point (Trent Bridge Walk²) and the licensing limit are also provided for comparison.

Table 1 Music Noise Levels during the concert on the 25th September 2021

Time	FoH Mixing Desk	Boundary with Development	Trent Bridge Walk ³	Licence Limit
	L _{Aeq,15 min} dB	L _{Aeq,15 min} dB	L _{Aeq,15 min} dB	L _{Aeq,15 min} dB
17:00:00	96	81	73	80
17:15:00	98	83	75	80
17:30:00	87	73	64	80

² Experience of concerts at the LCCG over many years has demonstrated that, provided the music noise level is no more than the license's permitted limit of 80 dB L_{Aeq,15 min} on Trent Bridge Walk (in the car park at the end of Edgbaston Drive), then the noise level is also compliant with the permitted limit at all other sensitive receivers.

³ Derived using an average difference between measurements at the FoH mixer and at Trent Bridge Walk of 23 dBA, established during multiple sample measurements during the performance of each band during the event.

Time	FoH Mixing Desk	Boundary with Development	Trent Bridge Walk ³	Licence Limit
	L _{Aeq,15 min} dB	L _{Aeq,15 min} dB	L _{Aeq,15 min} dB	L _{Aeq,15 min} dB
17:45:00	83	71	60	80
18:00:00	97	82	74	80
18:15:00	97	83	74	80
18:30:00	97	82	74	80
18:45:00	83	72	60	80
19:00:00	92	78	69	80
19:15:00	97	83	74	80
19:30:00	98	84	75	80
19:45:00	98	83	75	80
20:00:00	92	79	69	80
20:15:00	84	74	61	80
20:30:00	88	76	65	80
20:45:00	99	85	76	80
21:00:00	98	84	75	80
21:15:00	98	84	75	80
21:30:00	98	84	75	80
21:45:00	91	77	68	80
22:00:00	98	83	75	80
22:15:00	100	87	77	80

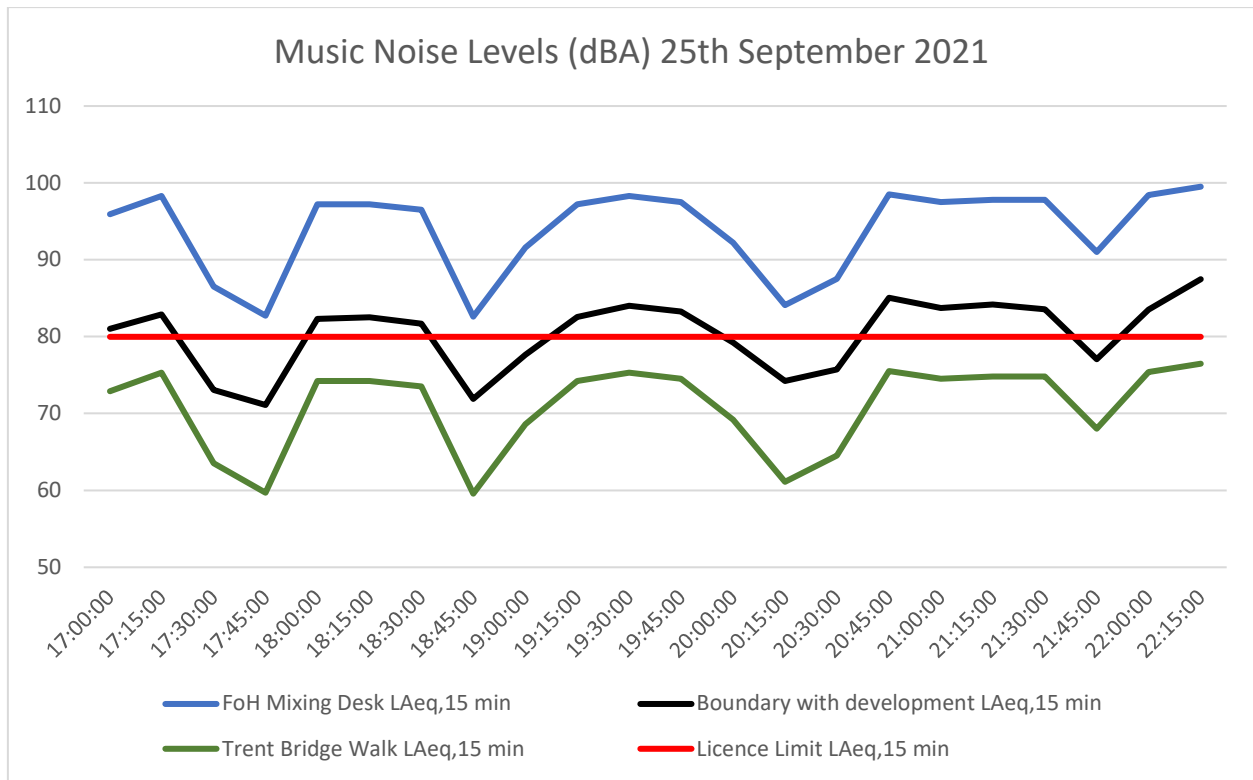


FIGURE 5: CHART SHOWING PROFILE OF MNLs DURING THE CONCERT AT LCCG ON 25TH SEPTEMBER 2021

6.8. Details of the sound system type and configuration have been used to model the predicted music noise levels at the façades of the proposed scheme that would face the LCCG, with music noise levels at the permitted limit of 80 dB L_{Aeq},15 min at Trent Bridge Walk.

6.9. The modelling results are presented in Table 2.

Table 2 Predicted Free-field MNLs at the proposed development facades relative to the permitted limit

Height m	Predicted MNL dB L _{Aeq} , 15 min ¹		
	Trent Bridge Walk Licence Limit	Development North-East Façade	Development North-West Façade
1.5	80	76	85
10	80	86	85
20	80	86	84
30	80	86	84

Note1: Free-field i.e. unaffected by acoustic reflections from a facade

6.10. As a simplification of the calculation process, the above predictions assume that the PA propagates as a point source, i.e. attenuating at the rate of 6 dB per doubling of distance along the whole of the propagation pathway.

6.11. However, the PA used at LCCG (as at virtually every other concert of this type) was a line array.

6.12. These types of PA are designed to project sound at as even and high a level across as large an audience area as possible. To do this line arrays combine the wave from each loudspeaker to create a single waveform that acts approximately like a line source, with the sound decaying at a much lower rate of 3 dB per doubling of distance for part of the propagation pathway, as shown in 0 below.

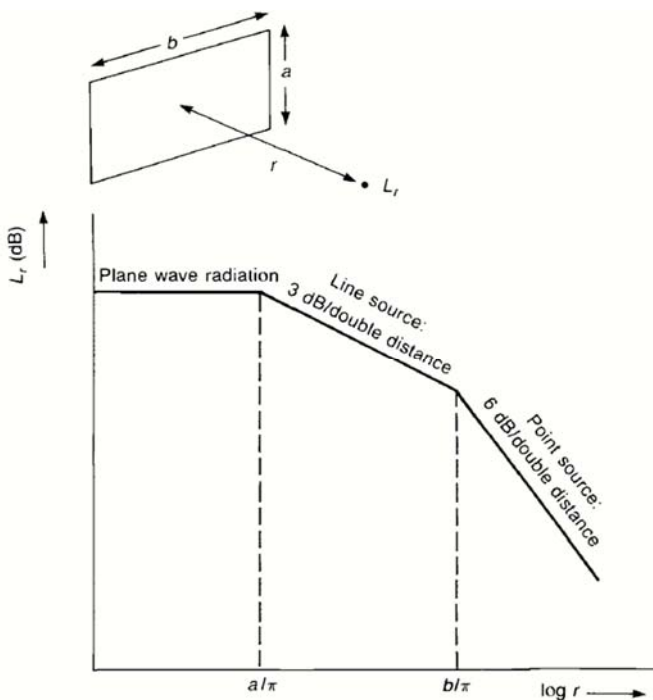


FIGURE 6: THEORETICAL PROPAGATION FROM A LINE ARRAY PA

6.13. Plane wave radiation occurs close to the PA and then line source propagation takes over for a longer distance. A line array decays at 3 dB with doubling of distance between the plane source and point source zones on the propagation pathway.

