BEFORE THE LONDON BOROUGH OF HAMMERSMITH & FULHAM LICENSING SUB-COMMITEE

IN THE MATTER OF AN APPLICATION FOR A PROVISIONAL STATEMENT

<u>Provisional Premises Licence application number: 2024/00263/LAPRP</u>
<u>Premises name: National Terrace - Olympia London Development</u>

Premises address: Olympia Exhibition Centre Hammersmith Road London W14 8UX

PROVISIONAL STATEMENT: SECOND OVERARCHING SUBMISSION

Introduction

- This submission is aimed at assisting the London Borough of Hammersmith and Fulham (LBHF) licensing committee, officers and the local resident objectors who are parties to the above matter, now listed for determination on 28 May 2024.
- 2. This document is a second overarching submission aimed at assisting the parties on matters that are relevant across the development, rather than specific to individual applications. It endeavours to pick up and address matters previously raised in earlier hearings as regards Olympia and issues that might reasonably be presumed to be addressed on both the 28th and 29th May. Where a matter or issue is particular to a specific application then the issue is addressed within the specific application submission, also within the supplementary agenda).
- 3. This document is to be read in conjunction with the following:
 - a. The Olympia 'Overarching Submission' and attachments

Appendices

- 4. The following documents have been appended to this submission:
 - a. Report authored by Simon Joynes acoustician
 - b. Report authored by Rob Adnit acoustician

Tenants / Operators

5. Olympus have undertaken a significant exercise in seeking to partner with suitable 'best of breed' international and local operators, in order to ensure operators deliver the finest food & beverage and entertainment operations within the development. Where there was competition

from more than one proposed operator for a particular unit, Olympus effectively chose the operators they deemed to be most competent, commercially appropriate and capable of delivering something special to the overall scheme.

- 6. The applicant believes that the mix will provide a diverse and exciting range of operations that Complement one another, with high professional standards a focus for all operators. This is an important element for the applicant, as the interaction between the various premises and the standards that the applicants are looking to introduce across the whole development, has been and remains a clear focus and requirement.
- 7. It is important to note that all operations will be "managed" by the applicants through their property/ management agreements with the ultimate individual unit operators. This will continue through engagement with the public realm operational management team (see Public Realm documentation). Clearly there will need to be a degree of co-operation and "buy in" from the operators, not least to ensure that the high standards demanded across the development as a whole are maintained. This is why the applicants have invested heavily in understanding who the ultimate operators are, their history, track record and how they measure against other key indicators.

Planning

- 8. As part of the development, planning criteria were collaboratively established between Olympia and the London Borough of Hammersmith and Fulham (LBHF).
- 9. In summary, where amplified sound is incidental to the use, such as background music, the agreed noise limit is 10 decibels below the typical lowest daytime and/or nighttime ambient noise level, as appropriate. On this basis, LBHF were satisfied that occupiers of the surrounding residential premises would not be adversely affected by noise.
- 10. Areas within the scheme where amplified sound is a primary component of the use or activities the agreed noise limit is 5 decibels below the typical lowest daytime-typical nighttime ambient noise levels, as appropriate.

Environment and sustainability matters

- 11. As part of the overall scheme, the developers have worked to ensure that environment and sustainability are at the heart of the re-development. This has included the following focusses:
 - a. The complete regeneration and re-purposing of existing asses and estate
 - b. 100% of Olympia's waste output to be diverted from landfill with 98% recycled at local waste management plants and the remaining 2% recovered as waste for energy

- c. Low carbon and renewable technologies within the development set to achieve a minimum 35% carbon reduction, to include:
 - i. Centralised heat network
 - ii. Combined heat and power plant to lower CO2 emissions
 - iii. Mechanical cooling from heat pumps
 - iv. LED lighting
- d. BREEAM (Building Research Establishment Environmental Assessment Methodology) 'excellent' rating target on new construction
- e. Smart battery management system ('BMS') with linked boiler plant to include central time control, weather compensation and metering and optimised are systems to use free cooling in mid-season and heat recovery in winter
- f. 50,000 square feet of roof terrace space with a 416,000 square feet of green roof to provide a feeding resource for birds and invertebrates.
- g. 2.5 acres of public realm for the wider society.

