SOUND MANAGEMENT PLAN 2023-2024

DREAMLAND

MARGATE. CT9 1XJ

Document control[1]:

#	Date	By	Checked	Amendment
1	01/11/2017	Gareth Hance	Nathan Hale	Original draft
2	04/07/2022	Shane Guy	Jake Taylor	Revised to mirror current operational procedures, sources & controls
23.1	15/12/2022	Gareth Hance	Shane Guy	Licence application

Periodic review: This document shall be subject to review by the venue operator every two-years & in the event of any significant change noise sources, sensitive receptors, or operational procedures. Document valid till 2025 Q1.

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1 Summary

The intention of this plan is to identify where everyday activities may potentially cause noise disturbance to our neighbours & propose simple, effective procedures to avoid common pitfalls & minimise the likelihood of complaints.

The purpose is to discharge our statutory obligations & comply with the licence conditions, whilst delivering an excellent experience for our audience. The objective balances the social, cultural & economic benefit to the community whilst controlling potential adverse noise impact.

The operators have ambitious plans to secure the venue's future by increasing the number of events, subject to agreement. They remain committed to managing noise emissions to an acceptable level for the community.

Dreamland events, attractions & associated actives have an inherent & unavoidable noise impact on our neighbours. Being considerate & keeping noise to a minimum, the venue can thrive. However, if we permit routine disturbance, Thanet District Council (TDC) may be obligated to restrict our operations to protect residents. To protect the venue, it becomes our responsibility to be good neighbours.

This is a live document; however, the ongoing objectives are to implement:

- Robust procedures for general operations & specific procedures for special events
- A culture of considerate staff, contractors & visitors
- Periodic review every two years & when significant operations change
- Positive collaboration with TDC & the community
- An effective complaints & action procedure

Large scale events such as concerts require their own specific Sound Management Plan & consequently outside this scope. Equally, the amusement rides also require specific consideration & are outside the scope of this plan. The Noise at Work assessment is available as a standalone document.

Overview: The venue has much to offer; live events, concerts, amusement park, refreshments & private functions.

An open-air stage hosts concerts throughout the summer. A further three indoor spaces offer all season events & attractions. Live performance is the predominant primary sound source during events. Secondary sound emission includes the amusement park, background music, food & beverage operations, concessions, plant, plus & general site-wide cleansing & waste activities. See sources on page 4.

The nearest receptors are in Arlington House, All Saint's Av, Hall-by-the-Sea Rd, Belgrave Rd, Eaton Pl & Railway Terrace, see page 4 & 32.While some complaint is inevitable, the music noise impact is broadly acceptable.

A community helpline operates to help maintain good communication & relations with our neighbours. See page 9.

The premises licence[2] conditions place restrictions on the activities to mitigate public nuisance. The opening hours, operating procedures & programming complies with the general conditions. See page 17 & summary below. For ticketed events, the specific Music Noise Level (MNL) assessed 1m from any residential façade must not exceed:

Part A Indoors: LN/201600141
Mo-Su 09:00 – 02:00
09:00 – 23:00 MNL < 55dB LAeq 15' (5dB above background[3])
23:00 – 09:00 MNL < 45dB LAeq 5' (5dB below background)

Part A Outdoors: LN/201600183
Mo-Sa + Bank Holiday Su 09:00 – 23:00. Other Su 09:00 22:00
Maximum 20 music event days per year including 8 major events
Hours 09:00 – 23:00. No amplified music permitted after 23:00
Minor events: MNL < 65dB LAeq 15' (15dB above background)
Major events: MNL < 75dB LAeq 15'

To quantify emissions, sound levels are measured using a combination of static & rotational monitoring, see page 7. Where levels approach or exceed trigger values, prompt appropriate action is taken.

Conclusion: The venue has committed to the daily implementation robust management controls to ensure that good practice is maintained, thus minimising the likelihood of disturbance to the local community. It is concluded that the level of disturbance can be minimised to an acceptable level if these control measures are fully implemented.

[2] A new application was submitted in December 2022. The current PL & conditions remain valid during the application period.
[3] The background value is quantified by a baseline survey as 50dB LA90.

2 Neighbourhood

With award-winning beaches, sunny micro-climate & massive feel-good factor, Margate has experienced a recent property boom. Regeneration projects such as Dreamland & the Turner Contemporary Gallery means the area is thriving. Noise is an inherent detraction of any lively seaside town, & tolerance can deteriorate into frustration.

Considered to be the oldest-surviving amusement park in Great Britain, the site dates to the railway boom of the early 1870s when the Hall by the Sea was operated by the circus impresario 'Lord' George Sanger. More recently described as the heartbeat of Margate, Dreamland has been brought back to life in 2015 achieving the truly remarkable for the local community & generations of visitors to come. Today, Dreamland is part of the established soundscape.

Figure 1 - aerial

The site is in an urban beachfront location adjacent to Marine Terrace (A28), bordered by a mixture of residential & commercial properties. The immediate terrain is moderately flat, without advantage of natural barrier. Road Traffic Noise is significant, generally above 50dB $L_{Aeq\ 8hr}$, see page 18.

Nearest noise sensitive dwellings (aka receptors) lie directly to the north on the opposite side of the seafront road. Receptors include, but not limited to the following:

- Arlington House, All Saints Av
- Hall by the Sea Rd, south façade
- Belgrave Rd, west façade
- Eaton Pl, Stratford House
- Grosvenor Rd, elevated dwellings over-looking the site
- All Saints Av, #157 – 169, new development facing the scenic stage
- Railway Terr, south-east of railway embankment, facing the scenic stage

North: Hall-By-The-Sea Rd & Marine Parade with dwellings above the commercial leisure, retail & hospitality premises. Notably Arlington House, a large tower-block directly overlooking Hall-By-The-Sea & the park. A single occupant on east side of the building is responsible for most complaints. HBTS & Scenic stage sound levels must be carefully regulated to minimise complaint.

East: Belgrave Rd & car park. The terrain elevates approximately 20m further east. Upper floors of dwellings on Grosvenor Pl & the High St have direct line-of-sight. Break-out of HBTS & Scenic Stage occurs with a SW wind.

South: Stratford & Weymouth Hs on Eaton Place on the perimeter fence is home to relatively socially active residents. Community music, entertainment & performance vehicles, contribute to the soundscape. Complaint is unusual.

West: A railway embankment provides some protection to the south-west. Upper floors on Railway Terr have direct line-of-sight with Scenic Stage. Minimising disturbance & compliance at this location is challenging.

3 Venue

Sound Sources is the collective term for regulated entertainment, operations & associated sound emission sources. Considerate initial planning helps to control at source as outlined in Section 7. Dreamland has numerous sound sources. These sources fall into primary & secondary contributions categories. See map on page 32.

Primary Sound Sources

- Scenic Stage
- Hall by the Sea
- Ballroom
- Roller Rink

Secondary Sound Sources

- Amusement Park
- Background Music
- Ingress / egress
- Road Traffic Noise
- Loading / waste / general services
- Plant equipment
- Bars & concessions

Figure 2 - Sources

3.1 Primary sources

Source		Aim	System	Times	PAX	Notes	FOH dBC	dBA
S1	Scenic Stage	W	Medium line array	< 23:00	6500	Outdoor stage. On-axis with Railway Terr 150m west	106	94
S2	Hall By The Sea	N	Medium line array	< 02:00	1100	Primary indoor space. Break-out at Arlington Hs 70m west	108	96
S3	Ballroom	N	Compact line array	< 02:00	500	Mixed activity. Virtually no breakout/adverse impact	108	96
S4	Roller Rink	S	Point source	< 02:00	500	Mixed activity. Venue prone to breakout & suitable for lower	106	94

Table 1 - Primary sources

Music Noise Impact

From experience, the FOH levels shown in Table 1 - Primary sources corresponds to an acceptable Music Noise Level (MNL) at the immediate receptors outlined in section 2 on page 4 with a reasonable margin for uncertainty. Weather has a significant influence on the working sound level limit at the stage FOH of ± 3dB.

Scenic Stage: The nearest receptor is Railway Terrace, approximately 160m from the stage with distance attenuation of 45dB (aka geometric). The embankment & VIP sheds provide a further 10dB of attenuation. The maximum level 1m from the PA is therefore ≈120dBA for a corresponding acceptable level of 65dBA at Railway Terrace. The operational FOH level is circa 106dB LCeq 15' / 94dB LAeq 15'.

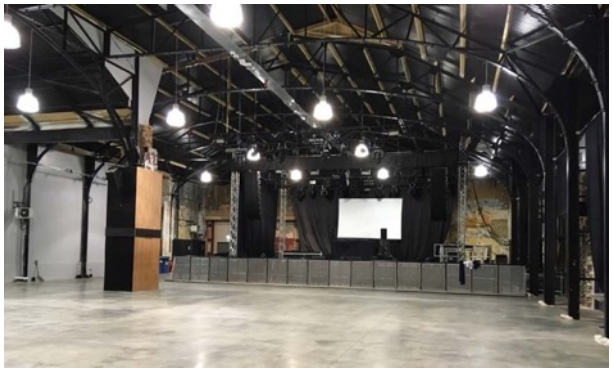
HBTS: The nearest receptor is Arlington House, approximately 70m from the area source roof. An internal level of ≈ 96dBA corresponds to 45dBA at Arlington Hs. i.e., -21dB area source geometric attenuation & 30dB roof barrier. The operational FOH level is circa 108dB LCeq 15' / 96dB LAeq 15'. Other indoor stages have minimal emissions impact.

A SoundPlan acoustic model is shown on page 19. The prediction represents the known in-situ arrangements as far as practicable. Further modelling & assessment is required to ameliorate sound levels for the audience & community.

Stages

Scenic stage:

The stage comprises a d&b V-series compact format line array for live & recorded music. The PA is configured to deliver sound to the banked seating, approximately 30m sq. The stage faces All Saints Av & Railway Terrace; however, the PA directivity & embankment minimises breakout. Weather & music profile influences the working FOH limit significantly. The system comprises automatic limiters & operated under the control of a competent engineer



Hall by the Sea:

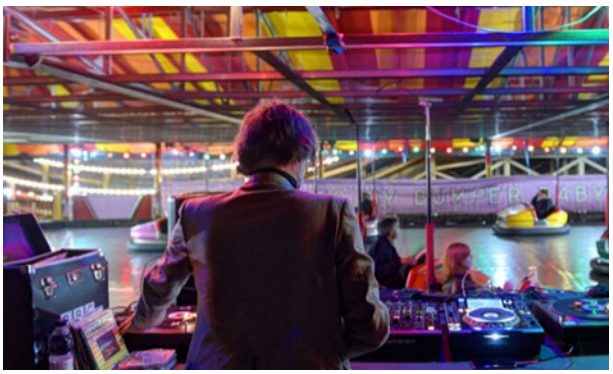
Comprises a d&b Y series line array for live & recorded music. The array optimises acoustic energy in the auditorium & off the walls & ceiling. The sub-bass is arrayed, reducing low-frequency breakout. The system comprises automatic limiters & operated under the control of a competent engineer. The construction offers a marginal degree of insulation. To minimise break-out the stage-dock door & large south doors should remain closed with the stage live. Structure-borne transmission is problematic around 40-60Hz.

Ball Room:

This is a multi-purpose space. The internal sound levels are self-regulating. Above 98dBA the aural experience is uncomfortable. Sound & vibration insulation properties are excellent; however, it is critical that internal doors are closed when the nearby external doors are open.

Roller Disco:

The flexible space will involve different setups depending on the event. Events are not routinely programmed in this space. When events occur, they may require a temporary stage, with ground stacked speakers are arrayed to optimise acoustic energy in the auditorium. Off-setting the stage at an angle improves the challenging acoustics & mitigates breakout. E.g., set into the north-east corner facing the WC's. It is critical that the doors at the east end of the room are kept closed. Whenever practicable, it is helpful to keep the park entrance doors at the south-west corner of the room closed. Structure-borne noise is particularly problematic below 120Hz.



Amusement Park

An installed background music system is set at a level that does not disturb residents. Temporary event PA systems shall be located & operated such that it does not cause disturbance or exceed the agreed limits.

3.2 Secondary sources

Vehicles

There are two public car parks. A two-storey car park adjacent west shared with Arlington House off All Saints Rd. On the east-side lies a large open-air park off Belgrave Rd, leading to with the amusement park main gates. Highway access is self-regulating & traffic noise part of the inherent seafront soundscape.

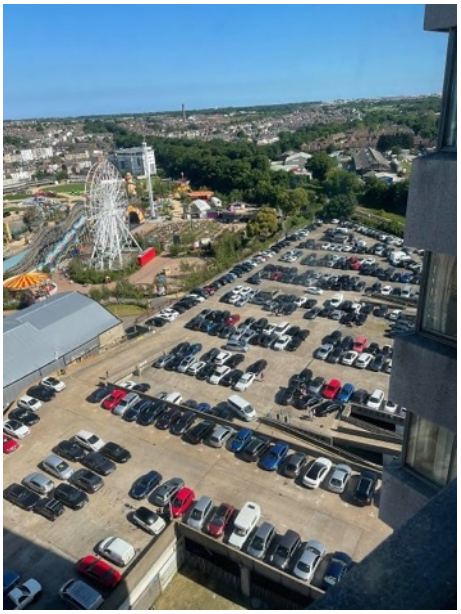


Figure 3 – Car Park

Pedestrians

The amusement park main entrance is inside Belgrave Rd car park, approximately 80m south of Hall by the Sea Rd & 130 west of Belgrave Rd. A second entrance in Arlington Car Park opens on demand (Gate F). The main pedestrian entrance on Hall by the Sea lies directly opposite the Dreamland owned Cinque Ports bar. Venue & security staff are located at these gates while in operation.

Service areas

A service compound for stores & waste is located at the north perimeter directly opposite the Cinque Ports. The stage door/loading dock for Hall by the Sea is accessible via Arlington Hs car park.

