

# YORK RACECOURSE SHOWCASE EVENTS NOISE MANAGEMENT PLAN - 2023







## YORK RACECOURSE SHOWCASE EVENTS

NOISE MANAGEMENT PLAN - 2023

## **QUALITY MANAGEMENT**

**Document Ref:** 177/V06/2023 **Prepared for:** York Racecourse

Revision	Prepared by	Issue Date
04 – 2021 Update	Matt Butler MIOA	15/07/2021
05 – 2022 Update	Matt Butler MIOA	05/07/2022
06 – 2023 Update	Matt Butler MIOA	17/07/2023

Blue Sky Acoustics Ltd
Popeshead Court Offices
Peter Lane
York
YO1 8SU

Contact:

Tel: 01904 234 740

Email: info@blueskyacoustics.co.uk Registered in England & Wales No 8367593



## Contents

1,	Introduction	1
	Relevant Guidance	
	Noise Limits	
	Stage Layout	
	Noise Monitoring Methodology	
	Roles and Responsibilities	
7.	Complaints Procedure	7
8.	Noise Control Strategy	8
Figu	re 1: Noise Monitoring Locations	10
Арр	endix A – Noise Survey Record Sheet	11



#### 1. Introduction

- 1.1.1 Blue Sky Acoustics Ltd has been commissioned by York Racecourse to prepare a Noise Management Plan (NMP) for the control and management of noise from Music Showcase Events for the 2023 season.
- 1.1.2 The events will take place on Friday 28<sup>th</sup> and Saturday 29<sup>th</sup> July on land to the west of the Bustardthorpe Stand, York Racecourse. The events consist of both live and recorded music being played on an outdoor stage, typically for a duration no greater than two hours within the periods 20:30 to 22:30 on Friday and 17:30 to 19:30 on Saturday, in addition to daytime line and sound checks.

#### 1.2 Purpose

1.2.1 The purpose of the NMP is to identify and implement strategies which will minimise the disturbance of residents from activities associated with the events, specifically music noise levels. Should complaints be received, the NMP provides strategies by which to mitigate and thereby facilitate a mutually acceptable outcome for both the complainant and the event organiser.

#### 1.3 Contents

- 1.3.1 The NMP contains all pertinent information with regards to the management of music noise levels in accordance with the events licence. The following points are included:
  - Nearest noise sensitive receptors and noise monitoring locations;
  - Stage layout and orientation;
  - Noise limits;
  - Correspondence with local residents;
  - Duty Holders and Chain of responsibility; and
  - Complaints procedure.

#### 2. Relevant Guidance

## 2.1 Code of Practice on Environmental Noise Control at Concerts (1995)

- 2.1.1 The Code of Practice (the Code) provides guidance for the assessment and control of noise at concerts and gives advice on how disturbance or annoyance can be minimised. The Code was written by the Noise Council, a group of professional bodies concerned with issues relating to noise and vibration in the community and industrial environments.
- 2.1.2 The scope of the Code is limited to environmental issues relating to noise from performance and sound checks only. It does not cover work related noise issues which are covered by the Control of Noise at Work Regulations 2005<sup>1</sup>, and the Health and Safety Executive's, *The Event Safety Guide*<sup>2</sup> A guide to the Health, safety and welfare at music and similar events.
- 2.1.3 The Code provides guideline noise limits which should not be exceeded at 1 m from the facade of any noise sensitive property between the hours of 09:00 and 23:00. Appropriate noise limits should be discussed and agreed with the Local Authority prior to an event taking place. When applying noise limits to a specific event, the location of the venue and number of events held per year at the venue must be taken into consideration.

<sup>&</sup>lt;sup>1</sup> Statutory Instrument 2005 No. 1643: The Control of Noise at Work Regulations, HMSO, 2005.

<sup>&</sup>lt;sup>2</sup> Health and Safety Executive, The Event Safety Guide (Second Edition), 1999.



2.1.4 The document aims to minimise noise levels where possible however it is recognised that full compliance with the Code will not necessarily prevent all complaints. Local factors such as topography and atmospheric conditions may affect the likelihood of complaints being received. Compliance with the Code also does not in itself prevent action from being taken under the Environmental Protection Act 1990 (EPA). Action under the EPA is unlikely where the relevant departments within the Local Authority have been consulted prior to the event occurring, the event is well planned and managed and is limited to the specific times and duration agreed.