Arrivals and departures

- 12. Event bookings will be managed via a centrally held calendar, which will dictate the mix of events which can run simultaneously on any given date and time. This calendar will be shared with emergency services and LBHF via a safety advisory group meeting and any concerns discussed.
- 13. Departure of customers will be managed by the individual operations and operators alongside the Olympia Public Realm teams. The different styles and types of operations will ensure that key factors such as activities and dwell times have significant effects on likely arrival and departure patterns, which in turn assist with the management of departure from the development as a whole.

Conclusion

- 14. Each provisional statement application within the overall Olympia development has been supported by a robust operating schedule and limited hours and activities. Each application has sought to provide a realistic and appropriate indication of what the developers are looking for with each unit to be licensed.
- 15. The overall development is being built with the highest environmental and sustainability standards to the fore, with operators from the various units being asked to buy into these standards and reflect them in their operations where practicable.
- 16. Provisional statements allow for further consideration and determination should anything substantive change between now and each final application for a premises licence. As such,

this committee, responsible authorities and residents alike have comfort that the timings, activities and standards of operation set out therein cannot substantially change without all parties having a second opportunity to scrutinise the proposal.

MATTHEW PHIPPS
TLT SOLICITORS

Olympia Licensing Applications Supporting Document

Reference: 2024/00263/LAPRP

Premises name: National Terrace - Olympia London Development, Olympia Exhibition Centre, Hammersmith Road, London, W14 8UX

Reference: 2024/00261/LAPRP

Premises: Roof Garden Gin Bar - Olympia London Development, Olympia Exhibition Centre, Hammersmith Road, London, W14 8UX

Reference: 2024/00264/LAPRP

Premises: Roof Garden North Terrace - Olympia London Development, Olympia Exhibition Centre, Hammersmith Road, London, W14 8UX

Reference: 2024/00265/LAPRP

 $Premises: Roof Ground North Terrace \ Mezzanine - Olympia \ London \ Development, Olympia \ Exhibition \ Centre, Hammersmith \ Road, London, W14 \ 8UX \ Roof \ Ground \ North \ Terrace \ Mezzanine - Olympia \ London \ Development, Olympia \ Exhibition \ Centre, Hammersmith \ Road, London, W14 \ 8UX \ Roof \ Ground \ Roof \ Ground \ Roof \ Roof \ Ground \ Roof \$

Reference: 2024/00266/LAPRP

Premises: Roof Garden South Terrace - Olympia London Development, Olympia Exhibition Centre, Hammersmith Road, London, W14 8UX

Reference: 2024/00267/LAPRP

 $Premises: Roof Ground South Terrace \ Mezzanine - Olympia \ London \ Development, Olympia \ Exhibition \ Centre, Hammersmith \ Road, London, W14 \ 8UX \ Annual Market \ Mezzanine - Olympia \ Mezzanine \ Mezza$



Client Olympus Holdings Ltd

Date: 19th May 2024

Author: Simon Joynes

Status: Client Draft

Version: 1.1

Signature:

hoffer

DISCLAIMER

The preparation of this report by Joynes Nash has been undertaken within the terms of the brief and the terms of the contract, using reasonable skill and care and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of any nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The opinions and interpretations presented in this report represent our reasonable technical interpretation of the data made available to us. However, due to the uncertainty inherent in the estimation of all parameters, we cannot, and do not guarantee the accuracy or correctness of any interpretation and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, cost damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. Joynes Nash accepts no responsibility for data provided by others.

