MEMORANDUM

To:	Philip Somarakis	Date:	04 April 2024
CC:	Tom Power, Sustainable Acoustics team		
From:	Diego Cordes	Ref:	24-0049-0 Brockwood Festival - Acoustic Advice - Tech Memo 02-04 NMP Review DC.docx

SUBJECT: Acoustic Review of Brockwood Festival Noise Management Plan – Sound Propagation

1 NON EXECUTIVE SUMMARY

Sustainable Acoustics have been asked to technically review the noise impact assessment completed on behalf of the applicant of Brookwood Festival by the acoustic consultants who manage the noise from 'Boomtown'. In particular the impact on the Krishnamurti Centre which uses the land as a retreat and also the impact on those using Brockwood Park School. These noise sensitive receptors are 260 to 350m from the proposed music stages.

After a review of the report, and conducting our own noise measurements a number of concerns are raised in relation to the applicants proposal. These can be summarised as follows:

- No noise impact upon wildlife has been undertaken, despite endangered bat species being present in the area
- No regard for protecting the enjoyment of the relative tranquillity of the area, which is medium to high according to SDNP, and confirmed by us to be a very quiet area, has been undertaken
- The technical robustness of the report is poor, not providing much of the information that would be expected, including background measurements, instrumentation, weather conditions of survey work etc. It read more like a desktop noise management statement, than an acoustic impact assessment.
- Cumulative impacts of noise from 'Boomtown' and the regularly occurring Motocross nearby have not been considered.

In conclusion the application fails to meet the expectations of local and national licensing regulation and policy allowing the special characteristics of the national park to be harmed for those using the nearest noise sensitive receptors. As a result is recommended this application for a licence is **rejected on noise grounds**.

2 SUMMARY

This technical memorandum focuses on the review of the Noise Management Plan presented by F1 Acoustics representing the Brockwood Festival organization, and into our own preliminary assessment to inform the hearing on the 10th April 2024.

The sound propagation calculations and noise limit target specification proposed by the Brockwood Festival are considered within context and against the current guidance: Code of Practice on Environmental Noise Control, National Planning Policy Framework (NPPF) and other relevant guidance that includes the Local Plan of the South Downs National Park (SDNP), SDNPA Events guidance Note and Licensing Policy of the Local Licensing Authority (which is Winchester).

The Krishnamurti Centre has instructed Sustainable Acoustics to investigate the impact from the proposed event noise on the land used by the centre for a retreat and also the impact on those using Brockwood Park School, SO24 0LQ, which is a boarding school, has 17 occupied full-time residential apartments and is also used for guests out of term.

The event proposed in 2024 is for 3 days between 12th and 14th July, although the licence application is for an annual event of up to 5 days for up to 5000 people. F1 Acoustics have submitted a noise impact assessment. They are the same consultants who moderate Boomtown, a festival that is audible from this site 9 km away. There would be a cumulative impact from these two events on the site as well as from a near-by motocross venue at West Meon Hut which occurs regularly which needs to be considered.

The implications for whether the special qualities of the National Park for the closest noise sensitive receivers will be likely affected, with further steps recommended for implementing National Noise Policy and the consideration of planning and licence policy of the SDNP.

3 RELEVANT POLICY & GUIDANCE TO CONSIDER

Local Licensing Policy

3.1.1 The Winchester City Council is the local authority. In their Statement of Licensing Policy – Licensing Act 2003. (February 2024-2029) point 1.5 states:

"The South Downs National Park Authority ("SDNPA") is the sole planning authority for "premises" within the South Downs National Park ("SDNP"). The purposes of the SDNP are:

- *Purpose 1 - 'To conserve and enhance the natural beauty, wildlife and cultural heritage of the area'.*
- *Purpose 2 - 'To promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public'.*
- *The SDNPA also has a duty 'To seek to foster the social and economic well-being of the local communities within the National Park in pursuit of our purposes'."*

Where there is a conflict between the purposes and/or duty then Purpose 1 must have priority.

Point 1.14 states:

Winchester District is an attractive area, with historic towns and villages, as well as beautiful countryside, part of which is covered by the South Downs National Park. It attracts visitors from around the world, as well as students who choose to study at the City's academic institutions. Many commute into the District to work each day, whilst a large proportion of residents commute to London and the surrounding areas.

Furthermore, **Section C: Prevention of Public Nuisance – Noise Control**

C2. Stricter conditions with regard to noise control will be expected in some circumstances.

This includes:

- *(ii) areas of the District that have low levels of background noise (such as within South Downs National Park)*
- *(iii) licensable activities which extend into nighttime hours e.g. 2300-0700*
- *(iv) Licensable activities to be held outdoors, in garden areas or in marquees*
- *(vii) Poor history of compliance*

C6. Where an event is held in the South Downs National Park, event organizers should consider:

- *the Tranquillity Study carried out by the SDNPA available at www.southdowns.gov.uk/wp-content/uploads/2017/03/13-04-17-SouthDowns-National-Park-Tranquillity-Study.pdf.*
- *(b) the International Dark Skies Reserve status, with respect to lighting at large events. Guidance can be found on the SDNPA website at www.southdowns.gov.uk/dark-night-skies/.*

National Licensing - Licensing Act 2003

3.1.2 The fourth licensing objective is Public Nuisance. Under common law that is a nuisance so wide as to affect across section of his majesty's subjects in the way described in 3.2.

3.1.3 The aim of any noise maker, whether part of a Temporary Event Notice (TENs) or as a licensable activity as part of a licence associated with a premises must promote prevention of Public Nuisance.

3.1.4 This does not mean reduce noise until it can't be heard, but simply that it must not cause a nuisance.

3.1.5 If a nuisance is caused then this objective has not been satisfied and a Review can be called, or TENs would have grounds not to be granted.

Public Nuisance

3.1.6 A nuisance is noise which causes material interference with the use or enjoyment of land for its common purpose. This applies to the client's use of the land (including gardens) as a retreat as well as a domestic residence. A public nuisance is one which is so widespread as to not simply be a private nuisance, affecting a cross section of his majesty's subjects. In licensing terms this could include a low-level nuisance affecting only a few people.