- 6.14. The distance at which the transition to a point source occurs is dependent on both the length of the array and the frequency, but a typical 12 cabinet line array can be regarded as a single point source (reducing by 6 dBA with doubling of distance), beyond approximately 80m for broadband levels⁴.
- 6.15. The arrays typically used at LCCG are considerably longer, with close examination of **Error! Reference source not found.** revealing 20 boxes visible in the stage-right side-hang array, so this 3 dB per doubling of distance propagation zone is longer than 80 m.
- 6.16. To mitigate the differences between line and point source propagation, the Vanguardia modelling was based on directivity data taken at a distance of 150 m, where the line array would appear acoustically small and its propagation would resemble that of a point source.
- 6.17. For more distant receptors, like the Trent Bridge Walk position (some 200 m from the main PA hangs), this provides a robust estimation methodology which has been verified against measurements taken at this location during 25th September 2021 concert which are similar to those Vanguardia have taken at multiple previous events at LCCG.
- 6.18. For receptors closer than 150 m, however, this methodology under-predicts because it assumes a decay rate of 6 dB per doubling of distance for the entire propagation pathway, whereas a significant proportion of the propagation calculation (if not all) should in fact be closer to 3 dB per doubling of distance.
- 6.19. The significance of assuming point source propagation along the whole of the transmission pathway from the line array PA to the measurement position means the predictions in table 2 above of Music Noise Levels at the most exposed facades of the scheme inherently underestimate the likely noise levels at the façades of the proposed scheme nearest to the

⁴ Creedy & Murphy, Acoustic predictions of high power sound systems. software modelling and verification measurements Proceedings of the Institute of Acoustics & Belgium Acoustical Society Noise in the Built Environment, Ghent, 29-30 April 2010

LCCG which are less than 70 m from the closest PA array, probably by an order of up to around 3 dBA.

CONCLUSIONS

- 6.20. Measurements taken close to the LCCG boundary with the development site throughout the large-scale rock concert on the 25th September 2021, coupled with the prediction of the propagation of music noise from the concert at LCCG; demonstrate that Music Noise Levels at the facades of the proposed scheme closest to the LCCG are likely to be higher than the permitted licence limit.
- 6.21. The music noise levels during the concert on the 25th September were below the permitted licence limit at existing noise sensitive receptors. This means that for other concerts the music noise level could be higher than on the 25th.
- 6.22. Consequently, if the scheme went ahead there is a substantial risk that the music noise levels in the audience arena would have to be reduced to below values that provide satisfactory entertainment and such concerts would become unviable. Attached in Appendix 2 is a letter from LCCC setting out the negative economic and financial impacts if concerts were to be become unviable and were lost.

7. REVIEW OF APPELLANT'S NOISE EVIDENCE

- 7.1. An assessment of noise and vibration issues associated with the scheme was contained in the Acoustic Design Statement, Vibration Assessment and Plant Noise Limits Report Prepared by Holtz Acoustics For: Accrue (Forum) 1 LLP 12th February 2020.
- 7.2. Further information has been provided in Inquiry Evidence Noise – Main Proof, Summary and Appendices, prepared For: Accrue (Forum) 1 LLP 5th November 2021, by Mr E James of Holtz.
- 7.3. The above documents are commented on in the following sections of this report

ACOUSTIC DESIGN STATEMENT, 12TH FEBRUARY 2020

Overview

- 7.4. Although the Holtz report makes a reference to the Agent of Change principle in the NPPF it does not acknowledge the detailed guidance on the matter in the NPPG.
- 7.5. The general approach in the Holtz report to identifying and assessing noise emitted from the LCCC cricket ground is inadequate as it fails to identify all the relevant sources, how often these sources might occur and for how long, and the likely resulting noise levels affecting the proposed development site.
- 7.6. Consequently, the recommended mitigation measures are not adequate to meet policy aims and objectives. If the scheme was permitted as applied for it would put the continued and planned future operation of LCCC at risk i.e. the Agent of Change principle has not been adequately addressed.

DETAILED COMMENTS ON THE HOLTZ NOISE AND VIBRATION ASSESSMENT

- 7.7. The detailed comments below follow the order and numbering in the Holtz report.

Guidance

- 7.8. The Holtz report references the National Planning Policy Framework (NPPF), which briefly touches on issues of conflict between established noisy land uses and proposed noise sensitive development. But the report does not acknowledge the more detailed advice on the Agent of Change principle in the NPPG.
- 7.9. Regarding Trafford Council policy, the Holtz report does not acknowledge or reference any of the relevant parts of the existing or draft emerging local plan regarding noise sensitive development, noise generating development or the need to ensure development must be compatible with the surrounding area; and not prejudice the amenity of the future occupiers of the development and/or occupants of adjacent properties by reason of noise etc.
- 7.10. The Holtz report states that:
- "2.2.1 We have had informal "informal discussions with an Environmental Health Officer (EHO) at Trafford Council regarding the typical requirements for an acoustic report relating to residential development near roads and tram lines.*
- 2.2.2 It was discussed that an assessment in accordance with the new ProPG guidance would be appropriate and should demonstrate that the internal noise level recommendations in BS8233:2014 can be achieved."*
- 7.11. No mention is made of any discussions with the EHO regarding noise from LCCC cricket ground and/or the Agent of Change principle.
- 7.12. There is no mention of any discussions with LCCC regarding the sound emitted from the ground that needs to be assessed or how often, how long and how late these sources may occur. It is understood that this is because neither Accrue or Holtz approached LCCC to discuss the issues.
- 7.13. The Holtz report references the ProPG as a source of guidance. The ProPG reflects the NPPF and NPPG by being explicit in stating that mitigation measures for noise should not compromise other factors important for good health and quality of life such as ventilation and control of

overheating. The noise assessment briefly mentions trickle vents to allow windows to be kept closed to maximise the noise insulation provided by the building envelope, but these will only prevent build-up of toxic and noxious gases and fumes to prevent severe health consequences; and ordinary comfort and quality of life is likely to be compromised by the associated low air flow rates, especially regarding overheating in warmer months, when most cricket and concerts take place. There is no mention of any overheating control in the noise assessment and no overheating study is to be found in the documents logged against this application on the Trafford Council Web site.

Assessment of Concert Noise

7.14. Here the Holtz report discusses noise from concerts as follows:

4.4.1 The proposed development will be within 100m from Old Trafford Cricket Ground. In addition to hosting cricket matches the cricket ground has a license to host live music events.

4.4.2 It is understood from the license agreement that these are limited to 7 a year. However based on previous and upcoming schedules there are typically only 1 or 2 a year.

4.4.3 It will not be possible to fully mitigate live music noise through scheme design and the extent to which residents are disturbed by one off concerts is likely to be linked to their sensitivity to noise.

4.4.4 We have therefore included proposals for a noise management plan for the development, details are to be confirmed but this is likely to take to form of the building management providing early warning of concert dates to residents so they are fully informed.

7.15. In fact, the proposed development will be within considerably less than 100 metres from the LCCC cricket ground. The scheme would be adjacent to the boundary with the LCCC and around 50 metres from the temporary west stand which is removed to allow the stage and PA to be installed for concerts.

7.16. It is correct to say that the licence permits 7 concerts a year and in the past, there have been fewer than this. However, LCCC in future are looking to have more concerts than in the past,

for example 5 concerts are already planned for next year. Notwithstanding that historically fewer than the maximum permitted number of concerts have taken place, the advice of the NPPG means that *“the agent of change will need to take into account not only the current activities that may cause a nuisance, but also those activities that businesses or other facilities are permitted to carry out, even if they are not occurring at the time of the application being made.”* i.e. 7 concerts per year should be assumed.

7.17. The Holtz report states that it will not be possible to “fully mitigate” the concert noise i.e. use the design and construction of the scheme to mitigate the concert noise. The report then suggests an unspecified “Noise Management Plan” will be implemented that will merely mean residents are advised when concerts are likely to take place. In my view this is a wholly inadequate suggestion that does not mitigate the concert noise at all and would still leave LCCC at risk.

