



An
Coimisiún
Pleanála

Specialist Report

R318314_App1

#

Development	500 seat outdoor community amphitheatre
Address	Former Council Depot at Commons North Lime Quarry, Lanesborough, Co. Longford
Applicant	Longford County Council
Type of Application	L.A. Dev. - AA Application
Topic	Noise Impact Assessment: Adequacy of acoustic surveys and analysis of noise impact
Senior Environmental Scientist	Finbarr Quigley, BSc. MSc.
Senior Planning Inspector	Jimmy Green
Date	19 th November 2025

Contents

Contents.....	2
1.0 Introduction	2
2.0 Assessment	3
3.0 Conclusion	8

1.0 Introduction

1.1. Scope of Report to Inspector

1.1.1. Following review of the Acoustic Assessment Report received by the Commission, specialist support is requested regarding:

- The credibility and accuracy of the noise reporting and modelling carried out,
- The credibility of being able to achieve the noise control commitments stated in the application
- Consideration of the suitability of the proposed development at this location in the context of potential noise impacts

1.1.2. In my capacity as Senior Environmental Scientist with over twenty years of professional experience, I have the relevant expertise to provide a professional opinion in relation to the items above.

1.1.3. This report to the Planning Inspector and available to the Commission is a written record of my review and examination of the submitted information and will support the Inspectors report in relation to this application.

1.2. Documentation

1.2.1. For the purpose of this specialist report, I have read all the documentation attached to this case relating to acoustics matters including inter alia, details of the proposed development, the operational plan, planning stage noise assessment, noise impact assessment prepared in further information response, drawings and site layout

plans, and all associated documentation prepared by the Applicant, observations received by the Commission.

1.3. Site Location and Description of Proposed Development

- 1.3.1. The subject site is located in Lanesborough, Co. Longford, in the townland of Commons North. The proposed development site lies within a disused limestone quarry site in an area of mixed woodland on the shore of Lough Ree. The surrounding landscape to the north, east and south-east is dominated by residential properties and pasture farmland; to the south lies an area of deciduous woodland and the area to the west and northwest is dominated by Lough Ree and public amenity space.
- 1.3.2. The proposed development is described in detail in the Inspectors report and not repeated here.

2.0 Assessment

2.1. Approach to examining the issues

- 2.1.1. In my examination of the issues, I have considered the following questions:
 - Has the Applicant demonstrated sufficient expertise to carry out acoustic surveys and to prepare the noise impact assessment report?
 - Has the Applicant had proper regard to appropriate guidance documents relating to noise from outdoor music events?
 - Has the Applicant developed an appropriate background noise level for noise sensitive receptors?
 - Have appropriate noise limits been considered by the Applicant for the control of nuisance from noise?

2.2. Applicant Competency

- 2.2.1. The planning stage noise assessment report was authored by Stephen Kearney, BE MIEI MIOA of Allegro Acoustics on behalf of De Blacam and Meagher Architects. The noise impact assessment (NIA) report prepared in response to the request for further information (RFI) was authored by Dirun Ergin, BA, MS of Allegro Acoustics

and reviewed by Stephen Kearney. Stephen Kearney's experience and qualifications are presented in Section 2 of the NIA prepared for the RFI response.

- 2.2.2. I am satisfied that the Applicant has demonstrated sufficient expertise to carry out acoustic surveys and to prepare the noise impact assessment report.

2.3. Appropriate Guidance Application

- 2.3.1. Section 4.2 of the applicants planning stage noise assessment proposed that the daytime noise limit of 55dB $L_{Aeq,30 mins}$ as outlined by the World Health Organisation in the document *Guidelines for Community Noise*, 1999 is appropriate to apply in this instance. The report suggested that this noise criterion is considered applicable at the façade of the closest noise sensitive locations to the proposed theatre.
- 2.3.2. The noise assessment report made no reference to the UK Noise Council's *Code of Practice on Environmental Noise Control at Concerts*, 1995 which remains the most widely used in setting environmental noise guidelines for large outdoor music events. This code recommends music noise level (MNL) limits at nearby noise sensitive premises for concerts taking place in a range of venues and locations. The code is designed to assist those planning a music event, those responsible for licensing such events and those responsible for enforcing noise-related conditions. The code addresses the environmental problem of noise from the performance and sound checks only.
- 2.3.3. In 2021 the Association of Acoustic Consultants of Ireland published the document *Environmental Noise Guidance for Local Authority Planning & Enforcement Departments*. This guide provided advice for local authority officers involved in enforcement, assessment of noise reports, & drafting of noise condition for planning permissions & permits. In Part 3, Section 21 of the Guide, sector specific guidance is provided on the management of noise from concerts and festivals, and the 1995 Code of Practice is identified as the most appropriate guidance to use when setting limits for this type of activity.
- 2.3.4. Section 3.1 of the 1995 Code of Practice (CoP) clearly sets out recommended limits for concerts and sound checks held in various locations and categories of venues. The code specifies that music noise levels (MNLs) should be measured 1m from the façade of any noise sensitive premises for events held between the hours of 09:00 and 23:00. Table 1 below from the CoP, outlines that when concerts/music events

