# Proposed Bourbles Quarry: on land off Bourbles Lane, Nr Preesall, Lancashire





## Planning Application Regulation 25 Submission

**Regulation 25 submission of supplementary information: The Town & Country Planning (Environmental Impact Assessment) Regulations 2017.**

**In Support of Planning Application Ref: LCC/2023/0030**

Planning Application to allow the extraction and processing of sand & gravel including the construction of new site access roads, landscaping and screening bunds, minerals washing plant and other associated infrastructure with restoration to leisure end-uses, agricultural land and biodiversity enhancement using Imported Inert Fill.

**December 2024**

Baxtergroup

Greenfield enviro

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**Planning Application to allow the extraction and processing of sand & gravel including the construction of new site access roads, landscaping and screening bunds, minerals washing plant and other associated infrastructure with restoration to leisure end-uses, agricultural land and biodiversity enhancement, using imported Inert Fill.**

**PROPOSED BOURBLES QUARRY**
**on Land off Bourbles Lane, Nr Preesall, Lancashire**

**PLANNING APPLICATION REF LCC/2023/0030**

**Further information required to support planning application and under Regulation 25 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.**

Response to Letter Dated 27th March 2024

**Prepared by:** S J Rees
B.Sc., M.Sc., C.Geol, FGS, MIQ

**Date:** 3rd December 2024

**Signed:** [redacted]

1 Commercial Road, Keyworth, Nottingham, NG12 5JS
Tel: 0115 9372002 Email: admin@greenfieldenvro.co.uk
Greenfield Environmental Ltd Registered in England & Wales. Company No. 4120443

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# REGULATION 25 LETTER REQUESTING MORE INFORMATION

Lancashire County Council

Simon Rees
Greenfield Enviro
1 Commercial Road
Keyworth
Nottingham
NG12 5JS

Email: Devman@lancashire.gov.uk
Phone: 01772 534130
Our ref:
Date: 27th March 2024

Dear Mr Rees

**PLANNING APPLICATION REF LCC/2023/0030 – PROPOSED EXTRACTION OF SAND AND GRAVEL FORM LAND AT BOURBLES FARM, PREESALL**

I refer to your planning application for the above development. Following the receipt of consultation responses and my own review of the planning application and Environmental Statement, I have compiled the following schedule of comments and further information comments. I would be grateful if you could address these comments to allow the planning application to be determined. These comments comprise a request under Regulation 25 of the Environmental impact Assessment Regulations

Documents : Can you please supply the appendices to the planning statement as they do not appear to have been supplied with the original submission

1. Geology / reserve assessment

The requirement within Policy CS4 of the Joint Lancashire Minerals and Waste Local Plan is for specific sites and / or preferred areas to be identified for the extraction of not less than 4.1 million tonnes of sand and gravel by 2021 and that preference will be given to the release of sand and gravel reserves which provide for the maximum practicable contribution of high quality sand. High quality is not defined in the glossary to the Plan but my interpretation is that is should mean sand which meets the relevant BS / European standards for aggregate products. I cannot find any information within your planning statement which sets out the volumes of mineral which would satisfy the relevant BS / European standards for sand and gravel materials.

What is the proportion of the reserve that would be over size that would require further processing to produce saleable product?

2. Site design

Access – The Planning Statement explains that the first 30 metres of the access road from the junction with Lancaster Road will be hard surfaced. In my view the wheel wash needs to be located at the junction of the hard surfacing and unsurfaced roads. The wheel cleaner either needs relocating or the extent of the hard surfacing needs extending further into the site to the position of the wheel cleaner as shown on the submitted drawings.

Impacts on existing infrastructure – you will note the letter from United Utilities dated 4th October 2023 which comments upon possible impacts on their water infrastructure and related easements. UU have requested that you submit a detailed drawing showing the proven location of the water main in relation to the proposed layout of the site including bunds, mounds and other structures and engineering works.(please see comment below in relation to phasing plans)

Proposed plant area (drawingPA23-6v2)-

- The southern side of the proposed plant area is currently formed by a hedge which is quite 'gappy' during winter. The soil storage is proposed in two areas – a large square mound on the western side and a rectangular mound close to Bourbles Lane. Would it be possible to amend the soil storage locations so that a linear bund is constructed along the southern and western sides of the plant area? This would create a greater degree of visual and acoustic screening particularly to the properties at Hillfield House / Pointer Farm compared to the existing soil storage mound design where there would be very little screening in the currently proposed design.
- The proposed plant area drawing states that the plant surface levels would be approximately +5 m AOD. I am therefore assuming that the following heights of the various stockpiles are correct
    - Topsoil / subsoil 3 – 3.6 m
    - Imported inert wastes – 7 metres
    - Raw feed – 7 metres
    - Processed materials from plant– 4 metres
    - Product stockpiles – 7 metres

- The proposed plant area drawing shows the processing plant layout. The planning statement discusses the requirement to use plant periodically to crush over size. Where would that plant be located? How often would it be used (see question above relating to the proportion of over size)

Design of Quarry

There are no detailed plans showing how each phase will be worked including where soils will be stripped and used to form screen bunds particularly where extraction areas are close to residential properties. Some more detail would be useful on these matters.

- Phase A – Paragraph 4.3 of your planning statement discusses working the sand and gravel in this area to a shallow depth of around 2 metres. Is it proposed to also excavate the underlying silty clay? See comment in relation to Phase 1 works below
- Before any of the extraction activities could commence in Phase 1 the topsoil/ subsoil would need to be stripped. Where would it be stored? Are you proposing a temporary storage location pending these materials being used to form the mounds on the northern and eastern boundaries of Phase 1?
- Phase 1 –The planning statement describes how this phase would be worked and that the reserves nearest Bourbles Lane would be worked dry down to the watertable and then the area backfilled using the bedrock grey silty clay from the plant area before constructing the perimeter bund. However, Drawing PA23-8v2 shows a cross section through Phase 1 and shows the initial void backfilled using imported inert wastes. Can you confirm the actual proposal please. It would seem to be preferable to use the on site material as this will be readily available. If the proposal is to use the onsite material from the excavation of the clean water lagoon, would there be enough material generated to backfill the void area quickly to allow construction of the perimeter soil mound?
- Paragraph 4.4.1 states that 'during the early stages of the phase 1 development, the proposed extraction area adjacent to the residential properties will commence with the soils stored adjacent to Bourbles Lane.' Would this actually be possible? – from the cross section plan it looks as though construction of the soil storage will only be possible once the sand and gravel has been excavated and the area backfilled. Could you confirm please. Would there be a period of phase 1 when there is effectively no screen mound in place alongside Bourbles Lane.
- I think it would be useful to prepare a materials balance table showing the volumes of different materials that would be excavated and how they would be utilised on the site.
- Paragraph 4.4.5 of the Planning Statement describes the backfilling of Phase 1 and says that it is not proposed to deposit any imported inert material within the Phase 1 area. However this paragraph also says ' with restoration carried out using excavated bedrock grey silty clay sourced from the plant area (lagoon excavation and *incoming inert temporary tipping area*)'. There appears to be a contradiction here.
- Phase 2 – Paragraph 4.4.7 states that all minerals from this phase will be extracted in a single campaign of between 4 -6 weeks. If this is the method of operation, is there room within the processing area to store this volume of materials within the 7 metre storage height limitation.
- Again Phase 2 needs some more detailed explanation to show where soils will be stored particularly to provide some protection for the residents of Bourbles Farm House.
- Phase 3 – Can you explain the last two sentences in paragraph 4.4.8
- The conceptual restoration needs a contour plan to accompany the proposals to control the levels of infilling.

- I understand that the existing southern fishing lake is being used as a silt lagoon. However, the restoration concept plan shows the restored lake design in this location having the same form as the existing lake. Presumably there will be some change to this lake as it will be at least partially infilled with silt.
- Afteruse design – Part of the submitted afteruse design includes the chalet buildings. I assume it would be your intention that the exact design of this areas including the sizes and design of the chalet buildings would be the subject of a planning condition should planning permission be granted. However, I do wonder if this area might be better designed if the area inside the circulatory road could be developed to form a central lake / pond area with the chalets grouped around this.