7.18. On the face of it, not being able to fully mitigate the concert noise suggests that the scheme should be refused planning permission. It is conceivable that the design and construction could be developed in such a way that appropriate noise conditions could be achieved and any associated negative impacts on ventilation and control of overheating suitably managed. But such a scheme is not proposed in this case. If such a scheme were submitted it would have to be assessed on a case by case basis entailing detailed assessment of the noise levels likely to be incident on the facade of the scheme and implementation of robust acoustic measures, and provision of alternative means of ventilation and control of overheating other than by opening windows e.g. mechanical ventilation and heat recovery.

7.19. It would be wrong to assume that the maximum concert noise likely to be incident on the façade would be no more than the 80 dB LAeq,15 min permitted in the licence for LCCC. This level applies to existing noise sensitive premises which do not extend above two storeys and most of which are further from the main stage and PA used for concerts than the proposed scheme

and are acoustically screened by buildings and stands around the perimeter of the LCCG, which will not protect the proposed development above around 3rd to 4th floor level.

7.20. Predicted noise levels from concerts at the LCCG at the north-east facing façade of the proposed scheme i.e. overlooking the stadium, with a front of house level at the mixing desk of around 100 decibels are shown below.

TABLE 1: PREDICTED CONCERT NOISE LEVELS AT THE NORTH EASTERN FACADE OF THE PROPOSED SCHEME AT DIFFERENT HEIGHTS

Height of Proposed Scheme (m)	Predicted Free-field Concert MNLs (dBA) at north-east facade of the proposed scheme
Ground floor (1.5)	70 to 75
2 nd floor (6)	75 to 85
4 th Floor (12)	75 to 85
6 th Floor (24)	80 to 90
9 th Floor (32)	85 to 90

7.21. The above noise level predictions closely align with the subsequent noise monitoring of the Concert at LCCG on the 25th September 2021 and the modelling of noise affecting the proposed scheme described in section 6 above.

7.22. Table 4 of BS 8223 advises that an internal noise level of 35 dB LAeq,T is recommended for living rooms during the period 0700 to 2300 hrs, with a 5 decibel increase where this is not possible and housing is “desirable”. The table below shows the required noise insulation to achieve these targets at different heights in the scheme and outlines potential methods of achieving this.

TABLE 2: NOISE INSULATION REQUIRED BY THE BUILDING ENVELOPE AND POTENTIAL METHODS AT DIFFERENT HEIGHTS OF DOING SO

Height of Proposed Scheme (m)	Required Reduction dBA	Potential Mitigation Method
Ground floor to 2 nd floor (1.5)	35 to 40	Specialist double glazing and acoustic vents through facade
2 nd to 4 th floor (6)	40 to 45	Specialist triple glazing and acoustic vents through facade
4 th to 6 th Floor (12)	40 to 45	Specialist triple glazing and acoustic vents through facade

6 th & 7 th Floor (24)	45 to 50	Deep secondary glazing and ducted ventilation from a quieter façade
8 th & 9 th Floor (32)	50 to 55	Winter garden, specialist double/triple glazing and ducted ventilation from a quieter façade

7.23. The table above shows that without the mitigation specified there will be conflict between the uses and that if the scheme is to be permitted it should only be on the basis that such mitigation is secured by condition; and that in the absence of such mitigation the scheme will lead to conflict and should be refused.

7.24. Care should be taken when applying the guidance in BS 8223 to the noises from LCCG. The standard explicitly states that its advice applies to “anonymous” noise sources such as steady constant road traffic noise. Noise from cricket matches will be steady and will include intermittent peaks from the crowd and PA systems. Music noise is not anonymous and its rhythmic and low frequency (i.e. bass beat) characteristics aggravate its impact compared to sounds of similar level without these features.

Noise Survey Methodology

7.25. The noise survey methodology for noise from road traffic and the tramlines is not commented on here.

7.26. However, the noise survey for noise from cricket at the LCCC is considered inadequate.

7.27. Only a single noise survey was carried out during a one-day match between Yorkshire and Lancashire. This is not representative of all cricket associated noise levels generated at the cricket ground and does not assess how loud the noise can be for other more forms of cricket with more lively crowds, and during concerts.

7.28. The survey was carried in a location that is substantially screened from noise generated in the cricket ground and would only be valid for those parts of the proposed scheme at and below

1st floor level. Above this height noise levels at the façade of the proposed scheme would increase rapidly as the degree of screening of the cricket pitch and stands would fall due to the angle of view until around approximately the 3rd or 4th floor where it is anticipated there would be no screening and noise from the ground would be unhindered as it propagated the short distance to the façades of the scheme overlooking the LCCC.

7.29. Consequently, it is estimated that cricket associated noise levels for the majority of the proposed north-eastern and northern façades of the scheme could be at least 20 decibels higher than reported in table 6 of the Holtz report i.e. around approximately 4 times louder, as shown in the table below.

TABLE 3: ESTIMATED CRICKET NOISE LEVELS 1 M FROM UNSCREENED PARTS OF THE NORTH EASTERN AND NORTHERN FAÇADES OF PROPOSED SCHEME

Event	Estimated LAeq,10secs (dB) 1 m from the façade of the proposed scheme	Comments
Underlying ambient level i.e. general “hum” of crowd etc. noise	66	Higher than desirable level from BS 8223 for balconies and terraces. Would require enclosure of balconies in wintergardens to reach desirable level from BS 8223. Can be mitigated to meet internal guidelines by acoustic double glazing and alternative means of ventilation and control of overheating.
Applause from crowd	71	Higher than desirable level from BS 8223 for balconies and terraces. Would require enclosure of balconies in wintergardens to reach desirable level from BS 8223. Can be mitigated to meet BS 8233 internal guidelines by acoustic double glazing and alternative means of ventilation and control of overheating.

Applause and cheering after wicket	76	Higher than desirable level from BS 8223 for balconies and terraces. Would require enclosure of balconies in wintergardens to reach desirable level from BS 8223. Can be mitigated to meet Bs 8223 internal guidelines by robust acoustic double glazing and alternative means of ventilation and control of overheating.
PA system	79	Higher than desirable level from BS 8223 for balconies and terraces. Would require enclosure of balconies in wintergardens to reach desirable level from BS 8223. Can be mitigated Can be mitigated to meet BS 8223 internal guidelines by very robust acoustic double or triple glazing and alternative means of ventilation and control of overheating.

Summary of internal noise calculations

7.30. Table 4 in the Holtz report provides a summary of the calculation of the break in of noise into the scheme (assuming closed windows). The presented calculation is not robust as it uses broad band values and assumes that laboratory derived single figure ratings of noise insulation are the same as the A-weighted difference between external and internal conditions, which is normally not so, as this is dependent on the frequency of the noise source and the sound insulation performance of the façade in each frequency band.

7.31. Furthermore, the internal noise level calculations do not allow for any degradation in measured performance from tightly controlled optimised laboratory tests to in-situ real world circumstances, which is inevitable. An allowance of a minimum of -5dB to convert from lab to real world for workmanship, flanking etc. is considered necessary. This means the Holtz report is over optimistic and has underestimated the break in of noise to the scheme.

7.32. Consequently, based on the construction described in table 4 of the Holtz report, internal noise levels would be likely to exceed the lower preferred internal noise guidelines from BS 8223 for day and night, and be closer to the maximum relaxed standard that BS 8223 says can be permitted where housing is “*desirable*”. However, the ProPG, as referenced in the NPPG, requires that good acoustic design is used to ensure all reasonably practicable measures are used so noise levels are minimised, before noise guidelines are “relaxed”. In which case the proposed construction described in table 4 of the Holtz report should be revised, based on a full “rigorous” noise break-in calculation from BS 8223, to more effectively reduce the break in of noise to the scheme.

External Amenity Area Noise Assessment

7.33. The NPPG is clear in stating that outdoor amenity spaces should have acoustic conditions that allow them to be used as intended.

7.34. The report shows that a substantial proportion of outdoor amenity spaces in the scheme e.g. balconies etc, will have noise levels above the recommended guidelines of BS 8223. This is for ordinary conditions due to road traffic and tram noise. Whilst the noise conditions would be contrary to planning policy as they would not represent a good standard of amenity, there is no mechanism whereby action would be taken if complaints of excessive road and tram noise affecting amenity spaces were made by new residents of the scheme.