Planning & Licensing

3.1.7 S182 guidance makes clear at 7.7 that use of Temporary Event Notice (TEN) does not relieve the premises from requirements under planning law for appropriate planning permission, where it is required.

3.1.8 It also clearly states at 8.97 that "Any decision of the licensing authority on an application for a provisional statement will not relieve an applicant of the need to apply for planning permission".

3.1.9 At 14.65 it states, "*Licensing committees are not bound by decisions made by a planning committee and officers should consider discussions with their planning counterparts prior to determination with the aim of agreeing mutually acceptable operating hours and scheme designs*." It goes on in 14.66 to say:" Proper *integration should be assured by licensing committees, where appropriate, proving regular reports to planning committees*".

3.1.10 Where any doubt remains that licensing decisions should take account of planning this is clarified by a recent letter from the Minster of State for Crime Policing and Fire, dates 15th January 2024, which can be found here: https://www.instituteoflicensing.org/media/w1qdeti4/15-01-24-minister-philp-to-licensing-and-planning-authorities.pdf . A relevant extract from it is below:

"We particularly wanted to highlight activity linked to two issues that have been the subject of ongoing post-legislative scrutiny of the Licensing Act 2003 by the House of Lords. These relate to the provision of training for licensing practitioners, and the collaboration between local licensing and planning regimes".

3.1.11 It is likely that the site could operate within the permitted 28 days on land without the need for planning permission, meaning that the usual safeguards would not be required to protect quality of life. Although planning and licensing are different regimes nevertheless it has now been clearly recognised by Government that licensing decisions should take into account the planning situation. This is strengthened by the fact that what the "ordinary use" of the land is has a bearing on whether a noise impact might be considered to be a nuisance or not[1]. As the use is decided by planning this is therefore relevant to consider in the licensing objective to promote the prevention of public nuisance.

4 APPROPRIATE CRITERIA FOR NOISE IMPACT

This must take into account national and local licensing policy, noise policy and that licensing controls in conditions would need to apply appropriate controls. In doing so, regard must be had for not only the impact on people, but also the impact on wildlife as specified in Purpose 1 of the local licensing policy.

a) Noise Pollution

4.1.1 It should be noted that where a '*low adverse impact level*' is generally required to be demonstrated for grant of planning permission to be accepted a less stringent criteria can be considered for operations under the licensing tests, providing they do not cause a nuisance. This would usually be on '*observable adverse impact level*', so in terms of noise pollution and the impact this has been defined in planning guidance as *expected not to cause a nuisance* for the purposes of licensing.

"Noise can be heard and causes small changes in behaviour, attitude or other physiological response, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a small actual or perceived change in the quality of life".

4.1.2 This degree of impact can be quantified objectively as the noticeable change in overall noise level, so **Music Noise Levels (MNL) of +5dB(A) over ambient noise ($L_{Aeq,5mins}$) with careful controls on the bass frequencies of 63Hz and 125Hz to not exceed the $L_{90,5mins}$ by more than +5dB.** This allows a small degree of impact during daytime hours strikes an appropriate balance, limiting the harm to the special qualities of the National Park to within policy expectations. No impact beyond 11pm is considered appropriate to implement planning protections for sleeping hours and to avoid harm to the special qualities of the National Park, which effectively require music not to be audible. This can be approximated to the MNL being -10dB(A) below the L_{A90}.

b) Relative Tranquillity

4.1.3 This degree of impact can be quantified objectively as the noticeable change in overall background noise level, which would still allow music to be audible, but not sufficiently to disturb the underlying soundscape. **Music Noise Levels (MNL) of +3dB(A) over background noise ($L_{A90,5mins}$), with careful controls on the bass frequencies of 63Hz and 125Hz to not exceed the $L_{90,5mins}$ by more than +3dB.** This allow for the protection of relative tranquillity on the land of sensitive receptors, during daytime hours, when the ordinary use of the land is as a retreat. The nighttime protection is for sleep, and to avoid harm to the enjoyment of the special qualities of the National Park, which effectively require music not to be audible. This can be approximated to the MNL being -10dB(A) below the L_{A90}.

5 EXISTING NOISE CLIMATE

The instrumentation used and location of measurements over 3 days (25th to 27th March 2024) have been presented in Appendix 2. The weather conditions were stable, but this is a preliminary survey given the timescales given to respond to this application. This data does not include a weekend, so may over-represent the noise climate if anything.

[1] Fearn v Tate case (supreme Court Ruling 2023) [2023] UKSC 4 :

In summary the area is extremely quiet during daytime and nighttime, with slight distant contribution from the A272, but this supports the rightly deserved label given by the SDNP as medium to highly relatively tranquil (meaning a general absence of manmade sound).

The background levels measured are presented for the nighttime in Figure 1 and daytime in figure 2 below. The time history for the whole period is shown in Appendix 2, and the data summarised, including for the bass region octave bands of 63Hz and 125Hz in Table 1.

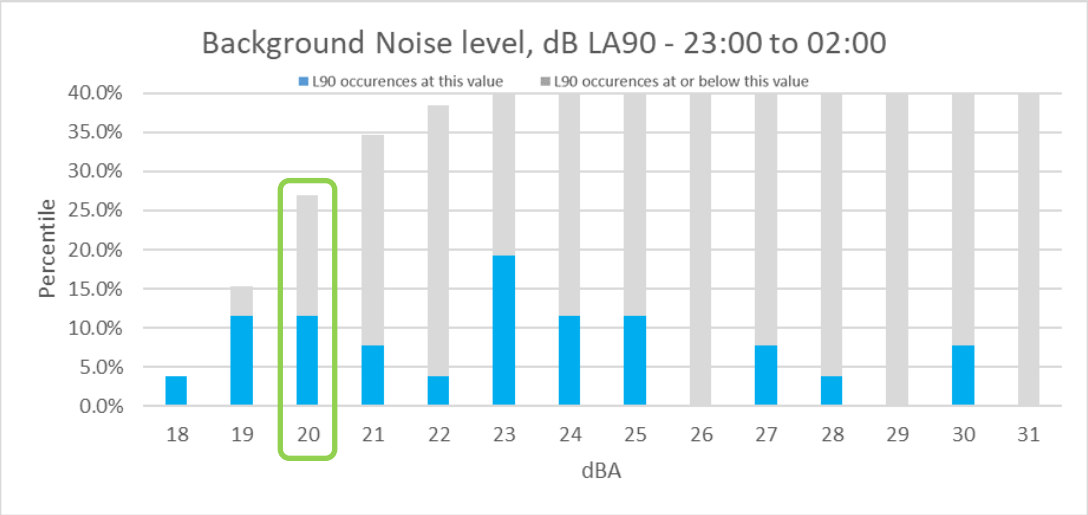


Figure 1: Statistical analysis of background noise levels between 23:00 and 02:00