Plant

Heating & ventilation units are adequately baffled, with design criterion of 5dB below background at the nearest dwelling. They are in clusters at the following locations:

- Between HBTS & Ballroom
- Service yard off Hall by the Sea Rd
- Roller Rink kitchen
- Resort Studio (Scenic Railway)
- Scenic stage bar
- VIP bar

Figure 4 - HVAC

3.3 Baseline

A baseline survey was conducted in February 2015 while the park was closed & the town in low-season.

50dB LA90 $_{1hr}$. ±5dB is representative of the background value at the nearest dwelling, Arlington Hs

The operational Music Noise Level (MNL) limit is consequently:

- Indoors: Before 23:00 = 55dB LAeq 15' (5dB above background) / After 23:00 = 45dB LAeq 15' (5db below background)
- Outdoors: Minor events = 65dB LAeq 15' (15dB above background) / After 23:00 = No outdoor music permitted

Pop code methodology was adopted. The background value is the arithmetic average of the LA90 $_{1hr}$ between 19:00 – 23:00[4] each day over one week. Data was excluded where influenced by heavy rain or wind speeds above 5m/s.

Since the survey the background LA90 has been routinely measured at Arlington Hs prior to outdoor concerts. These short measurements positively support the 2015 survey with representative values of 50dB LA90 at Arlington Hs.

Sound levels will vary throughout the year. Data gathered over a relatively short period may be different to annual averages. Data presented in "A Good Practice Guide on the Sources and Magnitude of Uncertainty Arising in the Practical Measurement of Environmental Noise"[5] shows that there is a 50% probability that sound levels measured over 7 continuous days is within 1 dB of the annual level & the 90% range is 6 dB i.e., ± 5dB uncertainty is accepted

Margate is a seasonal resort & Dreamland is part of the soundscape as Britain's oldest working Amusement Park. Consequently, it is proposed a background survey shall be commissioned in the summer for review purposes.

[4] Advised that any proposed music event will end at 23:00 hours.
[5] N J Craven, G Kerry, A Good Practice Guide on the Sources and Magnitude of Uncertainty Arising in the Practical Measurement of Environmental Noise, 2007, University of Salford.

4 Monitoring

4.1 Plan

Monitoring shall be undertaken for compliance with expected standards & minimise the likelihood of complaint.

A nominated Noise Representative shall implement in-house procedures.

Fixed environmental meters shall be located as shown on page 18.

A combination of continuous Front-of-House (FoH) level monitoring with fixed perimeter sound meters & validatory attended measurements shall maintain acceptable levels as best practicable.

The maximum sound level at source will be set during commissioning & adhered during sound checks & live event days.

Monitoring

- Overseen by competent person
- Robust procedure in place
- Calibrated instrumentation
- Continuous cover during live event
- On & off-site measurements logged
- Confirmatory attended assessment
- Attend premises as required
- Act promptly if levels are excessive

The FOH sound engineer shall use a sound meter at the control position for guidance. The system engineer shall use FOH & fixed perimeter meters in combination to assess likelihood of compliance & disturbance. If the fixed meters indicate excessive levels, the engineer shall take prompt action, e.g., reduce music level.

To mitigate uncertainty, a Noise Representative shall undertake attended measurement if the fixed meter value is within 3dB of the limit &/or a complaint is received. The measurement positions depend on the activities occurring at the venue but shall include the most impacted receptor. The full procedure is detailed on page 29 & 30.

Validation

For periodic review of the routine monitoring strategy, a validation procedure is required by a competent acoustic consultant. The following checks should be performed when the PA system is commissioned & repeated annually within 28-days of opening for the season or in the event of significant changes.

While the stage or source under investigation operates with representative content & level, the measured sound at the following monitoring locations shall be calculated back to the façade of the offsite receptors.

- R1 Arlington Hs
- R2 Hall by the Sea Rd
- R5 Belgrave Rd
- R7 Railway Terr

If the calculated façade level exceeds the agreed offsite limit level, the sound at source shall be reduced until the calculated level is within the offsite limit with a reasonable margin for error, nominally 3dBA. The level at source will be recorded & set as an upper operational limit. Further confirmatory assessment shall be carried out at the most impacted receptor locations to assess likelihood of disturbance.

Where the residual sound is significant, quantified as less than 5dB below the Music Noise Level, the façade level at offsite receptors shall be calculated from the monitoring locations above.

Instrumentation

The following SLM deployment scheme is proposed & subject to dynamic assessment on-site:

Class 1: Atteneded	Class 1: Unattended	Class 2: Attended	Class 2: Unattended
Acoustic Consultants	Fixed meters	Noise Representatives	Stage FOH

Table 2- SLM deployment

4.2 Reporting

The acoustic consultant shall document the findings of the commissioning phase & subsequent controls. The venue operator shall implement the agreed SMP & operational procedures for the duration of the tenancy as far as can be practically determined. Any significant or repetitive variation shall be reported to the venue management team within 28-days for consideration & procedural refinement if necessary.

During events a show report shall be produced with typical operating levels, any notable exceptions, actions taken & any complaints. The log containing measurements, actions, complaints & conclusions will be available within 14-days of request by stakeholders & authorities.

5 Community

Effort shall be made to facilitate good relations through positive community engagement.

In the event of a complaint, the venue operator shall take all practicable steps to engage with the resident or business, minimise disruption to an acceptable level with the aim of achieving conciliation & implementation of practical solutions to minimise the likelihood of repeat complaint. See Figure 7 – Complaint procedure on page 24.

Steps may include, but not limited to direct contact details for the Noise Representative or Duty Manager, implementing specific procedural changes that eliminate or minimise the source of disruption &/or additional logging equipment to quantify sound levels as best practicable.

5.1 Engagement

The venue operator shall undertake steps to inform & engage the community in advance via traditional, online & social media communication. Details shall include an overview, timings & contacts.

5.2 Helpline

The venue operator shall implement a dedicated helpline which will be monitored by Control.

The procedure is outlined in Figure 7 on page 24. From experience, the monitoring & control procedure minimises the likelihood of complaint.

Adequate staff & training shall be in place to ensure complaints are handled efficiently. A telephone number, instant messaging service & where practicable an email address, will be published to the residents & responsible authorities in advance to ensure every effort is made to facilitate good relations.

In the event of a complaint, Control shall share the details with the Duty Manager & Noise Representative to facilitate prompt noise source identification & amelioration.

The Duty Manager shall communicate with the Noise Representative by instant text messaging as the primary mechanism to facilitate an adequate response. Alternatively, a mobile phone or 2-way radio where practical.

The Noise Representative shall take proactive steps to engage with the resident, minimise disruption & implement measures to minimise the likelihood of repetition. See procedure page 24. Where requested the Noise Representative will visit a premises where practicable & safe to do so.

Where the disturbance is likely to be community noise, unrelated to Dreamland, the Noise Representative should log the observation & feedback the findings to the resident.

The helpline shall adopt a General Data Protection Regulation (GDPR) complaint procedure. The complaints log will be shared on demand with responsible authorities subject to GDPR compliance within 14-days of request.

6 Control

6.1 Organisation

The venue operator shall engage with the responsible authorities & local community. Factors such as programming, locations, timings & procedures shall be carefully considered as follows:

Organisational control

The operators acknowledge the importance of good noise control. A noise representative will be appointed to implement this plan with the full support of the management team. The duty manager will have absolute authority over any on-site activity.

Pre-Event Information

Events shall be advertised in advance. Specific details of helpline contacts shall be sent directly to the management offices of Arlington House. The details shall also be made available to the local community via a public website. The particulars shall be shared with responsible authorities in advance. Visiting sound contractors & artist management shall be made aware of the requirements of strict noise control prior to arrival.

Helpline

A dedicated helpline shall be made available for the duration of the events. See page 9.

Site layout

In general terms, the site layout minimises break-out by facing away from nearest noise sensitive receptors. Three of the four stages are located inside substantial buildings of brick &/or masonry construction. The outdoor stage benefits from the railway embankment providing attenuation. See tables in Sources on page 5.The potential for the off-axis bass-spill has been considered. The stages have good physical separation & consequently, the likelihood of a sound-clash between stages is minimised. Unexpected adverse effects of acoustic reflection, scattering, refraction, diffraction, resonance & reverberation are problematic to predict in a large area with a complex mix of temporary sources, temporary structures & variable metrological conditions. However, noise monitoring should identify such issues & mitigating action shall be taken where practicable.

Operating Hours

Use of the P.A. including system set up, soundcheck & performance will be strictly limited; the times agreed with the responsible authorities & no earlier than 09:00 or later than the licenced hours without exception. Secondary contributions such as site services, traffic & construction will be managed as outlined in the event plans with consideration to hours, regularity & location. The staggered start & close of activity times will promote a managed increase & decrease in levels over the duration of each day.

Content

The varied entertainment content & inherent break during activity changeovers will help mitigate against long-periods of the bass beat. The music has mainstream appeal & unlikely to aggravate potential disturbance compared to say an EDM programme. To minimise likelihood of complaint, the programming between Sunday – Wednesday tends to be more laid back & of lower intensity with the weekends featuring a more upbeat mix.

Prediction

To help establish compliance & mitigate the potential impact for disturbance a music noise prediction shall be undertaken using a recognised methodology; SoundPlan software modelling with ISO 9613 – Part 2 Attenuation of Sound During Propagation Outdoors calculations. During system commissioning the levels will be measured to determine correlation more precisely.

Strategy

This plan adopts SMARTER methodology to deliver effective results: Specific, Measurable, Achievable, Relevant, Timely, Evaluated, Reviewed

The statutory criterion for noise preludial to health or nuisance (e.g., EPA90) have been considered:

Frequency	Adverse cumulative impact is unlikely given the short tenancy & the venue's concert frequency
Duration	The majority of the entertainment is background music, with high energy content of shorter duration
Timing	All amplified operates with appropriate sound levels for the day & time
Intensity	A wide dynamic range is typical of the diverse music profile where extended periods of high-intensity music is unlikely. The controls shall be in place to minimise environmental noise impact to an acceptable level. Appropriate programming & breaks help to regulate Temporary Threshold Shift.

6.2 Sound systems

The consultant shall liaise with the sound contractor & technical production in advance regarding system design, noise limits & propagation.

Systems

- Good layout & specification
- Advance information before arrival
- Under the control of an engineer
- Maintain appropriate levels
- Local monitoring
- Strict time keeping

Planning

In general terms, the site layout draws on the experience of the previous season & prediction calculations. See tables in Sources on page 5 & site layout organisation on page 10. The programming & timings further minimise the opportunity for excessive sound levels. The robust noise monitoring procedure adequately identifies unexpected issues.

Before arrival, the organisers shall inform artists, sound engineers & contractors of the strict noise control requirements.

The primary stages (Scenic Stage & Hall by the Sea) shall have a Sound Level Meter at the control position. Systems will be always under the supervision of a competent person. System controllers may be fitted with limiters that may further help control levels. Site levels will always reflect the audience size & dynamics. Audience capacities tend to be lower earlier in the day & transient throughout.

The operator shall prohibit portable music equipment that is not part of the licensed entertainment or for the sole purpose of background music at an authorised trader's concession area.

There will be no amplified sound outside the licensed hours of operation without exception.

Sound check

Live sound checks[6] are infrequent. When essential these activities shall be scheduled no earlier than 9am on any day.

Bass

Special consideration will be awarded to the bass frequencies (aka Low Frequency.) octaves centred on 63Hz & 125Hz. The system controllers may be used to 'notch' out specific frequencies as required. Directional sub-array may be deployed to attenuate off-axis radiation by up to -18dB[7]. The FOH meters display LC, ensuring Low-Frequency (LF) emissions influence the measured value. The LC value will always exceed any octave band value.

Propagation

No later than 1 hour before doors on the first day of season opening during sound checks, simultaneous measurements will be taken from the control position (aka Front-of-House) & the specified monitoring locations are shown in the appendix. If the noise measured exceeds the acceptable levels at the nearest Noise Sensitive Premises (NSP), the engineer will be requested to lower the volume until it complies with the conditions. The level measured at the FOH will be recorded and set the upper limit for the system. This upper level may be reduced to allow for the cumulative level. This is a dynamic assessment & the FOH levels may be adjusted throughout the event as required. e.g., the adverse effects of temperature inversion at night giving rise to sound travelling further than expected.

Technical rider

Any third party such as a touring artist either bringing or requesting additional equipment shall be assessed by the technical/production manager to consider the acceptability of proposed equipment & reject if there is a likelihood of adverse impact to offsite levels.

Any such equipment such as backline amplifiers or additional P.A. speakers would be regarded in the context of this document & members of the technical team would:

- Prevent the use of any equipment that appeared inappropriate or significantly out of line with this plan
- Avoid any external sound engineer operating a sound level beyond that agreed & likely to cause a disturbance offsite

[6] Excluding in-ear monitoring or similar low-level line checks where the activity is inaudible at the licence perimeter.
[7] SSE / Vanguardia Hatfield test of L'Acoustics K1 & Martin MLA line array

6.3 Build & Break

During Build & Break periods, some construction noise is to be expected. This noise source shall be minimised and confined to the General hours between 07:00 – 20:00 whenever possible. NB. Noisy activities of observable significance shall not be undertaken before 08:00. Any activity that is likely to be intrusive & discernible offsite will be scheduled during social hours.

Construction

- Overseen by management
- Observe BS5228 recommendations
- General hours 07:00 – 20:00
- NB. No noisy work before 08:00
- Overnight work inaudible inside

Best practicable means will be employed to keep the build & strike noise as low as reasonably possible. Measures to be considered will be consistent with the recommendations of BS5228 & all activities will be carried out with due care to minimise potential disturbance, e.g.:

- Overnight break activities shall not exceed a No Observable Adverse Effect Level (NOAEL). i.e., inaudible inside dwellings
- Careful selection of plant and construction methods
- Use of site enclosures, where practicable & necessary, to provide acoustic screening at the earliest opportunity
- Choice of transport routes & scheduling shall minimise public disruption

Immediately after the live events, some technical equipment is dismantled & loaded into vehicles. Planned activities will avoid noise impact where possible, which is supervised by the production or site manager. The activities undertaken include lowering equipment from flown positions & repacking into transit cases. Significant effects such as noisy metal on metal operations is restricted to general hours between 08:00 – 20:00. Extensive dismantling work commences the following morning, including dismantling stages & similar temporary structures.