7.35. However, during cricket matches and music concerts the noise levels in amenity spaces will be higher than from road traffic and trams, and complaints could be made, which the local authority has a legal duty under the Statutory Nuisance legislation to investigate and take enforcement action if satisfied a nuisance exists. Furthermore, it would only take a single resident to initiate the review process under the Licensing Act 2003 for the risk that regulated entertainment at the LCCC would be constrained to be made real.

7.36. The Holtz report points out that where private amenity space will be too loud, the NPPG allows nearby i.e. within 5 minutes walk, quiet public amenity space to be used as a proxy. However, this should only be considered after good acoustic design as recommended by the ProPG has been considered. In this case that would include providing winter gardens to those balconies and terraces that are above the recommended noise levels for outdoor amenity spaces so the noise levels can be reduced. The Holtz report does not mention this mitigation option.

7.37. This report does not comment on the other parts of the Holtz report covering vibration (from trams) and plant noise.

INQUIRY EVIDENCE NOISE – MAIN PROOF, SUMMARY AND APPENDICES, BY MR E JAMES OF HOLTZ, DATED 5TH NOVEMBER 2021.

Concert Noise

7.38. Mr James' conclusion that none of the proposed scheme would experience concert noise levels above the licence limit of 80 decibels is fundamentally flawed. Although Holtz "calibrate" their model to measurements at the far side of the B&Q site and just outside the emergency access gate to LCCG on Greatstone Road, the model underestimates the concert noise levels at the scheme because:

- The model is not calibrated to the 80 decibel noise limit off-site so the model does not reflect what can, and with some events does, happen.
- The noise level Holtz have assumed at the mixing desk appears to be less than during The Courteeners Concert on 25th September 2021.
- The noise level at the mixing desk at The Courteeners Concert was around 4 decibels less than it could have been and the off-site noise limit of 80 decibels still be met at existing receptors i.e. levels at other concerts have been and can be higher than at the event on the 25th September 2021.

- The Holtz modelling assumes that the PA can be suitably modelled as what's called a point source, from which sound decays at a rate of 6 decibels per doubling of distance. Whereas the PA at the Concert on the 25th September 2021 was what's called a line array which means at distances to around 100 metres the sound decays at around 3 dB per doubling of distance. This is important as the nearest façade of the scheme is within the zone where the music noise would have decayed at a much lower rate with increasing distance than the Holtz model assumes i.e. they have underestimated the level at the development site. Whereas the existing noise sensitive receptors where the 80 decibel licence limit applies as sufficiently far enough away that they fall in the zone of propagation where the PA is effectively a point source where the sound decays twice as much at 6 decibels for doubling of distance.
- The Holtz calibration measurements were in the zone where the music noise from the PA would have decayed at a higher rate with increasing distance, but they have assumed the same rate of decay at the nearest façade of the scheme, where the sound from the PA would have decayed at a slower rate.
- The Holtz calibration measurements appear unreliable because, for example:
 - At MP1 on Greatstone Road the measurement times are not contiguous and there is a spurious drop in level at 22:11:17 hrs which is not reflected in the measurements I took at the mixing desk throughout the concert.
 - At MP2 the measurements include the period when The Courteeners took a break from playing high level rock to more nuanced and less loud "ballad" like material and had a short interval.
- Holtz have modelled the PA as a single line array (stack) of speakers inside the parameters of the stage so it is not visible from the development site and firing directly into the audience so that little sound radiates towards the proposed development. In fact, as well as the stage left and right line arrays of speakers

directly “firing” into the middle of the crowd, there were “side hangs” of tall stacks of speakers hung from the stage roof outside of the parameters of the stage to cover the sides of the audience on the pitch and in the stands around the pitch. The stage right side hang was clearly visible from the development site and was orientated to provide cover for the stands to the south west and south of the ground which meant the development site would have been, at least in part, included in the PA coverage (see the figure 3 taken at the base of our measurements within 15 metres of the development site).

- As described in section 6, Vanguardia took measurements at a height of 11 metres with a microphone on a pole mounted on the landing to the steel staircase near the Cricket Shop adjacent to the north -east corner of the development site. Unlike the Holtz measurements there was a clear line of sight to the stage right PA and the measurements were within around 15 metres of nearest facade of the proposed scheme and were consistently around 85 to 89 decibels when bands were performing. The equivalent level at the façade of the proposed development would have only been a decibel or two less.

7.39. We have refined our initial model further to account for the noise limit off site and have calculated the following concert noise levels at the proposed scheme.

TABLE 4: PREDICTED FREE-FIELD CONCERT NOISE LEVELS AT THE WORST AFFECTED FACADES OF THE PROPOSED SCHEME WITH MUSIC NOISE AT THE LICENCE LIMIT AT THE NEAREST EXISTING NOISE SENSITIVE RECEPTORS

Height m	Receptor dB(A)		
	Trent Park Walk	North-East Façade	North-West Façade
1.5	80	76	85
10	-	86	85
20	-	86	84
30	-	86	84

7.40. The above predicted concert noise levels are precautionary as the prediction method has not allowed for the lower rate of sound decay from a line array, in reality the levels would be 2 to 3 dB higher than shown in table 6 above i.e. similar to the measurements taken during The Courteeners concert at a height of 11 metres close to the boundary with the development site.

Cricket Noise

7.41. Table 3 of the Holtz report presents predicted noise levels at the scheme from cricket at LCCG. The facades facing the cricket ground are predicted to experience cricket noise of 66 dB LAeq,T.

7.42. Subject to provision of suitable alternative means of ventilation and control of overheating, achieving the recommended internal noise levels in the scheme could be achieved using the methods described in the Holtz report with windows closed, but not with windows open.

7.43. A further consideration is whether the predicted cricket noise that Holtz provide are free-field i.e. without the influence of reflections from the building façade, or include the influence of reflections from the facade. If the predictions are free-field then the level on balconies etc. are likely to be 3 decibels higher than the predictions in the Holtz report.

7.44. However, whether free-field or façade the predicted cricket noise is substantially greater than the BS 8223 recommendations for outdoor amenity spaces including balconies and terraces of 55 dB LAeq,T.

7.45. The Holtz report goes on to dismiss the impact of cricket noise in outdoor amenity spaces on the basis that BS 8223 says noise levels in outdoor amenity spaces should never be a reason for refusal of planning permission, the ProPG⁵ says noise in outdoor amenity spaces should be minimised but can still be more than recommended, that the residents would have access to less noisy amenity space elsewhere in the scheme, and the need for mitigation to include

⁵ ProPG – Professional Planning Practice Guidance, jointly published by the IOA, CIEH and ANC

provision of winter gardens would shift them away from being considered 'outdoor amenity spaces.

7.46. BS 8233 does say that noise levels in outdoor amenity spaces should not be a reason for refusing planning permission. But the British Standard Institute does not set national planning policy and guidance and the NPPG⁶ is explicit in saying that "*where external amenity spaces are an intrinsic part of the overall design, the acoustic environment of those spaces should be considered so that they can be enjoyed as intended*".

7.47. The ProPG⁷ does say that noise in outdoor amenity spaces should be minimised. But it also makes clear that where despite mitigation the noise levels in outdoor amenity spaces is not acceptable that on its own can be a reason for refusal of planning permission. It is also important to consider that the recommendations of the ProPG are confined to noise from transportation sources i.e. anonymous noise sources, or combinations of transport and industrial/commercial noises sources where neither is dominant. Cricket noise from the LCCG affecting this scheme does not fall into any of these categories.

7.48. The residents would have access to less noisy amenity spaces elsewhere in the scheme. But that would not mitigate the risks to LCCC as that would be a tacit admission that the private amenity space associated with a demise in the scheme was so badly affected by noise from LCCG that it could not be used as intended, as that use would be materially unreasonably affected by the noise. This is important as such circumstances are the primary description of a legal nuisance and would therefore lay LCCG open to reviews of its licence and nuisance-based enforcement action by the local authority and aggrieved individuals, contrary to the Agent of Change principle. The LCCC letter in Appendix 2 summarises the main negative

⁶ See NPPG Paragraph: 006 Reference ID: 30-006-20190722 Revision date: 22 07 2019, penultimate paragraph.

