

MEMORANDUM

To: Elmbridge Borough Council
Date: 19th October 2023,
Updated 8th December 2023
CC:
From Peter Rogers (SAL)
Ref: 23-0165-0 M01 DC PR

SUBJECT: ST GEORGE'S HILL LAWN TENNIS CLUB, WEYBRIDGE – NEW PADEL COURTS

EXPERT OPINION



INTRODUCTION

- 1.1.1 St George's Hill Lawn Tennis Club has the intention of expanding their amenities with three new padel courts by replacing one existing tennis court at the southeast corner of the club.
- 1.1.2 Multiple reports have analysed the possible noise impact on the residential neighbours. This memorandum carries out an expert review of the applicant's report No: P22-158-R03v2 – July 2022- by Hepworth Acoustics, and provides some broad comments on the resident's report No: RPT1604 – August 2023 – by JSP Consultants for the benefit of understanding the technical strength of the application and the objections to it. I have also considered the opinion of Mr Clarke and provided my own expert opinion in this note, which I have provided a statement of truth at its conclusion, in line with Civil Procedure Rules, Part 35 in the event this is relied on in a formal decision making setting.
- 1.1.3 This opinion has been updated to pick up typographical errors and to include reference to updated information provided by Mr Clarke on the 8th December 2023.


EXPERTISE

- 1.1.4 I am Peter Rogers, of Sustainable Acoustics. I am a Fellow of the Institute of Acoustics with over 30 years experience, in Local Authority and as an independent acoustics consultant. I offer my opinions in this matter as independent registered expert in acoustics.
- 1.1.5 I have experience in Padel tennis noise impacts assessments of which I have been involved in a number.

APPLICANT'S REPORT, BY HEPWORTH ACOUSTICS

- 1.1.6 It is my view that this is a reasonably robust noise impact assessment report, which includes a good analysis of the possible impact from the new padel courts on the close residential properties. Below I review what I consider are its main strengths and weaknesses.

Main strengths:

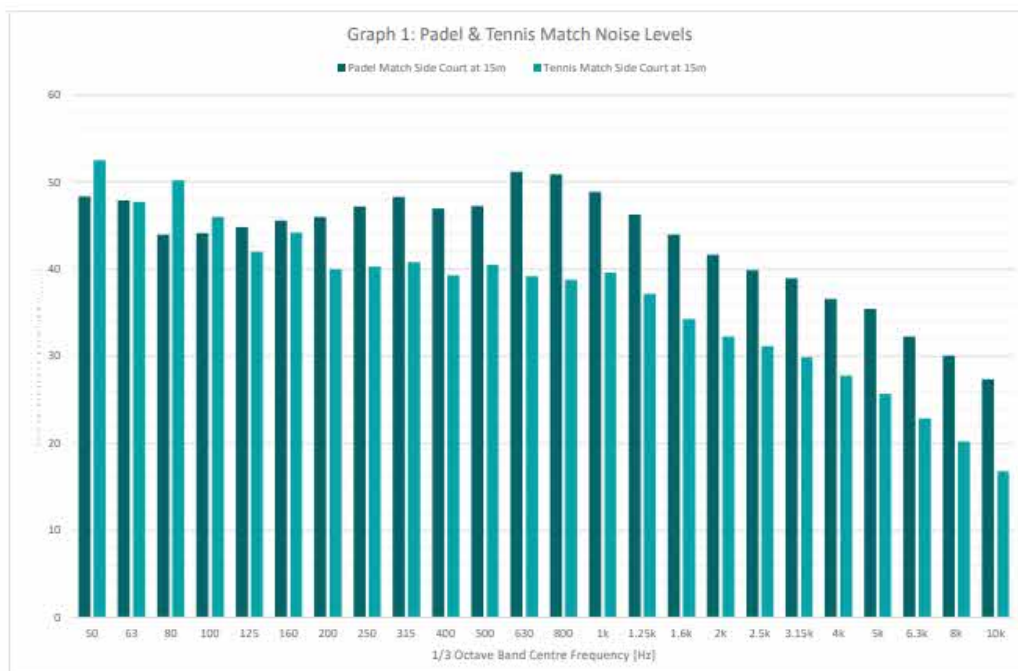
-  Recommendation of a barrier and canopy enclosure: The report establishes initial values for the new Padel court under current conditions and recommends mitigation measures that would meaningfully reduce the impact on the neighbours.



- Margin of safety in the assumptions: It doesn't include any insertion loss for the canopy, which in my experience could increase by up to 5dB if an acoustic lining is used (which would be additional to the proposed mitigation) depending on the makeup and the frequencies involved.

