



Sound Control Strategy

Wild Fields Festival 2024
Raynham Estate, East Raynham, Norfolk NR21 7EE
15th - 18th August 2024

Prepared by: Richard Vivian, Big Sky Acoustics Ltd
On behalf of: Wild Fields Festival Ltd
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1.0 Introduction

- 1.1 Big Sky Acoustics Ltd is one of the leading specialists for the control of noise in the licensed music and entertainment sector in the UK. The Principal Consultant at Big Sky Acoustics is Richard Vivian. He has over 30 years experience in sound measurement and control. He has developed sound management policies and provided real-time sound monitoring for events and prestigious venues throughout the UK.
- 1.2 This application is for a four-day event at Raynham Hall Estate in North Norfolk.
- 1.3 There will be noise monitoring throughout the event to ensure premises licence noise conditions are adhered to and levels do not exceed any conditional limit which may be placed on the licence.
- 1.4 A sound propagation model has been developed for the proposed stage locations on the event site and this is used as a worst-case prediction of the music sound levels at the nearest noise sensitive property receptor positions in four quadrants around the site. The model is based on theoretical prediction methods and practical experience of monitoring music events at locations across the UK. In reality sound system directivity, site topography, and meteorological conditions dictate that actual levels at receptor positions will be below predicted levels. However, by adjusting the stage sound level the model can demonstrate that sound from amplified music, even under worst-case conditions, will be in compliance with industry guidance in areas where there are residential, or other noise sensitive, properties. The model can be further refined with real-time data as the event progresses.
- 1.5 This document demonstrates that sound control is a management objective at the time of the application and throughout the event. Both pre-emptive and re-active procedures will be put in place to address any concerns regarding noise.

2.0 Assessment standards and guidance

- 2.1 The accepted guidance document for noise from infrequent outdoor music events is the 'Code of Practice on Environmental Noise Control at Concerts' published by The Noise Council in 1995, also known as 'The Pop Code'. The music noise level guidance pages from the code of practice are shown in Appendix E.
- 2.2 With regard to statute the provisions of the Environmental Protection Act 1990, the Noise Act 1996, The Clean Neighbourhoods and Environment Act 2005 and The Licensing Act 2003 provide protection to the general public from the effects of noise nuisance.
- 2.3 Management of statutory nuisance is set out in Part III of the Environmental Protection Act 1990. The act places a duty on a local authority to investigate complaints of statutory nuisance from people living within its area.

- 2.4 The Clean Neighbourhoods and Environment Act 2005 was introduced after consultation with stakeholders. Its purpose was to strengthen existing legislation to help councils deal more effectively with a wide range of problems associated with local environmental quality and introduces both extra powers, and extra flexibility to previous environmental legislation.
- 2.5 The Noise Act provides the assessment methodology that between the hours of 11pm and 7am the permitted level for noise within complainants' premises, with the windows shut, is 34 dB $L_{Aeq,5mins}$ if the underlying level of noise is no more than 24 dBA, or 10dBA above the underlying level of noise where this exceeds 24 dBA.
- 2.6 The Licensing Act 2003 requires North Norfolk District Council, in its role as Licensing Authority, to carry out its various licensing functions so as to promote the following four licensing objectives:
- The prevention of crime and disorder
 - Public safety
 - The prevent of public nuisance
 - The protection of children from harm
- 2.7 Each objective is of equal importance. It is important to note that there are no other licensing objectives, therefore these four are of paramount importance at all times. The Licensing Authority must base its decisions, in relation to determining applications and attaching any conditions to licences, on the promotion of these licensing objectives.
- 2.8 The Licensing Act 2003 further requires the Licensing Authority to publish a Statement of Licensing Policy (SLP) that sets out the policies the Licensing Authority should apply to promote the licensing objectives when making decisions on applications made under the Act. The most recent North Norfolk District Council SLP became effective on 31st January 2022.
- 2.9 Paragraph 1.8 of the SLP reads: *The licensing authority wishes to encourage licensees to provide a wide range of entertainment activities within the District throughout their opening hours and to promote live music, dance, theatre etc for the wider cultural and social benefit of the community.*
- 2.10 Section 6 of the SLP addresses public nuisance and states:
- 6.1 Licensed premises, especially those operating late at night and in the early hours of the morning, can cause a range of nuisances impacting on people living, working or sleeping in the vicinity of the premises.*
- 6.2 The concerns mainly relate to noise nuisance, light pollution and noxious smells and due regard will be taken of the impact these may have. The Council will expect Operating Schedules to satisfactorily address these issues. Applicants are advised to seek advice from the Council's Environmental Protection Service before preparing their plans and Schedules. The Council expects operating schedules to satisfactorily address these issues, as appropriate.*
- 6.3 The Council will consider attaching Conditions to licences and permissions to*

prevent public nuisance, and these may include Conditions drawn from the Model Pool of Conditions relating to 'Public Nuisance'.