COPYRIGHT © Joynes Nash Ltd 2024

The material presented in this report is confidential. This report has been prepared for the exclusive use of the client and shall not be distributed or made available to any other company or person without the knowledge and written consent of the client or Joynes Nash.

www.joynes-nash.co.uk

Simon Joynes 07870508492 simon@joynes-nash.co.uk

Pete Nash 07769202073 pete@joynes-nash.co.uk

Office 17 Park Lane, Henlow, Bedfordshire, SG16 6AT

Company Number: 9422341

VAT Registration No: 204 752234

About The Team

Peter Nash BSc(Hons), MSc, CEnvH, MCIEH, MIOA, TechIOSH

Peter Nash has 16 years' experience as a Local Authority Environmental Health Officer, up to Technical Manager Level and has 15 years of Professional Practice within the Environment Industry. He holds a BSc(Hons) in Environmental Health, the IOA Diploma in Acoustics and Noise Control and an MSc in Applied Acoustics. He is a Chartered Environmental Health Practitioner and registered with the Environmental Health Registration Board. Peter is a Member of the Chartered Institute of Environmental Health, and a Member of the Institute of Acoustics. He has appeared as an expert witness in a number of significant noise nuisance and planning cases, public inquiries and appeals.

Simon Joynes BSc(Hons), MSc, CEnvH, MCIEH, AMILM, AMIOA

Simon Joynes has over 20 years' experience in both Private Sector and Local Government. He has acted as a senior advisor and has significant experience in the technical aspects and practical application of environmental law, including acting as an expert witness in courts and planning enquiries and the preparation and reviewing of environmental reports and mitigation strategies. (Air Quality, Land Contamination, Acoustics, Water Quality, Odour Management & Industry Regulation). He holds a BSc (Hons) Environmental Health, MSc in Contaminated Land Remediation, the IOA Diploma in Acoustics and Noise Control, Certificates of Competence Environmental Impact Assessments. He also holds affiliations with the Chartered Institute of Environmental Health, the Institute of Acoustics and is an Associate Member of the Institute of Leadership and Management.

An introduction to Joynes Nash

Joynes Nash is a leading consultancy for the live events industry. We have extensive experience of live music events and a proven track record of working with event organisers to enhance the audience's experience, whilst preserving the image of events and venues.

Our consultants experience has ranged from relatively small scale to major events staged both in urban and residential environments, providing for tens of thousands of people. Projects and clients have included Junction 2, Carfest (North and South), Garage Nation Festival, BBC Introducing, Guards Polo Club, Tramlines Festival, Liverpool Sound City, Red Bull Music Academy. We are also responsible for looking after the interests of venues such as Donington Park Racing Circuit, Saracens Rugby Club and Tobacco Dock with respect to live events.

We consider despite the many technical challenges that events bring, that relationships between all interested parties are of paramount importance and that each and every one of these understands situations clearly. We therefore approach each event not in isolation, but carefully consider the public image of events, the venues and the thoughts of the wider community to make events successful and to secure venues for future years.

Contents

1.	Introduction	- 1 -
2.	Pertinent Matters	- 1 -
3.	Licensing Policy Hammersmith and Fulham – Policy Statement	- 1 -
4.	History to the Development	- 2 -
5.	Critical Risks of Noise from People within Licenced Premises	- 3 -
6.	In Summary	- 5 -

1. Introduction

Joynes Nash has been tasked with providing an independent review of the submissions pertaining to Land Use Planning and Licensing for the Olympia redevelopment. This review is aimed at considering the submissions in the context of the wider development, using professional experience to make informed judgement about the risks associated with the operational phase of the development, with the primary focus on the use of the rooftop area.

2. Pertinent Matters

Whilst it is accepted that Planning and Licensing are separate regimes, there is inevitably some links between the two. Indeed, s.182 guidance at Para 9.45 considers such scenarios by suggesting that committees and officers should consider discussion with their planning counterparts prior to determination with the aim to agreeing mutually acceptable operating hours and scheme designs.

Licensing committees are not bound by decisions made by planning committees, and vice versa, there is an understanding that statement of licensing policy should indicate that planning permission, building control approval and licensing regimes will be properly separated to avoid duplication and inefficiency.

Therefore, whilst the planning and licensing regimes involve consideration of different (albeit related) matters, it is acknowledged that they are intrinsically linked and that a consistency of approach between different strategic policies is adopted to ensure that the licensing objectives are promoted.