are held more than three times in a year, an exceedance of up to 15 dB over background levels at a sensitive location is permitted.

Table 1

Concert days per calendar year, per venue	Venue Category	Guideline
1 to 3	Urban Stadia or Arenas	The MNL should not exceed 75dB(A) over a 15-minute period
1 to 3	Other Urban and Rural Venues	The MNL should not exceed 65dB(A) over a 15-minute period
4 to 12	All Venues	The MNL should not exceed the background noise level ¹ by more than 15dB(A) over a 15-minute period

¹The value used should be the arithmetic average of the hourly L_{A90} measured over the last four hours of the proposed music event or over the entire period of the proposed music event if scheduled to last for less than four hours.

2.3.5. The Operational Plan (Section 15.1) submitted with the application advised that the proposed amphitheatre will be used on an occasional basis (6 – 10 times per annum) for Tier 1 and 2 events. Tier 1 events are described as concerts and drama/musicals and the plan suggests an initial target of three Tier 1 events to be held per year. Tier 2 events are described as being locally focused and include seasonal events for Christmas or Halloween and School productions etc. Given the event frequency information submitted, the venue falls into the 4 to 12 category and therefore the MNL should be limited to $\leq 15\text{dB(A)}$ above the background level as measured at noise sensitive receptors.

2.4. Background Noise Level

2.4.1. The applicant arranged to have a baseline noise survey carried out at four locations in April 2021. The report stated that these monitoring locations represented the closest noise sensitive locations to the proposed theatre. Figure 2 of the noise assessment report suggests the monitoring was undertaken next to the road and not at the façade of the dwellings. I would suggest that these monitoring locations do not

represent the 4 closest noise sensitive locations but are representative of noise sensitive locations in 4 different directions from the proposed theatre, which is an acceptable approach to take.

- 2.4.2. Monitoring took place for a period of 30mins in the daytime (between 09:00 – 19:00) and 30mins in the evening (19:00 -23:00) at all 4 locations. The daytime monitoring took place between 12:21 and 14:33 and the evening monitoring took place between 19:17 and 20:57. The monitoring data presented included values for L_{Aeq} , L_{A90} , L_{A10} , L_{Amax} and L_{Amin} . The background (L_{A90}) values recorded during the daytime period ranged from 32dB to 43dB with traffic on the adjacent public road the dominant noise source. The background (L_{A90}) values recorded during the evening time period ranged from 33dB to 46dB with traffic on the adjacent public road the dominant noise source again.
- 2.4.3. The report included a note advising that the monitoring took place during a period when travel restrictions due to Covid-19 were in place which may have impacted the background levels.
- 2.4.4. The response to the request for further information included monitoring results from a second baseline survey carried out in August 2025 at the same 4 locations used during the survey in April 2021. The daytime monitoring took place between 16:35 and 18:20 and the evening monitoring took place between 19:13 and 21:13. The monitoring data presented included values for L_{Aeq} , L_{A90} , L_{A10} , L_{Amax} and L_{Amin} . The background (L_{A90}) values recorded during the daytime period ranged from 39dB to 40dB with traffic on the adjacent public road the dominant noise source. The background (L_{A90}) values recorded during the evening time period ranged from 34dB to 37dB with traffic on the adjacent public road the dominant noise source again.
- 2.4.5. The *Code of Practice on Environmental Noise Control at Concerts*, 1995 recommends that the background noise level used should be the arithmetic average of the hourly L_{A90} measured over the last four hours of the proposed music event or over the entire period of the proposed music event if scheduled to last for less than four hours. Given that the noise assessment report suggested that music events could take place up to 23:00, the appropriate method for determining a background level would be to take $L_{A90, 1hr}$ readings for each of the hours between 19:00 and 23:00 and calculate the arithmetic mean value of the 4 readings. This should be

repeated at each of the 4 noise sensitive locations used in the noise assessment reports to determine site-specific background levels.