Infill proposals – Figures are provided in the Planning Statement for the volume of infill of 220,000m3 or 250,000m3 depending on the paragraph. However, in paragraph 4.6.4 of Vibrocks Air Quality statement the volume of inert infill is stated to be <1,000,000 m3. It would be useful to have one accurate figure for the volume of imported fill required to create the restoration contours.

Restoration proposals

Restoration concept plan – it would be useful to prepare a copy of this plan without the red line as this obscures the restoration proposals particularly the boundary treatments when they are on the same alignment as the red line.

It is noted that you are proposing a new hedgerow across the Phase 3 area along the line of the water main However, this area is a BHS for its value for over wintering birds which will require a wide, open area. It may be better to remove the hedgerow from this area and carry out new hedgerow planting elsewhere on the site – for example along Bourbles Lane or around the boundaries of phases A, 1,2 or 4. I would advise that you seek some ecological advice on this matter.

It is considered that the proposal lacks significant enhancement for over wintering birds. Some further development of the restoration proposals should be undertaken to provide the distinct habitats required by the over wintering birds that are found on the site presently.

At least one of the new ponds on the site should be designed for use by amphibians with suitable profile slopes, planting mixes and the inclusion of hibernacula. All ponds provided for wildlife purposes should have gently sloping margins (1:15 – 1:20 slopes) with a variety of water depths.

Habitats proposed as part of the restoration for breeding birds should be targeted at those species identified during the bird surveys. Features should be provided for both ground nesting and hedgerow / tree nesting species.

All new hedgerows should contain at least seven native woody species that are suitable for planting in Lancashire.

You will note the comments of the RSPB in relation to the restoration and afteruse and biodiversity net gain that would be provided. However, this application is not affected by the mandatory BNG requirements and therefore the only requirement is for you to meet the biodiversity gain requirements in paragraph 185 and 186 of the NPPF. However, I do think there are opportunities for you to improve upon these aspects of the site design. For example where you have shown new ponds / water features, I think it would be better if these could be surrounded by other marginal habitats rather agricultural land which is likely to diminish their value.

Afteruse : Wyre Borough Council have raised objection to the application. The first ground of their objection is that no business plan has been submitted with the proposals for the holiday accommodation to demonstrate how the business would operate and be a viable enterprise. This is a requirement of policy EP9 of the Wyre Local Plan.

Comments on Environmental Statement

Flooding : A large area of the site is located within flood zone 3. Paragraph 2.4.3 of the FRA concludes that the proposed sand and gravel extraction is water compatible development. However, this does not necessarily apply to the inert waste infilling aspect of the proposal which would be 'more vulnerable' development in terms of the flood risk vulnerability classification.

Land levels following infilling – Paragraph 6.2 of the FRA states that ground levels will be restored to similar levels to pre development conditions whilst the 4$^{th}$ paragraph of the conclusion states that ground levels will be lower than pre development conditions. Can you explain the inconsistency. The restoration land levels will be important in ensuring that the existing flood risk is not increased.

The FRA also comments frequently on the need for mitigation for flood events. However, I cannot see anywhere where the mitigation measures proposed are explained.

Brine wells – A possible issue an existing brine well is raised in the letter from the EA dated 3/10/23.

Ecology : These comments have been compiled using the responses from Natural England, the County Council's own ecologist and the representations from organisations such as the Lancashire Wildlife Trust and RSPB.

Impact on European sites : The site is relatively close to Morecambe Bay SPA and directly affects land that may comprise functionally linked land (land used by species for which the SPA is designated). The ecological assessment acknowledges a possible impact on the SPA and therefore a Habitats Regulations Assessment should be undertaken prior to the determination of the application.

Natural England have concluded that the proposal could have potential significant effects on nearby designated sites. They say that further information is required including a Habitats Regulations Assessment is needed demonstrating consideration of the potential impacts on designated sites. Without this information, NE say that they may need to object to the proposal. They have concluded that the information provided with

the application does not enable the requirements of Regulation 63 of the Habitats Regulations to be satisfied.

It appears that there are some issues regarding the assessment of the development upon birds that are associated with the SPA. It is understood that the Fylde Bird Club provided data on the use of the site by certain bird species but that this data has not be fully utilised or included with the ecological assessment. In particular, this relates to the use of the site by whooper swans and pink footed geese which are associated with the SPA. Further background information on the use of the site by over wintering birds is contained in the representation from the RSPB which can be viewed on the application webpage.

Comments are made on the adequacy of the over wintering bird surveys. I understand that you have commissioned further surveys during the 2023/24 winter period in order to address this issue and provide further information that can be used to inform any HRA. The surveys should at the very least provide the following data:

- The numbers of over wintering birds
- The species found on the site
- The zone of influence
- The types of habitat found within the site and wider area and an assessment of their suitability for qualifying bird species.
- The appropriateness of proposed mitigation measures

One of the mitigation measures for over wintering birds is likely to be a method of operation which avoids the need to undertake any extraction works over the wintering period. Does the processing area have space to accommodate sufficient 'as dug' material to supply the plant over a five month over wintering period? Potentially this could be around 40,000 tonnes with a 100,000 t annual output.

In addition there should be an assessment of possible disturbance impacts (particularly noise) on the areas of land that are used by qualifying bird species. This assessment should take account of the site phasing and times when different operations would be undertaken of each area of the site. You will note that Natural England have included some information within their letter as to how noise impacts on bird species should be assessed.

The survey data should provide for the survey effort described in their letter including two survey visits per month between September and March. This survey data should be used to make a conclusion on whether the site comprises functionally linked land to the SPA. If the data concludes that the site (or part of the site) is functionally linked land, the County Council will then need to carry out a Habitats Regulations Assessment and sufficient information on bird activity and likely impacts will need to be submitted to enable the assessment to be carried out.

Impact on Biological Heritage Sites – the proposed development would result in the loss of part of Piling Moss – Head Dyke BHS. The planning application should detail the measures that will be employed to reduce or eliminate impacts upon the BHS.

Hedgerows : None of the hedgerows present on the site have been classified as important under the Hedgerow Regulations 1997. However, the EIA identifies hedgerows H1, H2 and H5 as containing bluebell which would normally qualify a hedgerow as 'important' for the purposes of these Regulations. Clarification should be provided as to the status of the hedgerows and whether they would actually be impacted by the development.

Breeding bird surveys : three breeding bird surveys have been undertaken across the site. The numbers of surveys undertaken do not comply with current guidelines which recommend six surveys spread between March and July. Justification should either be given for the reduced survey effort or additional surveys commissioned to cover the missing periods.

Water voles :There are no surveys for water voles. Given that the site contains a range of potential water vole habitats, the applicant should either explain why such surveys are not required or provide suitable survey information.

Bats :There appears to be a difference between the ecological assessment and arboricultural assessment regarding the suitability of trees on the site for bat species.

It also appears that the survey effort for bats was below that normally recommended particularly in terms of the duration of each survey event. It is therefore possible that bat activity could have been missed. The report should be updated to either provide a justification for the reduced survey effort or the results of further surveys submitted.

Common Toad : The ecological assessment identifies that surveys for this species were undertaken but provides no details of the methods of survey, dates of survey or numbers of surveys completed. Further information to address these issues should therefore be submitted.

Cumulative ecological impacts : This assessment is mentioned in the ES but there is no evidence that such an assessment has actually been undertaken.

A precautionary working method statement should be produced for the site detailing the measures that will be employed to avoid harm to reptiles, common toad, other common amphibians, nesting birds and brown hares particularly during vegetation clearance.

The ecological mitigation measures including features provided for as part of the restoration should be accompanied by a suitable management period. 30 years is suggested which will equate with that required if this development was to fall within formal biodiversity net gain requirements.

Ecology and water quality : Natural England have requested that any HRA should include an assessment of how any surface waters flowing to designated sites would be effected. This might require a better explanation of how water at the site would be managed including the requirement to discharge to any surface watercourses.