#### 2.2 Low Frequency Noise

- 2.2.1 Two footnotes are included in The Code which indicate low frequency noise may be more of a problem at larger distances from the event where the frequency balance of music alters so that only low frequency bass beats remain. This is due to lower frequencies attenuating with distance at a lower rate than mid and high frequency content.
- 2.2.2 With regard to advice on low frequency levels, The Code states that no precise guidance was available at the time of publishing the document, however the following was included in the document as a guide:
  - "A level of 70 dB in either the 63Hz or 125Hz octave frequency band is satisfactory, whereas a level of 80 dB or more in either of those octave frequency bands causes significant disturbance."
- 2.2.3 This advice was based upon a study undertaken by J.E.T Griffiths et al. (1993)<sup>3</sup>, one of the authors of The Code, addressing low frequency sound from concerts and specifically relates to noise impacts at locations 2km and beyond from the venue. The distances at which these limits were intended to apply were further clarified in a paper by the same author: *Environmental Noise Guidelines and Sound Management for UK Concerts: 2004*.
- 2.2.4 To underline the purpose of low frequency limits, J.E.T Griffiths<sup>4</sup> issued a letter addressed to Lambeth Council's Noise and Scrutiny Commission in a subsequent dispute clarifying that the low frequency limits referenced in The Code were intended for noise impact at measurement locations 2km and beyond from a venue, and that the use of the overall LAeq noise limit in closer proximity would therefore adequately take account of low frequency sound.
- 2.2.5 This is supported by research carried out for Defra (2006)<sup>5</sup> which reviewed various noise indices with community response to music sources. The research concluded that LAeq was the best descriptor for assessment of music noise without the need for additional low frequency limits. While this research was specifically based on music from pubs and clubs, late at night and on an infrequent basis, it does bear relevance to music noise from concerts which are also held on a similar basis.
- 2.3 Code of Practice and Guidance Notes on Noise Control for Concerts and Outdoors Events
- 2.3.1 The City of York Council's (CYC) Code of Practice sets out the Council's approach to the control of noise from outdoor events. The document aims to strike a balance the between the production of a successful music noise event, the enjoyment of attendee's and the protection of the residents living within the City of York.
- 2.3.2 The Council's Code of Practice expands on the guidance written in the Noise Council's Code of Practice on Environmental Noise at Concerts and gives practical advice on the control of noise for specific noise events.
- 2.3.3 All duty holders<sup>6</sup> are expected to have read and understood this document in advance of an event taking place.

<sup>&</sup>lt;sup>3</sup> A study of low frequency sound from pop concerts. J.E.T Griffiths, J.G Staunton & S.S Kamtha, Proceedings of the Institute of Acoustics, Vol15, Part 7, 1993.

<sup>&</sup>lt;sup>4</sup> Letter addressed to the Noise Nuisance Scrutiny Commission, Lambeth Council, Public Submission by Lock N Load Events Limited in Relation to Noise at Events, J.E.T Griffiths, March 2011. <a href="https://moderngov.lambeth.gov.uk/mgConvert2PDF.aspx?ID=7502&T=10">https://moderngov.lambeth.gov.uk/mgConvert2PDF.aspx?ID=7502&T=10</a>

<sup>&</sup>lt;sup>5</sup> Noise from Pubs and Clubs (Phase II), Capita Symonds, Defra Contract NANR 163, May 2006.

<sup>&</sup>lt;sup>6</sup> A Duty Holder is defined as a person or organisation with a level of responsibility required to control noise levels. Roles and responsibilities of duty holders are described in Section 6: Roles and Responsibilities.



## 3. Noise Limits

- 3.1.1 The noise limit for live showcase events is detailed in the licence as 65 dB(A), L<sub>Aeq</sub> over a 15-minute period at the nearest residential properties.
- 3.1.2 Whilst the noise limits are stipulated as 65 dB(A), The Code of Practice on Environmental Noise Control at Concerts advocates that where circumstances require, a shorter measurement period of 1-minute L<sub>Aeq</sub> can be used as an early warning mechanism to identify likely exceedances of the limit. This is most applicable in circumstances where there are several monitoring locations and the event is of a short duration; reflective of the scenario at live showcase events. Where a 1-minute measurement is undertaken the Code supports an additional control limit typically 2-3 dB(A) above the 15-minute L<sub>Aeq</sub> noise limit (67/68 dB(A)). This is due to a shorter measurement period representing a higher music noise level without breaks or pauses and therefore a worst-case scenario.