- 2.11 Section 12 deals with cultural activity and states at paragraph 12.1 "*The Council recognises the need to encourage the provision of a broad range of events in North Norfolk's District to promote live music, dance, theatre and other entertainments for enjoyment by a wide-cross section of the public.*"
- 2.12 When it comes to the evaluation of noise under the Licensing Act an understanding of the concept of *public nuisance* is essential. Public nuisance is not narrowly defined in the 2003 Act and retains its broad common law meaning. It may include, in appropriate circumstances, the reduction of the living and working amenity and environment of other persons living and working in the area of the licensed premises.
- 2.13 Once those involved in making licensing decisions are satisfied of the existence of a public nuisance, or its potential to exist, the question is how to address it. Home Office Guidance¹ is useful in this regard and explains that in the context of noise nuisance conditions might be a simple measure noting that conditions in relation to live or recorded music may not be enforceable in circumstances where the entertainment activity itself is not licensable.
- 2.14 The guidance is clear that any conditions appropriate to promote the prevention of public nuisance should be tailored to the type, nature and characteristics of the specific premises and its licensable activities. Licensing authorities should avoid inappropriate or disproportionate measures that could deter events that are valuable to the community.
- 2.15 The guidance also states that any appropriate conditions should normally focus on the most sensitive periods. For example, the most sensitive period for people being disturbed by unreasonably loud music is at night and into the early morning when residents in adjacent properties may be attempting to go to sleep or are sleeping. (This is why there is still a need for a licence for performances of live music between 11 pm and 8 am).
- 2.16 As with all conditions, those relating to noise nuisance may not be appropriate in certain circumstances where provisions in other legislation adequately protect those living in the area of the premises.
- 2.17 In summary, the only defined statutory objective limit level for noise from licensed premises is that defined as the *permitted level* under the Noise Act 1996 and that only applies after 23:00hrs.
- 2.18 The Pop Code introduces its own specific guidance levels and it is noteworthy that daytime levels in the guidance may be considered high by some complainants and this reflects the infrequent nature of events. The night-time levels, by comparison are strictly limited.

¹ Revised Guidance issued under section 182 of the Licensing Act 2003, August 2023

3.0 Sound control measures

- 3.1 Operational measures have been proposed to control off-site sound levels and to reduce overall levels beyond the audience area on site.
- 3.2 A particular emphasis is placed on finishing the main stage events at the prescribed finish time ensuring that noise levels in the community are strictly controlled beyond 23:00hrs.
- 3.3 On and off-site sound monitoring will be carried out during the event. This will ensure that on-site levels are controlled in response to data from off-site monitoring positions.
- 3.4 Regular off-site monitoring positions will initially include the four locations shown in Figure 2 representing residential properties identified in each quadrant. These can be reviewed at any time as additional information becomes available. Further monitoring positions will be selected if conditions dictate.
- 3.5 Real-time sound monitoring allows precise and reactive control of noise ensuring that any noise issues that arise off-site due to changing conditions are rectified on site with revised sound system limits. Off-site monitoring also assists with engaging with the local community.
- 3.6 Noise data from the prediction model provides a useful starting-point for acceptable operating sound limits at the FOH position, and these will then be tailored for the specific sound system design and real-time conditions.
- 3.7 Communication from the sound control team to the sound system technicians on each stage will be clear and concise ensuring a fast response and appropriate adjustment of sound levels.
- 3.8 Sound monitoring and control will not only consider music noise but extend to all noise sources including plant operation and vehicle movements if they are considered to be excessive. Preventative measures will be taken to minimise all noise from the site.