Practical steps to reduce the construction & dismantling noise disturbance will include the following where practicable:

- Louder activities such as metal on metal operations shall be restricted to the hours between 08:00 – 20:00
- Minimise impact noise: metal on metal operations. Refrain from dropping heavy or metal items, e.g., tubes & decks
- Temporary use of damping/packing materials when lowering equipment or loading vehicles
- Avoid unnecessary noise: Keep conversations to a minimum. Use 2-way radio & refrain from shouting
- Where practical, reduce idling & switch off ignition. Specify vehicles with pink noise reversing alarm where possible.
- Efficient handling: Optimise the handling operation & time taken to complete the task safely. Use bulk transit cases to minimise handling operations. Locate vehicles as near as possible

6.4 Plant

Network power operates continuously, & used for stages, premises, security, CCTV & lighting public & work area's over-night. Generators are not required.

Mobile plant equipment such as telehandlers is used extensively throughout the building & break. Static plant such as refrigeration may operate continuously & of No Observable Adverse Impact Level (NOAEL).

On-site equipment will be subject to a simple procurement process managed by the site management. Only plant conforming to relevant standards & recommendations on noise will be used. Consideration will be given to the location & operating hours of the plant equipment.

Plant

- Overseen by management
- Consider proximity to NSR
- Observe BS5228 recommendations
- Use maintained / silenced equipment
- Minimise operating times
- Follow manufacturers procedures

Compressors & fans shall be sound reduced models fitted with properly lined and sealed acoustic covers which shall be kept closed whenever in use. Any pneumatic percussive tools shall be equipped with mufflers or silencers of the type recommended by the manufacturers. Plant will be switched off overnight where practicable & any essential plant equipment operating during unsocial hours will be located to be inaudible inside dwellings with windows open for ventilation.

6.5 Vehicles

The site is predominantly pedestrian access during the live phase. Any live traffic is restricted to loading & service. Any on-site vehicular traffic, including exits onto the public highways will be controlled as per the Traffic Management Plan. This plan will specify the types & numbers of vehicles allowed into the site, time of access & agreed routes. Access is primarily via the existing car parks, minimising impact on the nearest dwellings. The trend towards vehicles fitted with stop/start technology, hybrid-electric engines, HGV/Plant vehicles being fitted with directional pink noise reversing alarms further help mitigate traffic-related noise.

Unloading / loading

Location of loading & unloading operations shall consider proximity to residential dwellings where practicable. Low impact routine activities such as toilet cleaning, consumable restocking & portable items of equipment such as backline & instruments are unlikely to cause disturbance. Heavy items such as production deliveries will be carried out as per the production schedule & have been planned to avoid the likelihood of complaint. All loading operations & associated traffic such as forklifts will be carried out with due care to minimise potential disturbance between the hours of 23:00 & 07:00. Also, see Build & Break on page 12.

6.6 Bars & vendors

The duty manager shall keep music within agreed limits & operating hours. Deliveries & waste collections/bottling out will be confined to the back-of-house areas shown on the site plan & carried out as per the operations schedule. External chillers will be suitably located & maintained to ensure operation does not cause noise disturbance, especially over-night. Bottling out at anti-social hours is prohibited. Where indoor waste build-up causes a hazard, this should be bagged & carefully lowered into outdoor bins to minimise impact noise.

6.7 Noise at Work

The Control of Noise at Work Regulations 2005 (the Noise Regulations) intends to prevent or reduce risks to health and safety from exposure to noise at work, so far as is reasonably practicable. A NAW assessment is outside the scope of this document. In summary high noise levels over long periods are essential elements of a music event. While everyone in the operational chain has a role to play in managing the noise risks, the primary responsibility rests with the employer. Multiple contractors, self-employed visiting performers & sound engineers is a complex environment. Merely relying on an overall 'employer' is problematic to determine in this context. In general, everyone employed at a music event is exposed to the levels above the upper exposure action level.

Consequently, everyone working at the event, be they bar staff, security camera operator or monitor engineer needs to take personal responsibility to think about their own noise exposure and take reasonable care not to damage their own hearing health or that of other people.

- The people who most readily control sound levels, such as sound engineers or bar manager, should recognise their responsibility for providing a safe workplace
- All individuals working on-site should acquire & use appropriate hearing protection (earplugs etc.)
- Managers should schedule shifts, so individuals are not exposed to prolonged periods of working in high-volume areas
- Staff should rotate between quieter areas during each shift whenever practicable
- Find a quiet space to take breaks

6.8 Public

There is no precedent and no locus of law for controlling human activity or crowd noise. However, the gradual build-up, peak & slow-down nature will help to identify environmental noise hotspots, test propagation characteristics and the practicability of managing crowd to minimise disturbance. There are no overnight activities.

All reasonable steps will be taken to ensure that customers leave and disperse from the event without causing public nuisance or disorder; Door staff & notices at exits will remind customers to leave quietly so as not to disturb residents. A customer behaviour policy will be implemented by the management team. Anti-social behaviour is unlikely given the public demographic & negligible from experience, however rowdy, anti-social or disorderly conduct will not be tolerated & proportionate action taken by security staff. Groups loitering outside may be asked to move on by security staff if creating an undue disturbance.

Unlike workers, there is no specific legislation setting noise limits for the audience exposure to noise. However, the guidance strongly recommends that the sound pressure level should not exceed 140 dB L.C. peak & 107 dB LAeq over the duration of the event (LAeq Event). Compliance with the LAeq Event guideline is likely given an operational 88-98dBA limit on each FoH, dynamic nature of the music programming, quieter periods during changeovers & likelihood of members of the public moving between stages at regular intervals. In general, compliance with LC peak is likely given the pit barrier providing separation between loudspeaker and audience. Where practicable, the audience will not be permitted within 3m of a loudspeaker & no less than 1m under any circumstance. Warnings are typically published in the Terms & Conditions; e.g. "Warning: - Warning: exposure to loud and excessive music may be damaging to your hearing" or similar.

7 Conclusion

This document has shown that the venue operator shall implement robust management controls to ensure that good practice is maintained throughout the event, thus minimising the likelihood of disturbance to the local community. It is concluded that the level of disturbance can be minimised to an acceptable level on the basis that noise control measures are implemented with Best Practical Means. These measures include:

- Collaborate with the responsible authorities to uphold the planning & licensing objectives
- Safe & managed operating levels for public, staff & performers as best practicable
- The provision of a helpline & advance information, engaging in a positive working relationship with the community
- Careful site layout keeping the highest noise sources furthest away. Appropriate design & orientation of the PA
- Pre-event inspection of the sound systems in use & sound propagation tests to help set initial levels
- Appropriate monitoring & control throughout the event P.A. systems under the control of responsible persons throughout

8 Appendix

A. Terminology

Not all Sound is Noise. Noise is defined as unwanted sound, typically loud, annoying, or disturbing neighbours. Noise is subjective & requires an observer. Often music noise is particularly disturbing as bass and repetitive beats will disrupt local homes and businesses. Consequently, the character and tone of the noise may be of more considerable significance than the relative loudness. Most of the jargon used relates to **Decibels (dB)** and the different methods sound level is assessed. NB. A decibel (dB) is a relative value & must have context to convey meaning. E.g., dB $L_{Ceq\ 15'}$.

- A decibel (dB) compares the ratio of two values such as measured sound pressure relative to a reference level
- A sound pressure change of 3dB is typically considered a "just noticeable" difference in perceived sound level
- An increase or decrease of 10dB is perceived as a doubling or halving of the sound level
- A typical conversation is around 60dBA, a moderately busy bar around 80dBA and 100dBA for a concert or club

The ear is naturally less sensitive to low bass and high treble sounds compared to mid-range. To approximate how the ear responds, sound levels are often measured with adjustments or 'weightings' to represent the human ear. A-weighting is the most common adjustment when measuring environmental noise. To mimic the human perception of sound at lower volumes, A-weighting reduces the level of bass measured. Consequently, it is common for sound levels to be expressed as dBA. i.e., dB with A-weighting adjustment. Other weightings include C-weighting used to approximate how the ear responds in a loud environment like a concert. An LCeq criterion is more effective at controlling Low-Frequency Noise (LFN) compared to A-weighted plus the octave bands centred on 63Hz & 125Hz. Notably a C-weighted value will always exceed a single octave band value. Z-weighting, which means unweighted or linear response where no adjustment is applied.

Entertainment sound levels typically fluctuate over time. A **Sound Level Meter (SLM)** will measure over time and calculate the **Equivalent Level (Leq)**, an overall level like an average, representing the sound level while moderating transitory noises such as a door slamming or passing vehicle. The Leq measurement may also be frequency weighted & expressed as $L_{Zeq\ T'}$, where T is the minutes. E.g., $L_{Aeq\ 15'}$ is the A-weighted 15 minute average. These noise limits aim to protect neighbours from disturbance, so noise limits often refer to a sound level measured 1m from the façade of a neighbour's property. E.g., the MNL should not exceed 65dB $L_{Aeq\ 15'}$ at 1m from the receptor façade.

MNL is the specific noise level of the music from the venue, excluding the residual noise which is the combination of routine noises in the environment such as traffic but excluding any specific noise from an event or venue. The true MNL must be calculated as the measured level less the residual. In practice, this is difficult as it is unlikely to turn the event music on & off to compare the relative residual levels only with combined residual and music noise.

Consequently, it is necessary to take measurements when the music is inaudible to determine a representative residual level. The residual level is logarithmically subtracted from the measured level to determine the music level. Decibels are logarithmic so they cannot be subtracted as you would two normal numbers.

Background levels have a specific meaning describing a statistical assessment of the level that was exceeded for 90% of the time & expressed as L_{90}. The L_{90} approximates the background or ambient sound level when 90% of the loudest sounds are omitted. Licence conditions are often derived from the Pop code which defines the background as the L_{A90} over the last 4 hours of a proposed event or the entire event if shorter.

A reasonable rule of thumb is the background L_{A90} will be 5 – 10dB lower than the residual L_{Aeq} during the day. The difference will be 3 – 5 dB or less at night-time when there is less general activity.

B. Guidelines

The relevant legislation & guidelines includes, but not limited to:

- Licensing Act 2003 & Premises License conditions
- Environmental Protection Act 1990 & Noise Act 1996
- WHO Guidelines for Community Noise
- Noise Policy Statement for England (NPSE)
- Noise Council Code of Practice on environmental noise at concerts
- Sound advice: Control of noise at work in music and entertainment. HSG 260
- Control of Noise from Pubs & Clubs. IOA (2003) & DEFRA Report NANR292 – Noise from Pubs & Clubs
- BS 7445-1:2003: Description and measurement of environmental noise
- BS 4142:2014+A1:2019 Methods of rating assessing industrial & commercial sound
- BS 8233:2014 Guidance on sound insulation and noise reduction for buildings
- BS 5228:2009+A2014 Code of practice for noise & vibration on construction & open sites

Licensing Act 2003

The act establishes a single integrated scheme for licensing premises to provide regulated entertainment (e.g., live & recorded music), alcohol & late-night refreshment. **Closure powers:** Section 161 in combination with the Anti-Social Behaviour Act 2003 Sections 40 & 41, officers may close licensed premises for up to 24 hours on the grounds of public nuisance caused by noise. The Police & Local Authority have the power to seek a review of a licence, along with the possibility of a revocation of a licence. If licensed premises stay open during a 24-hour closure period, there is maximum penalty upon summary conviction of a three-month prison sentence, a fine of £20,000, or both.

Environmental Protection Act 1990

The EPA90 provides powers for a Local Authority to serve a Noise Abatement Notice under section 80 to prevent unnecessary or objectionable noise emissions. Statutory nuisance is defined in Section 79 of the EPA.

Clean Neighbourhoods & Environment Act 2005

The guidance extends the Noise Act 1996 and supplements the Environmental Protection Act 1990 & the Noise and Statutory Nuisance Act 1993 on statutory nuisance. In practice, upon receiving a complaint, a local authority may investigate the complaint and may because of the complaint issue a warning notice. A warning notice may be served on the venue if the local authority is satisfied that the noise measured from the complainant's dwelling exceeds license conditions permitted levels. It is possible that noise not exceeding this limit may nevertheless be a statutory nuisance. Failure to comply with the notice may result in an offence being committed. Instead of bringing a prosecution against someone who has failed to comply with a warning notice, a local authority may issue a fixed penalty notice. A fixed penalty notice provides a person with the opportunity to discharge liability to conviction by payment of the prescribed amount within 14 days. Payment within this time will avoid court proceedings. The fixed penalty for night noise from licensed premises is set at £500.

Good Practice Guide for Control of Noise from Pubs & Clubs

The guide published by The Institute of Acoustics in March 2003 provides guidance for the assessment & control of pub & club noise effecting noise sensitive premises. The main sources are PA systems, music, games, children's play areas, outside spaces, patrons' behaviour, vehicles, plant, machinery & activities such as waste & deliveries. The original intention was to provide objective noise criteria; however, it was not possible to satisfactorily validate the proposals & recommends that local policies are devised using the guide, licensing & planning policies. The guide recommends:

- For premises where entertainment takes place on a regular basis, music & associated sources should not be audible inside noise sensitive premises at any time.
- For premises where entertainment takes place less frequently, music & associated sources should not be audible inside noise-sensitive properties between 23:00 – 07:00. For other times, appropriate criteria need be developed which balance the rights of those seeking & providing entertainment, with those who may be disturbed by noise.
- In absence of objective criteria, what is 'regular' should be determined on a local basis to reflect the local expectation. The guide suggests that noise may be considered as inaudible when at a low enough level that it is not recognisable as emanating from the source in question and does not alter the perception of the ambient noise environment.