Impacts on Peat ; You will note that Natural England have raised issues regarding the need to remove peat and peat based soils. Presumably the borehole information

contained in the appendices to the Planning Statement will contain some data on the depths and distribution of peat across the site.

Arboricultural Survey – this only appears to cover part of the whole site area – for example the red line area on the tree constraints plan is not the same as the planning application area. It would also be useful if the tree constraints plan could identify the vegetation (trees/ shrubs and lengths of hedgerow) that require removal to facilitate the development. For example, some hedgerow removal will be required within hedgerow H5 to construct the access road and associated visibility splay.

Landscape issues : Landscape comments have been provided by Atkins Ltd for the County Council. In general it is considered that the landscape assessment is satisfactory subject to the following:

- Tree / hedge removal – The ES at 7.5.1 and 7.5.2 notes the loss of hedges and clarifies that this will be 55 metres of hedgerow. This is different from that shown in the arboricultural report. The two documents should be aligned.
- The weight given to residential receptions is described as 'low' and it is questioned whether this is correct.
- Have the visual effects of the built development within the afteruse proposals been considered?
- Landscape mitigation – it is considered that further detail is required to accurately conclude the effectiveness of the mitigation. The detail should include detailed landscape proposals, cross sections and elevations to illustrate the likely effectiveness of the mitigation proposed. In particular this relates to the further phased drawing information referred to above and the comments about the redesign of the soil screening mounds around the plant area.
- The viewpoint photographs are taken in summer and are therefore likely to show an 'at best' perception of the visual impacts. A winter assessment would have allowed a better comparison of visual impacts as a worst case
- Figure 6 : Site layout and proposed levels and figure 7 : Restoration scheme do not provide adequate information relating to operational and restoration phases. This does reduce the reliance that can be placed on the ES conclusion that the development would have a positive landscape effect. More information on development screening and restoration / landscaping proposals are needed in order to properly reach such a conclusion.

Air Quality : Comments on this topic have been supplied by Atkins for the County Council. The County Council's Public Health Team and UK Health Security Agency have also made comment. The main issues raised on the Vibrock Air Quality report are as follows:-

- The report does not reference the most recent pm2.5 targets which were introduced in January 2023. There is also retained EU law relating to air quality limit values
- The report also does not acknowledge the new Air Quality Strategy Framework

- The report references previous studies in relation to open cast coal mining but it is unclear how these are relevant to the sand and gravel extraction proposal
- Meteorological data – no reference is provided for the data source that has been used. Atkins are of the view that 10 years of wind data from Blackpool Airport would be appropriate to assessing air quality impacts from this proposal. The data used also only uses predominant winds and does not recognise that there are winds from other directions which is relevant given the distribution of sensitive receptors around the site.
- Paragraph 3.2.2. states that dust generating activities will be carried out within areas protected by screening bunds – however, that does not necessarily seem to be the case taking into account the proposed site design. There is either a lack of information on this point or the design requires amendment to provide a greater level of protection.
- NO2 – the assessment only appears to consider pm10 impacts. This may be appropriate but some mention should be made of baseline NO2 levels and whether the development would be likely to significant increase these
- Baseline dust monitoring – The nature of monitoring used was acceptable although the duration of the monitoring is considered to be too short and no details were provided of the weather conditions during the monitoring period.
- Description of the extraction method – Atkins are concerned that insufficient information has been submitted. It is understood that only the lower parts of phase 1 would be worked wet which is due to the depth of the deposit in this area. Extraction in the remainder of the site would be dry using limited pumping. Could you confirm my understanding please. In my view the aspect of the development with the most potential to generate dust will be the haulage of 'as dug' material to the plant site. It might be useful to provide some further information as to the likely duration of these activities for each phase.
- Dust generation and mitigation : Atkins have noted the potential for dust generation by dump trucks traveling on haul roads and then need for mitigation measures including use of a water bowser through a dust management plan. They have also raised the need for a paved surface between the wheel cleaner and surfaced entrance road.
- Atkins have also raised the issue of dust from soil stripping activities. In my views these activities in themselves do not normally generate large volumes of dust but the transport of such soils using dump trucks may give rise to significant dust impacts. It would be useful to prepare some better information showing the soil stripping and storage proposals for each phase so that the potential dust impacts can be more accurately assessed.
- The Planning Statement mentions the importation of hardcore material to create the access road and processing area and it is unclear if these works have been considered in Vibrock's report. However, I don’t consider that the dust impacts from these activities would be significant.
- Paragraph 4.6.10 of the Vibrock report notes that a maximum of 100,000 tpa is anticipated to be processed but that much of the material may not require processing. This statement seems to be at odds with the Planning Statement

which appears to say that the quarry will produce a range of concreting and other building aggregates. Presumably to ensure these all meet the required quality standards, they will all require some form of processing?

- Particulate assessment – the method presented by Vibrock considers pm10's and pre dates more recent Government advice regarding PM2.5's. The applicant should consider how operations may affect PM2.5 concentrations at nearby sensitive receptors. Atkins have also made a number of comments regarding the calculation of PM2.5 and the justification for the argument that the development would not result in an exceedance of PM2.5 objectives.
- Respirable crystalline silica – Atkins recommend that a source – pathway – receptor approach is used to model the impacts of RCS. It is noted that the majority of materials will be processed (but see comment above) presumably using water to remove silt and other contaminants which should mitigate against dust including RCS. However, would there be any dust impacts from any crushing of over size as presumably this would not require the use of water and could potentially produce more dust from the crushing process?
- Paragraph 7.5 of the Vibrock report references a site at Misterton – presumably a mistake carried over from another report.
- The assessment of air quality impacts from traffic should reference the actual traffic flows from the proposed development rather than <100 HGVs per day.
- Conclusions : Vibrock conclude that there will be no significant impact. Atkins agree that this is likely to be the case but cannot be agreed at this time due to omissions in the report and supporting information. For the low risk to be confirmed, it is essential that more information is provided on the site design, mitigation measures and dust management plan. Atkins have also raised issues regarding the monitoring of RCS to address community concerns including RCS potential in the mineral and exposure to workers on - site and to off site locations.

Noise ; Comments on this topic have been supplied by Atkins. They have raised the following issues:-

- The site would be worked in phases but the assessment results do not identify which phases the results relate to. As the working areas and sensitive receptors are spread out over a large area this should be confirmed. For example, it is assumed that the noise impact assessment results for the property at Woodlands on Bourbles Lane is during Phase 1 when the operations are closest to this house. However, what would the noise impact be for the remainder of the operation. Presumably there would also be some noise impacts from the processing area that would be experienced over the full duration of the development. I think it would be useful to have a table showing the noise levels that would be experienced at all receptors during all phases of the development
- The noise mitigation measures are not fully detailed – see the same issue discussed above
- There does not appear to be any assessment of noise impacts arising from additional HGV traffic particularly on those properties closest to the site access nor is there any assessment of noise impacts from dump trucks moving materials

on internal haul roads where these pass close to properties. The second issue is probably more significant in terms of noise impacts.

- Baseline noise measurements : these were measured at 7 locations for two 15 minute periods during the middle of the working day. It is possible that the background noise level could vary over time and there is no commentary on the degree to which noise levels vary over the course of the proposed working hours. The site is seeking permission to work on a Saturday morning and background noise levels could be lower during these times.
- The assessment demonstrates that for 'normal operations' noise levels are below 55 dB(A). At three receptors, noise levels are more than 10 dB(A) above background levels which should not be permitted unless meeting this imposes an unreasonable burden on the operator. The assessment has not shown if it would be possible to reduce noise levels so they are less than 10dB(A) above background. The assessment notes that exceedances above the 10 dB(A) above background will be short lived. However, there is no information to illustrate what is meant by 'short lived'. How many weeks would 'short lived' actually be?
- Paragraph 5.3.3 states that noise levels 'from normal operations could exceed the background level by more than 10 dB at Woodlands, Red Lea and Bourbles Farm. However, the proposed screening bunds reduce potential noise levels to within the 55 dB(A) limit at all assessment locations….' There needs to be better demonstration of the screening bunds particularly at Woodlands. How long would it take before a screening bund could be erected and what would be the noise impacts of working this area without the screen bund being in place?

