

Comments on the Applicant's Noise Note

Response to ExA Rule 17 letter by

William David Moore

The Examining Authority's questions are in [blue](#). The applicant's responses to those questions are in [red](#). My comments are in black.

Part a)

a) It has been suggested that the Applicant's Noise Assessment Update Note [REP3-061] mis-states the locations of NSRs 2, 3 and 4 and that they should not have been included in Table 5 to this Update Note. Can the Applicant explain why such NSRs have been included at Table 5.

The receptors included within Table 5 of the Noise Assessment Update Note were included as the existing noise levels at those receptors have been characterised using the noise levels measured at NMP4.

I very much hope the Examining Authority can see that the applicant hasn't addressed the point.

The paragraph before Table 5 of the [Update Note](#) states "The sound rating levels for the receptors on Billington Road East have been compared to the predicted noise climate detailed in Table 4."

As I have repeatedly explained to the applicant, NSRs 2, 3 & 4 aren't on Billington Road East. They are on Bridle Path Road. I think the applicant is deliberately not acknowledging the misstatement of location. NSRs 2, 3 & 4 are very far away from the applicant's rail noise contours and are also within lower road noise contours within [the applicant's road noise contour map](#).

I think the applicant doesn't want to acknowledge this, and has chosen to wrongly lump NSRs 2, 3 & 4 in with Billington Road East, the area with the highest current noise on the applicant's contour maps.

I also think that's also the reason the applicant's Update Note doesn't address NSR 1, and I think it's the reason the applicant subsequently **falsely** claimed the methodology with respect to NSR 1 is not in dispute.

When I told the applicant to withdraw this false claim, the applicant started attributing the applicant's contours from Billington Road East to NSR 1, as shown on [Page 19](#). NSR 1 also isn't on Billington Road East.

Look at the location of NSR 1 on [the applicant's road noise contour map](#). It's in the applicant's 45.0-49.9 LA10 18hr road noise contour. Yet the applicant is attempting to attribute 55 dB LAeq of daytime road noise to the NSR.

The applicant's claim that NSRs experience more ambient road noise than NMP4, and therefore the sound of train pass bys measured by NMP4 during different time periods shouldn't be attenuated, is demonstrably inapplicable to NSR 1. NSR 1 is located in a **lower** road noise contour than NMP4.

Part b)

b) Again, with regard to Table 5 to the Noise Assessment Update Note, can the Applicant explain its findings that all NSRs experience at least 50dB of ambient rail noise, given that they appear to fall outside of the rail noise contours depicted in the Update Note.

The analysis that has been undertaken and detailed in the Noise Assessment Update Note does not state that all receptors experience at least 50dB of ambient rail noise. The existing ambient noise levels at NSRs north of the rail line are a combination of both road and rail traffic noise.

The analysis shows that, as distance increases from the rail line, road traffic from surrounding roads becomes more dominant. The purpose of the analysis was to determine if the noise levels measured at NMP4 were representative of NSRs to the north of the rail line.

The analysis suggests that the measured noise levels are representative of NSRs to the north of the rail line, regardless of whether the ambient noise levels are dominated by road or rail traffic.

Therefore, the conclusions of the Noise and Vibration ES Chapter are valid, and this is what the update note concludes.

I very much hope the Examining Authority can see that the applicant hasn't addressed the point. All the NSRs in Table 5 of the applicant's Update Note are outside the rail noise contours, yet the applicant has still attributed 50 dB of rail noise to every NSR in Table 5. The applicant shouldn't have done that, because they are all outside the contours.

Figures 3 & 4 of the applicant's Update Note actually show road noise falling, not rising, with increased distance from the railway line.

Part c)

c) At paragraph 10.174 to ES Chapter 10 [REP4-039], the Applicant draws reference to BS4142 insofar as it relates to circumstances where absolute levels may be more relevant than the margin by which the rating level exceeds the background level. This includes circumstances where background sound levels and rating levels are low. Can the Applicant explain why its methodologies are in line with such advice, given that, in this instance, the background and rating levels are higher than those levels at all NSRs during all time periods.

The paragraph relating to low background and rating levels has been taken verbatim from the guidance document, and was included within the noise and vibration chapter to highlight that the absolute noise level could be considered within the context assessment.

BS4142 does not state that the consideration of absolute levels is limited to situations where the background sound levels and rating levels are low. Section 11 of the Standard states:

“An effective assessment cannot be conducted without an understanding of the reason(s) for the assessment and the context in which the sound occurs/will occur. When making assessments and arriving at decisions, therefore, it is essential to place the sound in context.”

BS4142 states:

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

- The absolute level of sound;
- The character and level of the residual sound compared to the character and level of specific sound; and
- The sensitivity of the receptor and whether dwellings or other premises used for residential purposes will already incorporate measures that secure good internal and/or outdoor acoustic conditions. “

The absolute level of sound should therefore be considered as part of any contextual assessment. The Applicant has done this and reported the assessment outcome within the Noise and Vibration ES chapter.

Furthermore, the assessment has considered any differences between the character and level of the residual sound compared to the specific sound when applying acoustic penalties (pre and post mitigation scenarios), and the external and internal noise levels as a result of the HRNFI (paragraphs 10.302 and 10.303 Chapter 10 Noise and Vibration 6.1.10A Revision 08), taking into account any façade treatment.

Therefore, the assessment methodology is in line with the requirements of BS4142.

I very much hope the Examining Authority can see that the applicant has not addressed the point and has not commented on whether the applicant thinks Paragraph 10.174 applies in any of the cases in the report.

The applicant wrote:

“BS4142 does not state that the consideration of absolute levels is limited to situations where the background sound levels and rating levels are low.”

No one has said it does.

The applicant wrote:

“The paragraph relating to low background and rating levels has been taken verbatim from the guidance document, and was included within the noise and vibration chapter to highlight that the absolute noise level could be considered within the context assessment.”

Including Paragraph 10.174 does not “highlight that the absolute noise level could be considered within the context assessment”.

Paragraph 10.174 strictly relates to cases where **both** background and rating levels are low. Where **both** background and rating levels are low, absolute sound levels might be as, or more relevant than the margin by which the rating level exceeds the background.

But Paragraph 10.174 should not apply to any of the NSRs during any time period, because the background sound levels and rating levels are too high, so the inclusion of Paragraph 10.174 is highly misleading to the reader, it should not be in the report, and the applicant should not have relied on it at all.

In the cases in the report, the exceedance of the rating level above the background sound level is what matters.

Part d)

d) In terms of construction noise, can the Applicant clarify the rationale used for predicting the reduction in the significance of effects at NSRs with mitigation in place. In making such reductions, has the Applicant considered factors such as the attitude of site operators, noise characteristics (such as impulsivity), the duration of site operations and existing ambient noise levels?

As the applicant's reduction in significance of effect is subjective, we only have the applicant's word for and view of these claims.

Part e)

e) In terms of window attenuation, it would appear that previous proposals for rail freight interchanges (notably East Midlands Gateway and Northampton Gateway) assumed that a partially open window would lead to a 12dB reduction of the sounds projected to be caused by the Proposed Development. Can the Applicant explain why this has not been applied in this instance?

The applicant's comments are similar to the ones I responded to at Deadline 7.

I would humbly suggest that applicants in other rail freight interchange proposals were sincerely interested in conducting a robust assessment, and the applicant in this case is not. A "defendable estimate" is the self-selected bar for the applicant in this case. It is not a high one.