

Land at Maple Lodge Close, Maple Cross

Rebuttal (Noise)

Report 19/0333/Rebuttal 1

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Rebuttal

Appeal by BCL (Maple Cross) LLP & Impact Property Development Ltd

Appeal against non-determination by Three Rivers District Council
of planning permission for development at
Land to the North of Maple Cross Lodge, Maple Cross
Rickmansworth, Hertfordshire, WD3 9SE

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1 Qualifications and Experience

- 1.1 My name is Matthew Heyes and I am an Associate Director at RSK Acoustics (formally Cole Jarman), a dedicated acoustics consultancy practice. I have a Bachelor of Science degree with honours in Acoustics. I am a Member of the Institute of Acoustics. My qualifications and experience have previously been set out in my Proof of Evidence.
- 1.2 I confirm that the evidence which I present for this appeal has been prepared in accordance with the guidance of my professional institution. I confirm that the opinions expressed in this Rebuttal are my true and professional opinions.

2 Commentary on Mr Bryant's Interpretation of Planning Policy

2.1 National Planning Policy

- 2.1.1 Section 4 of Mr Bryant's report (CD6.2.5) details relevant national planning guidance. Mr Bryant considers national planning guidance from the National Planning Policy Framework (NPPF) (CD6.2.5 para 4.2-4.4), the Noise Policy Statement for England (NPSE) (CD6.2.5 para 4.5-4.10), National Planning Policy Guidance (NPPG) (CD6.2.5 para 4.11-4.12). I am in full agreement with the national planning guidance references that Mr Bryant has made in his proof and have made reference to the same sections within my own.
- 2.1.2 In particular, NPPF (174) refers to the prevention of unacceptable levels of noise pollution. NPPF (185(a)) refers to avoiding noise giving rise to significant adverse impacts on health and the quality of life. Reading the paragraphs together (in a manner which makes them internally consistent), an unacceptable level of noise pollution is one which gives rise to significant adverse impacts on health and amenity.
- 2.1.3 The national guidance referenced by both Mr Bryant and myself makes it clear that the aim of the planning system is to avoid Significant adverse impacts on health and quality of life (CD6.2.5 para 4.7-4.8). Where the impact is above the Lowest Observable Adverse Effect Level (LOAEL) (CD6.2.5 para 4.9) but is below the Significant Observed Adverse Effect Level (SOAEL) then the action must be to mitigate and reduce noise to a minimum (CD6.2.5 Table 1). Where this is



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done there is no conflict with policy or guidance and no reason to refuse planning permission. It is the SOAEL which is the level above which significant adverse effects on health and quality of life occur. This is consistent with the detail definitions provided by the PPG and relied on by Mr Bryant at Table 1 (p.8).

- 2.1.4 In his summary of acoustic criteria, Mr Bryant states that if the rating level of the development does not exceed the existing background noise level then this would be a LOAEL and "generally acceptable" (4.23).
- 2.1.5 I do not agree with the LOAEL being set at the background noise level because BS4142 does not suggest that exceeding the background noise level would constitute an observed adverse effect.
- 2.1.6 Further, Mr Bryant has not provided any recommendations for where the SOAEL threshold should be taken. It is only where the noise from the site exceeds these SOAEL limits that it would be appropriate to refuse planning permission (consistent with the NPPF and PPG).
- 2.1.7 For reference I still maintain that the day and night thresholds for SOAEL detailed within the CJ report (CD 1.3.3 Appendix A, tables TA2 and TA3) are appropriate. These are absolute levels of 55 dB $L_{A,r,Tr}$ and 45 dB $L_{A,r,Tr}$ during the day and night periods respectively, or 10 dB above the existing background noise levels, whichever is higher. The reasoning for these levels is fully detailed within the CJ report (CD 1.3.3 Appendix A) and takes guidance directly from BS 4142 and WHO.
- 2.1.8 The designed layout of the units (CD 1.1.1 P16) is such that significant amounts of acoustic screening is offered to the nearest dwellings, from service yard operation, by the warehouses themselves. Due to this planned acoustic screening, I consider that noise from the operation of the unit has been suitably mitigated. No further mitigation has ever been suggested by the LPA, especially the EHO who considers the scheme to be acceptable. Accordingly, it is only when the noise impact exceeds this SOAEL level that there is potentially a significant adverse on health and amenity and an unacceptable level of noise pollution (for the purposes of the NPPF and Policy DM9d).



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2.2 Local Planning Policy

- 2.2.1 In his proof (CD 6.2.5 para 4.14) Mr Bryant states that the two key issues when considering the Three Rivers District Council policy DM9d the first is:

Whether the proposals are anticipated to have unacceptable adverse impact on the indoor and outdoor acoustic environment of existing development; and.