4.0 Sound system specification

- 4.1 Consideration has been given to sound system design and configuration ensuring that loudspeaker directivity control is used to concentrate sound in the audience area and minimise spill to other areas.
- 4.2 Bass loudspeakers are normally ground stacked in a single array for smoothest coverage in the audience area. Bass loudspeakers should be mono summed.
- 4.3 In addition to the normal safety controls on each sound system, such as amplifier clip limiters built into digital amplifiers, an additional compressor-limiter should be fitted across each desk (or system processor) L and R output to provide overall maximum level control for the system. Specific control of low frequency energy is achieved through system parametric EQ.

- 4.4 Full power technical checks will not be permitted before the first event day. The sound system will be assessed for sound propagation off-site during the opening sets on each stage. Technical crews must be aware that a certain amount of system tuning and configuration may be required by the sound control team during the early part of an opening set as levels are optimised for the current conditions.
- 4.5 Beyond the scheduled performance times for each stage the sound systems will be powered down. In order to achieve this it is the responsibility of the Production Manager to ensure that the artist performing the final set is given a countdown of 20 minutes, 10 minutes, 5 minutes, and 1 minute to ensure the set finishes on time. No further amplified music should occur beyond the scheduled finish time for each stage. The sound control team will be supported by the Operations Manager and Security Team and will retain the overall decision to reduce levels, or mute any sound system, if the operating times are not strictly adhered to.
- 4.6 PA systems specifications (to be finalised, this spec as of 5.12.23):

Main Stage

16 off d&b J8 - Speaker Cabinet
8 off d&b J SUB - Sub Bass Cabinet
2 off d&b J INFRA - Sub Bass Cabinet
Front Fills: 4 off d&b Y7P - Speaker Cabinet
Outfills: 6 off d&b Y8 - Speaker Cabinet
Monitors: 10 off d&b M4 - Monitor Cabinet and 1x d&b Q SUB - Sub Bass Cabinet
Side Fills: 4 off d&b Y8 - Speaker Cabinet, 4 off d&b Y SUB - Sub Bass Cabinet

Stage 2

12 off d&b V8 - Speaker Cabinet
4 off d&b V12 - Speaker Cabinet
4 off d&b Y7P - Speaker Cabinet
9 off d&b B2 - Sub Bass Cabinet
Monitors: 8 off d&b M4 - Monitor Cabinet and 2 off d&b V SUB - Sub Bass Cabinet

Stage 3

4 off d&b Y8 - Speaker Cabinet
2 off d&b Y SUB - Sub Bass Cabinet
2 off d&b Q7 - Speaker Cabinet
2 off d&b B2 - Sub Bass Cabinet
Monitors: 2 off EV ETX10P - Active Speaker and 2 off EV ELX 118P - Active Sub

5.0 Working with the local community

- 5.1 The event phone line is ##### and will be publicised on the website, via a leaflet drop to residents and also on *(insert any relevant social media channels for the local community)*. Any calls to this number regarding noise complaints will be logged and investigated. The phone line will be staffed from 16:00hrs on Thursday 18th until 02:00hrs on Monday 19th August.
- 5.2 Any additional complaints reported by environmental health officers or police officers will also be logged and investigated.

- 5.3 Investigation of a noise complaint can include a visit to the local resident if they wish and assessment of the sound from that location by a competent person. Results from sound measurement equipment and subjective evaluation will be recorded.
- 5.4 Where action is deemed necessary corrective measures will be taken as quickly as possible.
- 5.5 It is important to reassure the public that this is an event with powerful licensing controls over the operation, including very specific controls on noise levels and a defined finish time for amplified music each day. It is not an unlicensed party (rave) nor is it a nightclub with inadequate soundproofing causing ongoing disturbance every night until the early hours. It will be well-publicised so that local residents are aware of the event in advance. Controls will be put in place to minimise disturbance so far as is reasonably practical and ensure compliance with the premises licence conditions. It is also recognised that residents have a right not to be unduly disturbed by reason of noise regardless of the nature of an event.

6.0 Sound propagation model

- 6.1 The propagation model uses typical stage operating levels to assess the feasibility of the site.
- 6.2 In reality sound system directivity, site topography, and meteorological conditions dictate that actual levels at receptor positions will be below predicted levels and therefore real-time monitoring will ensure levels are controlled as conditions dictate.
- 6.3 Meteorological conditions can introduce significant variability in off-site conditions which will dictate actual stage levels in real-time during the event.
- 6.4 Predicted operating levels before 23:00hrs are comfortably within Pop Code guideline levels based on the worst-case propagation model calculations. Loudspeaker directivity control will further reduce mid and high band propagation off-axis to the loudspeaker arrays. Site topography and meteorological conditions further attenuate sound.
- 6.5 Additional controls for low frequency sound will be considered above and beyond the A-weighted level limits in the Pop Code.