2.5. Noise Impact Assessment – Modelling

2.5.1. The applicants developed a 3D Environmental Noise Model of the proposed theatre and of the surrounding area using SoundPLAN Version 7.3 environmental noise modelling software. This software implements the calculation and prediction methodologies outlined in *ISO 9613 Acoustics - Attenuation of sound during propagation outdoors*. The applicant advised that the following assumptions were used when developing the SoundPLAN 3D environmental noise model:

- Drawings supplied by the project architect were used to develop a topographical profile of the study area.
- These drawings were supplemented with a site visit by Allegro Acoustics personnel and additional information available from Google™ Earth regarding the study area. This model included objects which form barriers and reflecting surfaces for noise, including the quarry face, buildings, foliage, and perimeter walls. A graphic from the model was shown in Figure 5.
- Sound Power data, (L_w) was calculated for two scenarios; 500 members of an audience talking and clapping for a 15-minute period and amplified music being played on the stage. The noise levels for the clapping and talking scenario were obtained from the modelling software SoundPLAN V7.3 Emissions Library. The amplified music scenario was modelled by employing an indicative arrangement which provided 77-80dB(A) in the theatre.

2.5.2. The model outputs predicted sound pressure level (SPL) readings at 16 noise sensitive receptor locations. The report correctly identified the buildings with two floors and predicted SPL levels for ground and first floor windows at these properties to assess impacts on sensitive receptors who may be asleep upstairs at the time the music was playing. The predicted noise levels for the nearest properties ranged from 47dB(A) to 53dB(A) using the amplified music model inputs. The report suggested that because these levels were below the 55dB(A) limit suggested by the acoustic consultants, they would meet the criteria set by themselves.

- 2.5.3. As already discussed, I consider the appropriate music noise limit for the sensitive receptors identified is background + 15dB, which requires a more accurate assessment of background levels as outlined in Section 2.4.5.
- 2.5.4. The quality of the model outputs are dependent on assumptions and accurate input data. In this instance, because the exact type of sound equipment to be employed is unknown, the model inputs and outputs therefore have increased uncertainty. The uncertainty of the model outputs will reduce once the sound equipment has been selected and the relevant sound power level data applied.

3.0 Conclusion

- 3.1.1. Having reviewed the available documentation, I am satisfied that the noise impact assessment reports submitted have been prepared by competent acoustic consultants with the correct qualifications and appropriate experience. However, I do not agree with the conclusion that a 55dB(A) limit should be applied at all sensitive receptors and the reasons for this have been outlined in this report. In isolation, this should not be considered as a reason for refusal, and the development could proceed on the basis that noise control be carried out in accordance with the provisions of the UK Noise Councils *Code of Practice on Environmental Noise Control at Concerts*, 1995.
- 3.1.2. Should the Commission be inclined to approve the development, I suggest the following conditions relating to the control of noise from live events be included for the purposes of protecting the amenity of the area:
- The applicant shall appoint a suitably qualified and experienced noise control consultant, to the approval of the Licensing Authority, prior to live events involving amplified music or theatrical performances taking place at the venue. The noise control consultant shall liaise between all parties including the licensee, sound system engineer and the licensing authority etc. on all matters relating to noise control prior to and during events.
 - The noise control consultant shall carry out a survey to determine the background noise levels (as defined by the Code of Practice on Environmental Noise Control at Concerts, 1995) at four locations around the venue representative of the noise sensitive receptors likely to experience the largest increase in noise as a result of an event. The information obtained from this

survey shall be made available to the licensing authority in advance of an event taking place.

- A noise propagation test shall be undertaken prior to the start of an event in order to set appropriate control limits at the sound mixer position. The sound system shall be configured and operated in a similar manner as intended for the event. The sound source used for the test shall be similar in character to the sound likely to be produced during the event.
- The control limits set at the mixer position shall be adequate to ensure that Music Noise Level (MNL) shall not at any noise sensitive receptor exceed the background noise level by more than 15dB(A) measured over a 15-minute period throughout an event, rehearsal or sound check.



Finbarr Quigley
Scientist

19th November 2025