Noise Policy Statement for England (NPSE)

The Noise Policy Statement for England was published by Defra in 2010. It sets out the long-term vision of government noise policy, to promote good health and a good quality of life through the management of noise. The NPSE seeks, where possible, positively to improve health and quality of life through the pro-active management of noise while also considering the guiding principles of sustainable development. The first aim of the NPSE is to avoid significant adverse impacts on health and quality of life from environmental and neighbourhood noise within the context of Government policy on sustainable development. The second aim is to mitigate adverse impact. The third aim is to contribute to the improvement of health and quality of life through the effective management and control of environmental, neighbour and neighbourhood noise. There are three action levels applied to noise impacts:

- NOEL: No Observed Effect Level This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise (WHO indicates a level of 30dBA inside dwellings).
- LOAEL: Lowest Observed Adverse Effect Level This is the level above which adverse effects on health and quality of life can be detected (WHO indicates a level of 40dBA inside dwellings).
- SOAEL: Significant Observed Adverse Effect Level This is the level above which significant adverse effects on health and quality of life occur.

World Health Organisation (WHO) Guidelines for Community Noise 1999

These guidelines aim to consolidate knowledge on the health impacts of community noise and to provide guidance to environmental health authorities and professionals trying to protect people from the harmful effects of noise in non-industrial environments. The guideline values for community noise in relevant environments are as follows:

- Indoor dwelling: 35dB $L_{Aeq\ 16HRS}$ (07:00 - 23:00)
- Inside bedrooms: 30dB $L_{Aeq\ 8HRS}$ (23:00 - 07:00)

Code of Practice on Environmental Noise Control at Concerts[8]

The Code of Practice on Environmental Noise Control at concerts (1995) also known as the Pop Code provides guidelines for managing music noise disturbance. The Music Noise Level (MNL) must not exceed the guidelines shown below at 1 metre from the façade of any noise-sensitive premises between 09:00 and 23:00. For events running between 23:00 and 09:00, music should not be audible inside noise-sensitive premises with the window open. The code accepts there is no universally accepted guideline for inaudibility but assumes that music just audible outside[9] the noise-sensitive premises is not audible inside.

Concert days per calendar year	Venue Category	Guideline
1-3	Urban Stadia or Arenas	The MNL should not exceed 75dB LAeq 15'
1-3	Other Urban & Rural Venues	The MNL should not exceed 65dB LAeq 15'
4-12	All Venues	The MNL should not exceed the background noise level by more than 15dB
Up to 30	Indoors	The MNL should not exceed the residual level by more than 5dB

Table 3 – Pop Code

The code states: For venues with more than three events per calendar year, the frequency & scheduling of the events will affect the level of disturbance. Additional disturbance can arise if events occur on more than three consecutive days without reducing the permitted MNL. The code states that where arrangements are satisfactory with higher or lower noise levels than the proposed guidelines, these limits should continue.

The code recognises that the MNL in an audience close to the mixer position is typically 100dBA & anything below 95dBA would prove unsatisfactory to an audience. The Pop includes a footnote regarding bass; 'Although no precise guidance is available the following may be found helpful (ref 8) a level up to 70dB in either the 63Hz or 125 Hz Octave Band is satisfactory; a level of 80dB or more in either of these octave frequency bands causes significant disturbance'. This is often misused as Ref 8 relates to a study[10] assessing disturbance beyond 2km & therefore should not be applied to closer receptors. The low-frequency sound is adequately controlled by the LAeq limit[11]. Note to Guideline 3.4 states it is the frequency imbalance that causes a disturbance. Consequently, there is less of a problem from low-frequency content near an open-air venue. The Pop code authors maintain that the LFN notes in Ref 8 are not intended as LF criterion for licence conditions.

Edinburgh Napier University researched attitudes to environmental noise from concerts (Defra NANR 292). It suggests the perceived level of entertainment noise is significant in the context of the environs, not a venue category. The report states that 'annoyance' rates for urban venues appear to be linked to MNL rather than a category or concert days. The report also suggests a significant percentage of the population will form an opinion of the noise's subjective annoyance irrespective of the actual level. Because of this research, events adopt similar noise criteria to Stadia or Arenas as provided Pop criteria table above. There is good evidence of licensing authorities applying comparatively high levels of 75dB 15' to temporary venues with more than 3 & as many as 48 concert days per year that are successfully operating with minimal levels of a complaint.

Since the publication of the Pop Code in 1995, several modifications have been made following changes in the events industry, increase demand for outdoor events and changes to associated guidelines and legislation. Thus, it has been under review for some time, particularly in relation to the number of concerts & corresponding levels.

BS7445-1:2003 Description & measurement of environmental noise

This standard serves as a guideline for the description & methodology of environmental noise measurement.

BS 4142:2014+A1:2019 Methods of rating assessing industrial & commercial sound

A standard primarily used for assessing the likelihood of complaints arising from industrial & commercial activities. NB. The standard states it is NOT to be used for the assessment of regulated entertainment.

BS 8233:2014 Guidance on sound insulation and noise reduction for buildings

Provides information on building acoustic performance. Indirectly, helpful a reference for acceptable internal levels.

BS5228:2009+A2014 Code of practice for noise & vibration control on construction & open sites

As the code of practice for noise and vibration control on construction and open sites, BS 5228 refers to the need to protect against noise and vibration of persons living and working in the vicinity of & those working on construction sites. This Standard provides effective practical procedures for the control of production build & break disturbance.

[8] This guidance is included to provide background context for the noise control of concerts & outdoor events.
[9] Just audible can be quantified as 5dB below the residual level when assessed at the boundary of the noise-sensitive premises.
[10] A study of Low-Frequency Sound from Pop Concerts, J.E.T. Griffiths, J. Staunton and S Kamath (Proc IOA, Vol 15, Part 7, 1993)
[11] Noise from Pubs and Clubs (Phase II), Capita Symonds, Defra Contract NANR 163, May 2006.

C. Proposed conditions

Dreamland submitted a new licence application in December 2022. The proposed outdoor noise conditions are detailed below. The indoor conditions have not been defined, but the hours have been extended till 04:00. The current PL & conditions remain valid during the application period:

1. Outdoor regulated entertainment noise controls for the Prevention of Public Nuisance

1.1. Repetition: A maximum of 48 days per calendar year is permitted to control annual cumulative impact. There shall be, at most, four occurrences of four consecutive event days.

1.2. Duration: A maximum of 12 hours per day is permitted to control daily cumulative impact.

1.3. Timing: Amplified regulated entertainment is permitted between 09:00–23:00 to control disturbance outside social hours.

1.4. Intensity: The intensity shall be regulated as best practicable to control the likelihood & severity of disturbance. The maximum specific Music Noise Level (MNL) 1m from the façade of any dwelling shall be time-weighted to limit exposure. The C-weighted level (LC), in addition to the A-weighted level (LA), shall control Low-Frequency Noise (LFN).

- Eight days x 75dBA / 90dBC Leq 15'
- Sixteen days x 70dBA / 85dBC Leq 15'
- Twenty-four days x 65dBA / 80dBC Leq 15'

1.5. Management: A Best Practicable Means framework shall outline robust controls for objective compliance, including but not limited to:

- General assessment & methodology with action levels & procedures
- Environmental monitoring installation for routine assessment of most impacted receptors
- Community engagement, with published contact information & key facts
- Review every 2-years or in the event of any material change

D. Road Traffic Noise

Noise map estimates published by DEFRA under the Environmental Noise Regulations (2006) predicts residual contribution circa 55-60 dB LAeq 16hr (07:00 -23:00) & 50-55dB LAeq 8hr (23:00 – 07:00).

In addition to the 2015 baseline survey & the ENR06 data, the prevailing background (LA90) & residual level (LAeq) shall be assessed outside of opening hours using the fixed monitoring stations to minimise uncertainty.