Highways ;

You will note that LCC Highways conclude that planning permission should not be granted in its current form as the development would have an unacceptable impact on highway safety.

Highways have identified four main issues:

- The access plans fail to demonstrate that adequate sight lines are achievable
- The access plans do not show that a vehicle can enter the site safely whilst another is leaving
- The access plan does not provide a swept path for all vehicle movements
- The application does not demonstrate that there is adequate width on Lancaster Road between the site access and the junction with the A588 to allow two HGVs to pass safely.

- To address the Lancaster Road issue, I think it would be useful to include a drawing to show how two HGVs can pass safely on this section of highway particularly on the bend leading up to the A588 junction. It would also be useful to include some information on HGV flows on this road to demonstrate the frequency where HGVs might have to pass on this road. I note that there is information within the TA on traffic flows but this appears to be only on the A588 from a Department of Transport traffic count. There does not appear to be any

traffic count information for Lancaster Road. You will also note that highways have drawn attention to the lack of pedestrian facilities on this section of highway and the implications for road widths. Some information on pedestrian usage of this road might therefore also be of assistance.

I hope these comments are useful to you and I look forward to receiving your response. If you wish to discuss any of the issues raised in more detail please contact me.

Yours sincerely,

Jonathan Haine
Team Leader – Development Management

Please do not hesitate to contact the case officer, if you wish to discuss further the content of any ES or submit a draft ES for initial consideration.

Yours faithfully

*<<case_officer_lookup>>*

Jonathan Haine
Planning Officer

# 1. RESPONSE TO REG25 QUESTIONS

## Reg 25 Responses – Bourbles Quarry Planning

### 1. Geology / reserve assessment

The requirement within Policy CS4 of the Joint Lancashire Minerals and Waste Local Plan is for specific sites and / or preferred areas to be identified for the extraction of not less than 4.1 million tonnes of sand and gravel by 2021 and that preference will be given to the release of sand and gravel reserves which provide for the maximum practicable contribution of high quality sand. High quality is not defined in the glossary to the Plan but my interpretation is that is should mean sand which meets the relevant BS / European standards for aggregate products. I cannot find any information within your planning statement which sets out the volumes of mineral which would satisfy the relevant BS / European standards for sand and gravel materials.

Planning Statement (Appendix 2) includes an assessment of the sand and gravel deposit including the laboratory test results and analysis for aggregate strength, durability and also water absorption. All the results confirm the material is suitability for use a high-quality concreting aggregate.

What is the proportion of the reserve that would be over size that would require further processing to produce saleable product?

The oversize fraction (+40mm) comprises about 6% of the mineral deposit. This is considered a minor amount of the sand and gravel deposit.

### 2. Site design

#### Access

The Planning Statement explains that the first 30 metres of the access road from the junction with Lancaster Road will be hard surfaced. In my view the wheel wash needs to be located at the junction of the hard surfacing and unsurfaced roads. The wheel cleaner either needs relocating or the extent of the hard surfacing needs extending further into the site to the position of the wheel cleaner as shown on the submitted drawings.

The access road from the wheel wash to the highway will be asphalt hard surfaced.

#### Impacts on existing infrastructure

You will note the letter from United Utilities dated 4th October 2023 which comments upon possible impacts on their water infrastructure and related easements. UU have requested that you submit a detailed drawing showing the proven location of the water main in relation to the proposed layout of the site including bunds, mounds and other structures and engineering works. (please see comment below in relation to phasing plans).

The site plans show the locations of the gas main and also the water main that crosses the site. There are no bunds located on top of any of the these identified pipes and where access roads are proposed to cross the design includes a concrete structure that is compliant with utilities company best practice guidance.

Prior to any site work, as is the case with any "construction works" or quarry development, the utilities companies will be invited to site to set out all of the relative pipework and agree a method of working.

**Proposed plant area (drawing PA23-6v2)-**

- The southern side of the proposed plant area is currently formed by a hedge which is quite 'gappy' during winter. The soil storage is proposed in two areas – a large square mound on the western side and a rectangular mound close to Bourbles Lane. Would it be possible to amend the soil storage locations so that a linear bund is constructed along the southern and western sides of the plant area? This would create a greater degree of visual and acoustic screening particularly to the properties at Hillfield House / Pointer Farm compared to the existing soil storage mound design where there would be very little screening in the currently proposed design.

  There is no reason why a 3m high linear bund could not be formed along the southern boundary of the plant site. A revised plant area plan showing the amended soils storage bunds is attached – Plan PA23-6 v2.

- The proposed plant area drawing states that the plant surface levels would be approximately +5 m AOD. I am therefore assuming that the following heights of the various stockpiles are correct
- Topsoil / subsoil 3 – 3.6 m - confirmed
- Imported inert wastes – 7 metres - confirmed
- Raw feed – 7 metres – Phasing Plan for Phase A shows 10m high bund and "as-raised" stockpiles noted as 10m in Landscape assessment (section 2.24).
- Processed materials from plant– 4 metres – confirmed
- Product stockpiles – 7 metres - confirmed
- The proposed plant area drawing shows the processing plant layout. The planning statement discusses the requirement to use plant periodically to crush over size. Where would that plant be located? How often would it be used (see question above relating to the proportion of over size).

  There is only a nominal amount of oversize within the deposit. It is assumed that this material would be stockpiled separately within the stocking yard, likely near to the as-raised stockpile. When a crusher is brought to site it can then feed directly into the as-raised stockpile for processing and screening through the wash plant. It is unlikely that a crusher would be required for more than two one-week periods during a year, more likely to be required just once a year.

**Design of Quarry**

There are no detailed plans showing how each phase will be worked including where soils will be stripped and used to form screen bunds particularly where extraction areas are close to residential properties. Some more detail would be useful on these matters.

- Phase A – Paragraph 4.3 of your planning statement discusses working the sand and gravel in this area to a shallow depth of around 2 metres. Is it proposed to also excavate the underlying silty clay? See comment in relation to Phase 1 works below.

  Basal silty material will be excavated to create the clean water lagoon in the plant area and also would be excavated within the lake areas proposed in each phase to ensure that the water depths are not too shallow. The Silty clay material will be used in the restoration.

- Before any of the extraction activities could commence in Phase 1 the topsoil/ subsoil would need to be stripped. Where would it be stored? Are you proposing a temporary storage location pending these materials being used to form the mounds on the northern and eastern boundaries of Phase 1?

  All soils beneath the boundary bunds will be stripped and stored in an area adjacent to the proposed mineral cutting. The mineral will then be extracted and trench (approx width 12m) will then be backfilled with basal silty sand from the plant area. Once backfilled, the soils from Phase 1 be stripped across the area and the soils stored in boundary bunds, as shown in the proposed Phasing scheme.

- Phase 1 –The planning statement describes how this phase would be worked and that the reserves nearest Bourbles Lane would be worked dry down to the watertable and then the area backfilled using the bedrock grey silty clay from the plant area before constructing the perimeter bund. However, Drawing PA23-8v2 shows a cross section through Phase 1 and shows the initial void backfilled using imported inert wastes.

  The plan states inert backfill and not imported inert wastes, however for clarity the cross-section has been amended – see plan PA23-8v2.

  Can you confirm the actual proposal please. It would seem to be preferable to use the on site material as this will be readily available. If the proposal is to use the onsite material from the excavation of the clean water lagoon, would there be enough material generated to backfill the void area quickly to allow construction of the perimeter soil mound?

  The proposal remains unchanged with the plan amended as above.

- Paragraph 4.4.1 states that 'during the early stages of the phase 1 development, the proposed extraction area adjacent to the residential properties will commence with the soils stored adjacent to Bourbles Lane.' Would this actually be possible? – from the cross section plan it looks as though construction of the soil storage will only be possible once the sand and gravel has been excavated and the area backfilled. Could you confirm please. Would there be a period of phase 1 when there is effectively no screen mound in place alongside Bourbles Lane.