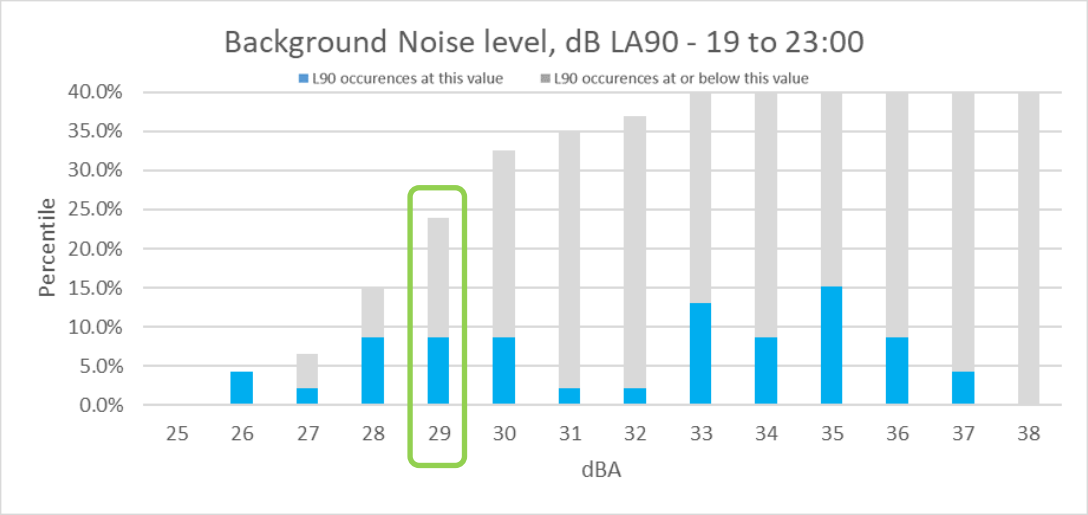


Figure 2: Statistical analysis of background noise levels between 19:00 and 23:00

Existing (no music) – See Appendix 2	$L_{eq,63Hz,15min}$	$L_{eq,125Hz,15min}$	$L_{Aeq,15min}$
Daytime (16 hr average)	53dB	48dB	**43dB(A)**
Nighttime (8hr average)	44dB	37dB	**38dB(A)**

Table 1: Summary of Octave bass frequency results and overall ambient noise levels at The Krishnamurti Centre and Brockwood Park School, SO24 0LQ

6 NOISE LEVEL TARGETS AT THE CLOSEST NOISE SENSITIVE RECEPTORS

6.1 Applying Local Licensing Policy to Event Noise Targets

6.1.1 There must be compliance with 1.5 purpose 1 and 2 of local licensing policy, to conserve the natural beauty and guard against harm to the enjoyment of the special qualities for the national park, which includes the medium to high rating of the relative tranquillity of the area from the map, identified by the SDNP (see Appendix 3). Therefore, it is appropriate in our professional opinion to apply the criteria set out in 3.1.3 in recognition of the ordinary use of the noise sensitive land as a retreat.

MNL Targets (music) – based on Section 3 criteria	63Hz	125Hz	$L_{Aeq,15mins}$
Daytime (07:00 – 23:00)	56dB	51dB	**46dB(A)**
Nighttime (23:00 – 02:00)	34dB	27dB	**28dB(A)**

Table 2: Summary of human centric policy driven appropriate event noise levels (MNL) targets in octave bass frequency results and overall ambient noise levels at The Krishnamurti Centre and Brockwood Park School, SO24 0LQ

6.2 Guidance: Code of Practice on Environmental Noise Control at Concerts

In light the age of this guidance, which was 1995 and the current efforts from both the Institute of Acoustics and the Association of Noise Consultants to update this guidance to the modern concert practices and community response, the commonly referred *Pop code* has become a starting point reference that needs to be complemented with up-to-date standards, guidance and field experience to adequately conform to current legislation and policy, and in this particular case to the extra protection required within a National Park. Its sole use is not considered to be appropriate for this situation in the professional opinion of the author. It has been considered as F1 Acoustics' assessment relies heavily on it.

The CPENCC guidance by the Noise Council is from 1995 and provides guidance for low numbers of outdoor festival style music noise from events, which are often applied by Local Authorities.

The guidance can be found in full on line, or by clicking here where there is an internet connection.

In summary it sets Music Noise Levels (MNL), which are $L_{Aeq,15mins}$, and relevant for events held outdoors that occur a certain number of times a year.

At 3.2 it does make clear: *"For events continuing or held between the hours 23.00 and 09.00 the music noise should not be audible within noise-sensitive premises with windows open in a typical manner for ventilation".*

For a small number of events during the day in rural venues it suggests a MNL should not exceed 65dB(A) as a 15 min L_{Aeq} level. This is a very light touch level of control, allowing a significant impact for the short period. The table supporting this position can be found in Appendix 2.

This is not aligned with 1.5 and 1.14 C2 and C6 of the policy of the licensing authority, and if applied would not offer adequate protections to the noise sensitive receptors, wildlife and special characteristics of the national park.

6.3 Discussion to inform what are the appropriate Targets for licensing

F1 Acoustics claim to be consultants to Boomtown, from which sound is audible at this noise sensitive location over a great distance, causing an impact to the relative tranquillity when it is in operation over a very wide area. This raises that they should be well aware that the cumulative impact of another event should also be considered on these receptors. It has not been, and should influence any targets that are imposed by any conditions that might be imposed.