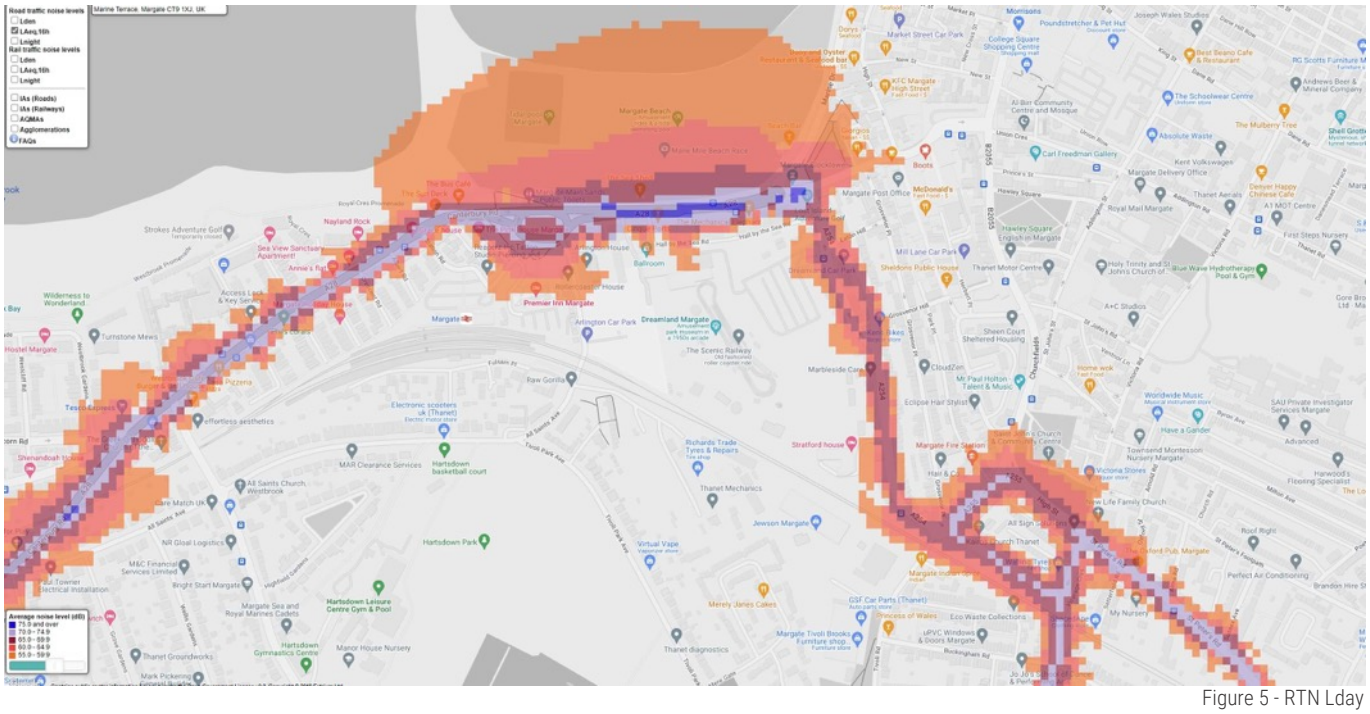


Figure 5 - RTN Lday

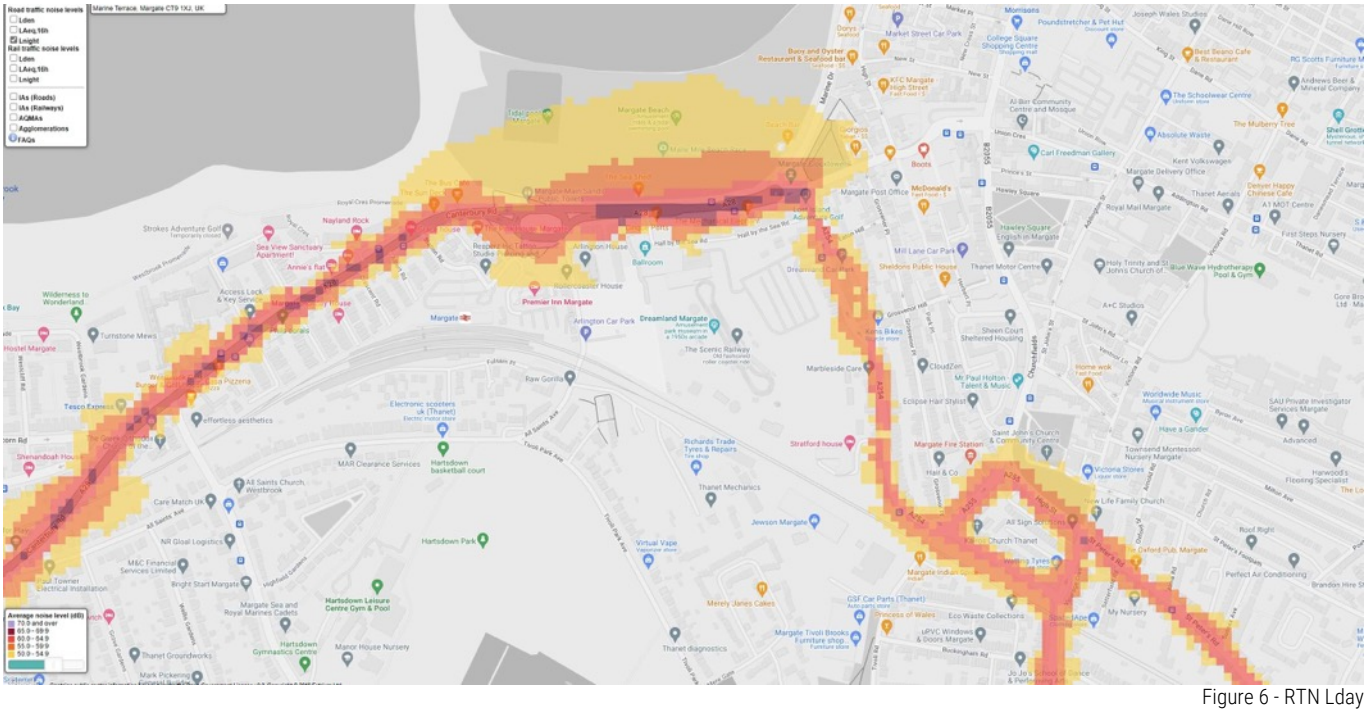


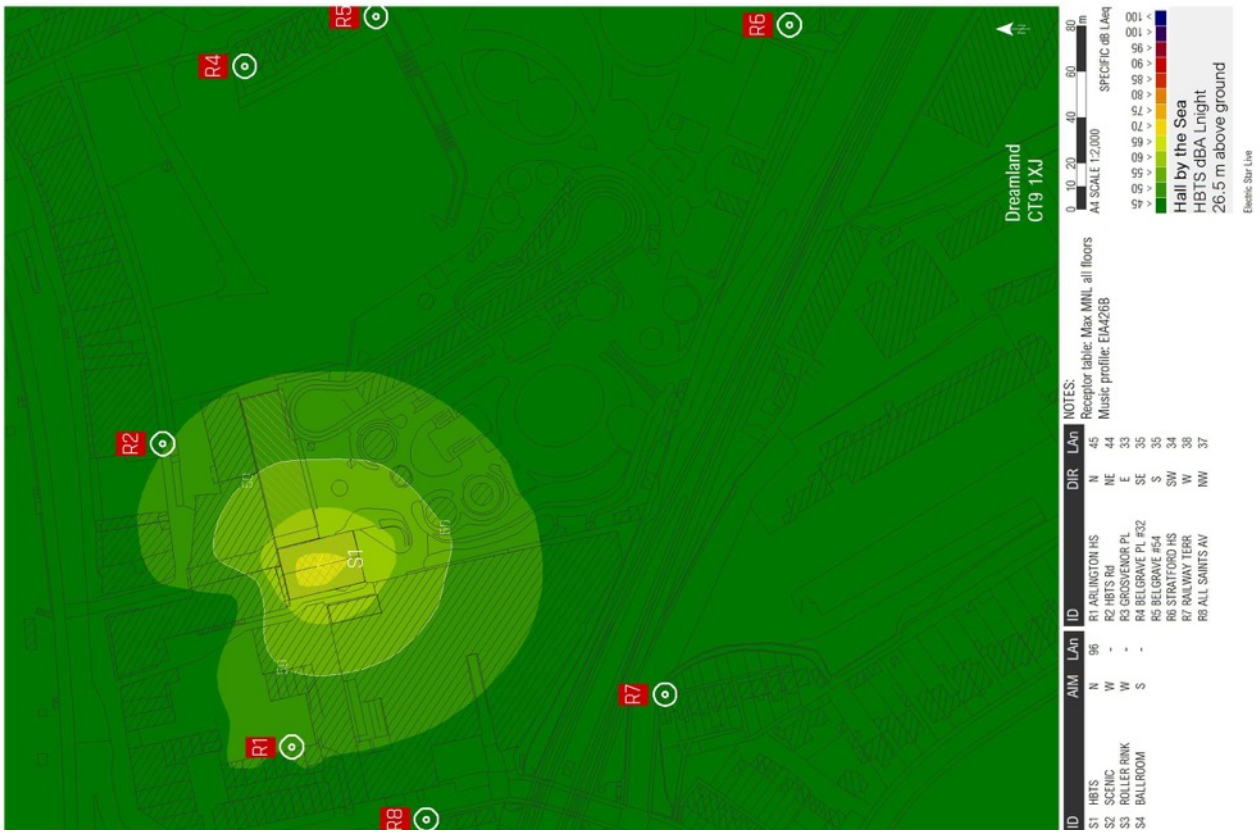
Figure 6 - RTN Lday

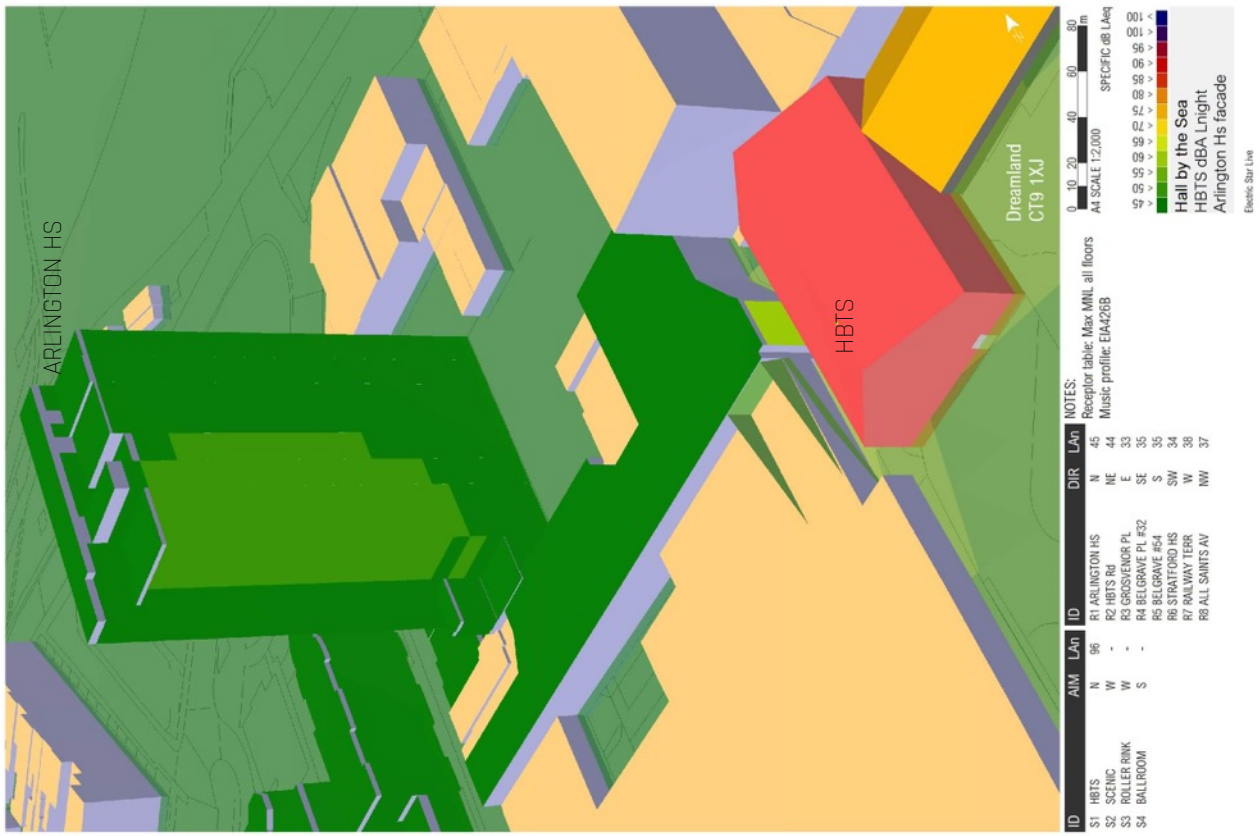
E. Acoustic model

ISO 9613 prediction using SoundPlan with the available venue & sound system parameters as best practicable[12]

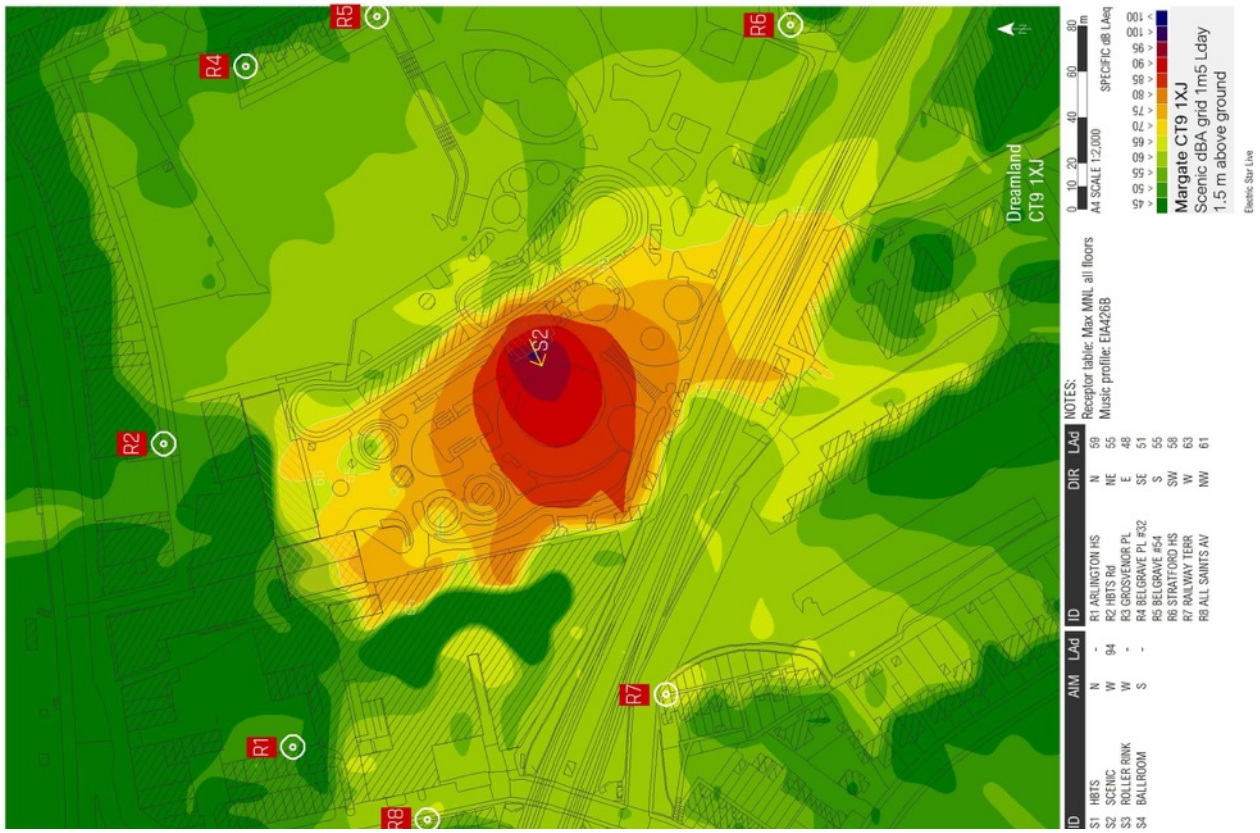
Hall by the Sea

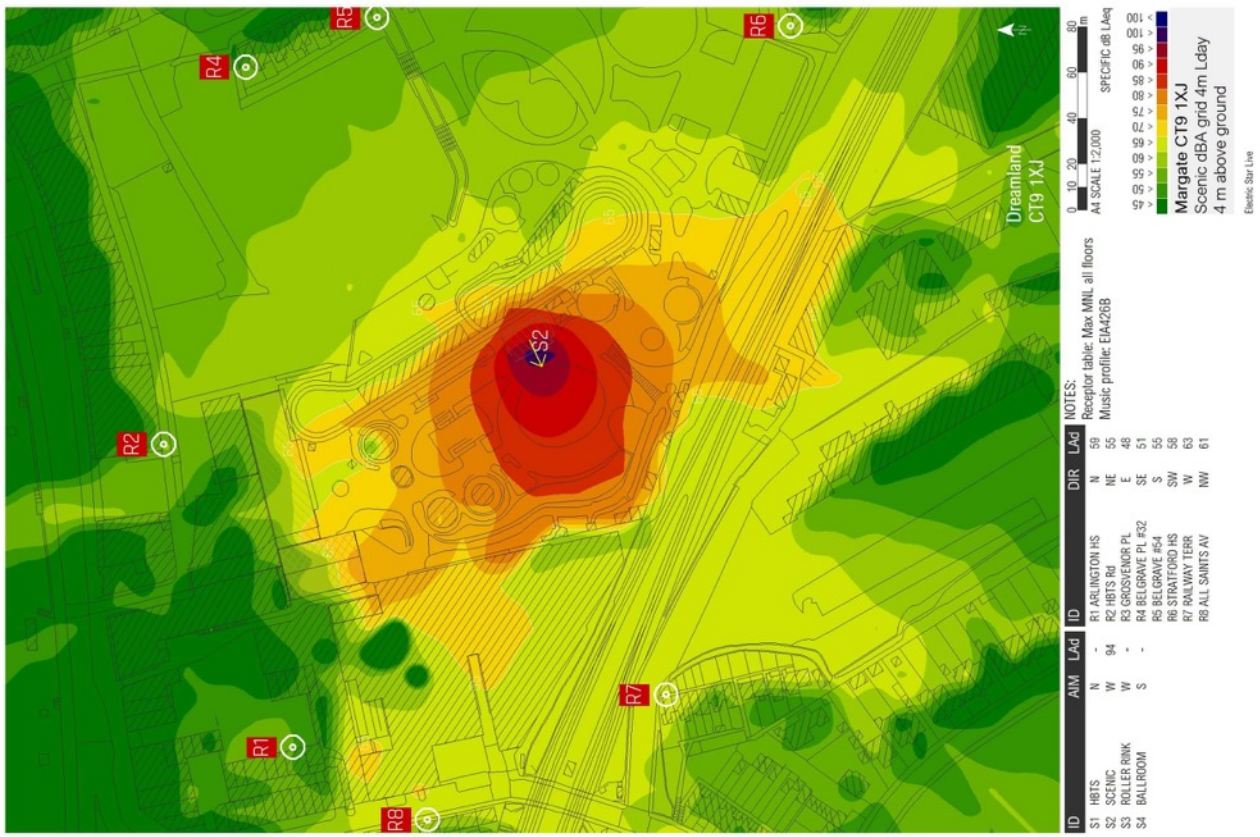
[12] SoundPlan Noise is a global market leading acoustic modelling software application