⁷ ProPg – advice on planning and noise sensitive development published jointly by the Institute of Acoustics, Chartered Institute of Environmental Health and Association of Noise Consultants

economic and financial impacts if as a result of these actions operations at the LCCG were to be curtailed on noise grounds.

7.49. Winter gardens are an enclosed balcony or terrace, usually with fully glazed panels, that can be opened and closed as the resident wishes. They provide a means of acoustically and thermally protecting private balconies and terraces to achieve acceptable conditions. Winter gardens are increasingly found on urban developments where external noise levels exceed around 60 to 63 dB LAeq,t. When open they provide an amenity space directly connected to the outdoors, but with poor acoustic conditions that will typically discourage use of the balcony by residents, as rest and relaxation and speech communication will be compromised. When closed they have good acoustic conditions suitable for rest, relaxation and speech communication; albeit the space is more of an outdoor room or transitional space between outdoors and indoors. In this case, residents would be able to have any winter garden balcony open for most of the time when LCCG is relatively quiet; but close the winter garden for the substantial minority of the year when noisy activity and events are taking place at LCCG.

Ventilation and overheating

7.50. The proposed mitigation of internal noise levels is wholly dependent on windows being kept closed so that the noise insulation performance of the building envelope is maximised.

7.51. Basing mitigation on keeping windows closed is a significant adverse effect on quality of life, even if alternative means of ventilation and control of overheating are provided, as it reduces the connection to the outdoor environment and limits resident's freedom of choice in the ways in which they can use their homes. This may be acceptable in circumstances where noise levels are constantly high such as city centres and near transport infrastructure where residents of such locations are aware that acoustic conditions are poor and trade off the adverse effect of keeping windows closed with benefits of central urban living and access to transport infrastructure.

7.52. However, in this case, for most of the time there will be no, or very little noise emitted from LCCG and the location has the acoustic characteristics of a relatively quiet sub-urban district. But for a substantial minority of the time moderate to very high levels of various noises are emitted from LCCG i.e. there would be a substantial change in the acoustic character of the locality, and residents would need to keep windows closed to achieve acceptable acoustic conditions to try to mitigate significant adverse effects indoors.

7.53. Examples of where use of closed windows to mitigate music noise impacts has been regarded as inappropriate in Agent of Change scenarios are provided in the Appeal decisions Appeal Ref: APP/K1128/W/18/3215145 Brewery Quay, Island Street, Salcombe, Devon TQ8 8DP (CD L3) at paragraph 35; and Appeal Ref: APP/P4605/W/18/3217413 18-20 Albion Court, Frederick Street, Birmingham B1 3HE (CD L4) at paragraphs 10, 11, 13 and 16.

7.54. Relying on open windows for ventilation and control of overheating will mean that the noise insulation performance of the building envelope is minimised and the internal noise levels would exceed normal thresholds of acceptability and lay LCCC open to risk of noise enforcement action and restriction of their operations and business. Clearly ventilation, control of overheating and noise issues are closely interrelated in these circumstances.

7.55. The Holtz assessment says no evaluation of alternative means of ventilation and control overheating and the interaction with noise issues is provided as the application is for outline permission and these matters can be addressed at the detailed design stage. Scrutiny of the application on the LPAs web site as of the date of this evidence, dated the 19th March 2020 at section 4 "Description of the proposal" shows that the only matter for which approval is not sought as part of the outline application is landscaping, and that approval is sought as part of the outline application for matters including access, layout, appearance and scale. Thus, it would appear that the Holtz report did not appreciate the level of detail that was being sought as part of the application, as landscaping (in this instance) would not have an appreciable impact on noise.

8. DEED OF EASEMENT

- 8.1. It is important to understand the policy and legal context in which the noise issues of this case are played out. Like all noise-generating properties, there is a risk that noise generated at the LCCG at the proposed scheme might amount to a legal nuisance. If a nuisance is shown to exist, LCCC can be legally required to reduce the noise to a level which does not constitute a nuisance. This would significantly constrain if not prevent the continued use of the LCCG for established sporting and non-sporting activities.
- 8.2. A key to understanding the legal concept of nuisance is the 1879 case of *Sturges v Bridgman* LR 11 Ch D 852. Mr Sturges, the defendant, ran a confectionary shop which operated a noisy pestle and mortar. It had done so for over 20 years but had no neighbouring property so there were no complaints as to its use. Dr Bridgman, the claimant, then built a consulting room for his practice as a physician adjacent to the defendant's noisy shop. The claimant brought an action in nuisance to obtain an injunction to prevent the continuance of the noise. The Court of Appeal held that the noise from the business was not a nuisance until the doctor moved in next door and built his consulting room. At that point, the noise became a nuisance and was unacceptable in its extent. The key message from *Sturges* can be put as simply as this: 'being there first' or arguing the complainant "moved to the nuisance" is no defence to a legal action in nuisance. The Supreme court more recently confirmed this aspect of the law in *Coventry v Lawrence* 2014 UKSC 13.
- 8.3. A further issue regarding the legal concept of nuisance is that no fixed objective noise level standard applies. Instead, a series of tests including how long, how often, what time of day, the sensitivity of the receptor, and the nature and character of the locality apply and are assessed qualitatively. This means that a level of noise in one set of circumstances may be a legal nuisance, but in other not necessarily very different circumstances, is not a nuisance. This flexibility has led to the legal nuisance being described as "protean" i.e. tending or able

to change frequently or easily. The ultimate arbiter of whether something is a legal nuisance are the courts and they have been careful in their judgements to avoid setting fixed noise level thresholds based on standards and guidance as definitive boundaries for nuisance. Consequently, whilst standards and guidance can be used to inform planning decisions there remains uncertainty whether compliance with these will avoid nuisance and protect existing noise generating land use from encroaching noise sensitive development.

- 8.4. Another important consideration here is that whilst the Agent of Change principle requires the development to include adequate mitigation, in this case that relies on using the building envelope with windows closed to provide sufficient noise insulation to moderate internal noise levels. Notwithstanding that alternative means of ventilation and control of overheating need to be included in the design and construction of the scheme, and the inherent uncertainties in the actual noise insulation performance of the scheme's building envelope compared to design predictions; residents may wish to open windows for a range of reasons and therefore negate the mitigation provided by the building envelope. Consequently, internal noise levels would be much higher than if the mitigation stayed in place and could be held to be a nuisance. Furthermore, reliance on keeping windows closed to mitigate noise is not always acceptable, as adduced in the planning appeal decisions in core documents L3 and L4 which respectively note that

"It would be unreasonable to expect future occupants to keep their windows closed at all times. With the windows open the noise levels would be higher than the guideline targets."
(CD L3 paragraph 34)

And.

"Regardless of the provision of mechanical ventilation, future occupiers may wish to open the windows for access to fresh air or other reasons, and the actions of the future occupiers are not within the control of either the appellant or the Council"(CD L4 paragraph 16)

- 8.5. Whilst the Agent of Change principle has helped to move on planning policy in relation to existing noise generating land uses against encroaching noise sensitive development, it does not deliver legal protection against nuisance actions and the consequences.
- 8.6. In the absence of a formal and effective change in the law, an interim answer to this problem lies in deeds of easements of noise. In short, the effect of the deed is to prevent there being in law an actionable nuisance arising from the levels of noise emanating from an existing noise generating land use. The only circumstances in which there could be such an actionable private nuisance would be if the levels of noise increase above those stipulated in the deed.
- 8.7. The deed is entered into between the developer, the venue and (if appropriate) the Council. In the deed, a right is granted by the owner of the development site to the venue to allow noise from the venue to pass over the neighbouring development site, up to the levels agreed to be representative of its established use. By operation of law, the future owners of the new residential dwellings will then become bound by the deed when they acquire their interest in the new dwelling. The deed is registered against the title and is enforceable as a property right, in the same way as any other property right (such as a right of light, right of support etc.).
- 8.8. The deed cannot, nor does it attempt to, prevent a future resident from complaining about noise from the venue. However, if that resident does decide to bring a claim, it would inevitably fail in the court (assuming noise levels prescribed in the deed had not been exceeded), as the resident has already accepted at purchase to be bound by the right of the venue to pass noise at those levels across the dwelling. Therefore, there can be no nuisance unless the prescribed levels are exceeded (and it should be noted that the onus would be on the claimant, to demonstrate that there had been such exceedances), as there has been neither a wrongful act nor an infringement of a non-contractual right. In effect, the arguments that 'we were here first' and the claimant had "moved to the nuisance" would have legal status and protect the LCCG.