  The initial soil strip and excavation of the sand and gravel below the proposed soils bund adjacent to Bourbles Lane would be initially screened using standard Herras fencing. A scheme of working to construct the soil bunds adjacent to northern and eastern Phase 1 boundaries is shown attached.

It is anticipated that this work would be no different that earthworks associated with the laying of major gas mains or highways works adjacent to a main road. As the mineral is excavated and the trench backfilled the soils across Phase 1 would be stripped as part of the same works, thus creating the soil bunds as proposed.

- I think it would be useful to prepare a materials balance table showing the volumes of different materials that would be excavated and how they would be utilised on the site.

  Fron the borehole grading information from boreholes across the site the general sand to gravel ratio is 61% Sand: 36% Gravel – 3% Silt.

  The sand ratio anticipated from the wash plant :

  70% coarse (concreting sand) 30% Fine (building) sand.

  Gravel Products: 35% 10mm : 45% 20mm : Oversize 20%

- Paragraph 4.4.5 of the Planning Statement describes the backfilling of Phase 1 and says that it is not proposed to deposit any imported inert material within the Phase 1 area. However, this paragraph also says ' with restoration carried out using excavated bedrock grey silty clay sourced from the plant area (lagoon excavation and incoming inert temporary tipping area)'. There appears to be a contradiction here.

  To be clear, the wording should state that no imported inert backfill materials will be deposited below the water table as there cannot be any de-watering operations in this part of the site. There will be a need for the basal grey silty clay materials (sourced from the plant area of the site) where the processing plant and inert tipping area will be situated within the site compound. The void created in the plant area would then be backfilled with imported inert fill prior to a concrete slab being constructed onto which the plant would be constructed.

- Phase 2 – Paragraph 4.4.7 states that all minerals from this phase will be extracted in a single campaign of between 4 -6 weeks. If this is the method of operation, is there room within the processing area to store this volume of materials within the 7 metre storage height limitation.

  The proposed phasing plans and the landscape assessment state 10m high as-raised stockpile (see above). The Phase 2 area only contains about 16,000$m^3$ of mineral (about 28,800 tonnes). A 10m high stockpile would consume an area of less than 3,500$m^2$. Within the "as-raised" stocking area on the end of the haul road there is an available area of about 6,500$m^2$.

- Again Phase 2 needs some more detailed explanation to show where soils will be stored particularly to provide some protection for the residents of Bourbles Farm House.

  As stated the excavation works in Phase 2 are only proposed to take place over a period of about 4-6 weeks. A soil bund is proposed adjacent to the boundary fence to store soils, with an 8m stand-off to the large trees on the site boundary, as shown in Phasing plans.

- Phase 3 – Can you explain the last two sentences in paragraph 4.4.8

We are proposing that the exposed slopes adjacent to the pipeline corridor will be covered as quickly as possible. This backfilling may comprise imported inert materials if available. However if there is no immediately available material then the backfilling against the exposed face will be undertaken using the basal grey silty clay bedrock materials.

- The conceptual restoration needs a contour plan to accompany the proposals to control the levels of infilling.

  See Plan PA23 -9 v2 attached. This does not show the red-line boundary for clarity (as required below).

- I understand that the existing southern fishing lake is being used as a silt lagoon. However, the restoration concept plan shows the restored lake design in this location having the same form as the existing lake. Presumably there will be some change to this lake as it will be at least partially infilled with silt.

  Plan PA23-9v2 shows the area restored as wet woodland and grassland. The key shows area A "proposed wetland scrapes". The lagoon / lake will have a similar outer shape, but the area will not be a lake in its current form but will be a wet woodland area founded on the old silt bed.

- Afteruse design – Part of the submitted afteruse design includes the chalet buildings. I assume it would be your intention that the exact design of this areas including the sizes and design of the chalet buildings would be the subject of a planning condition should planning permission be granted. However, I do wonder if this area might be better designed if the area inside the circulatory road could be developed to form a central lake / pond area with the chalets grouped around this.

  The reason for not proposing a lake within the plant area is that the land would have been covered in concrete and would be ideal as hardstanding for the chalets. The final layout and design however would be agreed with the local district council.

**Infill proposals**

Figures are provided in the Planning Statement for the volume of infill of 220,000m$^3$ or 250,000m$^3$ depending on the paragraph. However, in paragraph 4.6.4 of Vibrock's Air Quality statement the volume of inert infill is stated to be <1,000,000 m$^3$. It would be useful to have one accurate figure for the volume of imported fill required to create the restoration contours.

The most definitive figure would be 220,000m$^3$. The Vibrock figure is clearly incorrect as is a "typo error". The reason for the variance is due to the size of the lakes as part of the restoration scheme as the dimensions and side slopes will determine the final amount of backfill required.

**Restoration proposals**

Restoration concept plan – it would be useful to prepare a copy of this plan without the red line as this obscures the restoration proposals particularly the boundary treatments when they are on the same alignment as the red line.

See Plan PA23-9 v2.

It is noted that you are proposing a new hedgerow across the Phase 3 area along the line of the water main However, this area is a BHS for its value for over wintering birds which will require a wide, open area. It may be better to remove the hedgerow from this area and carry out new hedgerow planting elsewhere on the site – for example along Bourbles Lane or around the boundaries of phases A, 1,2 or 4. I would advise that you seek some ecological advice on this matter.

The proposed hedge is an extension of the existing hedge that would continue across the Phase 3 area to Bourbles Lane. The current boundary between the fields is formed by wooden fencing and isolated trees, which would have historically formed part of hedge. The presence of the gas and water mains adjacent to the boundary lend itself to hedgerow planting as there cannot be any future issue in fence removal and confusion over the location of these buried services. It should be noted that there is a new hedgerow proposed on the northern boundary of Phase 2 and on the northern boundary of Phase A.

However, if it is considered that a hedge is not necessary within the Phase 3 area, it can remove this from the scheme and just insert a fence, as is currently on the site.

It is considered that the proposal lacks significant enhancement for over wintering birds. Some further development of the restoration proposals should be undertaken to provide the distinct habitats required by the over wintering birds that are found on the site presently.

There have been very few recorded over-wintering birds noted during the two major periods of site monitoring over the past two winters. The birds that have been noted are generally observed to be present further to the east of the site, with generally few birds recorded on the proposed quarry site. The proposed restoration in the Phase 3 (eastern) area comprises two large open fields of open pasture separated by a hedgerow. This is very similar to the current habitat and similar to the majority of the habitat noted across most of this part of the Wyre District.

At least one of the new ponds on the site should be designed for use by amphibians with suitable profile slopes, planting mixes and the inclusion of hibernacula. All ponds provided for wildlife purposes should have gently sloping margins (1:15 – 1:20 slopes) with a variety of water depths.

It is proposed that the final design for each pond could be provided as a condition, together with other detail for the types of planting and habitat creation in each separate phase area. However, due to the relatively limited depths of the ponds of about 4m (water unlikely to be more than 2.5m to 3m deep), having very shallow gradients would create very large slope areas. Assuming a 4m deep pond with 1in 15 side slope, the width of the slope would be about 60m. The proposed ponds included on the restoration plan range in diameter from about 50m to 70m, thus for these side slopes ponds of over 120m wide would need to be created.

Habitats proposed as part of the restoration for breeding birds should be targeted at those species identified during the bird surveys. Features should be provided for both ground nesting and hedgerow / tree nesting species.

See above relating to final habitat creation for each phase area.

All new hedgerows should contain at least seven native woody species that are suitable for planting in Lancashire.

See above.

You will note the comments of the RSPB in relation to the restoration and afteruse and biodiversity net gain that would be provided. However, this application is not affected by the mandatory BNG requirements and therefore the only requirement is for you to meet the biodiversity gain requirements in paragraph 185 and 186 of the NPPF. However, I do think there are opportunities for you to improve upon these aspects of the site design. For example where you have shown new ponds / water features, I think it would be better if these could be surrounded by other marginal habitats rather agricultural land which is likely to diminish their value.