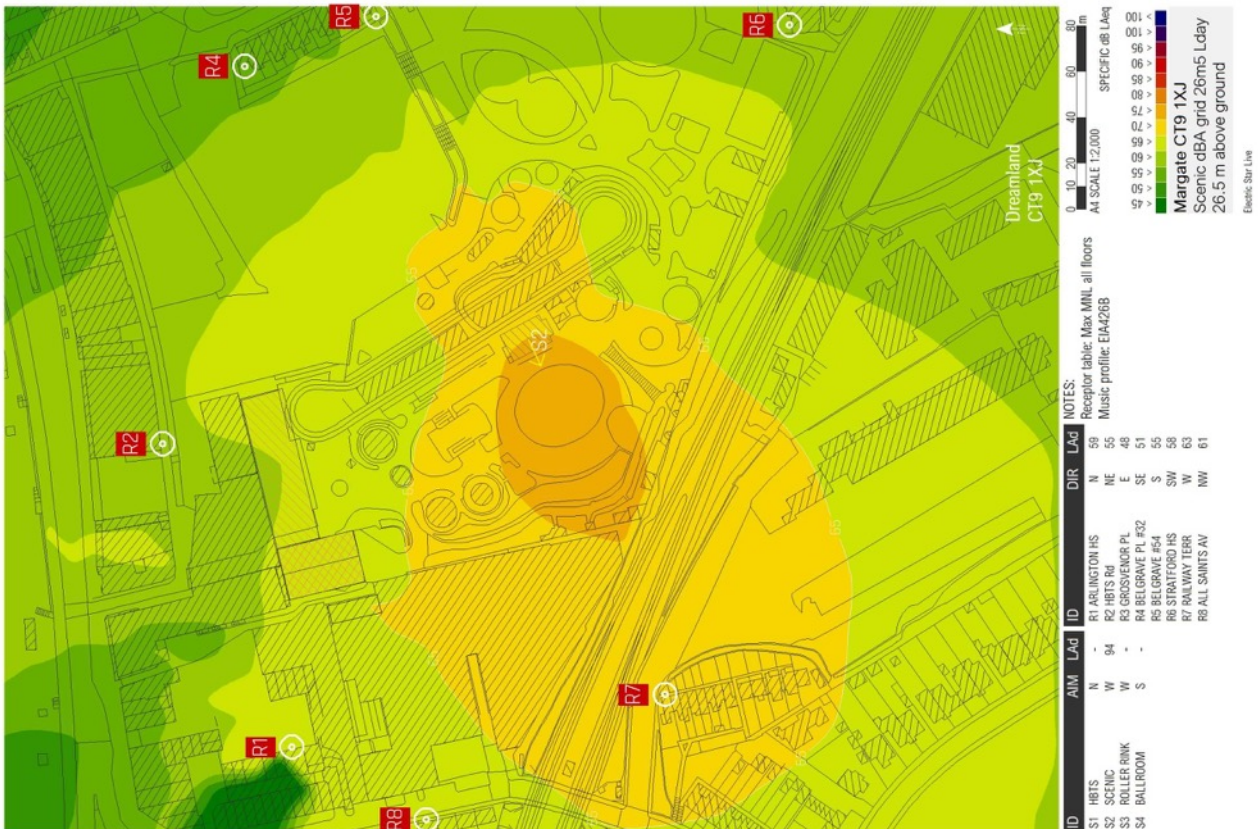

R1
R2
R3
R4
R5
R6
R7
R8
S1
Dreamland
CT9 1XJ
N
ID AIM LAn ID DIR LAn
S1 HBTS N 96 R1 ARLINGTON HS N 45
S2 SCENIC W - R2 HBTS Rd NE 44
S3 ROLLER RINK W - R3 GROSVENOR PL E 33
S4 BALLROOM S - R4 BELGRAVE PL #32 SE 35
R5 BELGRAVE #54 S 35
R6 STRATFORD HS SW 34
R7 RAILWAY TERR W 38
R8 ALL SAINTS AV NW 37
NOTES:
Receptor table: Max MNL all floors
Music profile: EIA426B
A4 SCALE 1:2,000
SPECIFIC dB LAeq
Hall by the Sea
HBTS dBA Lnight
26.5 m above ground
Electric Star Live


ARLINGTON HS
HBTS
Dreamland
CT9 1XJ
N
ID AIM LAn ID DIR LAn
S1 HBTS N 96 R1 ARLINGTON HS N 45
S2 SCENIC W - R2 HBTS Rd NE 44
S3 ROLLER RINK W - R3 GROSVENOR PL E 33
S4 BALLROOM S - R4 BELGRAVE PL #32 SE 35
R5 BELGRAVE #54 S 35
R6 STRATFORD HS SW 34
R7 RAILWAY TERR W 38
R8 ALL SAINTS AV NW 37
NOTES:
Receptor table: Max MNL all floors
Music profile: EIA426B
A4 SCALE 1:2,000
SPECIFIC dB LAeq
Hall by the Sea
HBTS dBA Lnight
Arlington Hs facade
Electric Star Live

Scenic stage



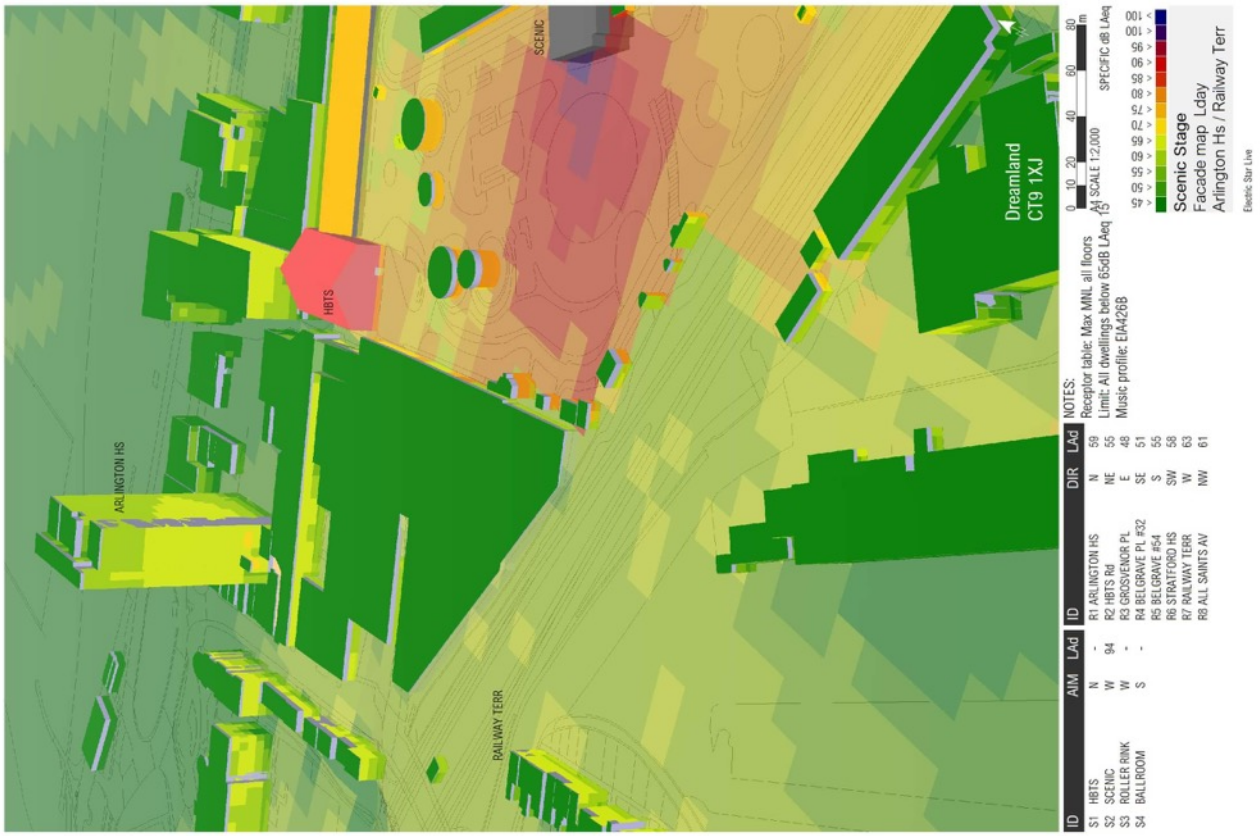




ID		AIM	LAd	ID		DIR	LAd
S1	HBTS	N	-	R1	ARLINGTON HS	N	59
S2	SCENIC	W	94	R2	HBTS Rd	NE	55
S3	ROLLER RINK	W	-	R3	GROSVENOR PL	E	48
S4	BALLROOM	S	-	R4	BELGRAVE PL #32	SE	51
				R5	BELGRAVE #54	S	55
				R6	STRATFORD HS	SW	58
				R7	RAILWAY TERR	W	63
				R8	ALL SAINTS AV	NW	61

NOTES:
Receptor table: Max MNL all floors
Music profile: EIA426B

A4 SCALE 1:2,000
SPECIFIC dB LAeq



ID		AIM	LAd	ID		DIR	LAd
S1	HBTS	N	-	R1	ARLINGTON HS	N	59
S2	SCENIC	W	94	R2	HBTS Rd	NE	55
S3	ROLLER RINK	W	-	R3	GROSVENOR PL	E	48
S4	BALLROOM	S	-	R4	BELGRAVE PL #32	SE	51
				R5	BELGRAVE #54	S	55
				R6	STRATFORD HS	SW	58
				R7	RAILWAY TERR	W	63
				R8	ALL SAINTS AV	NW	61

NOTES:
Receptor table: Max MNL all floors
Limit: All dwellings below 65dB LAeq
Music profile: EIA426B

A4 SCALE 1:2,000
SPECIFIC dB LAeq

F. Operations

i. Strategy

Noise controls consider four key factors associated with disturbance:

Recurrence	The frequency & interval between events influences cumulative impact. In mitigation, Dreamland is predominantly seasonal. Programming the Scenic Stage is limited to around five months between mid-April & mid-September by the British climate. In context, Margate has a long history as a tourist destination. Dreamland's programme is part of the established soundscape. Nonetheless programming should be mindful of event impact, interval & periods of respite. Indoor events cause less disturbance & little have influence on cumulative impact.
Duration	Outdoor events operate up to a maximum of 12 hours a day. Music levels are generally dynamic, reflecting the gradual build over a day. Long period of music noise exposure is unlikely. To mitigate daily cumulative impact & threshold shift, music noise level variation should be considered. E.g., Electronic Dance Music (EDM) tends to have less level & character variation compared to live. Noise break-out from Indoor events cause less disturbance & duration & music genre has less influence.
Timing	Outdoor events ends before the 23:00 watershed. Generally, events end with sufficient time for the peak audience egress to occur before 23:00. Indoor events adequately control noise with a proven music level & egress procedure. This should continue minimising night-time disturbance.
Intensity	The programming is varied. A wide dynamic range is typical of the diverse music profile where extended periods of high-intensity music is unlikely. The controls shall be in place to minimise environmental noise impact to an acceptable level. Appropriate programming & breaks help to regulate Temporary Threshold Shift. The intended aural effect is the events are of little or no impact, perceived as not intrusive in context of a successful resort destination. This policy should continue.

ii. Roles

Acoustic consultant

- Assist with the commissioning of an effective noise control scheme for the venue operator to implement & manage
- Establish prevailing background (LA90) & residual (LAeq) sound levels
- Validate the procedures by measuring emissions directly outside the venue & at the boundary of the nearest dwellings
- Set suitable sound levels pre & post 23:00 inside the venue for compliance with the noise impact conditions
- Estimate the differential between monitoring positions & correlate to an acceptable range of measurement values
- Instruct the venue noise team on how to use the Sound Level Meter & noise control procedures
- Review Sound Management Plan updates

Venue noise representative

- With the full support of the operator, implement the Sound Management Plan for the Prevention of Public Nuisance
- Regulate sound emissions at source to minimise likelihood of noise break-out causing disturbance
- Measure sound level on the perimeter to quantify compliance with the licence conditions
- Conduct routine subjective assessment at residential receptors to evaluate likelihood of complaint
- Document measurements, observations, complaints & actions
- Schedule periodic review the Sound Management Plan with a qualified acoustic consultant

iii. Key notes

- Be a Good Neighbour
- Respond promptly & effectively to any concerns or complaints
- Stick to the licence hours. No music outside these times. No Exceptions
- Plan routine operations around social hours
- Do not empty waste outside after 22:00 where possible. Else bag & carefully lower waste into bins
- Be attentive to noise build up. E.g., noise creeping up in volume to excessive levels
- Tell your supervisor if you think an activity is the source of a noise problem
- If working long hours or in environment where you must raise your voice, give your ears a break
- Keep doors & windows closed wherever possible
- Ask patrons to leave quietly at the end of the night
- Consider noise break-out when booking events, especially bass heavy music
- Use appropriate locations, PA systems & music volumes for the space, act & audience
- Immediately & gradually lower music volume &/or specific frequencies if asked by management
- If noise is a problem, reduce the most dominant sources first for optimum efficiency
- Keep plant equipment maintained to reduce sound emissions to a minimum as best practicable
- Avoid excessive use of the shout microphone at the end of the night
- Routinely take a stroll around the block checking noise levels. Follow your ears

iv. Helpline procedure

A helpline number & email address will be published to residents. The duty manager will deal with any complaints in the first instance.

In the event of a complaint, it is important to:

- Remain polite, calm & rational
- Provide prompt & effective action
- Log details for later review

The duty manager or noise representative should immediately respond to the complainant to acknowledge contact, follow up with action, log the details & report back to the resident. The objective is to resolve any issues to the satisfaction of all parties, without the need for escalation to the Local Authority or Police. The time scale from first contact to resolution depends on the nature of the complaint; however, all steps will be taken in a timely fashion within 1 hour for any given action.

i. Complaints will be directed to the helpline, where the recipient will log the following:
   - Name, address & contacts
   - Date & time the complaint was received
   - Date & times the noise is occurring
   - The location of the noise.
   - Type of noise e.g., music, announcements
   - Other relevant notes.

ii. A recurring complaint will be attached to the initial incident to form an observation log sheet.

iii. The noise representative will attempt to discuss the matter with the complainant to get a better understanding of the issues, reassure the complainant that the event will conduct business responsibly, & advise of what steps are being taken.

iv. The duty manager or noise representative will take steps to identify the source of the noise. Measurements may be taken to quantify.

v. The duty manager or noise representative may conclude that the venue is not responsible, & politely ask the complainant to refer to the local council.

vi. Once the activity that is producing the noise has been identified the duty manager will discuss the issue with the appropriate person for that area.

vii. Where simple measures can be implemented to reduce or eliminate the disturbance, i.e., turn the bass down, the appropriate person will carry out the changes without delay. Where the issue or its resolution is more complex the matter may require escalation to the venue management.

viii. Once controls have been put in place, all relevant staff will be advised of the change.

ix. The venue representative will contact the complainant to advise that action has been taken.

x. The duty manager & venue noise representative will monitor for recurrence to ensure that the control has been effective.

