

# TECHNICAL NOTE

## Support to Lancashire County Council Minerals Planning Authority

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**SUBJECT**

Land off 12 Bourbles Lane – Second  
Noise review

**PROJECT NO.**

5218724

**DATE**

10 January 2025

**AUTHOR**

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**DISTRIBUTION****REPRESENTING****DOCUMENT REFERENCE**

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### Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	Noise Review	AL	VLW	VLW	AL	10 Jan 2025

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### Client signoff

<b>Client</b>	Lancashire County Council		
<b>Project</b>	Support to Lancashire County Council Minerals Planning Authority	<b>Project No.</b>	5218724
<b>Client signature / date</b>			

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# Project Context

In November 2023 AtkinsRéalis reviewed documents and summarised its view of the noise assessment for the Proposed Sand and Gravel Extraction, Land off Bourbles Lane, Preesall, application LCC/2023/0030. That initial noise review was a technical note titled “Land off 12 Bourbles Lane – Noise review”, dated 10<sup>th</sup> November 2023.

The November 2023 review concluded that *“it would be beneficial for the applicant to provide the following additional information to inform the planning decision:*

- *Confirmation that the assessment results presented apply to all phases of the development,*
- *An opinion on baseline noise levels on a Saturday morning,*
- *Further details on the dimensions of bunds and stand-off distances used for noise mitigation,*
- *Consideration of mitigation measures to bring all results within 10dB of baseline noise levels,*
- *An assessment of potential noise impacts of development traffic using the local road network.”*

Subsequently, several application documents were updated, including the noise assessment. This technical note presents a second review considering the updated noise assessment documentation in the context of the conclusions of the first review.

## Baseline Noise Levels

An additional set of baseline noise measurements has been undertaken, including measurements on a Saturday morning. Summary baseline noise data is shown in Table 5 of the updated noise assessment, demonstrating that Saturday noise levels are within 1dB of weekday noise levels.

## All development phases

The updated noise assessment presents in Tables 6 and 7 the noise levels for each phase of the development at each of the receptors. This allows the impacts of each phase to be separately identified and compared against the targets.

Table 6 in the report shows the noise impacts of short-term operations, even though the table is titled “normal operations”. This shows that noise levels from all phases at all receptors are lower than the 70dB(A) noise limit for short term operations.

The table identifies that there are 4 receptors where noise levels are within 10dB of the 70dB(A) limit:

- Ourome during phase A – noise level 67dB
- Woodlands and Red Lea during phase 1 – noise level 69dB
- Bourbles Farm during phases 2 and 4 – noise level 62dB during phase 2 and 69dB during phase 4.

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Table 7 in the report shows the noise impacts of normal operations. This shows that noise levels from all phases at all receptors are lower than the 55dB(A) normal operations limit.

The table also compares the noise level from the activities against the background allowing the identification of activities leading to receptors being more than 10dB above background.

**Table 1 - Noise Impacts at Receptors**

Phase	Comparison with 55dB(A)	Comparison with 10dB above background
A	All receptors below 55dB(A)	All receptors lower than 10dB above background.
1	All receptors below 55dB(A)	Two receptors (Woodlands and Red Lea) more than 10dB above background. One receptor (Ourome) equal to 10dB above background. All other receptors lower than 10dB above background.
2	All receptors below 55dB(A)	One receptor (Bourbles Farm) equal to 10dB above Saturday background. All other receptors lower than 10dB above background.
3	All receptors below 55dB(A)	All receptors lower than 10dB above background.
4	All receptors below 55dB(A)	One receptor (Bourbles Farm) more than 10dB above background. All other receptors lower than 10dB above background.

This table reflects the results described in paragraph 5.3.3 in the report, except for the two receptors being equal to 10dB above background.

## Mitigation

The presentation of the results identifies which receptors are affected by noise from each phase of the project, which was not possible in the original assessment. These results can be compared with the phasing plans which demonstrate:

**Table 2 - Noise Mitigation for Receptors**

Receptor	Impact	Mitigation
Woodlands	Phase 1: more than 10dB above background.	Bund along northern edge of Phase 1
Red Lea	Phase 1: more than 10dB above background.	Bund along eastern edge of Phase 1
Ourome	Phase 1: equal to 10dB above background.	No mitigation specified
Bourbles Farm	Phase 2: equal to 10dB above background.	Bund along eastern edge of Phase 2
Bourbles Farm	Phase 4: more than 10dB above background.	Bund along northern edge of Phase 4

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This table demonstrates that earth bunds have been used to control noise at the locations where noise levels have been predicted to be more than 10dB above background levels, and at one location where noise levels equal 10dB above background.

The applicant could have described in the updated report the reasons for including each bund. They also could have demonstrated that these bunds have been designed to minimise noise as much as practicable within constraints.

The applicant does not appear to have assessed the cumulative effects of Phase A with the extraction at Ourome. Based on the data presented, combined noise levels from simultaneous extraction and processing are likely to remain below 55dB(A). However, there is potential for the combined noise levels to be more than 10dB above baseline levels.

Figure 3 in the noise report gives detail on the mitigation for Phase 1. Similar detail is not provided for Phases 2 and 4, where noise levels are at least 10dB above background. Stakeholders may benefit from seeing the same level of detail for these phases.

## Traffic on Local Road Network

The application includes an updated transport statement. The section of road with the greatest potential for adverse noise impacts is the B5270 Lancaster Road between the site entrance and the A588. There are several properties near this section of road who would experience any changes in noise from changes in traffic.

Appendix A of the updated transport statement includes observed traffic data on the B5270, with approximately 1500 vehicles in each direction per 18hour day. Paragraph 3.11 of the statement identifies that two-way flow for heavy vehicles accessing the site from each direction of the A588 would be 37 HGV's per day. This gives a combined two-way flow of 74 HGV's per day on the B5270 Lancaster Road.

There is sufficient information in the updated transport assessment for the applicant to demonstrate the potential road traffic noise impact of the development on the B5270 Lancaster Road between the site entrance and the A588. An initial look at the data suggests a negligible impact.

## Conclusions

The previous review identified five items where further information from the applicant would be beneficial. Additional baseline monitoring has been undertaken and further assessment information has been provided. These resolve the majority of the items raised in the initial review. The assessment shows that short-term noise levels are within the 70dB(A) criteria. Noise levels from normal operations are within the 55dB(A) criteria, but are more than 10dB(A) above baseline noise levels in some circumstances. Noise mitigation is included to deal with the majority of impacts.

If noise is a particular concern for this development, there may be benefits in the applicant providing details about the noise attenuation of the proposed bunds, the potential for cumulative effects, and any other proposed noise management controls.

The applicant has not assessed road traffic noise from the development on receptors near the B5270 Lancaster Road, but the available data indicates this is unlikely to be a concern.