F1 has suggested a MNL of 60dB(A) daytime and 45dB(A) nighttime. In some recognition of the rural nature of the area, for music continuing they propose would continue up to 02:00 for two consecutive nights. It is understood that two stages are proposed to operate at levels of 95dB(A) at 10m from the mainstage, with 102dB at 63Hz.

This would be 14dB above the daytime targets proposed in Table 2 and 17dB above at night in overall and 26dB at 63Hz, and would be expected to result in a significant adverse impact that could seriously impact on the ordinary daytime use of the land as a retreat and on the guest and boarding school dormitories (which will still be in use). The objective of CPEPC is music being inaudible inside at night – this would be not achieved due to the low noise levels in the area (which local policy C2 identifies as a reason for more strict conditions).

Table 2 provides reasoned noise targets based on the aims of local and national licensing policy, and an appropriate basis for a condition (see Section 7 for proposed wording).

Based on the Table 2 targets being used the following calculation establishes the music upper limit at 10m from the stage to achieve the target at the boundary to the land of the noise sensitive receptor's properties:

Daytime Total MNL Target of 46dB(A) + Distance attenuation - wind gradient correction = possible source levels

Day-time Stage*(260m): 46+48-5 =**89dB(A)***

Nighttime Total MNL Target of 28dB(A) + Distance attenuation - wind gradient correction = possible source levels

Night-time Stage*(350m): 28+51-5 =**74dB(A)***

Such a low value of 89dB(A) daytime and 74dB(A) night-time for the combined music sound level of two stages is **not commercially viable** for music events, in a rural area in close proximity to sensitive receivers. This means additional mitigation, such as stage distances, speaker arrangements and specifications and screening would need to be considered, but this is not expected to be enough to satisfy the level of control that would be needed to meet local policy and avoid harm to the enjoyment of the special qualities of the national park, and protect wildlife from potential disruption (which has not been assessed).

CPENC 3.4: *"Assessment of noise in terms of dB(A) is very convenient but it can underestimate the intrusiveness of low frequency noise. Furthermore, low frequency noise can be very noticeable indoors. Thus, even if the dB(A) guideline is being met, unreasonable disturbance may be occurring because of the low frequency noise. With certain types of events, therefore,* ***it may be necessary to set an additional criterion in terms of low frequency noise, or apply additional control conditions****"*

In addition, to control bass the CPENCC recommends that low frequency levels do not exceed 70dB in either the 63Hz or the 125Hz octave bands at 1m from the facades of sensitive properties. Due to the predominantly rural character of the area and the extremely low background level L_{A90} (29db 19:00-23:00) we suggest that tightening of this value to those stated in Table 2.

7 MISSING DATA AND TECHNICAL REVIEW OF F1 ACOUSTIC'S REPORT

7.1.1 Having carried out a technical review of the report submitted by the applicant we have the following comments:

- **Background survey**:
  CPENC 4.2: *"Determine the sound propagation characteristics between the proposed venue and those living nearby and **carry out an appropriate background noise survey**"*

  The lack of a background measurement with statistical analysis is considered a serious omission that limits the understanding of the context where an event is proposed. This is a basic requirement for any assessment of this kind, as the background sound level will determine what can and cannot be heard and directly affect the impact of the noise towards the noise sensitive receivers.

- **Traffic & People's noise assessment:**
  CPENC 3.11: *"Associated activities (E.g. Fairground) **should be taken into account when setting the limit for music noise level"***

  CPENC Note 6 to Table 1: "Account should be taken of the noise impact of other events at a venue. **It may be appropriate to reduce the permitted noise from a concert if the other events are noisy"**.

  Considering the licence application is for two stages and temporary infrastructure and accommodation for 5000 people, it is imperative to fully assess the level of noise impact of incoming and outgoing vehicles and people for what could take weeks of traffic, and for the 3-day (building to 5-day over time) temporary camping site of this magnitude. **This has not been done.**

- **Propagation calculations for the Day-time stage:**
  The expected noise level from closest stage to the noise sensitive receptor is **not present in the report.**

  Due to the extended time that the neighbours would be exposed to noise, it is necessary to present simulation/ calculations from all main sources of noise to understand the final impact towards the noise sensitive receptors, and the cumulative impact of Boomtown, which can be heard from the site.

- **Simulation – Receptors height:**
  The receiver's values in the presented simulation are at 1.5m and not at a representative height of a 2nd storey level, the worst case.

  Receivers should be calculated at a 2nd floor height of 8m, instead of the 1.5m in the report, which greatly underestimates the values due to the ground effect as opposed to an elevated source where the impact will be considerably higher.

8 CONCLUSIONS

A number of specific conclusions can be drawn from the review of the festival's acoustic technical proposal and our preliminary assessment, of which 11 are listed below:

1. **Tranquillity** - The locality is rated by the Sound Downs National Park as having **medium to high relative tranquillity**, and our noise assessment would agree with this. This is therefore a prized aspect, which forms part of the special characteristics of the national park, with the noise sensitive receptor of The Krishnamurti Centre use being a retreat and Brockwood Park School used for boarding, located within 260 to 350m from the event stages at SO24 0LQ. The risk of harming the enjoyment of their common use of the land is therefore high.

2. **Locality & Backgrounds -** This location is rural in character and has been shown to experience **very low background noise levels during day and night-time**, making noise pollution even more impactful on the quality of the soundscape. Section C2 and C6 of 1.14 of licensing policy requires this and relative tranquillity is taken into account, and it has not been in the assessment, failing to meet this requirement.

3. **Wildlife impact assessment** - Important data is missing from the F1 Acoustic report, including there has been **no consideration of the impact of the noise on wildlife** (as required to meet the guiding Purpose 1 of local licensing policy to "conserve and enhance the natural beauty, wildlife"). This is considered to require priority over economic wellbeing of the applicants as part of the community, according to the policy. As such the application should be rejected due to the importance of some species, including, we understand, evidence of this providing habitat used by the endangered Barbastelle bat, which could be affected by noise from the event. (Note: an area outside our expertise and likely F1 Acoustics also).