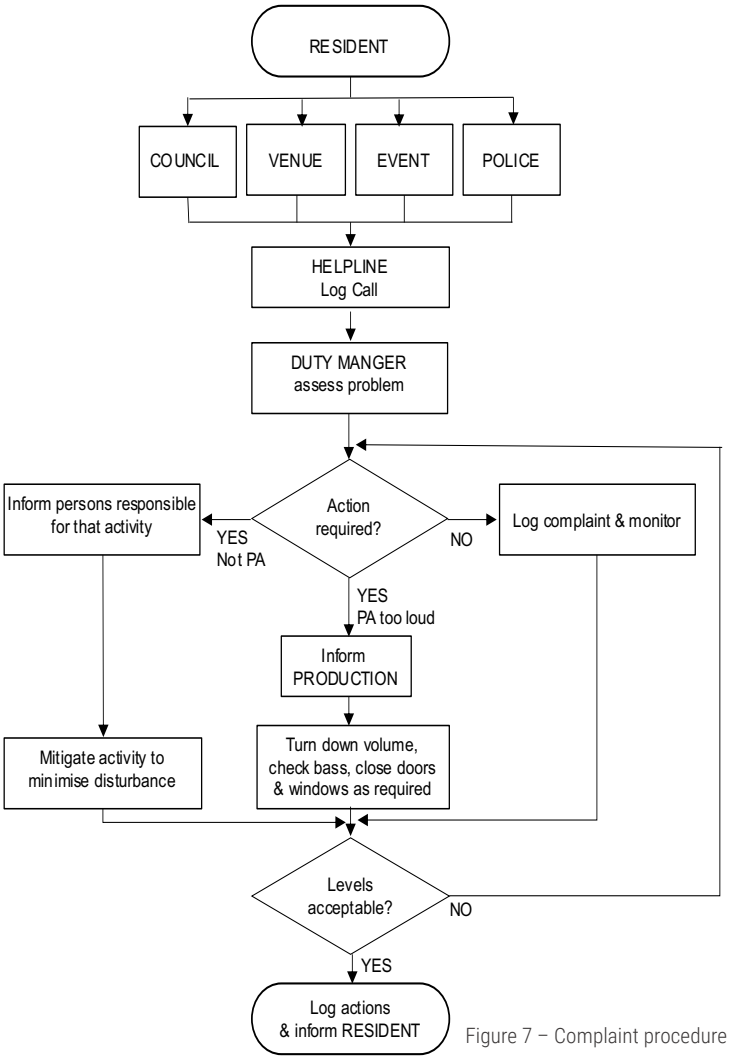


Figure 7 – Complaint procedure

v. Method statement

ID. Source	Risk	Control
1. Indoor entertainment Live & recorded music Plays & films Sporting events Dance & similar Locations: All indoor spaces	Timings: Routine disturbance, especially late nights.	Entertainment noise from the venue must be kept at a level such that residents are unaffected by the routine or timings. The hours are also restricted by the license conditions.
	Volume: The volume causes annoyance &/or the bass beats aggravate.	Any amplified sound, including music & speech, should not cause disturbance inaudible inside any dwelling with a window open. Before 23:00 a reasonable estimate is a Music Noise Level (MNL) 5dB above the background level (LA90). After 23:00 the MNL should not exceed 5dB below the background. Routine monitoring & subjective listening checks at the perimeter of the site will help to assess the likelihood of disturbance. Consider if the weather conditions might cause sound to travel further, e.g., a cold still night. Your hearing may also be less sensitive having adjusted to the louder environment of the venue (aka threshold shift). The Background Music (BGM) systems should be clearly marked with a "maximum volume" setting – a level found to be acceptable & unlikely to cause complaint. Do not exceed this level without permission from the Duty Manager. For live music, discuss the acceptable levels with the musicians prior to the performance. This level is quantified with a sound level meter at FOH & the exterior fixed meters. Subjective listening checks outside the venue will help minimise uncertainty. Nominally internal sound level with background music would be around 75 – 85dB $LA_{eq\ 15'}$ & for live or recorded music a level of 98-108dB $LC_{eq\ 15'}$ is suggested. The duty manager is responsible for the overall volume of the venue. The music systems must be under the control of a competent engineer or nominated person. Bass & bass beats may cause annoyance event at lower levels, so turn the bass down if it is perceivably loud at the perimeter.
	Sources & layout: The type of speakers or their placement may have an adverse impact	The PA systems in use are high quality & should operate without distortion to maintain good pattern control. Take any necessary steps to avoid vibration, especially in the bass which may cause problems. The loudspeakers & any instruments should be located to face away from walls, windows & doors to reduce the opportunity for sound leaking out of the building (aka break-out), leaks indirectly via voids (flanking paths) or causing part of the exterior building to vibrate or rattle (structural transmission).
	Building design & construction:	The sound insulation properties of the building construction & layouts are varied. The buildings comprise a mixture of materials. Some walls & roofs are double skinned. i.e., Interior & exterior panels mounted on a frame with decorative cladding or weather protecting outer layers. Windows & doors are a mixture of single & double glazed with secure weatherproof seals. The orientation of sound systems is usually perpendicular to the nearest noise sensitive dwellings, presenting a comparatively small façade towards the receptor. Cabins & storage yards on the apron provide limited break-up barrier. There are no adjoining properties & structural transmission is unlikely.
	Break-out: Vents, Doors & Windows.	Windows & doors should ideally be closed from dusk where appropriate & must be closed by 23:00 without exception. Control the volume if conducive to have doors & windows open given weather & entertainment. To minimise noise leaks vents & air conditioning (HVAC) are fitted with acoustic baffles & attenuators. Doors, windows & vents should be adequately sealed when closed to provide effective acoustic insulation. Do not place speakers or other sources point at or next to these openings to minimise direct-path-to-air break-out. If the programmed entertainment is unusually loud, keep the doors & windows closed & check the perimeter for unexpected break-outs. **NB.** The fire exit doors on HBTS west wall are prone to break-out. It is essential these doors remain shut. Upgrading the doors & partially enclosing these exits in a porch structure is recommended.

ID. Source	Risk	Control
2. Outdoor entertainment Live & recorded music Plays & films Sporting events Dance & similar Locations: Scenic Stage Amusement Park	Timings: Routine disturbance, especially late nights.	Outdoor events pose a higher likelihood of causing annoyance. Compared to indoor entertainment, outdoor activities are likely to occur over a shorter duration & with less regularity. The hours are restricted by the license conditions. The noise levels should be kept such that residents are unaffected. If there is any concern, such as the programmed entertainment is known to be a louder act, inform the nearest residents in advance of potential disturbance & ask they get in touch if there are any problems. Consider the time of day, where the prevailing level may be lower in the night. While the music levels are no louder than usual, they may be perceived as more disturbing in absence of masking from usual soundscape. Weather conditions, e.g., cold & clear nights the sound may be directed towards the ground, potentially causing unexpected problems.
	Volume: Volume causes annoyance &/or the bass beats aggravate.	In addition to the fixed sound meters, regular subjective listening checks at the boundary of the nearest noise sensitive properties will help to assess the likelihood of disturbance. Consider wind direction, weather conditions, & threshold shift when assessing potential disturbance. An acceptable level can be quantified with sound level meter if there is any uncertainty. At any dwelling, the Music Noise Level must not exceed the licence limits. For routine events this is 65dB LAeq 15' when assessed 1m from the façade of any dwelling. Outdoor music is not permissible after 23:00. The volume must be under the control of the duty manager or nominated person. Carefully consider the bass &/or beats turning down the bass as required.
	Sources & layout: Type of speakers or their placement may have an adverse impact.	The PA systems in use are high quality & should operate without distortion to deliver sound energy where the speakers are pointing (good directivity & off-axis rejection). Loudspeakers & any acoustic instruments should be located to face away from the nearest dwellings where possible. Subjective listening at Arlington House & railway Terrace is essential to assess Scenic Stage break-out.
3. HVAC, catering refrigeration & extraction Locations: All buildings	Level & tonal rating: Routine annoyance owing to mechanical rattle, hum, or whine.	If you notice the noise level, tone or vibration has changed, report to the duty manager for maintenance to check. The equipment should be located away from residents & will be a good quality, quiet operating design with acoustic baffles & insulation. Regular maintenance will ensure quiet operation (specific rated level must be ≤ 10dB below background L_{A90}).
4. Outdoor areas & exits Locations: Site-wide	Public noise: Customer egress, anti-social or disorderly behaviour & loitering causing annoyance to residents.	It is unlikely that public activity will cause an unacceptable disturbance. The gradual build-up, peak & slow-down nature of the venue will help to mitigate noise & identify crowd-related disturbance before a problem arises. Rowdy, anti-social or disorderly behaviour will not be tolerated & proportionate action taken by security staff. Traffic noise is unlikely to cause problems for routine operations given gradual build up & egress. Many visitors will arrive on foot & public transport reducing activity in the car park. Groups loitering outside may be asked to move on by security staff if creating undue disturbance. Kindly ask customers to leave the premises in a quiet & orderly fashion to show respect to local neighbours, especially after dusk. Signage & door staff will reinforce the message.
	Activities & rides: Temporary activities & rides increase overall noise or introduces an unexpected specific annoyance such as inflatable blowers.	Sound is inherent to the enjoyment of amusement rides & park activities; however due consideration will be given to likelihood of complaint. If sound from the activity be clearly audible beyond the perimeter & is considered likely to cause disturbance, then mitigating action must be taken. Noise control of the rides is outside the scope of this assessment. Nonetheless, controlling the single loudest source is often more effective than controlling all the other sources combined. The Coasters generate the greatest noise emissions. Impact noise & vibration from the track/rail & wheel interaction should be minimised with damping & insulating baffles. Where practicable, place barriers such as huts & cabins between activity & dwellings. Baffled enclosures & anti-vibration mounts may be helpful to reduce motor, fan & compressor emissions. Consider replacing the equipment with something quieter if there are issues with a particular ride or activity.

ID. Source	Risk	Control
4. Outdoor areas & exits *(continued)* Locations: Site-wide	Concessions: Outdoor concessions or temporary "pop-up" activities may increase overall noise or introduce an unexpected problem.	Deliveries & waste collections will be subject to the same procedures as the in-house operators. Any external equipment will be suitably located & maintained to ensure quiet operation. The amusement park has a Background Music (BGM) system operating at a level intended to create a lively atmosphere & is audible for no more than circa 7m from source. Concessions are not permitted to use their own music system, unless as a planned attraction. The duty manager will keep music within agreed limits & operating hours.
5. Daily operations Locations: Site wide	Deliveries: Routine disturbance, especially early morning & late night.	All loading operations & associated traffic must be carried out with due care to minimise disturbance. When taking deliveries some noise is inevitable but avoid unnecessary noise such as slamming doors & dropping goods. Use bulk trolleys to reduce the number of trips from vehicle to stores. Vehicle loading & unloading operations should be confined to the Back-of-House areas where practicable to minimise the potential area effected. Low impact routine activities such as toilet cleansing, consumable restocking & portable items of equipment such as backline & instruments are unlikely to cause disturbance. Drivers should be asked to avoid revving engines & switch off their engines when not manoeuvring, providing this does not require multiple restarts. Refrigeration units should be switched off providing the food safety procedures allow. Avoid slamming doors & tail-lifts. Heavy items such as dray deliveries should normally be carried out between 08:00 – 18:00. HGV vehicles being fitted with directional pink noise reversing alarms further help mitigate.
	Waste: Routine disturbance, especially early morning & late night.	Like deliveries above. Restrict heavy activities to 08:00-18:00 and to the service compound where practicable. Use bulk containers for minimising the number of operations. Waste collection vehicles are now routinely fitted with pink noise reversing alarms. After 22:00 do not empty bottle bins or remove empty kegs outdoors. Unless the waste is causing more serious hazard such as obstructing exits, wait until the following day to take glass & kegs outside. If waste becomes a hazard after dusk, bag all waste & lower into bins. Give special consideration to the residents on Hall by the Sea Rd directly adjacent to the service compound.
6. Communication Locations: Site wide	Helpline: Residents must be able to contact the venue easily if they are experiencing disturbance.	A helpline will be in operation & the procedure is outlined in the appendix. In summary, remain calm when dealing with a complaint, even if the customer becomes irate or confrontational. Complaints should always be resolved as quickly & effectively as possible. Keep comprehensive records of all contact, from the initial problem to the eventual solution. Prompt, effective action & good record keeping is key to good relations & any dealings with the council.
	Music: Bass & beats are likely to generate complaint.	A music policy is recommended to help manage artist expectations & provide staff a noise control framework for delivering a great audience experience whilst minimising likelihood of complaint.
	Monitoring: Noise levels must be routinely checked to ensure license compliance.	Routine Monitoring should observe the procedures set out in this document to ensure disturbance is unlikely & the licensing objectives are upheld. Any breach or near miss should be reported immediately to identify the source & take mitigating action. Equally any external contributions should be logged. Margate is a lively town with a busy seafront road, amusement arcades, venues & beaches. Residents may mistake Dreamland with noise originating from other sources.