It is also common that regulatory officers with respect to technical matters provide the same role for both regimes. Indeed, Environmental Health (who largely provide the noise control function within Local Authorities) and Planning are both statutory consultees for the purposes of The Licensing Regime.

Importantly Planning is considered generally a much higher threshold of control for noise issues than that under the licensing act. With respect to any assessment of impact of planning, we refer to the terms such as 'detrimental to amenity' and aiming to avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development. This differs to the concept of public nuisance expressed within the Licensing Act. Noise that may be detrimental to the amenity of residents may well not reach the threshold of public nuisance, however noise which is a public nuisance will exceed the threshold of being detrimental to the amenity of residents.

3. Licensing Policy Hammersmith and Fulham – Policy Statement

The LBHF Statement of Licensing Policy considers in its introduction the relationship between the various responsible authorities. It states that:

"To achieve these objectives the Licensing Authority will use its full range of powers and engage all relevant responsible authorities. The Licensing Authority will enter into appropriate partnership arrangements, working closely with the police, the fire authority, Trading Standards, Environmental

Health, Planning, home office, safeguarding children authority, Public Health, local businesses, community representatives and Hammersmith & Fulham residents and other stakeholders in meeting these objectives "

It is further mentioned at Policy 13 where it considers that despite planning and Licensing being under different legislation, the licensing authority will ensure that the licensing regime is in line with the planning regime as far as is possible.

It is therefore concluded that operators of licensed premises will have to comply with planning, environmental health, trading standards, fire safety, licensing and building control legislation when opening or adapting licensed premises.

Likewise, it is reasonable assumed that the Licensing Authority will seek to avoid confusion and duplication by not imposing licence conditions relating to matters that are required or controlled under other legislation, except where they can be exceptionally justified to promote the Licensing Objectives.

4. History to the Development

The application site was subject to Planning Permissions Reference 2019/03100/FUL, 2018/03101/LBC and 2018/03102/OUT.

The application was supported by an appropriate Environmental Impact Assessment (EIA). The process of Environmental Impact Assessment in the context of town and country planning in England is governed by the <u>Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the '2017 Regulations')</u>. These regulations apply to development which is given planning permission under Part III of the Town and Country Planning Act 1990.

EIAs make sure that project decision makers think about the likely effects on the environment at the earliest possible time and aim to avoid, reduce or offset those effects. This ensures that proposals are understood properly before decisions are made through the proportionate evaluation of risks.

In the context of this proposal, the impact of noise from the site was considered in detail when determining the application. Chapter 9 of that submission deals specifically with Noise and considered noise generating activities associated with uses within the proposed development, namely:

- o Proposed Land uses including the new theatre and live music (I.e G-Gate, West Hall, as well as provision of external amenity areas.
- o Any potential noise breakout from internal uses, including the theatre and live music venue.

Para 9.70 of the EIA considers the use of external amenity space within the Olympia Estate. As remains the current position, no proposed external public address (PA) systems or live music are currently planned as Part of the Development. It further states that on that basis, a meeting held between a London Borough of Hammersmith and Fulham on the 2nd August 2018, that where these elements are not present in outdoor amenity areas, significant levels of noise from their use is not expected.

To put that statement into context, the considered approach to EIA's is that they are proportionate to the risk, based on constant evaluation of baseline data and technical assessment on issues with the potential to cause significant effects.

In coming to that conclusion at Para 9.70, the applicant and regulatory authorities reached a consensus that people noise other than where specified, could be scoped out of the Environmental Impact Assessment. That infers that the risk of impact from such was negligible, and below a level which required due consideration to assist the decisions makers in assessing the projects wider impacts.