Main weaknesses:

- L_{Max} was not used in assessment: The environmental ambient noise data does present L_{Max} values in table 2, the Padel courts impact assessment lacks L_{Max} values, which I consider important data to include. This is because it better informs the potential level of impact on the neighbouring properties due to the character of the sound, which is impulsive in nature. Average levels alone are likely underestimate the annoyance and do not robustly assess the noise source adequately.
- No tennis activity close to monitoring positions: The assessment of current environmental conditions has been done during a period when none of the tennis courts close to the residents were being used. This situation has the potential to alter the results of the impact assessment in favour of the applicant, as the background and ambient levels would be expected to be higher than the other courts are in use.
- L_{Aeq} is used as the prevailing environmental noise value: Although we are used to seeing comparisons of incident sound against the L_{A90} value, I consider the use of the L_{Aeq} to be a valid approach in this case as those values are not far apart from the L_{A90} , and as this assessment is evaluating noise from recreational activities that have similar character of sound that have dominated the area for more than 100 years, for which the methods in the BS 4142:2014 cannot be used. The use of L_{Aeq} to define the current soundscape is also within National and local guidance expectations but it is necessary to consider how similar the spectrum shapes of the Padel Tennis are to the ambient noise climate as well as to tennis as shown in Graph 1 below, which has not been done.



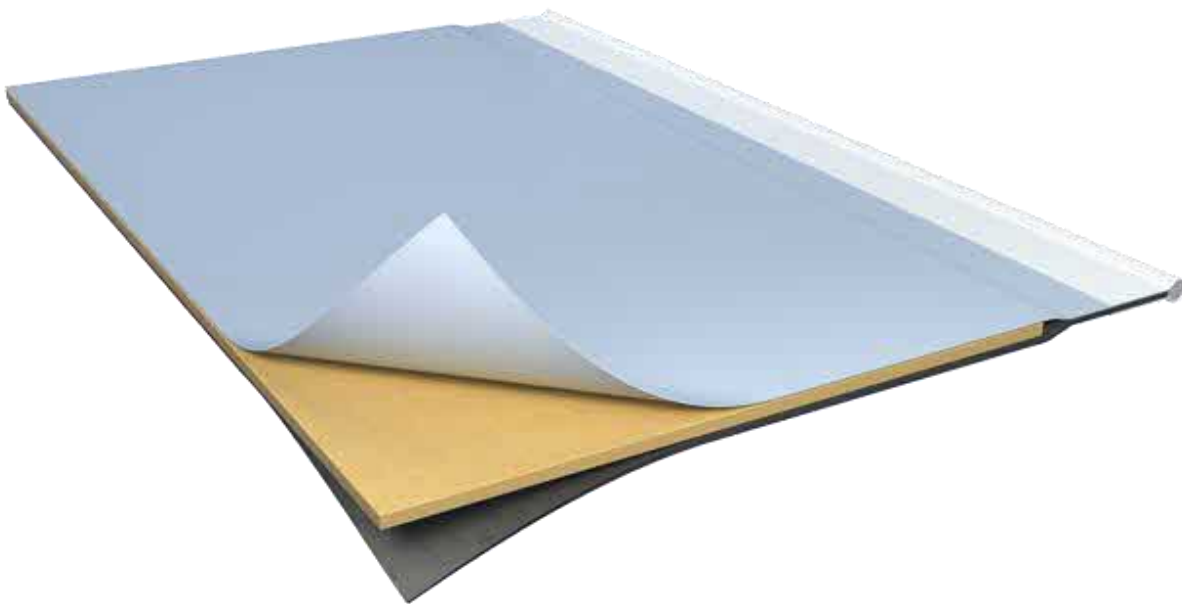
- Lack of historic context is given: This club was opened on 1913, most probably pre-dating the residential housing in the area, which have come closer to the club through the years where the dominating soundscape was that of tennis and racquet sports. This historic soundscape context has



not been mentioned in the report, which in my view is an important factor to be overlooked, further supporting the report conclusions.

☞ Lack of labels to the appended noise maps.

- 1.1.7 The impact assessment for all three courts being used concludes the impact will be Lowest Observed Adverse Effect level (LOAEL). Guidance for planning on noise (NPPG) says this means: “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”.
- 1.1.8 In reality this means there may be some adverse impact on quality of life of residents, when compared with tennis (especially when all three courts are in use) and in my opinion an “observable adverse impact” would be the impact I would expect to result, Whether it would be the lowest depends on the character of the sound in my opinion. It is unlikely to reach a “significant” level of impact in my view, but it maybe that some additional mitigation to the canopy would be beneficial to make sure that it will provide a useful acoustic benefit and would not make matters worse for residents as a result of reflections from the structure. It would be a wise precaution to implement aim two of the NPSE (2010), which is : “mitigate and minimise adverse impacts on health and quality of life;” .
- 1.1.9 To achieve this I suggest that an acoustic lining providing at least Rw 30dB, similar to that provided by: <https://www.directacousticsolutions.com/products-services/marquee-acoustic-lining/>