- 2.2.2 The policy above is in line with the national policy and guidance, in that it states that planning permission should only be refused if the development would have an unacceptable adverse impact on the environment, which I interpret to mean that if the impact is below the SOAEL threshold then planning permission should not reasonably be refused on noise grounds (for the reasons given above).

- 2.2.3 The second is:

Any proposed commercial development should not significantly increase the background noise levels at nearby noise sensitive properties including dwellings.

- 2.2.4 The policy therefore expressly allows an increase in the background noise level from commercial developments, when measured from dwellings. The policy precludes a "significant increase" (not any increase) in background noise levels. Accordingly, where there is a "significant increase" in the background noise level, there will be an "unacceptable adverse impact". This is consistent with the NPPF and PPG.

- 2.2.5 The policy does not provide any guidance on how the variation in background noise levels should be assessed. When considering the impact of any changes in noise level from commercial units I agree with Mr Bryant (CD 6.2.5 Para 4.15) that BS 4142 is the correct standard to use. My proposed criteria meet the requirements of BS 4142 and so I consider that they meet the requirements of DM9d. There is no significant increase above background noise levels and no conflict with local policy in the development plan.



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2.3 **BS4142**

2.3.1 In paragraph 4.18 of this proof (CD 6.2.5) Mr Bryant provides a summary of the typical BS4142 assessment methodology. I consider that the summary only considers the initial impact assessment detailed within BS4142 and so does not provide a complete outline of the assessment methodology. The standard makes it clear that a typical assessment would go on to consider the context of this assessment. The relevant part of which is the absolute level of sound as quoted below:

Where the initial estimate of the impact needs to be modified due to the context, take all pertinent factors into consideration, including the following.

1) The absolute level of sound. For a given difference between the rating level and the background sound level, the magnitude of the overall impact might be greater for an acoustic environment where the residual sound level is high than for an acoustic environment where the residual sound level is low.

Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night.

Where residual sound levels are very high, the residual sound might itself result in adverse impacts or significant adverse impacts, and the margin by which the rating level exceeds the background might simply be an indication of the extent to which the specific sound source is likely to make those impacts worse.

2.3.2 BS4142 (CD 4.44 Section 11) is explicit in the fact that this is an integral part of any assessment and so must be considered. Mr Bryant has only considered the initial part of the assessment when establishing the potential LOAEL threshold and so has not fully followed the assessment methodology within BS4142.

2.3.3 In paragraph 4.20 Mr Bryant states that he considers that ensuring that the noise levels are of “low impact” i.e equal to background is consistent with the LOAEL categorisation given in the



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NPPG. I do not consider this to be the case as it suggests that any level above this an adverse effect would be perceptible. Instead, as detailed within the CJ report (CD 1.3.3 Appendix A, TA3) I consider this to be in line with the description of NOEL. Further, this approach is inconsistent with Policy DM9d, which permits an increase in background noise levels, provided it is not a significant increase. It cannot be the case that any increase in background noise levels is significant, as this would have the effect of making the background noise level the NOEL, LOAEL and SOAEL. This is not the approach of policy of guidance (set out above).

2.3.4 Further, as I state in my Proof (CD 6.1.10 Para 5.1.3) BS 4142 states that there may begin to be an observed adverse impact at a point 5 dB above background and so I consider that logically this must be the LOAEL threshold. At 10dB above background noise levels, a significant adverse impact is likely (depending on context).

2.3.5 With regards to context My Bryant (CD 6.2.5 para 4.20) states the following:

As detailed above, BS4142 indicates that where rating noise levels exceed the background noise level by 5dB or more this is an indication of adverse impact being likely. Where rating noise levels do not exceed the background noise levels this is an indication of "low impact". Both of these figures are presented with the caveat "depending on context". It is our experience that rating noise levels not exceeding the background noise level is a suitable limit for commercial noise unless the context of the site is such that there is already significant and similar commercial operations.

2.3.6 I consider that the initial impact assessment detailed within BS4142 is based on a site where the existing noise climate does not include any of the factors which should be considered in the context part. i.e a site where the existing noise levels would not be considered to be quiet or loud, with no existing commercial noise sources, and where the houses do not contain any façade enhancements. With this type of site I consider that the LOAEL should be set at 5 dB above the representative background noise levels.

2.3.7 I agree with Mr Bryant that where the existing noise climate is dominated by industrial noise sources it might be appropriate to consider higher noise thresholds, however this is not relevant at this site and so I have not considered this any further.