4. **Noise management plan** – the document presented by the Festival applicants omits the information usually expected within a noise impact assessment (i.e. Background levels, Traffic and people's noise assessment, instrumentation, meteorological information). All of this information is missing, which highly increases the risk of misrepresenting the predicted acoustic impact on the neighbouring properties. This makes the **assessment unsafe to rely on** the conclusions drawn.

5. **Model assumptions** - The propagation calculations/ simulation has been done with receptors at 1.5m height, which is **wrong** and has the potential of a large variance in the noise values towards the neighbours which are located at 8m height relative to the source, due to the topography.

6. **Cumulative Impact** – No regard or acknowledgement has been given by F1 Acoustics for the fact that 'Boomtown' can be heard on this site, when in operation, which is over 9km away and this will contribute to the noise impact. Of note is that F1 Acoustics are involved in the noise control for 'Boomtown'. In addition, the Motorcross events at West Meon Hut also already causes regular disturbance at the site, which also has not been considered.

7. **Guidance & licensing objective** - The predicted night-time values do not achieve the expectations of the Code of Practice on Environmental Noise Control, which is the guidance referred to by F1 Acoustic as they would be 25dB over the nighttime background, meaning noise would be highly audible and there would be a serious risk of causing a Significant Observed Adverse Effect Level (SOAEL) which could constitute a nuisance. This would fundamentally breach the further licencing objective to proactively promote public nuisance. This shows that even on the guidance proposed by F1 Acoustics that commercially viable noise levels would not be possible beyond 23:00 hours, where the expectations are for the noise to be inaudible.

8. **Appropriate criteria** - The appropriate levels of noise control, which would align with licensing local and national policy objectives are set out in Table 2 (reproduced below is a suitably worded condition should the licence be approved with conditions – see section 8).

9. **Not commercially viable** – Applying the noise targets in Table 2 would result in total noise emissions from the site at 10m of 89dB(A) daytime and 74dB(A) nighttime (up to 2am). The two stages were assumed to be 95dB(A) each, indicating that this is not viable commercially as proposed. This prompts the need to consider a re-think to use mitigation and other good acoustic design approaches to see whether this could be achieved, or if not that **the site and proposal is incompatible.**

10. **Substantial impact** – For the proposed music noise levels an excess of 14dB(A) for daytime 12dB(A) at night, together with dominant bass frequencies over the Table 2 target criteria would be **likely to cause a substantial interference of material use during the day as a retreat and at night to sleep.**

11. **Planning v Licensing balance** - Planning tests to protect quality of life and amenity is relevant to the licensing decision, as the event would likely operate without the need for planning permission, and the recent clarification from Government is that **appropriate protections should be added which protects quality of life as well as just avoiding a nuisance occurring**. This is supported by Local current local licensing policy, and ties in with Table 2 criteria.

In conclusion the proposal is not aligned with 1.5 and 1.14 C2 and C6 of the policy of the licensing authority, or licensing objective four of the Licensing Act 2003 to prevent public nuisance. If permitted this licence would not offer adequate protections to the noise sensitive receptors, wildlife and special characteristics of the national park. For these reasons it should be **rejected on technical noise grounds** as not satisfying local or national policy, and because it would undermine the common use of The Krishnamurti Centre and Brockwood Park School, SO24 0LQ.

At proposed levels we conclude that there is **a serious risk of the event causing material interference to ordinary use of the land as a retreat and to house overnight accommodation** for staff and guests, which could provide sufficient evidence that it would constitute a nuisance in advance of it taking place. There is evidence that is a complaints history from the previous time the event was held.

It is recommended that the licensing sub- committee **rejects** the application on ground of noise, for the reasons stated, including the protect enjoyment of the special characteristics of the national park for humans, and to protect wildlife for which no impact assessment has been completed.

APPENDIX 1 Relevant Policy and Guidance

9.1 Noise Policy Statement for England

Paragraph 185 of the NPPF also refers to advice on adverse effects of noise given in the Noise Policy Statement for England[2] (NPSE). This document sets out a policy vision to

> *"Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development".*

To achieve this vision the Statement sets the following three aims:

> *"Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:*
>
> - *avoid significant adverse impacts on health and quality of life*
> - *mitigate and minimise adverse impacts on health and quality of life; and*
> - *where possible, contribute to the improvement of health and quality of life.*

In achieving these aims the document introduces significance criteria as follows:

SOAEL – Significant Observed Adverse Effect Level

This is the level above which significant adverse effects on health and quality of life occur. It is stated that "significant adverse effects on health and quality of life should be avoided while also taking into account the guiding principles of sustainable development".

LOAEL – Lowest Observed Adverse Effect Level

This is the level above which adverse effects on health and quality of life can be detected. It is stated that the second aim above lies somewhere between LOAEL and SOAEL and requires that: "all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development. This does not mean that such adverse effects cannot occur."

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. This can be related to the third aim above, which seeks: "where possible, positively to improve health and quality of life through the pro-active management of noise while also taking into account the guiding principles of sustainable development, recognising that there will be opportunities for such measures to be taken and that they will deliver potential benefits to society. The protection of quiet places and quiet times as well as the enhancement of the acoustic environment will assist with delivering this aim."

The NPSE recognises that it is not possible to have a single objective noise-based measure that is mandatory and applicable to all sources of noise in all situations and provides no guidance as to how these criteria should be interpreted. It is clear, however, that there is no requirement to achieve noise levels where there are no observable adverse impacts but that reasonable and practicable steps to

[2] Department for Environment, Food and Rural Affairs, *Noise Policy Statement for England,* London, 2010

reduce adverse noise impacts should be taken in the context of sustainable development and ensure a balance between noise sensitive and the need for noise generating developments.

10 OTHER RELEVANT GUIDANCE AND LEGISLATION

10.1 Guidance: Code of Practice on Environmental Noise Control at Concerts

Table 1 of the CPENCC sets out noise limits for music events appropriate for different environs and frequency of event:

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

TABLE 1

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

Notes to Table 1

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

2. There are many other issues which affect the acceptability of proposed concerts. This code is designed to address the environmental noise issue alone.

3. In locations where individuals may be affected by more than one venue, the impact of all the events should be considered.

4. For those venues where more than three events per calendar year are expected, the frequency and scheduling of the events will affect the level of disturbance. In particular, additional discharges can arise if events occur on more than three consecutive days without a reduction in the permitted MNL.