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Noise propagation model	Provisional stage levels				
	Prepared by: Richard Vivian, Big Sky Acoustics Ltd				
	Last revision: 15 December 2023				
Stage nominal operating levels	Genre	Day Max dBA @ FOH	Night (after 23:00) Max dBA @ FOH		
Main stage	Main performance area	98	0		
Big Top	Large stage in a tent	96	92		
Woodland stage	DJ/pre-recorded	96	92		
Stage name	Separation distance in metres	Noise contribution, day		Noise contribution, night	
Receptor Position North					
Main stage	340	47	0		
Big Top	530	42	0		
Woodland stage	580	41	37		
Total contribution at Position North:		49	dBA	37	dBA
Receptor Position East					
Main stage	740	41	0		
Big Top	320	46	42		
Woodland stage	360	45	41		
Total contribution at Position East:		49	dBA	44	dBA
Receptor Position South					
Main stage	1110	37	0		
Big Top	1190	34	30		
Woodland stage	1060	35	31		
Total contribution at Position South:		41	dBA	34	dBA
Receptor Position West					
Main stage	850	39	0		
Big Top	1270	34	30		
Woodland stage	1210	34	30		
Total contribution at Position West:		41	dBA	33	dBA

Figure 1: Simplified propagation model.

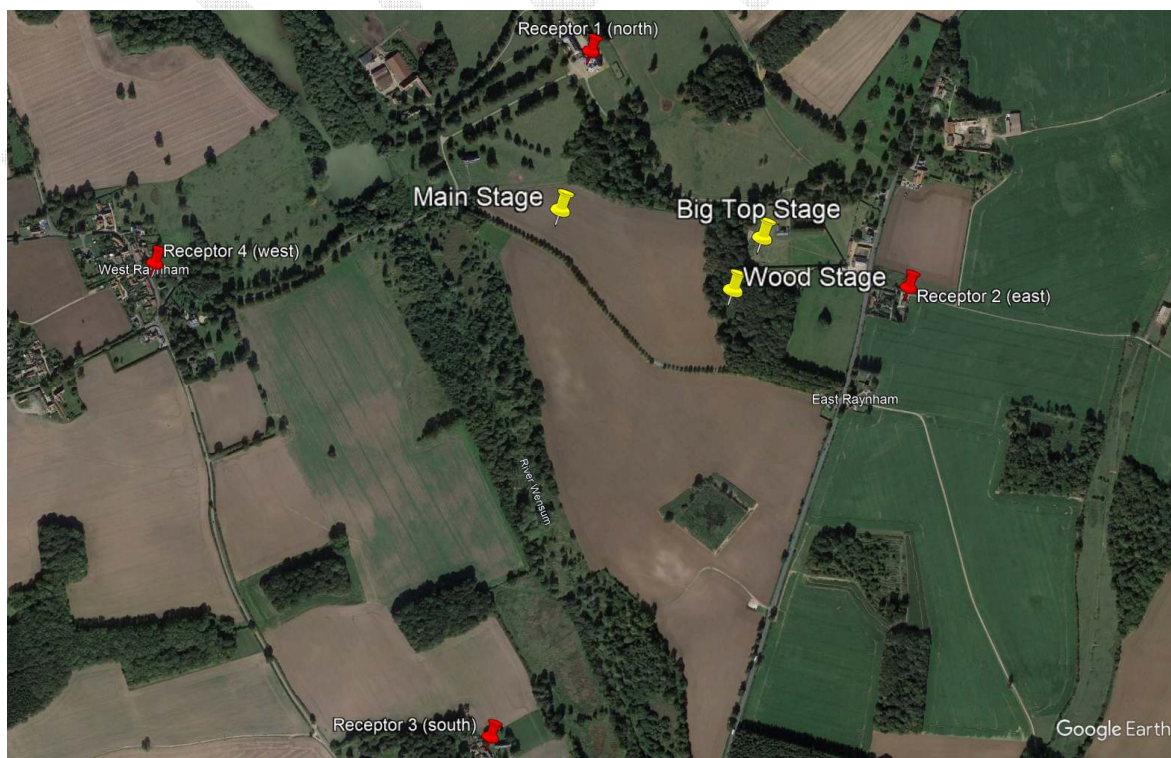


Figure 2: Initial receptor positions (subject to change)