This is agreed. See above relating to final habitat creation for each phase area.

**Afteruse**

Wyre Borough Council have raised objection to the application. The first ground of their objection is that no business plan has been submitted with the proposals for the holiday accommodation to demonstrate how the business would operate and be a viable enterprise. This is a requirement of policy EP9 of the Wyre Local Plan.

This business plan would be part of a Planning Application to Wyre Borough Council when the detailed scheme for the tourism scheme is submitted.

**Comments on Environmental Statement**

**Flooding**

A large area of the site is located within flood zone 3. Paragraph 2.4.3 of the FRA concludes that the proposed sand and gravel extraction is water compatible development. However, this does not necessarily apply to the inert waste infilling aspect of the proposal which would be 'more vulnerable' development in terms of the flood risk vulnerability classification.

It is the intention of the Operator to obtain a Bespoke Environmental Permit for the deposit of waste in a recovery operation. The Environmental Permit will authorise the deposition of materials to restore the quarry under a deposit of waste for recovery (DfR) permit for Restoration to agriculture with nature conservation areas. It is proposed that restoration will be completed in a phased manner, progressively following mineral extraction and that the proposed works will align with requirements of the planning objectives for the site.

These include the requirement to deliver a biodiversity net gain, restore a proportion of the site back to best and most versatile agricultural land and also ensure that there are no adverse impacts on potential wintering birds and other ecological receptors following mineral extraction. The restoration scheme should also that there is no adverse food risk impact following the backfilling operations.

Without any imported backfill for restoration the proposed restoration objectives cannot be attained.

**Land levels following infilling**

Paragraph 6.2 of the FRA states that ground levels will be restored to similar levels to pre-development conditions whilst the 4th paragraph of the conclusion states that ground levels will be lower than pre development conditions. Can you explain the inconsistency. The restoration land levels will be important in ensuring that the existing flood risk is not increased.

The FRA also comments frequently on the need for mitigation for flood events. However, I cannot see anywhere where the mitigation measures proposed are explained.

The proposed restoration scheme will ensure that the imported backfill materials will be deposited in such a manner where there is no flood risk impact on completion of the restoration. The proposed restoration contours are shown on Plan PA23-9 v2, where final post-restoration levels lie at similar levels to current site levels. The areas where the land lies below existing levels is within the series of ponds and lakes proposed across the site. Each separate phase of mineral extraction includes a low lying pond that will provide flood storage run-off mitigation compared to the existing pasture/ arable farmland.

**Brine wells** –

A possible issue an existing brine well is raised in the letter from the EA dated 3/10/23.

The Preesall Salt mine and brine fields are located to the west of Preesall where the bedrock comprises Mecia Mudstone with interbedded halite(salt) and gypsum beds. This sequence is fault bounded by the Preesall Fault.

The proposed quarry is located to the east of the Preesall fault where the bedrock is mapped as Sherwood Sandstone. This formation is an older sequence of Triassic strata that underlies the Merica Mudstone.

**Ecology**

These comments have been compiled using the responses from Natural England, the County Council's own ecologist and the representations from organisations such as the Lancashire Wildlife Trust and RSPB.

**Impact on European sites**

The site is relatively close to Morecambe Bay SPA and directly affects land that may comprise functionally linked land (land used by species for which the SPA is designated). The ecological assessment acknowledges a possible impact on the SPA and therefore a Habitats Regulations Assessment should be undertaken prior to the determination of the application.

Natural England have concluded that the proposal could have potential significant effects on nearby designated sites. They say that further information is required including a Habitats Regulations Assessment is needed demonstrating consideration of the potential impacts on

designated sites. Without this information, NE say that they may need to object to the proposal. They have concluded that the information provided with the application does not enable the requirements of Regulation 63 of the Habitats Regulations to be satisfied.

To complete the Habitat Regulations Assessment more fully a review of the potential water and dust discharges from site will need to be assessed. However, the detailed air quality and hydrological assessments do not identify any adverse or significant off-site impacts that can be considered harmful to the local, community, ecology or landscape.

It appears that there are some issues regarding the assessment of the development upon birds that are associated with the SPA. It is understood that the Fylde Bird Club provided data on the use of the site by certain bird species but that this data has not be fully utilised or included with the ecological assessment. In particular, this relates to the use of the site by whooper swans and pink footed geese which are associated with the SPA. Further background information on the use of the site by over wintering birds is contained in the representation from the RSPB which can be viewed on the application webpage.

Overwintering birds. A second winter season of monitoring has been undertaken that comprises fortnightly visits, as per the RSPB request. The specialist ecologists have proved almost exactly the results as found the previous year before and which has been reported on. The birds appear to be mainly located in fields to the East of the site, but not on proposed quarry area.

Comments are made on the adequacy of the over wintering bird surveys. I understand that you have commissioned further surveys during the 2023/24 winter period in order to address this issue and provide further information that can be used to inform any HRA. The surveys should at the very least provide the following data:

- The numbers of over wintering birds
- The species found on the site
- The zone of influence
- The types of habitat found within the site and wider area and an assessment of their suitability for qualifying bird species.
- The appropriateness of proposed mitigation measures

A second winter season of overwintering bird monitoring has been undertaken that comprises fortnightly visits, as per the RSPB request. A copy of the updated report is attached.

One of the mitigation measures for over wintering birds is likely to be a method of operation which avoids the need to undertake any extraction works over the wintering period. Does the processing area have space to accommodate sufficient 'as dug' material to supply the plant over a five month over wintering period? Potentially this could be around 40,000 tonnes with a 100,000 tonne annual output.

The application proposes mainly campaign extraction during the summer months with no proposed mineral extraction during the wetter winter months. There is sufficient space within the proposed plant area for a stockpile to accommodate about 5-6 months as-raised production within the available "as-raised" stocking area on the end of the haul road (about 6,500m$^2$).

In addition there should be an assessment of possible disturbance impacts (particularly noise) on the areas of land that are used by qualifying bird species. This assessment should take account of the site phasing and times when different operations would be undertaken of each area of the site. You will note that Natural England have included some information within their letter as to how noise impacts on bird species should be assessed.

Detailed noise monitoring assessments do not identify any adverse or significant off-site impacts that can be considered harmful to the local, community, ecology or landscape.

In relation to the NE reference to the "3 dB noise change", this appears to come from a generic approach to noise assessment often seen within EIAs to assist in determining significance of noise changes that are often used to assess road/rail traffic noise or for noise sources that don't have any specific guidance. Natural England appear to have adopted this as suitable criteria due to lack of other guidance on the matter, however we consider that this is not supported by any research or published guidance.

In relation to the ecological impacts, there are just so many species which all have different sensitivities which then vary from day to night and also throughout the year. The published guidance relates to human impacts are all fairly similar in their response to noise and are easier to study and address with specific guidance. The noise level change bands are based on human hearing with 1 dB considered to be on the threshold of perceptibility, 3 dB considered to be perceptible, 5 dB considered to be a noticeable change and 10 dB change representative of a doubling/halving of loudness.

Mineral sites have their own specific guidance and recommended noise limits that do not exceed the background noise level by more than 10 dB or a maximum noise level of 55 dB at specific receptors. To comply with eh NE request, using the baseline surveys undertaken (as part of the required noise guidance and best practice) the noise change estimates would be related to those specific residential properties assessed rather than specific habitats.

Natural England reference the application site being within 1.5km of Morecambe Bay and Duddon Estuaries SPA, Morecambe Bay SAC, Morecambe Bay Ramsar and Lune Estuary SSSI. It is also within 2.3km of Wyre Estuary SSSI. It is noted that at these distances, noise from the site would not be inaudible.

However, within the habitat areas that lie outside of these designated sites, but "near to the site", it is difficult to quantify what is required. In relation to quarries, given the very specific national guidance on noise from mineral sites, we need to rely on the long-established government policy and guidance to assess noise impacts.