Likewise, with regard to the final planning decision on this development, this was taken in accordance with Local Plans and Policies and the officers report concluded that impacts of noise and vibration have been satisfactorily assessed in the submitted Environmental Statement against the following Policies:

- o London Plan Policy 7.15 states that development proposals should seek to reduce noise by minimising the existing and potential adverse impacts of noise on, from, within, or in the vicinity of, a development and promoting new technologies and improved practices to reduce noise.
- o Local Plan Policy CC11 seeks to control the noise and vibration impacts of developments, requiring the location of noise and vibration sensitive development 'in the most appropriate locations'. Design, layout and materials should be used carefully to protect against existing and proposed sources of noise, insulating the building envelope, internal walls floors and ceilings, and protecting external amenity areas. Noise assessments providing details of noise levels on the site are expected 'where necessary'.
- Local Plan Policy CC13 seeks to control pollution, including noise, and requires proposed developments to show that there will be 'no undue detriment to the general amenities enjoyed by existing surrounding occupiers of their properties'.

5. Critical Risks of Noise from People within Licenced Premises

In order to try and put the risks into context, Joynes Nash Ltd has considerable experience of numerous venues across the UK. In terms of applications for the various regulatory regimes, the operational management of the premises and the investigation of noise issues arising from such on behalf of operators and regulatory authorities. These have included Collins Theatre, Islington, The Print Works, Rotherhithe, Tobacco Dock, Wapping, Roof East, Stratford which are not too dissimilar in operation. Likewise, numerous pub gardens operate in very close proximity to neighbouring properties all across the UK without incident or concern.

Indeed, the prediction of crowd noise is a problem faced by acoustic consultants. Although consultants are frequently required to predict noise emissions from activities involving crowds of people, there are no reliable prediction methodologies available. This is largely attributed to the difficulty in isolating each of the factors known to impact upon the level of noise generated by a crowd.

With respect to the proposed licensed premises there is considerable distance between the venues and the closest existing residential receptors. The nearest residential unit is some 78m from the edge of the National Terrace Unit on the other side of Olympia Way and the railway tracks.



Likewise from the edge of the Gin Bar Unit or terrace above it the nearest residential is some 96metre.



In terms of what factors influence crowd noise, the key issues are an individual's voice effort, the total number in the crowd, whether the noise from individuals is synchronised or random with time and whether the crowd noise is directional or has a diffused orientation.

Voice effort refers to phenomena where talkers increase their voice effort in the presence of increasing background noise to maintain communication, in this instance subjectively a low risk due to the nature of the offering and lack of regulated entertainment. Crowd numbers remain small, and speech remains likely to be in a diffuse orientation so not concentrated on specific receptor positions. Moderate risk may be caused from synchronised noise from verbal communications, such as in response to sports screenings on limited occasions, but this is entirely within the control of the applicant by reducing such stimuli and therefore subjectively the overall risk remains low.

It is also perfectly acceptable for the situational context within which the crowd is placed to be managed by the venue, such as is their control over other factors such as how much alcohol is being consumed, the size of individual groups within any larger gatherings etc. This can be achieved through the application of proactive management techniques and indeed where necessary influencing the environment, such as the playing of ambient background music to create a calming atmosphere. Taking all of the above into context, given the type of premises proposed, the single operator and the distance to receptors the risk from operational noise from the roof garden subjectively is considered low.

This accords with professional experience of the aforementioned venues where the crowd noise was never a key consideration, that providing a relatively low 'hub-bub' or noise which is not intrusive. In contrast it was largely always the regulated entertainment which provided for the unacceptable intrusion, which is not appliable in this instance.

Likewise, when assessing people noise, it is important for any noise assessment to consider the context of the location where any impact occurs and an assessment in consideration of existing background levels. Olympia is a mixed urban area, has a history of noise associated with entertainment provision, crowd noise in and vibrant and active area with increased ambient noise levels. Nothing in this application looks to change the character of the area.

6. In Summary

Planning and decisions should aim to avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development. That decision has already been taken by the Local Authority on the basis of a Planning Application. It can therefore be concluded that the Council has made a decision at planning that all is satisfactory against a more restrictive noise criterion.

The local planning authority is a responsible authority and able to make representations. If there are relevant matters that it wishes to put to the licensing committee it is able to do so. There have been none, which implies that the Authority have stood by their earlier decisions. This remains the same for the Environmental Health Officer who has subsequently withdrawn their objection.