7.0 Propagation testing

- 7.1 Some acoustics consultants have advocated propagation testing but it has very little, if any, benefit. The reality of outdoor events is that by the time the testing is carried out the stage position is set, the PA is rigged/flown, and so there are no physical changes to the system that are practically possible as a result of propagation tests. The only option available is to modify operating levels, and the system spectral response, and as those adjustments can be carried out swiftly in real-time then there is simply no reason for pre-event high power testing the day before the start of the event.
- 7.2 When a stage is being rigged the sound technicians will be working under pressure and it may be the case that all the rigging system, and the PA, is not actually off the truck or in its final configuration at the time of testing. Especially during peak festival season equipment will be coming off an event, going into a warehouse for cleaning/reconfiguration/testing, and coming straight out to the next event and so there are time pressures on sound crews. Other working personnel are also under pressure and high-power testing with test tracks and test tones effectively requires everyone in the area to wear hearing protection: this slows communication and efficiency during the busy rigging phase, as well as introduces some safety concerns particularly during the build phase when there may be machinery movement.
- 7.3 The test material itself may differ from the event programme material, and will be carried out under meteorological conditions that, in all probability in the UK, will be different the day before the event to the conditions that evolve during the event.
- 7.4 Another major reason not to do propagation tests before the event start time is that if testing happens on the day before the event it will cause noise within the community at a time when it was not expected, and therefore aggravates neighbours and triggers complaints. If testing is carried out on the day of the event itself it can cause visitors to the event to think the programming has started and this puts additional pressure on the gates and security searches. It can cause queues at entrances to become restless and harder to manage at a time when peak numbers need to be handled calmly and effectively.
- 7.5 Big Sky Acoustics works closely with the sound system technicians so that lines of communication will be established and objectives agreed in advance for noise control requests. During the opening numbers of the first set on each stage we will confirm levels, and also advise the predicted operating parameters for the stage, and this will remain in constant review for the duration of the event. In this way requests for modifications to the PA will rarely come as broadband requests to drop overall level by a large amount, and are more likely to be specific frequency adjustments, usually to a third-octave resolution, or specific dynamic requests such as for example, more compression on a kick drum. These changes are subtle, easily manageable, and very rarely noticeable by the audience but still achieve effective control and compliance with noise constraints off site.

8.0 Summary

- 8.1 This document presents recommendations for the Sound Control Strategy for a four-day event at Raynham Estate, East Raynham, Fakenham, Norfolk, England, NR21 7EE.
- 8.2 A range of sound control tools will be applied during the preparation and operation of this event ensuring that off-site noise levels are appropriately controlled.
- 8.3 This event will be continuously monitored by the Sound Control Team who will work in close co-operation with officers from North Norfolk District Council.



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Appendix A - Terminology

Sound Pressure Level and the decibel (dB)

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

Frequency and Hertz (Hz)

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

A-weighting

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

C-weighting

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

Noise Indices

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

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

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

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

L_{eq,63Hz} The equivalent continuous sound pressure level in the octave band centred on 63Hz. This can be considered the lower bass octave in music as it covers the frequency range of 44-88Hz.

L_{eq,125Hz} The equivalent continuous sound pressure level in the octave band centred on 125Hz. This can be considered the upper bass octave in music covering the range of 88-177Hz.