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3 Mr Bryant's Four Principal Concerns

3.1 Section 5 of Mr Bryant's proof (CD 6.2.5) details four principal concerns regarding CJ report (CD 1.3.3). These are:

- Incorrect Commercial Noise Limits
- Insufficient Noise Character Corrections
- No Consideration of Residences to the East of the Site
- Proposed Planning condition

3.2 These are considered below in turn:

Incorrect Commercial Noise Limits

3.3 Mr Bryant states the following in his proof at (CD 6.2.5 Para 5.2 bullet point 1):

In contrast to the typical BS4142 assessment methodology, RSK Acoustics did not undertake a survey of the existing background noise environment at the site in preparation of their assessment. Instead absolute commercial noise limits were assumed. This assumption was based on an amalgamation of BS4142 in combination with World Health Organisation guidance regarding internal noise levels in residential premises and the Noise Policy Statement for England.

3.4 As I detailed within my proof (CD 6.1.10) and the CJ report (CD 1.3.3 para 6.1) the original planning application was undertaken at a time when road traffic flows were significantly affected by the COVID 19 pandemic. Due to this it was not possible to undertake measurements of the representative noise climate around the site. Mr Bryant states that RSK Acoustics proposed the absolute noise limits instead of an assessment of the representative noise levels and this is not the case. As I have detailed within section 2.3.2 of this rebuttal, considering the absolute noise threshold values is an integral part of the BS 4142 assessment and so the noise criteria proposed within the CJ report (CD 1.3.3) would always look at both (i) the change in noise levels and (ii) the absolute noise levels. I consider that as the lowest noise limits possible for the site would be the absolute thresholds proposed, only considering these means that the assessment undertaken



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is a worst-case assessment. When a noise survey is undertaken at the site it is likely that higher noise limits will be set at certain times.

- 3.5 As I state above, consideration of the absolute noise levels is a key part of the BS4142 assessment procedure. Relevant levels are not provided within BS4142 and so, in order to take this into account, it is necessary to consider guidance within other documents. To do this Mr Bryant states (5.2) that it is appropriate to low noise levels provided within the previous (withdrawn) 1997 edition of BS4142. This standard has been withdrawn and fully superseded and so no weight should be given to it. If these levels were still relevant, they could (and should) have been included within the latest version of the standard.
- 3.6 The CJ report (CD 1.3.3, Appendix A, para A4.2.2-A4.2.6) considers relevant current guidance contained within the 1997 World Health Organization (WHO) guidelines for Community Noise and the WHO Night Noise Guidelines 2009. These documents provide guidance on absolute noise levels for industrial/commercial noise sources. The thresholds taken from the WHO guidelines have then been made more onerous by comparing them to the noise rating level of the site, instead of the absolute noise levels, and shortening the assessment time periods to ensure that the variation of noise over time is suitably controlled. This ensures that the amenity of the dwellings is suitably protected.
- 3.7 Mr Bryant (CD 6.2.5 Para 5.2 bullet point 1) highlights that the use of absolute levels is only appropriate in the event that both the background sound levels, and the rating levels are low. I consider that where the background noise levels are below the absolute LOAEL thresholds set out within the CJ report (CD 1.3.3, Appendix A, TA2) then these should be considered to be low.
- 3.8 Mr Bryant goes on to say that the results of the Cass Allen noise survey found that the background noise levels are higher than the level at which BS4142 would indicate an assessment of absolute commercial noise levels would be appropriate, but lower than the assumed limits given by RSK Acoustics. As I have stated before BS4142 does not provide guidance on the background noise levels which would be considered to be low and so this statement is not accurate. As I state



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above, I consider that where the background noise levels are lower than the absolute criteria that I have proposed these should be considered to be low in line with guidance in BS4142.

- 3.9 Mr Bryant's argument would appear to suggest that the impact of a development could be lowered by reducing the existing background noise levels. This would not make sense as an assessment approach and I do not consider this to be what the standard is saying.
- 3.10 I have requested the original survey data from Mr Bryant in order to make a comparison of the noise levels against the background noise levels to present in addition to the absolute noise thresholds. Mr Bryant has confirmed that this will be sent to me, however at this point I have not received the data. I may, therefore, have to present such evidence orally at the Round Table Session.
- 3.11 I do not, therefore, accept that "incorrect" commercial noise limits have been applied at all.
- 3.12 In the same section Mr Bryant provides a statement comparing the noise rating levels from the original CJ Report (CD 1.3.3), prior to my updated noise modelling, against the Cass Allen measured background noise levels:
- 3.13 Comparing the measured background noise levels to the commercial noise levels predicted by RSK Acoustics (including the character correction proposed by RSK Acoustics, discussed further below) at the most exposed receptor, an assessment in accordance with BS4142 would indicate that the outcome would be above the "low impact" threshold and approaching the "adverse impact" level. This would therefore be considered to be above the LOAEL and further mitigation would be required in accordance with the NPPG.
- 3.14 Mr Bryant appears to be suggesting that the impact is below 5 dB above the existing background noise levels and so I consider this to be below the LOAEL. Whilst we disagree on the exact level of the impact with both agree that this is below the SOAEL threshold and so it is necessary to mitigate and reduce to a minimum. As I state in paragraph 2.1.8 above the layout of the development has been designed to provide significant amounts of acoustic screening to the nearest noise sensitive properties and I consider that noise from the site has been mitigated and



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reduced to a minimum. Based on this the impact is noise unacceptable and so is not contrary to policy or guidance.