8.9. This is the main advantages of a deed of easement (DoE) for noise; it recognises the position before the new development came along, acknowledges the importance of ensuring that the established use can continue, and provides a legal mechanism for ensuring a new noise sensitive scheme and an established existing noise generating land use can coexist moving forward.

8.10. However, it is understood that the developer has not offered a deed of easement. Consequently, the uncertainties regarding the noise insulation performance of the building envelope, occupiers by-passing mitigation, and legal nuisance remain as significant risks to the continued operation of the LCCG as a nationally and regionally important sports and entertainment venue.

9. CONCLUSIONS

- 9.1. LCCG hosts 4 day county and 5 day test cricket, one day games, floodlit T20 and 100 ball games in the evening, and multiple large concerts, and associated sound checks on preceding days, with loud amplified music until 2230 hrs, every year. Consequently, the proposed development site's close proximity to the LCCG makes it inappropriate for large scale residential development as there will be conflicts in relation to noise that could result in LCCC being constrained from carrying out its existing activities, and future expansion or changes to its operations.
- 9.2. The Agent of Change principle from the National Planning Policy Framework (NPPF) as expanded upon in the National Planning Practice Guidance (NPPG) applies to the proposed scheme. The Agent of Change principle places the responsibility for mitigating impacts from existing established noise-generating activities or land uses on the proposed new noise-sensitive development. In other words, the person or business responsible for the change must also be responsible for managing the impact of the change so that established noise generating land uses can continue and potentially expand without hinderance.
- 9.3. Unfortunately, neither the initial and subsequent noise assessments accompanying the application and submitted to the Appeal appropriately assess all sources of sound emitted from LCCC. The initial surveying of noise emissions from LCCC only covers one form of one day cricket and was carried out in a location where screening meant the measured levels would underestimate the likely impacts on the proposed scheme. Subsequent consideration of cricket noise does not adequately address impacts on the amenity of balconies or terraces facing the LCCG. Whilst the monitoring of noise from a large scale concert only covered a small proportion of the event, including when levels were lower than during the rest of the concert, and did not reflect the worst affected part of the scheme.

- 9.4. The proposed mitigation is inadequate to meet the policy aims of avoiding significant adverse effects, mitigating and minimising adverse effects and ensuring new noise sensitive uses can integrate effectively with existing businesses and community resources without prejudicing the on-going operation and future development of those sources i.e. LCCG.
- 9.5. The main means of mitigation suggested in the noise impact assessment for metro train, road traffic, cricket and concert noise is to provide acoustic glazing so that windows can be kept closed to maximise the sound insulation provided by the building envelope. This will inevitably compromise ventilation and make overheating more likely. However, no assessment is made of ventilation and overheating and no mitigation measures for these issues are discussed in the noise report or provided in a standalone report in the documents listed for the scheme on the Trafford Council web site. Although this application is for outline permission, because of the Agent of Change principle and the potential drastic adverse effects on continued operations at LCCG it is considered important that ventilation and control of overheating are dealt with in detail at this stage, as the proposed mitigation of internal noise levels is wholly dependent on windows being kept closed so that the noise insulation performance of the building envelope is maximised. Furthermore, the application for the scheme only reserves landscaping for outline consideration and seeks approval as part of the application for matters including access, layout appearance and scale.
- 9.6. The initial Holtz noise report says it is not possible to wholly mitigate the concert noise. In which case the scheme should not go ahead. However, this is not correct. Concert noise can be mitigated by implementing robust measures such as acoustic double and triple glazing, wintergardens, and mechanical ventilation and means of controlling overheating. Such measures have been implemented in the housing schemes that have been constructed near Wembley stadium. There will be significant minimum construction standards and thus costs for acoustics to allow the scheme to mitigate these impacts adequately, particularly as the concert and floodlit cricket activities at LCCG are likely to increase rather than decrease in future.

9.7. Without the additional mitigation further to that proposed in the application and subsequent evidence to the Inquiry, outlined in this evidence, noise will cause conflict between the LCCC and the residents of the new scheme, so that if the application is permitted it should only be on the basis that the additional mitigation is secured by condition; and that in the absence of such mitigation the scheme should be refused.

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APPENDIX 1 – CONCERT NOISE CONTOUR MAPS