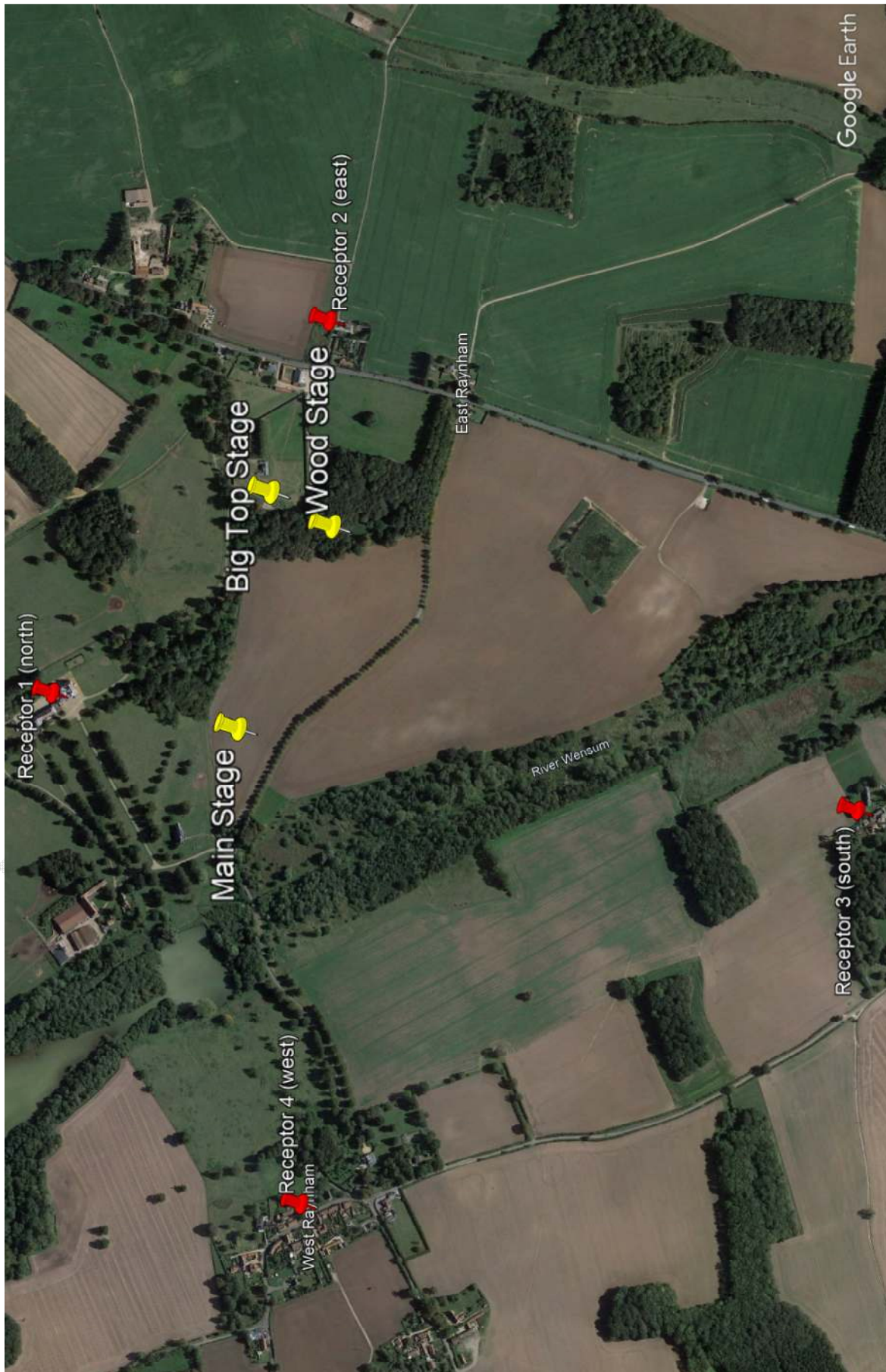
L_{Amax} is the maximum A-weighted sound pressure level during the monitoring period. If fast-weighted it is averaged over 125 ms, and if slow-weighted it is averaged over 1 second. Fast weighted measurements are therefore higher for typical time-varying sources than slow-weighted measurements.