The risk of noise disturbance from customer vocal noise from well managed premises is very low in this instance. Should the unfortunate situation arise where a premises is not well managed and noise issues become apparent then as with all licenced premises the licence review route will be open to the responsible authorities and local residents. This is on top of any action the Local Authority may take through the Statutory Nuisance regime.

Having established that the applicants submissions have already considered the impact on the amenity of local residents of the development, it would be inconsistent and contrary to the Councils own statement of licensing policy for anybody presiding over a decision to revisit the topic of noise from patrons when the context and potential for noise disturbance remain the same.

There remains no objectional reason that this application cannot be determined as applied for.

ADNITT ACOUSTICS
Renaissance House
32 Upper High Street
Epsom, Surrey
KT17 40J

T: +44 (0)20 7099 9735 F: +44 (0)845 127 5121 E: enquiry@adnitt.com W: www.adnitt.com



To:	Yvette Aunger	Fax:	
	Olympia	Email:	yvette@olympia.co.uk
From:	Robert Adnitt	Phone:	/
Date:	22 nd May 2024	Ref:	E21064 240515 RA TN5a - Venue Sound Insulation

Project: E21064 Future Olympia

Subject: Venue Sound Insulation Pages: 5

This technical note summarises the sound insulation measures being taken to protect nearby residential communities from entertainment noise in the new venues at Olympia.

1.0 INTRODUCTION

The development's planning criteria were collaboratively established between Olympia and the London Borough of Hammersmith and Fulham (LBHF). In summary, the proposed methodology, as agreed with LBHF, limits noise emissions from music venues during events to a level 5 decibels lower than the typical background sound level occurring at a 1-meter distance from the nearest noise-sensitive receivers.

In other areas within the scheme where amplified sound is incidental to the use, such as offices, hotel rooms, lobbies, restaurants, and bars without entertainment, as well as circulation spaces and meeting rooms, the noise limit is 10 decibels below the typical lowest daytime and/or nighttime ambient noise level, as appropriate.

On this basis, LBHF were satisfied that occupiers of the surrounding premises would not be adversely affected by noise.

2.0 WEST HALL

West Hall is a new 4,000 capacity music venue.

From the outset, this venue has been designed with sound insulation in mind, some of the country's leading acoustics consultants have worked to achieve very high levels of sound insulation to enable a full live music experience whilst meeting the stringent standards required by the planning conditions and protect the amenity of nearby residents.

The main external wall of the venue has a core of concrete with multiple additional layers both inside and out, and overall is at least 1,100mm thick, as shown in Figure 1 below:





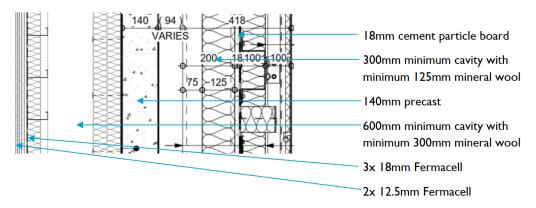


Figure 1 - Main West Hall External Wall

The roof of the venue features a double concrete layer separated by acoustic rubber pads, with a mixture of green roof and crushed stone toppings, these are shown in Figure 2 to Figure 4.

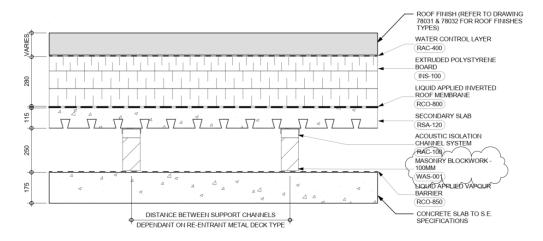


Figure 2 - Main Roof Construction

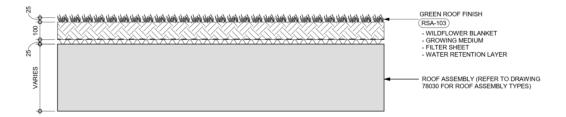


Figure 3 - Green Roof Topping

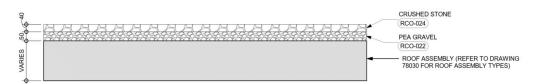


Figure 4 - Crushed Stone Roof Topping





Fire doors open into lobbies with further external metal doors, so there are always double sets of doors to provide high sound insulation from the venue to neighbours, Figure 5.