Figure 1 Concert noise at a height of 1.5 metres

Contour Height 1.5 m
Calibrated to 80 dB(A) at 1.5 m height on Trent Park Walk

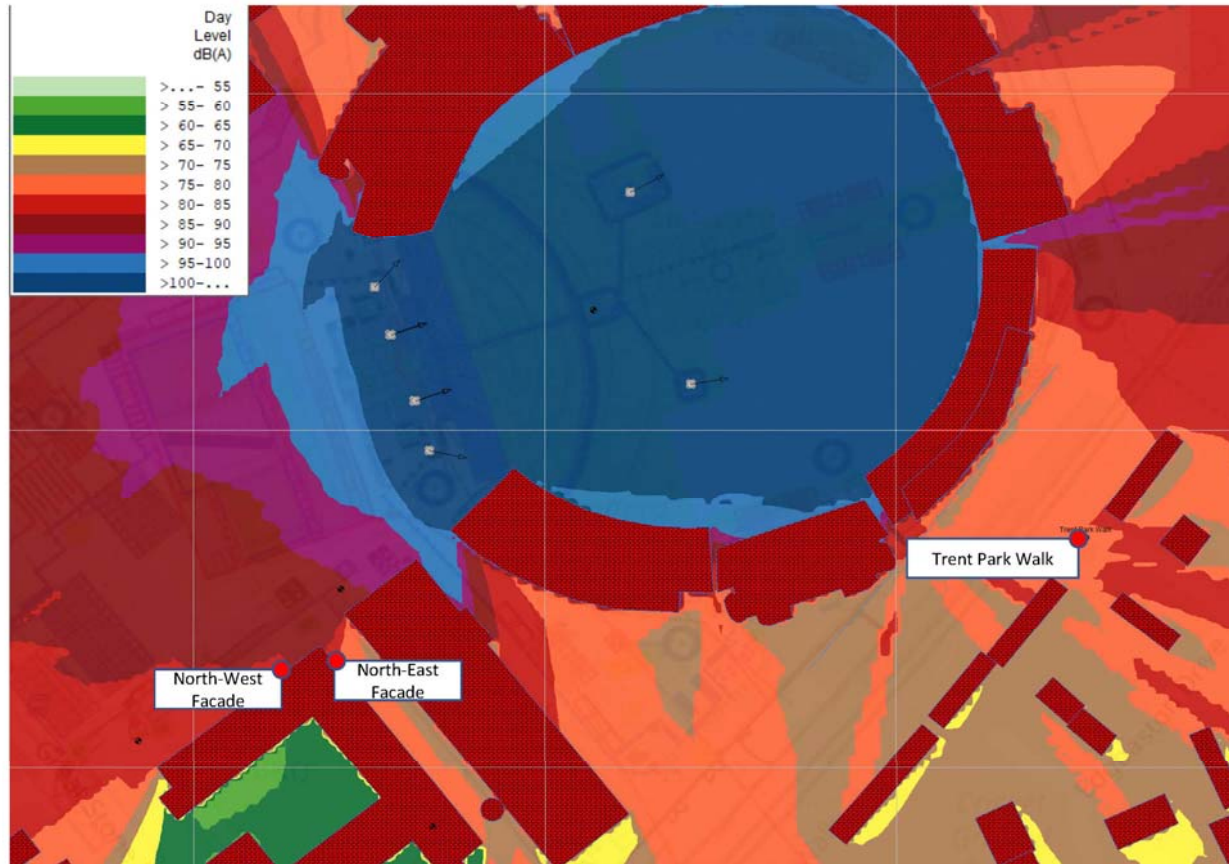


Figure 2 Concert noise at a height of 10 metres

Contour Height 10 m
Calibrated to 80 dB(A) at 1.5 m height on Trent Park Walk

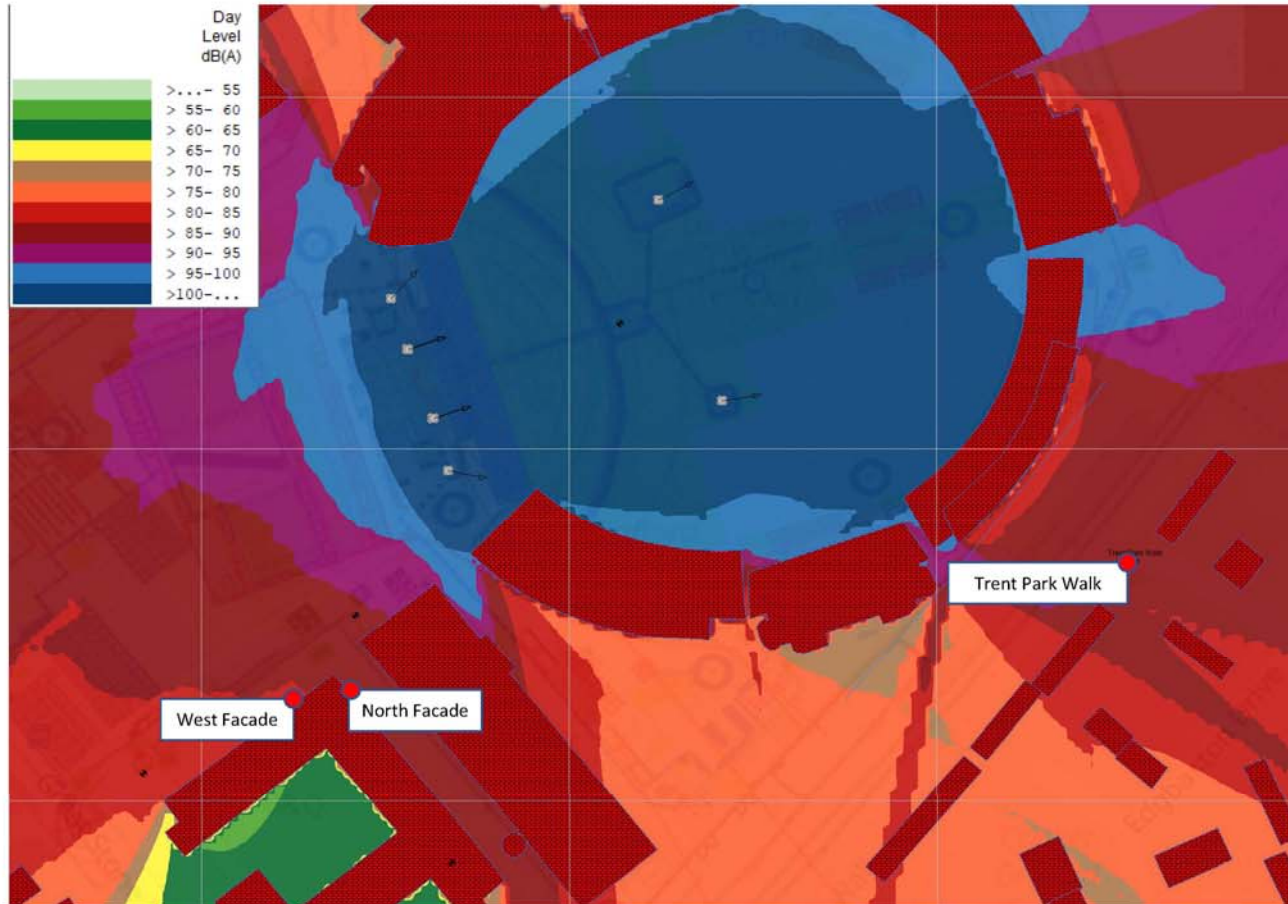
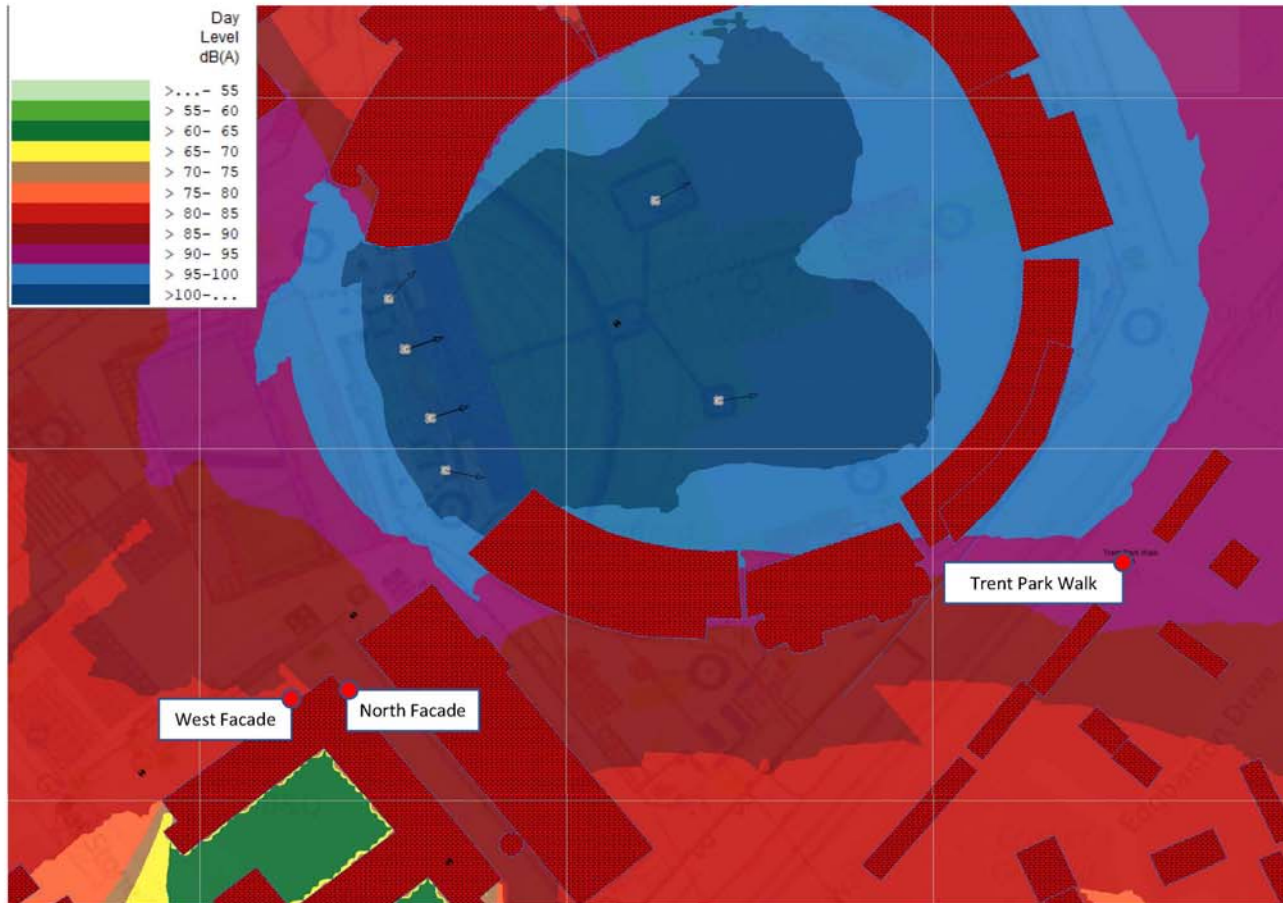