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

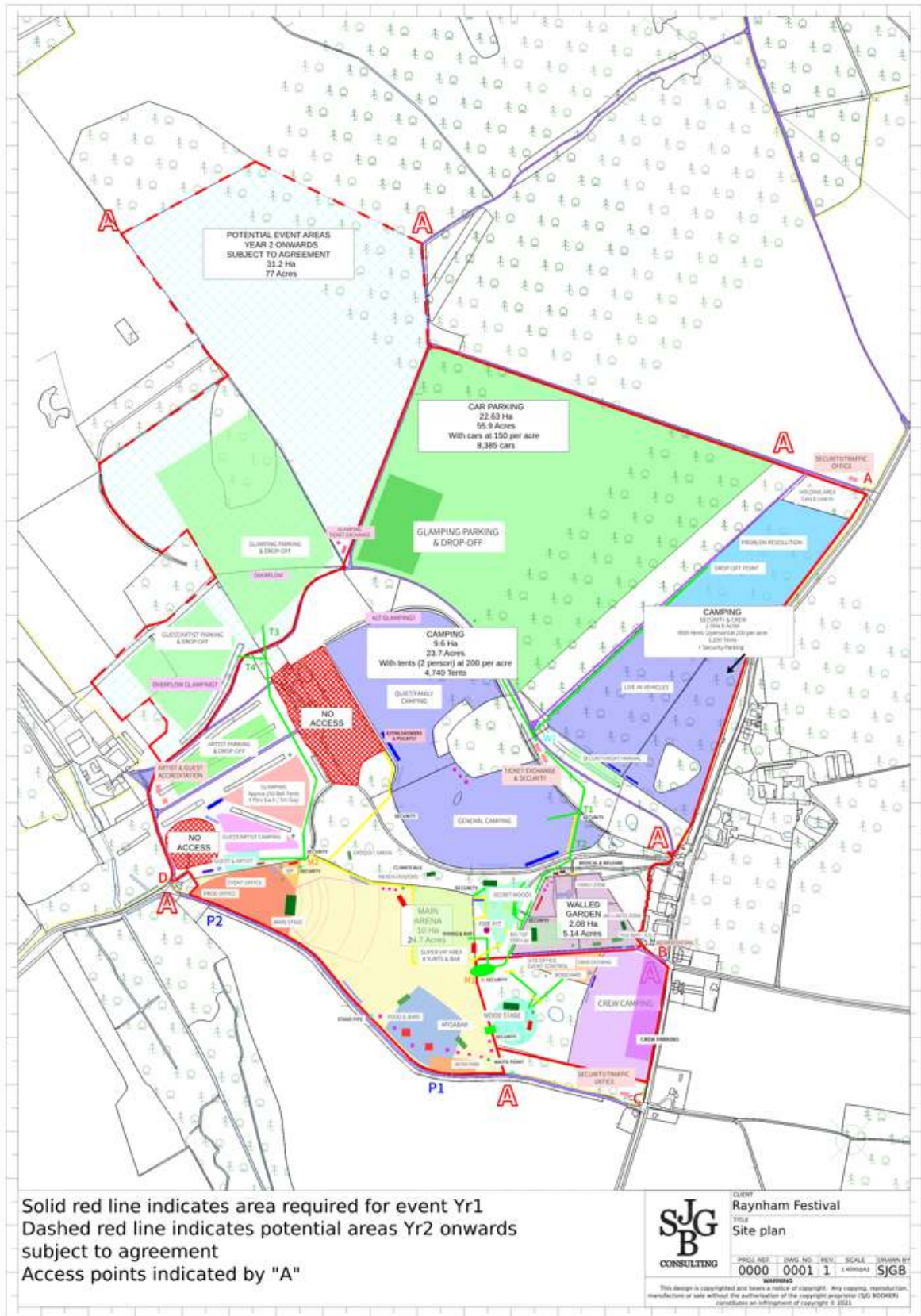
Example noise levels:

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

Appendix B - Proposed receptor monitoring locations



Appendix C - Site plan



Appendix D - Propagation model

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Stage name		Separation distance in metres	Noise contribution, day	Noise contribution, night	
Receptor Position North					
Main stage		340	47	0	
Big Top		530	42	0	
Woodland stage		580	41	37	
Total contribution at Position North:			49	37	dB
Receptor Position East					
Main stage		740	41	0	
Big Top		320	46	42	
Woodland stage		360	45	41	
Total contribution at Position East:			49	44	dB
Receptor Position South					
Main stage		1110	37	0	
Big Top		1190	34	30	
Woodland stage		1060	35	31	
Total contribution at Position South:			41	34	dB
Receptor Position West					
Main stage		850	39	0	
Big Top		1270	34	30	
Woodland stage		1210	34	30	
Total contribution at Position West:			41	33	dB

Appendix E - The Pop Code, guidelines

3. GUIDELINES

- 3.1 The Music Noise Levels (MNL) when assessed at the prediction stage or measured during sound checks or concerts should not exceed the guidelines shown in Table 1 at 1 metre from the façade of any noise sensitive premises for events held between the hours of 09.00 and 23.00.