### 4. Stage Layout

4.1.1 Each event will include one live stage on land to the south west of the Bustardthorpe Stand, oriented towards the north; therefore partially shielded from the closest residential area (The Residence) located to the north east. The location and orientation of the stage is detailed on Figure 1: Event Monitoring Locations.

## 5. Noise Monitoring Methodology

#### 5.1 Sensitive Receptors and Noise Monitoring Locations

- 5.1.1 The most appropriate locations for noise monitoring have been established through a previous consultation process with CYC representing all closest residential properties around the event site and additionally taking consideration of previous complaint locations.
- 5.1.2 Table 1 details the nine monitoring locations agreed with CYC to be representative of the closest noise-sensitive receptor areas around the event site. The monitoring locations are also detailed on Figure 1: Event Monitoring Locations.

**Table 1: Noise Monitoring Locations** 

Location	Approximate Distance to Stage, m			
The Residence	235			
The Chocolate Works	440			
Knavesmire Crescent	470			
Nelsons Lane	810			
Albermale Road	815			
Pulleyn Drive	1055			
Coggan Close	1125			
Trentholme Drive	1150			
Corner of Tadcaster/Racecourse Road	1170			

- 5.1.3 Properties further from the event site will experience a lower music noise level than those measured at the monitoring locations identified above; it will therefore be considered that compliance is naturally achieved at all other locations if measured music noise levels at the closest receptors detailed in Table 1 are within the limits.
- 5.1.4 During noise monitoring, measurements will be undertaken at the closest monitoring location and will move progressively further away from the stage position. In order to progress around the locations in the available time, short-term 5-minute measurements will be taken to demonstrate compliance.



- 5.1.5 It is expected that during the course of the monitoring process, properties which are found to experience the greatest noise impact will be prioritised for more regular monitoring and those which experience lower noise levels will be subject to less frequent measurement.
- 5.1.6 All noise measurement results will be recorded in the format of noise survey record sheets and a copy of the results provided to CYC upon request. A copy of the noise survey record sheet to be used is presented in Appendix A.



## 6. Roles and Responsibilities

6.1.1 A key aspect to a successful event is the identification of key 'Duty Holders'; specifically, their roles and responsibilities. Those involved in the production and control of music noise are responsible for being clearly aware of both their own specific roles and responsibilities and those of others. Clarity between Duty Holders is essential to ensure issues are addressed effectively and in a timely manner.

## 6.2 Event Organiser (Racecourse Management Team)

- 6.2.1 The Racecourse Management Team as Event Organiser holds overall responsibility for the management of the event and the appointment of a competent production management company and acoustic consultant.
- 6.2.2 The Event Organiser will ensure that:
  - All relevant information relating to the production and control of noise is provided to other duty holders;
  - Appropriate communication with neighbouring residents is undertaken including a point of contact; and
  - The production management company and noise consultant communicate and carry out their duties.

#### 6.3 Production Management Company

- 6.3.1 The Production Management Company are responsible for the installation of the stage and operation of a sound system which is suitable for the event site. The Production Management Company will assume overall responsibility and control of the sound desk and speakers throughout the event.
- 6.3.2 The Production Management Company will ensure:
  - Correct orientation of the stage;
  - Correct installation and operation of the sound system and any associated delay towers;
  - A propagation test will be scheduled prior to the start of the event;
  - All sound engineers, including guests are aware of the music noise limit and associated front of house (FOH) target level; and
  - Compliance with the music noise limit.

## 6.4 Sound Engineer

6.4.1 The Sound Engineer is solely responsible for the quality and control of music noise levels at the mixing desk and on stage. The Sound Engineer will be responsible for the control of noise emanating from the speaker systems and all ancillary equipment for the duration of the event and will be the first point of contact for the Acoustic Consultant should noise levels need to be reduced. Prior to the opening of the event, the Sound Engineer will ensure a propagation test is undertaken to calibrate off-site noise limits with an equivalent FOH reference limit. The Sound Engineer will seek to comply with FOH noise limits at all times and will be briefed on the chain of responsibility.