Figure 3 Concert noise at a height of 20 metres

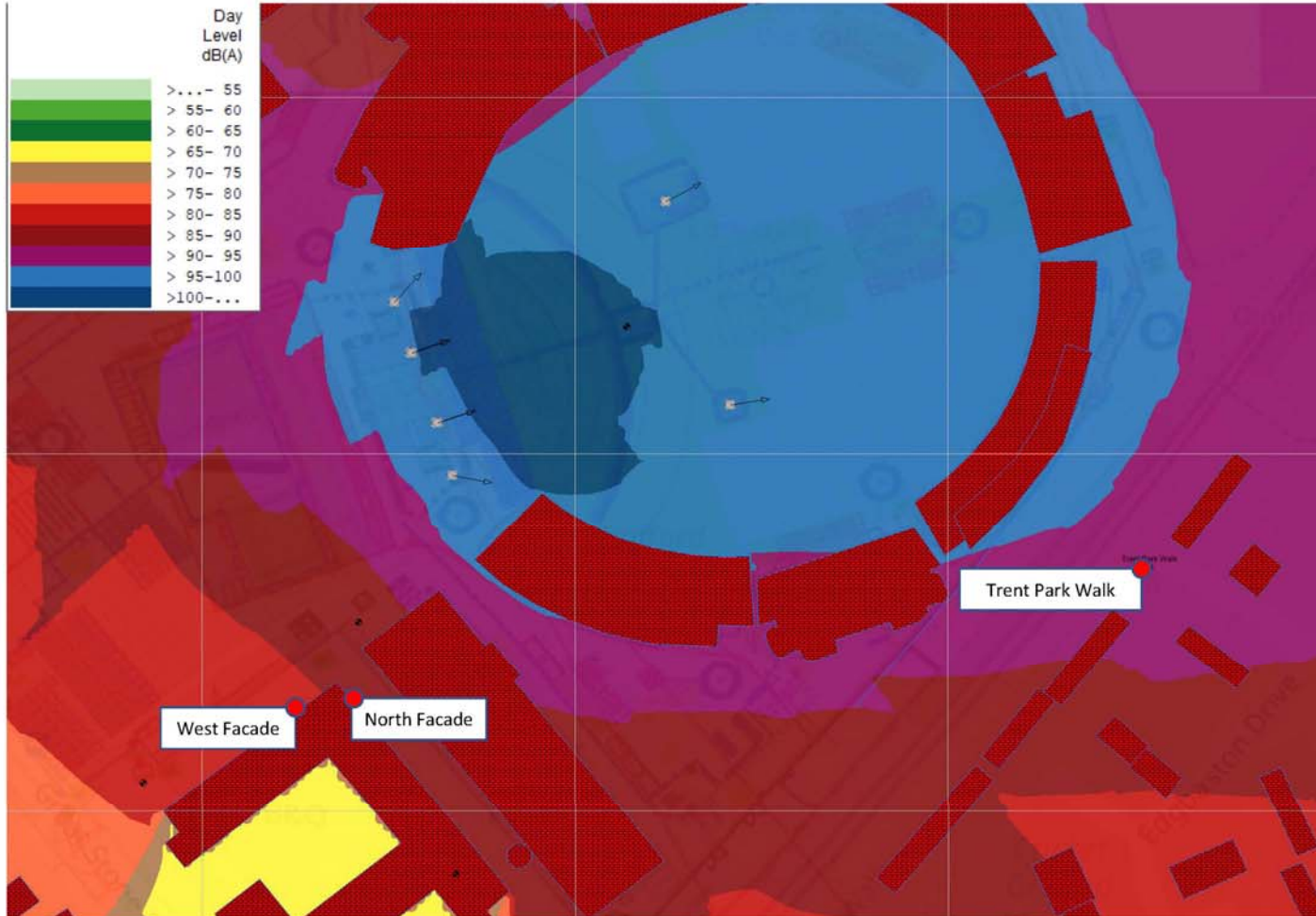
Contour Height 20 m
Calibrated to 80 dB(A) at 1.5 m height on Trent Park Walk



Concert noise at a height of 30 metres

Contour Height 30 m

Calibrated to 80 dB(A) at 1.5 m height on Trent Park Walk



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APPENDIX 2 – LCCC FINANCIAL AND ECONOMIC STATEMENT

Registered in England 05666276



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14th December 2021

Grant Anderson
Partner
Hill Dickinson LLP
50 Fountain Street
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Dear Grant,

Introduction, background, and context

Lancashire Cricket Club have been at its Old Trafford ground (now Emirates Old Trafford) since 1864 and has a reputation on the global stage as a venue that hosts international sport (for over a hundred years and major live music for over 25 years).

The ground is a non-designated heritage asset in the Borough of Trafford and the Club is a loved institution locally, regionally, nationally, and internationally.

Home to Lancashire Cricket Club with 23,000 capacity who play domestic cricket across three formats: The County Championship, The T20 Blast and the 50 over Cup.

Emirates Old Trafford is also host to Manchester Originals in The Hundred domestic cricket competition and also hosts the England national men's team in Test matches, One day internationals and International T 20 matches.

The venue is also a regular host to major 50,000 international concerts and is licenced to host up to seven per year. In 2022, there are already scheduled to be four concerts and the Club's intention moving forward is to utilise the full number of concerts permitted each year as it seeks to maximise revenue and recover from the economic consequences of the Covid pandemic.

In 2017, Emirates Old Trafford hosted the sad but iconic "One Love" concert which was broadcast live in over 180 countries world-wide.

Risk of new proposed development on old B and Q site to future concert hosting

If the new proposed development proceeds without taking into account Agent for Change legislation and without appropriate remedies such as winter gardens, significant acoustic treatments including extra thickness glazing and robust mechanical and engineering works to avoid overheating then post development, significant risks are presented to Emirates Old Trafford.

Without appropriate and robust remedies outlined then every new resident would have the right to make noise disturbance complaints to the environmental health team at Trafford Council. Emirates Old Trafford has one of the highest approved Db levels in the country of 85 for major concerts under its Licence.

Without aforementioned remedies, if any such complaints were upheld then the Licence that enables concert hosting would be called into formal review. The consequences of losing hosting rights under such a review would have the following impacts on the Club:

Consequences of loss of Concert hosting ability under licence as a result of upheld noise complaints:

The Club generally makes around £300k net profit from hosting a single concert night. The loss of the revenue per annum would be up to £2.1m as a direct financial impact. However, there could also be impacts to the Club's annual £2m annual sponsorship programme. The "eyeballs" provided by concert goers compared to sports ticket buyers is a significant variable benefit to sponsors and provides a key underpinning to commercial partnership relationships. The loss of the concerts would therefore have an adverse impact on the Club's sponsorship programme and revenues from sponsors.

In addition to this the Club spends around £3-400k on its local supply chain including over 250 variable staffing opportunities for local people for each concert.

This does not take into account external spend per visitor across local hotels, bars and restaurants which you would prudently set at circa £100 per head and so £5m impact on the local economy.

Opening the door to loss of cricket hosting status

Lancashire Cricket is at its heart a professional cricket club with a world class venue as a home that hosts the England national men's team and has done since the late 1880's and is the second oldest Ashes venue after the Oval in London.

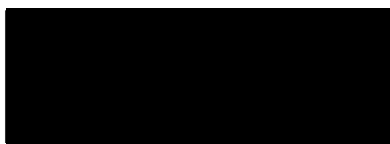
In addition to the risk of the Club losing concert hosting after noise disturbance complaints from residents at the appeal site, there will be potential for noise complaints against International Cricket and the new Hundred franchise tournament. If the Club were to lose international cricket hosting rights, then it loses its whole raison d'etre. The entire reason it is an established non designated heritage asset.

The loss of international cricket would have at least £3.5m direct impact on the Club's bottom line which would effectively call into question its ability to trade and to cover the significant fixed overheads of opening and operating a large multi-purpose stadium. Prior to the £60m development programme already undertaken by the Club, the Club lost international cricket hosting rights for four years between 2009 and 2012 over which it lost a cumulative £9m and came very close to going out of existence.

In addition to this the Club spends around £1m on its local supply chain including over 250 variable staffing opportunities for local people.

Outside of this, the economic impact to the regional economy cannot be overestimated. In 2019, Emirates Old Trafford hosted 6 ICC Cricket world cup matches and an iconic Ashes Test match.

Attached is an economic impact study of the net benefits to Greater Manchester of hosting those six international world cup matches in 2019 amounting to £31.6m GVA.



**Chief Executive
Lancashire Cricket**