The survey data should provide for the survey effort described in their letter including two survey visits per month between September and March. This survey data should be used to make a conclusion on whether the site comprises functionally linked land to the SPA. If the data concludes that the site (or part of the site) is functionally linked land, the County Council will then need to carry out a Habitats Regulations Assessment and sufficient information on bird activity and likely impacts will need to be submitted to enable the assessment to be carried out.

Impact on Biological Heritage Sites – the proposed development would result in the loss of part of Piling Moss – Head Dyke BHS. The planning application should detail the measures that will be employed to reduce or eliminate impacts upon the BHS.

The proposals for the development show the majority of the site returned to its original land-use with the restoration of land to the east of Bourbles Lane (that lies near to the BHS) returned to open pasture that is currently used for equestrian purposes.

**Hedgerows**

None of the hedgerows present on the site have been classified as important under the Hedgerow Regulations 1997. However, the EIA identifies hedgerows H1, H2 and H5 as containing bluebell which would normally qualify a hedgerow as 'important' for the purposes of these Regulations. Clarification should be provided as to the status of the hedgerows and whether they would actually be impacted by the development.

It is noted that there are some bluebells noted but these are considered to be less than 30yrs old so fall outside the protection of the hedgerows regulations. This is stated in the ecological submissions.

**Breeding bird surveys**

Three breeding bird surveys have been undertaken across the site. The numbers of surveys undertaken do not comply with current guidelines which recommend six surveys spread between March and July. Justification should either be given for the reduced survey effort or additional surveys commissioned to cover the missing periods.

The requirement for additional surveys specified within new guidelines on the number of surveys to be carried out (which were issued after the survey season in 2023) are in the updated report.

**Water voles**

There are no surveys for water voles. Given that the site contains a range of potential water vole habitats, the applicant should either explain why such surveys are not required or provide suitable survey information.

No Water Voles recorded on site. Repeat checks are being undertaking during other visits.

**Bats**

There appears to be a difference between the ecological assessment and arboricultural assessment regarding the suitability of trees on the site for bat species.

It also appears that the survey effort for bats was below that normally recommended particularly in terms of the duration of each survey event. It is therefore possible that bat activity could have been missed. The report should be updated to either provide a justification for the reduced survey effort or the results of further surveys submitted.

No potential bat roosting in trees were recorded during the ecological survey. The arboriculture survey is not a bat survey.

**Common Toad**

The ecological assessment identifies that surveys for this species were undertaken but provides no details of the methods of survey, dates of survey or numbers of surveys completed. Further information to address these issues should therefore be submitted.

No Toads recorded on site. Repeat checks are being undertaking during other visits.

**Cumulative ecological impacts**

This assessment is mentioned in the ES but there is no evidence that such an assessment has actually been undertaken.

A precautionary working method statement should be produced for the site detailing the measures that will be employed to avoid harm to reptiles, common toad, other common amphibians, nesting birds and brown hares particularly during vegetation clearance.

An ecological method statement can be provided as part of a post-determination planning condition.

The ecological mitigation measures including features provided for as part of the restoration should be accompanied by a suitable management period. 30 years is suggested which will equate with that required if this development was to fall within formal biodiversity net gain requirements.

A 30 year management plan for replaced habitats may require post restoration land be retained and managed for wildlife rather than returned to agricultural land-use.

It is noted that some consultees have promoted a wildlife reserve type restoration plan rather than returning the land back to current agricultural and equestrian uses, especially to the east of Bourbles Lane as this lies within a Biological Heritage Site. This would need to be agreed with the various landowners as well as the applicants as the proposals show the majority of the site returned to its original land-use.

**Ecology and water quality**

Natural England have requested that any HRA should include an assessment of how any surface waters flowing to designated sites would be effected. This might require a better explanation of how water at the site would be managed including the requirement to discharge to any surface watercourses.

The surface water management scheme will be implemented under an EA permit. The discharge permit is currently in consultation with the EA. It should be noted that the EIA with the detailed surface water assessment did not identify any issues related to any designated sites.

**Impacts on Peat**

You will note that Natural England have raised issues regarding the need to remove peat and peat based soils. Presumably the borehole information contained in the appendices to the Planning Statement will contain some data on the depths and distribution of peat across the site.

No peat was recorded in any of the boreholes drilled within the proposed extraction area. The overburden coving the sand and gravel generally comprised thin soils less than 0.8m thick.

**Arboricultural Survey**

This only appears to cover part of the whole site area – for example the red line area on the tree constraints plan is not the same as the planning application area. It would also be useful if the tree constraints plan could identify the vegetation (trees/ shrubs and lengths of hedgerow) that require removal to facilitate the development. For example, some hedgerow removal will be required within hedgerow H5 to construct the access road and associated visibility splay.

A detailed scheme of hedgerow removal can be provided as part of the post-determination planning conditions. However, it should be all major trees located on or adjacent to the proposed extraction area will be retained with working margins identified in the proposed extraction scheme.

**Landscape issues**

Landscape comments have been provided by Atkins Ltd for the County Council. In general, it is considered that the landscape assessment is satisfactory subject to the following:

- Tree / hedge removal – The ES at 7.5.1 and 7.5.2 notes the loss of hedges and clarifies that this will be 55 metres of hedgerow. This is different from that shown in the arboricultural report. The two documents should be aligned.
  We can address this. We are not sure about the exact length of the “hedges” to be removed as the hedges are patchy. We confirm.
- The weight given to residential receptions is described as 'low' and it is questioned whether this is correct.
- Have the visual effects of the built development within the afteruse proposals been considered?
  No not at this stage as the tourism proposals would need to be confirmed with Wyer Council.

- Landscape mitigation – it is considered that further detail is required to accurately conclude the effectiveness of the mitigation. The detail should include detailed landscape proposals, cross sections and elevations to illustrate the likely effectiveness of the mitigation proposed. In particular this relates to the further phased drawing information referred to above and the comments about the redesign of the soil screening mounds around the plant area.

  As the soil bunds will need to be amended as requested by LCC we will therefore need to address the proposed changes. LCC want more bunding around the plant area, especially along the southern boundary to reduce potential viewing impacts.

- The viewpoint photographs are taken in summer and are therefore likely to show an 'at best' perception of the visual impacts. A winter assessment would have allowed a better comparison of visual impacts as a worst case.

  In winter the weather is generally quite poor with worse visibility! I am not sure about the standards required for site photos.

- Figure 6 : Site layout and proposed levels and figure 7 : Restoration scheme do not provide adequate information relating to operational and restoration phases.

  This does reduce the reliance that can be placed on the ES conclusion that the development would have a positive landscape effect. More information on development screening and restoration / landscaping proposals are needed in order to properly reach such a conclusion.

  The phased working and extraction scheme shows only short-term impacts across most of the site (the project is only 5-6 years).

**Air Quality**

Comments on this topic have been supplied by Atkins for the County Council. The County Council's Public Health Team and UK Health Security Agency have also made comment. The main issues raised on the Vibrock Air Quality report are as follows:-

- The report does not reference the most recent pm2.5 targets which were introduced in January 2023. There is also retained EU law relating to air quality limit values.

  Amended in the updated Air Quality Report.

- The report also does not acknowledge the new Air Quality Strategy Framework.

  Amended in the updated Air Quality Report.

- The report references previous studies in relation to open cast coal mining but it is unclear how these are relevant to the sand and gravel extraction proposal.

  Historically health impact studies on the effects of particulates on human health were derived from studies of open cast coal sites and communities. As part of this study "The Newcastle Study" is still referenced within the IAQM 2016 Mineral Dust Impacts for Planning Guidance. Hence, we still consider this discussion relevant, albeit that sand and gravel operations would be expected to have a smaller scale of impact, given the smaller scale of site operations

- Meteorological data – no reference is provided for the data source that has been used. Atkins are of the view that 10 years of wind data from Blackpool Airport would be appropriate to assessing air quality impacts from this proposal. The data used also only uses predominant winds and does not recognise that there are winds from other directions which is relevant given the distribution of sensitive receptors around the site.