RESIDENT'S REPORT, BY JSP CONSULTANTS

- 1.1.10 I found this report to be mostly questioning aspects of the applicant's report and all other involved reports, without any significant objective constructive input towards assessing a counter position on the possible impact of the new Padel courts. It mainly based its conclusion on the subjective impression of the residents during an early Padel demo court built for testing, and an attempt to apply a BS4142 approach which is even agreed to not be appropriate.
- 1.1.11 I do not consider that this report undermines the technical evidence provided in the applicants report, and although I agree that the lack of L_{Max} values weakens the applicants report, I don't consider that is enough to invalidate it or fundamentally undermine its conclusion.
- 1.1.12 I have not commented on references to a Sustainable Acoustics report, which is referenced for comparative data at another site. In my knowledge there is no conflict as the Company was not involved with the assessment relating to St George's Hill, Weybridge in any way.

EXPERT OPINION BY CLARKE SAUNDERS

- 1.1.13 Mr Clarke is a respected acoustics expert, whom I recognise as such. I note that he has not provided a statement of truth with this opinion, which is more akin to a technical memorandum in structure. He does not therefore clarify that his duty is to the decision makers and this would not satisfy the CPR Part 35 rules. This point is clarified in 1.1.19, following our meeting.
- 1.1.14 Focusing on his comments on the applicants Hepworth report (Report B) he is critical of aspects, and agrees with my own reservation that the spectra comparison of the ambient noise (or residual noise as the report describes it) with the padel court spectral that is presented in Graph 1.
- 1.1.15 He also is skeptical about the benefit of the canopy providing, suggesting it might even make things worse. I consider this will depend on the angle of view to residential and whether any acoustic absorption is included, but suggest that the canopy is specified to make sure it does provide some reasonable mitigation benefit and that this concern is factored into the acoustic design.
- 1.1.16 Despite the points he concludes that by suggesting that the impact would be a LOAEL he seems to suggest that this is intended to mean there would be no impact of amenity (at his para 4 on page 3) or "nil" as he says in the 5th para of the same page. As the NPPG Noise guidance indicates (at my 1.1.6) this is clearly not the meaning of LOAEL, or the conclusion of the applicants' report, which in my interpretation of 4.49 clearly states that the impact would be expected to be "within the Lowest Observable Adverse Effect Level (LOAEL)". In my opinion this is not unclear or misleading. It is also within the expectations of the NPPF paragraph 185 and its guidance.
- 1.1.17 Mr Clarke's conclusion dismisses all the reports in various ways and suggests the reassurance needed by the planning authority. I find this unhelpful as Mr Clarke although apparently harboring reservations about the difference in character of the sound of Padel Tennis to tennis this has been robustly defined by the applicant in my view in Graph 1. It is rather the inability to then compare this with the ambient sound environment that remains uncertain in determining how impactful the sound would be. It is correct to say that this is part of the uncertainty that should be attributed to the assessment and its findings, which some further consideration should be given to in terms of the variation that will occur.



MEETING BETWEEN EXPERTS

- 1.1.18 On the 8th December 2023 Mr Clarke met with Mr Rogers to communicate for areas of clarity, informed by comments made by the applicants, his clients.
- 1.1.19 Mr Clarke requested that I consider further the following four areas:
- Intensification from historical use as shared domestic courts;
 - Canopy reflections
 - Expert declaration
 - Other padel examples in the area where complaints have been received (EBC records)
- 1.1.20 The points made on intensification is that the impact for a regularly used padel court, which is constructed for the purpose of being in greater use than the tennis court implies an intensification of use from that which previously occurred. This is based on the fact the tennis court was a private facility used only occasionally and shared by a limited number of people. Considering this it is my opinion that the direct comparison of Padel noise with tennis does, in terms of impact does rely on the assume the use pattern is comparably. An increase in the regularity of use would not alter the noise experienced when it is in use, but it would affect the cumulative impact which may be subject to controls such as limits on times of use during the day and how the space is managed. I would agree that the regularity of use is an area which does require some further consideration where a increase is expected.
- 1.1.21 The proposed canopy is reflective and like a cycle shelter, with open areas on the sides. This requires further good acoustics design input to make sure that reflected sound is not directed to residential, and that there would be benefits for it being in place. This could be catered for by condition, so the detailed mitigation is submitted and approved.
- 1.1.22 The lack of expert declaration in Mr Clarkes memorandum is not intended as a serious critique at this stage, where it is an opinion not intended to form expert evidence. Where it is it would be expected that the independence and duty to decision makers is made clear and confirmed in the statement.
- 1.1.23 Two other example sites in the immediate area (which include a site in Esher and Oxshott) which had attracted complaints were mentioned. This would be for EBC to explore their records and complaints history to consider whether this was correct or relevant to be considered in my opinion.
- 1.1.24 Consideration of the above does not alter my opinions or the conclusions in the round, but I have updated them in light of these points in the following section.