#### 6.5 Acoustic Consultants

- 6.5.1 Two Acoustic Consultants will be present during each event and will be responsible for off-site short-term noise monitoring, FOH noise monitoring and direct communication with the Sound Engineer and the handling and investigation of complaints where appropriate. Key duties will include liaising with the event organiser and other duty holders.
- 6.5.2 The Acoustic Consultants will ensure:
  - Consultation with CYC is undertaken before each event to discuss key monitoring areas and a means of direct communication during the event where required;
  - A sound propagation test is undertaken prior to the start of the event and FOH limits established;



- Continuous attended FOH noise monitoring is undertaken at each event;
- Off-site short-term noise monitoring of music noise levels is undertaken at the most sensitive noise receptors, particularly at the start of the event;
- That the Sound Engineer is directly informed of any required actions to reduce noise levels;
- All complaints directly received are recorded and investigated through attended measurements at the complainant's property where considered valid in the time available; and
- Compliance with the music noise limit.



## 7. Complaints Procedure

- 7.1.1 All complaints received directly by the racecourse on event days will be passed immediately to the Acoustic Consultant via two-way radio or mobile telephone.
- 7.1.2 All contact received from CYC by the Event Organiser in relation to noise should also be directed to the Acoustic Consultant. However, prior to each event the Acoustic Consultant will contact CYC to provide a mobile telephone number for direct liaison during the event in order to investigate complaints promptly or provide immediate updates on the measured noise levels where required.
- 7.1.3 Upon the receipt of a complaint, details will be recorded including the caller's name, address and contact telephone number. The response to the complaint will be based upon the professional judgement of the Acoustic Consultant which will take into consideration the current level of music noise measured around the site at the time of the call.
- 7.1.4 Where an issue is identified, attended noise monitoring will be undertaken at the earliest opportunity at or near to the complainant's residence to determine the specific level of music noise. Where the measured music noise level is compliant with the music noise limit this will be explained to the complainant. If the music noise level is over the agreed noise limit, the FOH Acoustic Consultant will inform the Sound Engineer and request that music noise levels are reduced by the desired amount. A subsequent measurement will be taken to ensure that any action has taken effect.
- 7.1.5 The complainant will be given information on the progress of the investigation and any actions taken as appropriate.
- 7.1.6 Every effort will be made to ensure that the concerns of residents are addressed in a manner that facilitates a mutually acceptable outcome for both the complainant and the Event Organiser. Any actions taken will be recorded and documented within a post event noise report which will be submitted to CYC's Environmental Protection Unit upon request.



### 8. Noise Control Strategy

#### 8.1 Prior to the Event

- 8.1.1 A propagation test will be undertaken prior to the start of the event using recorded music at "show level", in order to quantify the maximum permissible noise level at the front of house position relative to the noise limit at the closest monitoring locations. Sufficient headroom will be included in the FOH reference noise limit to help avoid a breach of the noise limits at nearby receptors.
- 8.1.2 A short meeting will be scheduled to occur prior to the start of the event between all Duty Holders in order to review the responsibilities, monitoring process, complaints procedure, methods of communication and noise control strategy. Any queries or uncertainties with the process will be raised and clarified at this time.

#### 8.2 During the Event – FOH Location

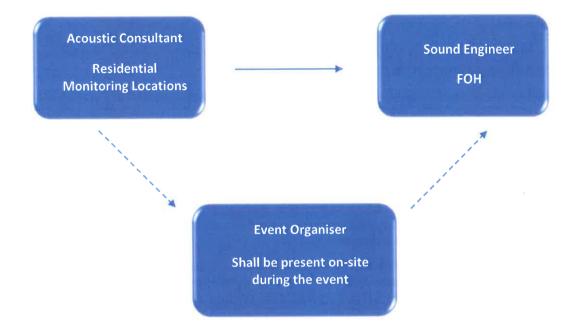
- 8.2.1 An Acoustic Consultant will be designated to the FOH position for the duration of the event equipped with a Class 1 sound level meter and a Class 1, 10Eazy monitoring system configured with a monitor to help visually guide the Sound Engineer. Both systems will be configured to continuously measure the short term 5-minute L<sub>Aeq</sub> to provide a guide for the sound engineer and this will be compared directly to the reference noise limit established during the propagation test.
- 8.2.2 Where the music noise level reaches the FOH reference noise limit, the 10Eazy system will visually indicate the required action to the engineer. The FOH Acoustic Consultant will also instruct the sound engineer to closely monitor the level and make a reduction should an exceedance occur.