vi. Schedule

TIME	REGULATED ENTERTAINMENT	CONTRUCTION & NOISY WORK	ROUTINE SERVICE OPERATIONS	INAUDIBLE
00:00				**23:00 - 07:00** DAYLIGHT TIME VENUE MUST BE INAUDIBLE INSIDE NEIGHBOUR'S HOMES
00:30				
01:00	INDOOR MUSIC OFF BY 02:00 ALSO SEE PL EXCEPTIONS			
01:30				
02:00				
02:30				
03:00				
03:30				
04:00				
04:30				
05:00				
05:30				
06:00			**06:00 - 00:00** MIDNIGHT	
06:30				
07:00		**BETWEEN 07:00 - 08:00** JOBS UNLIKELY TO DISTURB	ACTIVITIES UNLIKELY TO CAUSE DISTURBANCE TO RESIDENTS	
07:30				
08:00	PRODUCTION & BACKLINE LOAD-IN FROM 08:00	**BETWEEN 08:00-18:00 NO NOISY WORKS BEFORE 08:00**	LIGHT DELIVERIES, CLEANING & CLEARING WASTE INSIDE & OUTDOOR AREAS. LIGHT MAINTENANCE	
08:30				
09:00	**FROM 09:00 DOORS**	POTENTIALLY NOISY ACTIVITIES. LARGE, HEAVY OR NOISY DELIVERIES (E.G. DRAY'S) BULK WASTE COLLECTION GLASS COLLECTION CONSTRUCTION, BUILD & BREAK. METAL ON METAL ACTIVITIES	CONDUCT OUTDOOR ACTIVITIES WITH CARE E.G. GLASS COLLECTION, EMPTYING BINS & W.C. SERVICE	
09:30				
10:00				
10:30				
11:00				
11:30				
12:00				
12:30				
13:00				
13:30		SEE PRODUCTION SCHEDULE FOR SITE BUILD & BREAK DATES PLEASE REFER TO SMP SECTION ON BUILD & BREAK FOR NOISE MITIGATION GUIDANCE		
14:00				
14:30				
15:00				
15:30				
16:00				
16:30				
17:00				
17:30				
18:00		**BETWEEN 18:00 - 20:00** GENERAL BUILD & BREAK ACTIVITIES MAY CONTINUE TILL 20:00		
18:30				
19:00				
19:30				
20:00				
20:30				
21:00				
21:30				
22:00			***AFTER 22:00*** ***DO NOT BOTTLE-OUT***	
22:30	**OUTDOOR MUSIC OFF BY 23:0 NO EXCEPTIONS**			
23:00	INDOOR MUSIC CONTINUES			
23:30				

vii. Fixed monitoring

Class 2 Sound Level Meters (SLM) displaying LCeq 1' & 15' shall be deployed at the FOH position of primary stages.

Class 1 Type Approved Environmental Sound Level Meters with remote telemetry shall be deployed at the following locations, logging A & C weighted Leq 15' parameters continuously during licensed hours:

- Hall-by-the-Sea
- Scenic stage folly

During music events the system sound engineer will be tasked with observing the live values to evaluate break-out. If the value approaches an action level, the engineer must either reduce the music level or deploy attended monitoring. E.g., weather conditions or extraneous sources that may be adversely influencing the measurements.

During commissioning, the acoustic consultant shall determine the action values that correspond to MNL limits with a reasonable margin for uncertainty when assessed at Arlington House & Railway Terrace. The meters shall be subject to weekly field calibration[13] by the venue operator & bi-annual traceable calibration at an accredited facility.

Figure 9 - Fixed SLM

Figure 8 - Folly SLM

Figure 10 - HBTS SLM

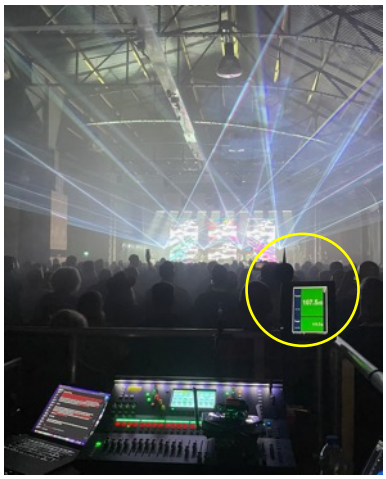


Figure 11 – HBTS FOH

[13] ISO BS61672-3

viii. Attended monitoring

Attended measurements shall be conducted on demand. The procedure shall be compliant with guidance in BS7445-1. Measurements should be representative of normal operations under typical conditions. i.e., unless conducting a baseline survey, measurement is not necessarily representative during changeovers while the stage will be quiet.

The advice given in BS7445 regarding meteorological conditions should be complied with where possible, primarily the weather should be dry & wind speed should be less than 5m/s. Applicable public safety protocols shall be maintained throughout working in & around venues or with residents or local authority. A competent operator[14] should take the measurement using a calibrated BS61672-1 compliant sound level meter fitted with a windshield & mounted on a tripod. The measurement procedure should generally comply with the guidance in BS7445-1. Meters shall be field calibrated before & after events. All instruments are subject to an ISO BS61672-3 calibration scheme.

The Sound Level Meter (SLM) should be placed on the tripod, ≈ 1.5m above ground &, where practicable, > 3.5 meters of any sound-reflecting surface other than the ground. Measurements < 3m of any surface other than ground shall be annotated as having a façade contribution. Where possible, maintain a direct line of sight to the noise source.

The operator should log the LAeq & LCeq and any relevant notes about where the measurement was taken, the time, the predominant noise observed & conditions such as traffic & weather. Measurement should be paused in the event of interfering noise sources such as non-event related traffic or plant equipment. The meter should be field calibrated at the start & end of the shift with any deviation noted in the log.

The SLM operator should communicate with the sound engineer or stage manager by messaging app/radio &/or phone, relaying any level adjustments needed. In addition to controlling the overall sound level, frequency adjustments can also be made to reduce the sound at specific frequencies, often characterised as a bass beat. Imbalanced Low-Frequency (LF) & bass-beat is more likely to trigger complaint than balanced full-range music. Where noise reductions are required, always address the dominant source first for effective noise control.

Measurements should be logged & kept on file for review purposes. A reasonable margin of error is expected to allow for meteorological conditions & the accuracy of measurements such as practicable access to locations.

Checklist

1. Check all equipment is ready & in working order:
   - SLM & field calibrator charged & calibrated15
   - Tripod or pole & windshield, PPE & logbook
   - Radio &/or mobile phone charged
2. Mount SLM on a tripod at 1.2-1.5m height, or a pole if appropriate, e.g., upper floors
3. Position SLM no less than 3m distance from any sound-reflecting surface, except ground[16]
4. Measure criterion levels over determined periods dB $L_{eq,T}$, e.g., $L_{Aeq15'}$, $L_{Ceq15'}$
5. Log values all relevant observations for a post-show report including:
   - Sound Pressure Level using appropriate parameters for the given assessment
   - Predominant & secondary sound contribution
   - Weather conditions17, boundary / façade contribution
6. Take appropriate action where levels exceed an acceptable range & disturbance is likely

Figure 12 – Attended

Notes

See monitoring locations on page 32. The choice of measurement positions depends on the activities occurring at the venue. For example, events in the Ballroom may have a greater impact on Arlington House compared to say Stratford House. Monitoring should focus on the areas listed below as the nearest & most likely adversely affected premises; however, the monitoring locations should be dynamically reassessed as required. Follow your ears.

Unless the music sounds at least twice as loud as the residual, the Music Noise Level (MNL) is a calculated[18] value:

- MNL = MEASURED level at residential receptor - RESIDUAL level
- Alternatively, MNL = MEASURED level at venue façade – ATTENUATION over distance to residential receptor

[14] A qualified person with a Certificate in Competence in Environmental Noise Management or equivalent & IOAtech or higher accreditation
[15] SLM should be BS61672-1 compliant & calibrated with the guidance given in ISO17025. It is recommended that sound calibrators are traceably calibrated at intervals not exceeding 1 year, and SLM at intervals not exceeding 2 years.
[16] Note any façade contribution where a free-field is not practicable
[17] BS7445-1 stipulates dry weather conditions with wind speed below 5 m/s
[18] Decibels must be added & subtracted logarithmically. E.g., $10.\log(10^{L1/10} + 10^{L2/10} + \ldots)$

ix. Monitoring locations

Attended monitoring shall focus on the most impacted locations below in addition to dynamic assessment.

Monitoring location		Dir	m*	Use	Notes	W3W
R1	Arlington Hs	N	190	Residential	Direct line of sight with Scenic & HBTS	///emperor.nanny.drilled
R2	Hall by the Sea Rd	NE	160	Residential	Nearest Roller Rink	///august.nobody.cubs
R3	Grosvenor Pl	E	260	Residential	Elevated location. Direct LoS with upper floors	///doors.staple.fades
R4	Belgrave Rd #32	SE	170	Residential	On axis with Roller Rink. Partially masked.	///carry.invent.throw
R5	Belgrave Rd #54	S	150	Residential	Closest receptor. Impacted by Scenic & HBTS	///minus.bill.shuts
R6	Stratford Hs	SW	190	Residential	Some impact from Scenic. Minimal HBTS.	///take.sober.over
R7	Railway Terr	W	170	Residential	Significant impact from Scenic Stage	///stir.loves.elite
R8	All Saints Av	NW	220	Residential	Some reverberence from car park	///crust.lungs.shameless

Table 4 - Receptors

Figure 13 - Receptors

https://www.google.com/maps/d/edit?mid=1JCE3yJxFijlKvSlqlOCGsOS5Wkxo2bs&usp=sharing

x. Sound log

EVENT: **OP:**
VENUE: **SLM:**
DATE: TIMES

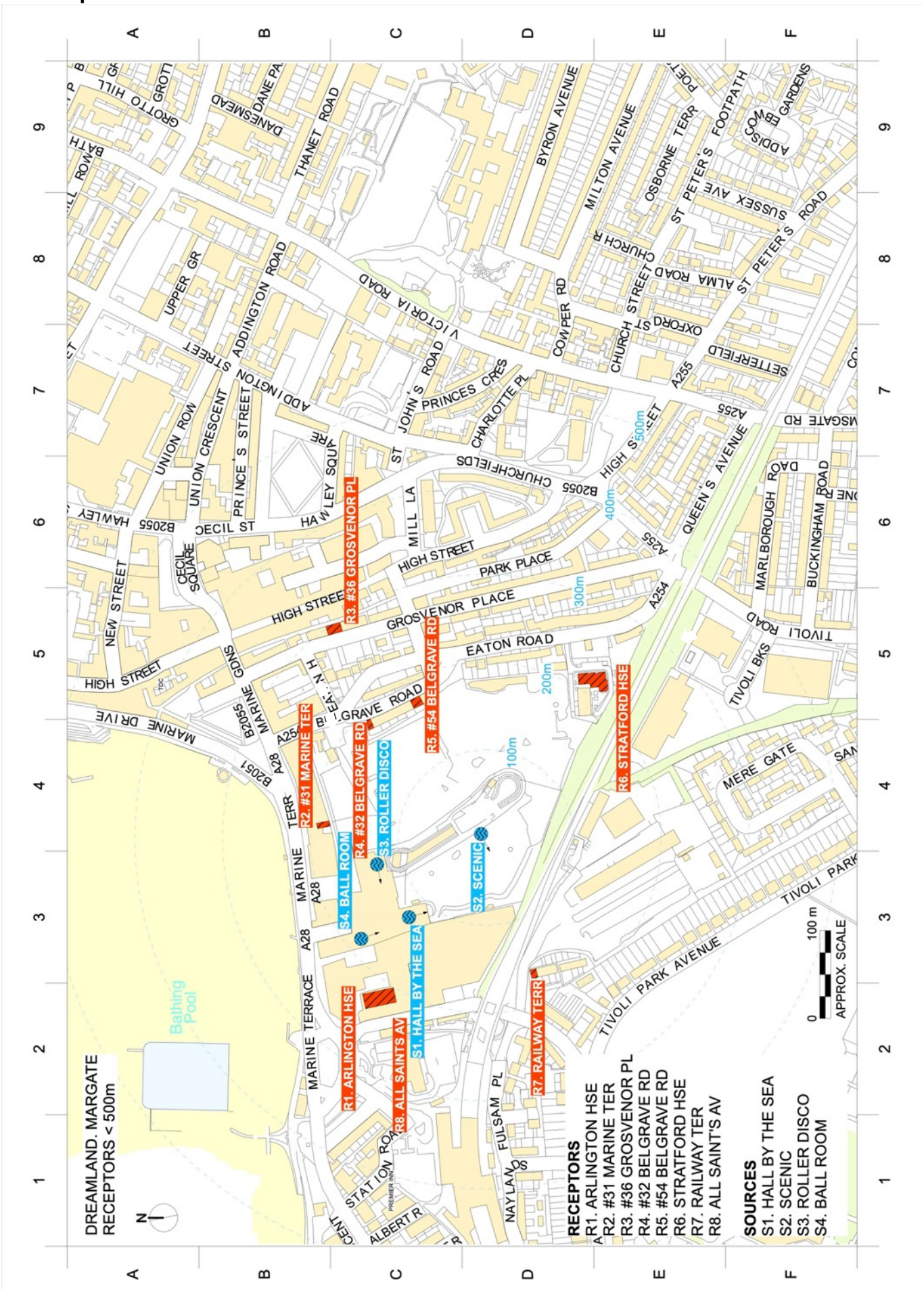
Location	Date	Time	Δt	LAeq	LCeq	LA90	Notes
RESIDUAL							
FOH							Typical FOH level during headline
ATTENDED							

Notes:
Drift:
Weather:
Observations:

Table 5 – Sound log

https://docs.google.com/spreadsheets/d/1mXsB2-B_XEmAd8oULhsuUO1-cTosjuVCx65Z6cq2Lco/edit?usp=sharing

G. Map



https://www.google.com/maps/d/edit?mid=1JCE3yJxFijlKvSIqlOCGsOS5Wkxo2bs&usp=sharing