Insufficient Noise Character Corrections

- 3.15 Mr Bryant considers that the acoustic character corrections of 3dB made within the CJ assessment were insufficient. In order to demonstrate that the character of the noise is not a concern I have applied a 6 dB penalty for Loading and Unloading activities within my updated noise model. This is fully detailed within my proof (CD 6.1.10 Section 7.2). I consider that this provides an additional level of comfort for the assessment and so this is no longer relevant.

No Consideration of Residences to the east of the site

- 3.1.1 Mr Bryant's third point is that the CJ report does not consider the residences to the east of site. Using the updated noise model detailed within my Proof, I have calculated the noise rating level from the site, to the worst-case dwellings to the east of the site for each hour of the day and each 15minute period at night. The calculated noise rating levels ($L_{A,r,T}$), compared to the LOAEL threshold are shown below:



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Time Period, hh:mm	L _{Ar,T} , dB	LOAEL Threshold	Difference
0000-0100	36	40	-4
0100-0200	36	40	-4
0200-0300	35	40	-5
0300-0400	36	40	-4
0400-0500	35	40	-5
0500-0600	35	40	-5
0600-0700	36	40	-4
0700-0800	36	45	-9
0800-0900	37	45	-8
0900-1000	17	45	-28
1000-1100	41	45	-4
1100-1200	17	45	-29
1200-1300	15	45	-30
1300-1400	20	45	-26
1400-1500	36	45	-9
1500-1600	40	45	-5
1600-1700	36	45	-9
1700-1800	36	45	-9
1800-1900	39	45	-7
1900-2000	35	45	-10
2000-2100	35	45	-10
2100-2200	35	45	-10
2200-2300	35	45	-10
2300-2400	35	40	-5

T1 Maple Lodge Close Assessment Results

3.1.2 My results show that the noise levels are below the LOAEL threshold and so complies with guidance within the NPPF, NPPG (CD 4.48) and Policy DM9 (CD 4.27) of the Local Council's Development Management Policies. I had previously scoped this out of my assessment because I did not consider it necessary. Indeed, the LPA (and EHO) have never sought such an assessment in this or the previous application.

Proposed Planning condition

3.16 Mr Bryant states (CD 6.2.5 para 5.2 point 4) that the planning condition proposed within the original CJ Report (CD 1.3.3 para 4.5) is not appropriate as it is based on the absolute noise



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criteria. The condition considers both the absolute noise criteria along with the representative background noise levels and so is in full accordance with BS4142 and is therefore considered to be suitable to adequately protect the existing residents from commercial noise emissions from the site.

4 Planning Conditions

- 4.1 Appendix 3 of Mr Bryant's proof (CD 6.2.6) comments on proposed Condition C19, condition C36 and condition C38 (condition numbers from Mr Bryant's proof).
- 4.2 Condition C38 limits the hours of operation for the development site to between 07:00 to 20:00 Mondays to Fridays (inclusive) and 10:00 to 1600 (inclusive) Saturdays, Sundays and Bank Holidays. I consider that this condition is not appropriate as our noise assessment demonstrates that there will be no significant adverse impact by operating outside of these times. Mr Bryant states in his final paragraph of this appendix that an assessment in line with BS4142:2014 indicated that should operations occur as proposed outside of the houses of approximately 0700 to 1900 then adverse noise impact would be the likely outcome. My assessment shows that the criteria are met throughout the day, evening and night time periods and so there is no justification (applying NPPF or PPG tests on conditions) to reduce the operational time periods. Mr Bryant has not provided any additional evidence which demonstrates that reduced operational times are required.
- 4.3 Condition C19 restricts the operational noise levels generated by the development at the nearest residents. Notwithstanding my concerns regarding the appropriateness of the limits proposed within this condition if the Council consider that the limits are appropriate based on guidance which considers 24 hour operations they must be appropriate at all times. If these limits can be met outside of the operational hours detailed within C38 then I consider that there is no reason why the site could not operate outside of these times.
- 4.4 If service yard activities were to exceed the limits in C19 there would still be internal operations such as stock taking or preparing goods for loading later in the day/the following day which could



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occur without any noise impact as noise from these activities would be controlled by the fabric of the building.

■ End of Section