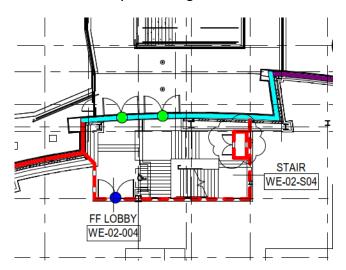


Figure 5 - Typical West Hall Door Lobby

3.0 PILLAR HALL

Pillar Hall is a renewed music venue in a listed building, with the upper part of the building becoming a new music venue and a restaurant below.

The sympathetic refurbishment includes sound insulation for the venue including new secondary glazing for the windows and acoustic treatment to the existing roof and ventilation.

The roof will be upgraded with a new underlining fixed to the rafters, Figure 6.

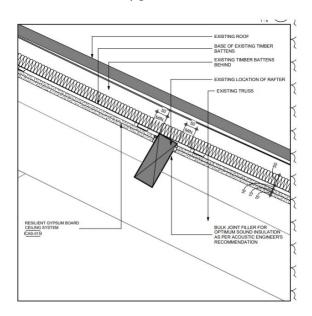


Figure 6 - Pillar Hall Roof Acoustic Treatment



4.0 THEATRE

A new 1,575 seat performing arts theatre is being provided.

The theatre itself sits on rubber bearings to form an acoustic break for noise passing into and out through the structure of the building, shown in Figure 7.



Figure 7 - Theatre Acoustic Bearing

There are office floors above which prevent sound breaking out from the roof of the auditorium and the external walls and fly tower have all been designed to provide exceptionally high levels of sound insulation.

The fly tower has a 200mm composite metal and concrete slab roof combined with acoustically rated smoke vents.

The external wall features a Twinwall pre-cast concrete core (composed of two 65mm thick pre-cast concrete wall leafs) lined with several plasterboard layers in a depth of over 1,100mm, shown below in Figure 8.

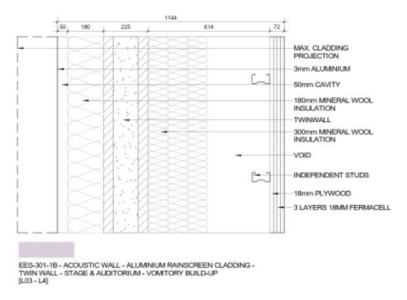


Figure 8 - Theatre Main Wall - Stage and Auditorium





5.0 GYM

The agreement with the gym operator will include acoustic requirements for them to comply with the same noise emission limits at neighbours given in the introduction above, in combination with all other venues.

Gym operators often offer high intensity workouts, with accompanying music, noise levels may be high, and the acoustic design shall be based on a noise survey of existing gyms.

Noise control measures may include any or all of the following:

- i. A noise limiting device fitted to any music system, set up at the time of acoustical commissioning.
- ii. Sound absorbing treatments (ceilings, wall panels, etc), mass barrier ceilings, or floating structures as part of the fit out to achieve the noise criteria.
- iii. Loudspeakers not being rigidly connected to the building structure and mounted on resilient brackets.

6.0 ROOF TERRACE

A combination of the noise control measures listed above may be used to control noise emissions to other internal spaces and also to control noise breakout to neighbours.

The agreement states that noise from uses and activities of the roof terrace shall not exceed the noise limits at neighbouring façades and at private external amenity spaces (including apartments on Russell Road).

This will require control of music on the roof terrace to suitable levels and appropriate management of the use of the terrace.

7.0 SUMMARY

The existing Olympia exhibition halls date from Victorian times and the structures were not designed to accommodate the high noise levels from modern touring bands and theatre.

The new venues have been purpose built with modern materials and from the outset, sound insulation has been an integral part of the Future Olympia design, with care taken at every stage of the process to minimise potential effects on residential neighbours.