5. For indoor venues used for up to about 30 events per calendar year an MNL not exceeding the background noise by more than 5 dB(A) over a fifteen minute period is recommended for events finishing no later than 23.00 hours.

6. Account should be taken of the noise impact of other events at a venue. It may be appropriate to reduce the permitted noise from a concert if the other events are noisy.

7. For venues where just one event has been held on one day in any one year, it has been found possible to adopt a higher limit value without causing an unacceptable level of disturbance.

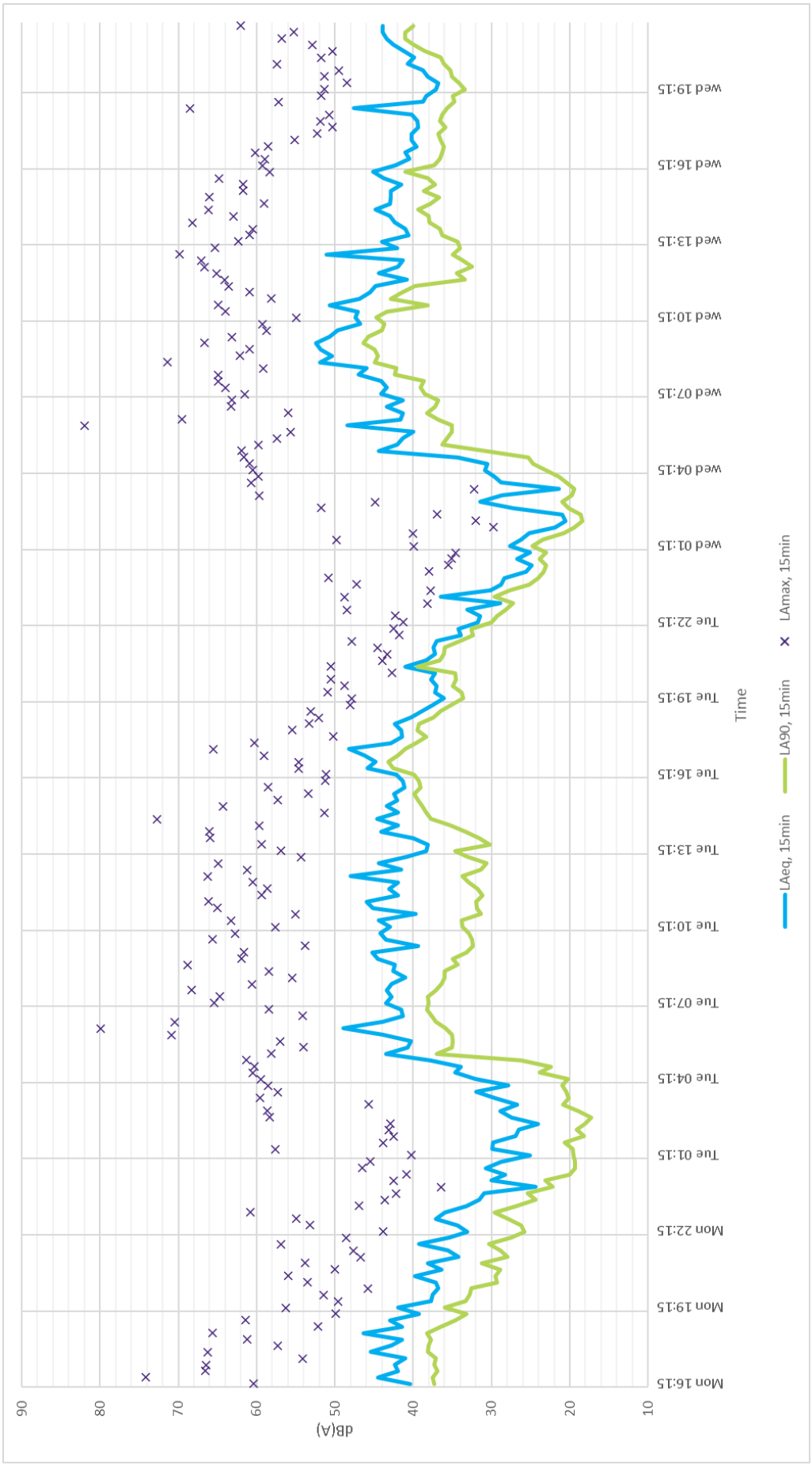
10.2 Other relevant guidance

The Noise from Pubs and Clubs final report for Defra, dated March 2005 (under contract NANR 92) is of interest, in that it considers an optimised UK assessment method. It identifies a number of criteria to be proposed for validation in Table 7 but is not conclusive about which one is favoured.

Name	Parameter	Type
IoA working group annex	L_{Aeq} vs L_{A90} plus L_{10} vs L_{90} in 40-160 Hz 1/3 octave bands	Relative
BS 4142 / Noise Act 1996	L_{Aeq} vs. background (L_{A90}, L_{A99}, etc.)	Relative
Noise Rating curve	1/3 octave (L_{eq}, L_{10} or L_{max}) vs. NR curve	Absolute
Absolute L_{Aeq}	L_{Aeq}	Absolute
DIN 45680 / Moorhouse	10 – 160 Hz 1/3 octave L_{eq} vs reference curve	Absolute
Inaudibility	Subjective	Relative

Table 7. Schedule of proposed criteria for validation.

APPENDIX 2 Logger Data, instrumentation location and


dB(A)
90
80
70
60
50
40
30
20
10
Time
Mon 16:15
Mon 19:15
Mon 22:15
Tue 01:15
Tue 04:15
Tue 07:15
Tue 10:15
Tue 13:15
Tue 16:15
Tue 19:15
Tue 22:15
Wed 01:15
Wed 04:15
Wed 07:15
Wed 10:15
Wed 13:15
Wed 16:15
Wed 19:15
LAeq, 15min
LA90, 15min
LAmax, 15min

Summary Data Results

		Ambient noise level, dB 63hzL_{eq}	Ambient noise level, dB 125hzL_{eq}	Ambient noise level, dB $L_{Aeq,\ 15min}$	Maximum noise level, dB $L_{Amax,\ 15\ min}$			Background noise level, dB $L_{A90,\ 15\ min}$	
		Period	Period	Range	Period	Range	Typical[1]	Range	Typical[2]
Daytime	07:00-23:00	53	48	32 - 52	43	31 - 74	65	26 - 46	32
	07:00-19:00	54	49	38 - 52	44	38 - 74	65	30 - 46	35
Evening	19:00-23:00	48	44	32 - 44	39	31 - 62	51	26 - 41	32
Night	23:00-07:00	44	37	21 - 49	38	23 - 82	65	17 - 38	20

1 Typical maximum noise level taken as the 10th highest of 2min samples during the period.
2 Typical background noise level shown is 20th percentile.