CONCLUSIONS

- 1.1.25 I would agree with the applicants report and the EBC EH comments that the noise from Padel Court is generally “noisier” than tennis, in terms of level but it is also a sound of a different character. The applicants report takes both of those things into account, quantifying it as 10dB(A) higher in level, and the spectrum of padel v tennis has been presented. The use of all three courts are assumed at the same time, and the resulting sound levels predicted therefore represents a worst case.
- 1.1.26 Overall, I found the applicant’s report to offer a reasonably robust methodology and process for assessing the noise impact from Padel Courts, which have no defined guidance in terms of noise assessment. They also allow a margin of comfort (uncertainty) in their impact assessment of the new Padel courts and in that worst case, with mitigation included they predict that a low adverse impact (LOAEL) would be caused. I would broadly agree with this assessment in terms of sound levels, given a review of their data and that the noise predicted to be between 23 and 43dB(A) from padel at residential, depending on the location would be well within the lower range of the residual noise in the quietest evening period (as seen in Graph 3). It may be that the observable impact is not low, depending on the regularity of use and whether the use would intensify as a result.
- 1.1.27 In terms how noticeable this would be is difficult to say as no frequency data has been presented for the residual noise in the evening, only overall levels in L_{Aeq} . This means it is difficult to conclude how noticeable it would be against other noise in the area. This means there is a greater degree of uncertainty that I would attribute to the conclusions made by the applicant, but this can be mitigated by the appreciation that tennis sound has been part of the area for a very long time, so it is only the difference that has the potential to cause a greater degree of annoyance. This should be qualified against how regularly this may occur (as considered in 1.1.20). Clarification on this may be beneficial or a condition limiting the days of use. A close look at Graph 1 shows the impact is likely in the 630Hz to 1.25kHz region of the spectrum, where that difference might be greatest. In my view this may make a noticeable difference subjectively to the sound but not to the degree that it would move the impact from a LOAEL to an observable adverse impact (OAEL). It would be an intensification of use that would do that.
- 1.1.28 I would suggest that based on the planning balance it would be likely to meet the expectation of the NPPF paragraph 185 a) and also the aims of national noise policy (NPSE), with a moderate degree of uncertainty in my opinion connected to this conclusion, provided that intensification of uses is moderately safeguarded against.
- 1.1.29 This noise control is achieved by including some quite substantial mitigation, which I would expect to be slightly better than assumed at minimising the noise impact, providing that good acoustic design is implemented, and this is checked via condition. This is primarily because of the noise reduction offered by the canopy, which has not been taken into account in the calculations and because the environmental survey was complete when no tennis games were occurring on the eastern side of the club; which would increase the background and L_{Aeq} levels of the current environment and change the results of the applicants assessment in a favourable direction.
- 1.1.30 Although the applicants report does have some technical weaknesses, which I have identified, most of them play in favour of a larger margin of comfort in regards to the added impact from the new Padel courts towards the neighbours, and is considered to be a reasonably robust assessment of the possible impact of the new Padel courts towards the neighbouring residents.



- 1.1.31 In my opinion provided that the mitigation identified is completed the noise impact will be adequately minimised to a point it would be likely to meet national and local planning policy with a moderate degree of uncertainty. It is my opinion that uncertainty could be minimised by requiring an enhanced condition 1 as proposed by EBC EH would satisfy this requirement and would be precise and enforceable with regards for the technical aspects of the condition wording. For ease of reference this is reproduced below overleaf:

Condition 1 - Noise

Prior to first use, the scheme, Assessment of Noise Impact from New Padel Courts at St George's Hill Tennis Club Report No: P22-158-R03v2 dated July 2022 conducted by Hepworth Acoustics, approved by the Local Planning Authority and its mitigation measures shall be fully implemented in accordance with the approved details. The works and scheme shall thereafter be retained, in accordance with the approved details for the life time of the development.

Before first occupation, post-completion testing shall be carried out to ensure that the sound insulation values have been achieved. This shall be carried out by a suitably qualified person and the results of the assessment shall be submitted to and approved in writing, by the Local Planning Authority.

- 1.1.32 The enhancement suggested to condition 1 would be to also require the canopy material should have an acoustic performance of at least Rw 30dB, include acoustic absorption to minimise reflected sound and should break line of sight to noise sensitive receptors.

2 STATUTORY DECLARATION

STATEMENT OF TRUTH I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

Signature.....  Date..... Updated 8th December 2023