TABLE 1

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

Notes to Table 1

- The 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.
 - There are many other issues which affect the acceptability of proposed concerts. This code is designed to address the environmental noise issue alone.
 - In locations where individuals may be affected by more than one venue, the impact of all the events should be considered.
 - For those venues where more than three events per calendar year are expected, the frequency and scheduling of the events will affect the level of disturbance. In particular, additional discharges can arise if events occur on more than three consecutive days without a reduction in the permitted MNL.
 - For indoor venues used for up to about 30 events per calendar year an MNL not exceeding the background noise by more than 5 dB(A) over a fifteen minute period is recommended for events finishing no later than 23.00 hours.
 - Account should be taken of the noise impact of other events at a venue. It may be appropriate to reduce the permitted noise from a concert if the other events are noisy.
 - For venues where just one event has been held on one day in any one year, it has been found possible to adopt a higher limit value without causing an unacceptable level of disturbance.
- 3.2 For events continuing or held between the hours 23.00 and 09.00 the music noise should not be audible within noise-sensitive premises with windows open in a typical manner for ventilation.

Notes to Guidelines 3.2

- The use of inaudibility as a guideline is not universally accepted as an appropriate method of control. References 6 & 7 (Appendix 1) set out the various issues. This guideline is proposed as there is insufficient evidence available to give more precise guidance.
- Control can be exercised in this situation by limiting the music noise so that it is just audible outside the noise sensitive premises. When that is achieved it can be assumed that the music noise is not audible inside the noise sensitive premises.

- 3.3 The nature of music events means that these guidelines are best used in the setting of limits prior to the event (see 4.0).
- 3.4 Assessment of noise in terms of dB(A) is very convenient but it can underestimate the intrusiveness of low frequency noise. Furthermore, low frequency noise can be very noticeable indoors. Thus, even if the dB(A) guideline is being met, unreasonable disturbance may be occurring because of the low frequency noise. With certain types of events, therefore, it may be necessary to set an additional criterion in terms of low frequency noise, or apply additional control conditions.

Notes to Guideline 3.4

1. It has been found that it is the frequency imbalance which causes disturbance. Consequently there is less of a problem from the low frequency content of the music noise near to an open air venue than further away.
2. Although no precise guidance is available the following may be found helpful (Ref.8): A level up to 70 dB in either of the 63 Hz or 125 Hz octave frequency band is satisfactory; a level of 80 dB or more in either of those octave frequency bands causes significant disturbance.
- 3.5 Complaints may occur simply because people some distance from the event can hear it and that, consequently, they feel the music must be loud even though the guidelines are being met. In fact topographical and climatic conditions can be such that the MNL is lower at locations nearer to the venue.
- 3.6 Although care has been taken to make these guidelines compatible with what occurs at existing venues, this may not be the case at every location. Where arrangements are satisfactory with either higher or lower noise levels than those contained in the guidelines, these limits should continue.
- 3.7 It has been found that if there has been good public relations at the planning stage between the event organisers and those living nearby, annoyance can be kept to a minimum.
- 3.8 The music noise level should be measured using an integrating-averaging sound level meter complying with type 2 or better of BS6698. The background noise level should be measured using a sound level meter complying with type 2 or better of BS5969. Time weighting F (fast response) should be used.
- 3.9 When measuring L_{Aeq} in order to determine the music noise level, care must be taken to avoid local noise sources influencing the result. When the local noise is intermittent, a series of short term L_{Aeq} measurements should be made of the music noise while the local source is absent or has subsided to typically low or mean minimum values. An average of these short term readings will give an estimate of the music noise level. A further option would be to measure the A-weighted sound pressure level on a sound level meter complying with type 2 or better of BS5969 with the time weighting set to S (slow response) when the music is loudest and not influenced by local noise. If the local source is continuous, make a measurement of the L_{Aeq} of the local source when the music is not occurring, and make a correction to the measured L_{Aeq} when the music is occurring to obtain an estimate of the music noise level.
- 3.10 The nature of many concerts requires the sound volume level to be increased during the event to enhance the performance. The prevailing noise control restrictions should be borne in mind so that the sound volume at the start of the event is not too high, hence allowing scope for an increase during the event.

- 3.11 Some concerts are accompanied by associated activities (eg fairgrounds) which can be noisy. These should be taken into account when setting the limit for the music noise level.
 - 3.12 When monitoring the music noise level, the sound of the audience applause can be a significant contributor. It is not possible to address this issue precisely; instead it is recommended that any such effect be noted.
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