Site Location and Context

The site is located in Brockwood Park, Alresford, SO24 0LQ. Receptor A is the most sensitive neighbouring receptor at 260m southeast from the closest point of the daytime stage. The nighttime stage is 350m away. Background sound levels are controlled by the A272, approximately 840m to the northeast. The site location is shown in the figure below.

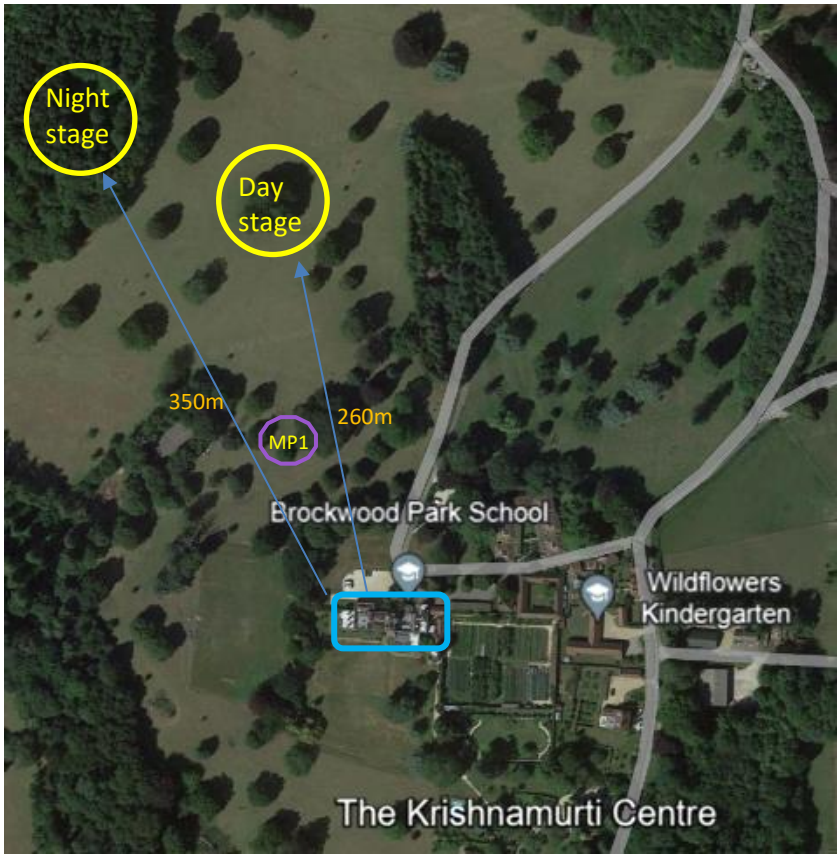


Figure A1: Site location and context. Brockwood Park School location in blue, stages in yellow. Sound level meter logging location in purple, Monitor Position 1.

Instrumentation

Equipment	Type	Serial Number	Calibration	
			Date	Certificate no
Svan 958				
Svantek Class 1 Sound and Vibration Analyser	958A	59146	31/07/23	1505800-2
Microphone	MK 255	12565	31/07/23	1505800-2
Preamplifier	SV 12L	57962	31/07/23	1505800-2

Equipment used during the survey. Calibration was checked before and after with no significant variance observed.