### 8.3 During the Event – Off-site Monitoring Locations

- 8.3.1 Where music noise levels are found to be within 3 dB of the licensed noise limits by the off-site Acoustic Consultant, the Sound Engineer will be informed.
- 8.3.2 Should the measured noise levels exceed the agreed noise limits the following noise control strategy will be implemented:
  - Following the conclusion of a 5-minute measurement whereby an exceedance has been recorded, the Sound Engineer will be immediately informed;
  - The level of exceedance and the advised reduction will be communicated and the levels immediately reduced by the Sound Engineer;
  - A consecutive 15-minute measurement will be undertaken in the location of the measured exceedance to confirm compliance with the noise limit.
- 8.3.3 Where the noise limits are still exceeded following the above process, the noise control strategy shall be escalated as follows:
  - The level of exceedance and the advised reduction will be communicated and the levels immediately reduced by the Sound Engineer;
  - A 15-minute measurement will be undertaken at the location of the measured exceedance to confirm compliance with the noise limit;
  - Where compliance with the limit is not achieved the Event Organiser will be informed and advised to immediately reduce levels to comply with the event license.
- 8.3.4 Communication between the Acoustic Consultants, Sound Engineer and Event Organiser will take place by two-way radio or mobile telephone. The communication and escalation path for the control of music noise levels is detailed overleaf.

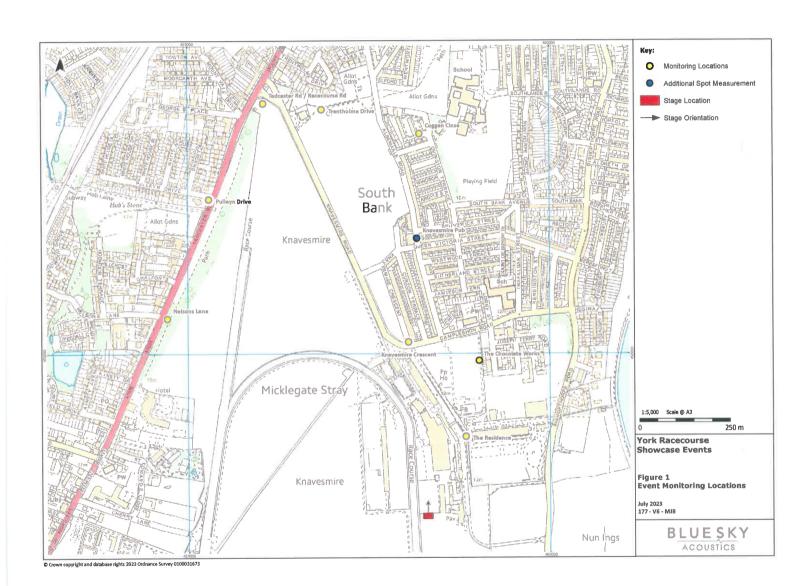


Flow Chart 1: Communication and Escalation Path for Noise Control





**Figure 1: Noise Monitoring Locations** 





## **Appendix A – Noise Survey Record Sheet**

York Racecourse Showcase Noise Measurement Record Sheet Artist: Date:



Location	Time	Measurement Duration	Wind Speed m/s	Wind Direction	Weather Conditions	FOH, LAeq dB	LAeq, dB	Noise Limit	Margin	Action / Comments
The Residence								65	65	
Knavesmire Crescent								65	65	
Pulleyn Drive								65	65	
Nelsons Lane								65	65	
Tadcaster/Racecourse road								65	65	
Trentholme Drive								65	65	
Coggans Close								65	65	
Knavesmire Pub								65	65	
Curzon Terrace								65	65	
Chocolate Works								65	65	
The Residence								65	65	
Knavesmire Crescent								65	-65	
Pulleyn Drive								65	65	
Nelsons Lane								65	65	
Tadcaster/Racecourse road								65	65	
Trentholme Drive								65	65	
Coggans Close								65	65	
Knavesmire Pub								65	65	
Curzon Terrace								65	65	
Chocolate Works								65	65	