APPENDIX 3 SDNP Local Plan & Tranquillity Map

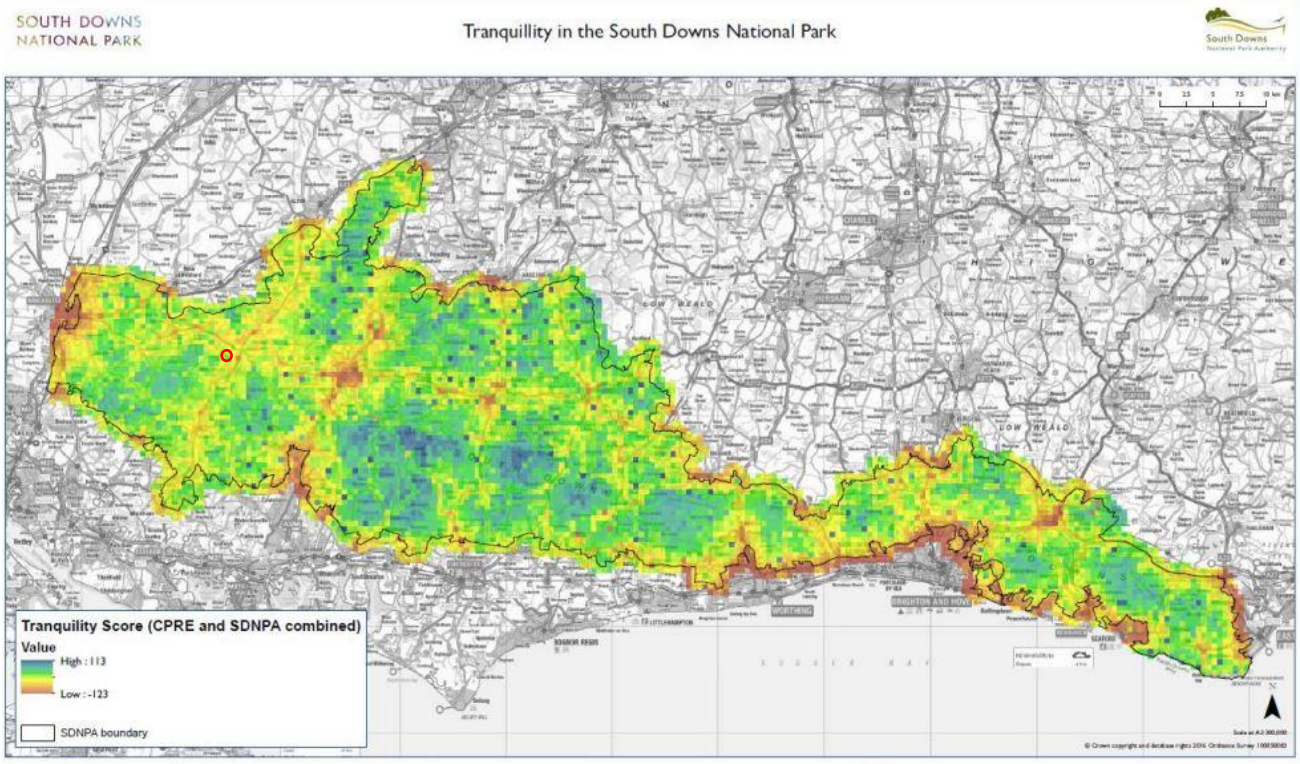


Figure 5.4, pg 54 of the Relative tranquillity South Downs Tranquillity Study – "baseline from which to assess changes in aural …environment" (5.44 of Local Plan)with approximate site location indicates by red circle.

SDNP Local Plan (2014 – 33) relevant extracts

There are 15 mentions of noise in the Local Plan, which are covered in the sections highlighted below, with key relevant sections in bold and underlined for emphasis.

> Pg 53, 5.45 states *: "The assessment of impacts on relative tranquillity is not the same as a noise assessment, and the assessment of zero noise impact for an application will not be taken necessarily as meaning that there would be a similar impact on relative tranquillity"*
>
> 5.46 states: " *The Tranquillity Study identified areas which are highly tranquil, of intermediate tranquillity, and those of low tranquillity. Applications for development proposals in highly tranquil areas should demonstrate that they conserve and enhance, and* ***do not harm, relative tranquillity****. Development proposals in areas of intermediate relative tranquillity are the areas which are most vulnerable to change, and should avoid further harm to relative tranquillity and take every opportunity to enhance it. Development proposals in areas of poor tranquillity are often located within or on the edge of urban areas and thus there may be limited scope for enhancing relative tranquillity in these area; opportunities to enhance relative tranquillity should be taken wherever possible*".
>
> 5.47 states: *"The extent that proposals conserve and enhance relative tranquillity will be determined by an assessment of the impact on relative tranquillity, which is proportionate to the scale and expected impact of the development in relation to the surrounding context".*

7.133 on pg 129 says about small and micro businesses: *"It is important that home based businesses do not cause unacceptable harm to the amenity of neighbours in terms of traffic, smell, loss of privacy, outlook, noise and overlooking".*

7.135 on pg 130 on Intensification states: *"Policy SD25 prioritises the development of previously developed land. Commercial development on existing employment sites should make an efficient use of existing buildings and previously developed land through intensifying uses,* ***provided that this does not compromise the special qualities of the National Park****".*

7.145 on pg 132 on change of use that: "*Robust evidence will need to be submitted and approved by the Authority that there will be* ***no adverse effect on the landscape and other special qualities through traffic, noise or pollution****. Advice on these matters will be sought from other statutory bodies, particularly the county councils and Highways England on the amount and type of traffic generation and the impact on the National Park's rural roads".*

Policy SD54 on Pollution and Air Quality (pg 166) states*: "Development proposals will be permitted provided that levels of air, noise, vibration, light, water, odour or other pollutants* ***do not have a significant negative affect on people and the natural environment now or in the foreseeable future, taking into account cumulative impacts and any mitigation*****"**

Policy SD2 : Ecosystem Services 9.8 on pg 184 Noise regulation is identified as Key to Ecosystem Services.

9.154 states : *"Development proposals should therefore be informed by the following evidence studies*": Bullet 10 = Noise Assessments

Policy SD7: Relative Tranquillity

Strategic Policy SD7: Relative Tranquillity

1. Development proposals will only be permitted where they conserve and enhance relative tranquillity and should consider the following impacts:
   a) Direct impacts that the proposals are likely to cause by changes in the visual and aural environment in the immediate vicinity of the proposals;
   b) Indirect impacts that may be caused within the National Park that are remote from the location of the proposals themselves such as vehicular movements; and
   c) Experience of users of the PRoW network and other publicly accessible locations.
2. Development proposals in highly tranquil and intermediate tranquillity areas should conserve and enhance, and not cause harm to, relative tranquillity.
3. Development proposals in poor tranquillity areas should take opportunities to enhance relative tranquillity where these exist.

Policy SD35: Employment Land

Strategic Policy SD35: Employment Land

1. The SDNPA will make overall provision for the following amounts of new employment land between 2014 and 2033:
   - Office (B1a/b): approximately 5.3 hectares
   - Industrial (B1c/B2): 1.8 hectares
   - Small-scale warehousing (B8): 3.2 hectares

2. Development proposals for the change of use of redundant B2 premises and land to accommodate the need for new offices and/or warehousing will be permitted provided that there would not be a potentially adverse impact on the landscape and other special qualities of the National Park including by reason of traffic, noise or pollution.
3. The Authority will safeguard all existing employment sites and allocations that are fit for purpose from development proposals for non-employment uses. Change of use applications that would result in a loss of employment land will only be permitted provided that evidence of a robust marketing campaign of at least 12 months clearly demonstrates that there is no market demand for the business premises.
4. The principal and local employment sites are shown on the Policies Map, to which further protection applies as follows:
   a) On principal employment sites: B Class employment uses will be safeguarded from development proposals for Non-B Class Uses and evidence of a robust marketing campaign of at least 18 months will be required.
   b) On local employment sites: commercial uses will be safeguarded from development proposals for non-commercial uses and evidence of a robust marketing campaign of at least 18 months will be required.

Details of marketing requirements are set out in Appendix 3.

Full document access can be found here:
https://www.southdowns.gov.uk/wp-content/uploads/2019/07/SD_LocalPlan_2019_17Wb.pdf