  The Air Quality Assessment states that 10-year dataset has been used from the weather station located at Blackpool Squires Gate, Lancashire. Windrose (Appendix 1) shows windspeeds from all directions. Although our report references the predominant wind direction within one paragraph, for all assessment location the relevant wind blow quadrants from site operations to each assessed receptor are studied and assessed.

- Paragraph 3.2.2. states that dust generating activities will be carried out within areas protected by screening bunds – however, that does not necessarily seem to be the case taking into account the proposed site design. There is either a lack of information on this point or the design requires amendment to provide a greater level of protection.

  Rephrased in Air Quality Assessment version 4 - "Works to be carried out in excess of 250m or within protected areas from screening bunds".

- NO2 – the assessment only appears to consider pm10 impacts. This may be appropriate but some mention should be made of baseline NO2 levels and whether the development would be likely to significant increase these

  The assessment criteria for the assessment of vehicle emission, the principal source of NO2, is not exceeded, detailed in section 7 of our report. Further information regarding background NO2 are however provided which are well below the relevant objective.

- Baseline dust monitoring – The nature of monitoring used was acceptable although the duration of the monitoring is considered to be too short and no details were provided of the weather conditions during the monitoring period.

  IAQM Guidance states: "There is less of an imperative for gaining a highly accurate measure of baseline dust deposition rates, as this information is not required for the qualitative assessment to disamenity effects that will usually be used". Vibrock use this data to support observations upon deploying and collection of monitoring equipment and helps identify if there are any areas of concern nearby in regard to dust deposition and cumulative impacts.

  The data obtained is for reference only and does not affect the outcome of the dust assessment. A dust management and monitoring plan would outline the long-term dust monitoring techniques and reporting procedures to be conducted at the site.

- Description of the extraction method – Atkins are concerned that insufficient information has been submitted. It is understood that only the lower parts of phase 1 would be worked wet which is due to the depth of the deposit in this area. Extraction in the remainder of the site would be dry using limited pumping. Could you confirm my understanding please.

In my view the aspect of the development with the most potential to generate dust will be the haulage of 'as dug' material to the plant site. It might be useful to provide some further information as to the likely duration of these activities for each phase.

Mineral extraction 4.6.5 and 4.6.6 reworded in Assessment version 4. Sand and gravel are typically deemed a material of high moisture content. Materials will be more saturated in phases where pumping is required. Dry windy days are considered further into the assessment alongside potential dust magnitude of the site. Materials being susceptible to dry and windy conditions are considered within the assessment. The type of material being extracted and processed can have a significant influence on potential emissions. Sand and gravel deposits may possess an inherently high moisture content, which can cause particles to adhere and thereby affords a high degree of natural mitigation. However, this does not negate the potential for fugitive emissions from this material if it dries out, especially during high wind conditions. Conversely, the extraction and processing of hard rock such as granites and limestone can more readily generate dust, which requires appropriate mitigation.

- Dust generation and mitigation. Atkins have noted the potential for dust generation by dump trucks traveling on haul roads and then need for mitigation measures including use of a water bowser through a dust management plan. They have also raised the need for a paved surface between the wheel cleaner and surfaced entrance road.

  Noted in report that a tractor and water bowser will be implemented. Paved access road and wheel wash have also been noted in the report. Rephrased in assessment version 4 “The use of a paved access road with wheel wash facilities are factors which would reduce this to a small residual source emission. The overall scale of dust impact from off-site transportation is considered to be small due to the planned wheel wash facilities preventing dust track-out.” “Vehicle cleaning facilities to be used and located on paved access road”.

- Atkins have also raised the issue of dust from soil stripping activities. In my views these activities in themselves do not normally generate large volumes of dust but the transport of such soils using dump trucks may give rise to significant dust impacts. It would be useful to prepare some better information showing the soil stripping and storage proposals for each phase so that the potential dust impacts can be more accurately assessed.

  Rephrased in assessment version 4 - this section of the report using the exact figures quoted in the environment statement. The assessment discusses the stripping being on a campaign basis, and the restoration being carried out in a progressive manner across the life of the quarry.

  The IAQM guidance depicts the potential dust magnitude of site preparation and restoration based on the amount of material being moved, size of the area being worked at any one time, amount of mobile plant involved, moisture content of material, and height of bunds created, such factors have been considered within the assessment. The dust mitigation measures for site, including control of vehicle speeds will apply to soil stripping activity to control dust emissions.

- The Planning Statement mentions the importation of hardcore material to create the access road and processing area and it is unclear if these works have been considered in Vibrock's report. However, I don't consider that the dust impacts from these activities would be significant.

  The construction of access roads and paved areas is not covered in the IAQM guidance. The length of the access road and the material the access road and paved areas are made from is considered in the assessment and in the IAQM guidance. The general dust control measures identified however such as control of vehicle speeds, minimisation of drop heights and the use of water as required will apply to the short-term site preparation activity.

- Paragraph 4.6.10 of the Vibrock report notes that a maximum of 100,000 tpa is anticipated to be processed but that much of the material may not require processing. This statement seems to be at odds with the Planning Statement which appears to say that the quarry will produce a range of concreting and other building aggregates. Presumably to ensure these all meet the required quality standards, they will all require some form of processing?

  The proposed sand and gravel plant will have 3 grades of gravel and 2 grades of sand. No concrete batching or any other material types. The mineral dust assessment guidance requests information on the annual tonnage of material being processed. It is proposed that 100,000tpa of sand and gravel will be processed and stockpiled. 61% Sand 36% Gravel and 3% fines.

- Particulate assessment – the method presented by Vibrock considers pm10's and pre dates more recent Government advice regarding PM2.5's. The applicant should consider how operations may affect PM2.5 concentrations at nearby sensitive receptors. Atkins have also made a number of comments regarding the calculation of PM2.5 and the justification for the argument that the development would not result in an exceedance of PM2.5 objectives.

  PM 2.5 particulates are discussed in paragraphs 6.1.14 to 6.1.18. The 2040 annual mean target is now included within this section based on the revised version 4 of this assessment.

- Respirable crystalline silica – Atkins recommend that a source – pathway – receptor approach is used to model the impacts of RCS. It is noted that the majority of materials will be processed (but see comment above) presumably using water to remove silt and other contaminants which should mitigate against dust including RCS. However, would there be any dust impacts from any crushing of over size as presumably this would not require the use of water and could potentially produce more dust from the crushing process?

  See paragraph 1.5.1, 2.5.5 and section 6.2 of updated AQ Report

- Paragraph 7.5 of the Vibrock report references a site at Misterton – presumably a mistake carried over from another report.

  Error changed in version 4 of the assessment

- The assessment of air quality impacts from traffic should reference the actual traffic flows from the proposed development rather than <100 HGVs per day.

  Revised paragraph 7.7 to include basic AADT values in updated AQ Report

- Conclusions : Vibrock conclude that there will be no significant impact.

  Atkins agree that this is likely to be the case but cannot be agreed at this time due to omissions in the report and supporting information. For the low risk to be confirmed, it is essential that more information is provided on the site design, mitigation measures and dust management plan. Atkins have also raised issues regarding the monitoring of RCS to address community concerns including RCS potential in the mineral and exposure to workers on - site and to off site locations.

  Addressed in previous comment and the report update

**Noise**

Comments on this topic have been supplied by Atkins. They have raised the following issues:-

- The site would be worked in phases but the assessment results do not identify which phases the results relate to. As the working areas and sensitive receptors are spread out over a large area this should be confirmed. For example, it is assumed that the noise impact assessment results for the property at Woodlands on Bourbles Lane is during Phase 1 when the operations are closest to this house. However, what would the noise impact be for the remainder of the operation. Presumably there would also be some noise impacts from the processing area that would be experienced over the full duration of the development. I think it would be useful to have a table showing the noise levels that would be experienced at all receptors during all phases of the development.

  The previous assessment presented worst-case noise level predictions at noise-sensitive premises in the vicinity of the proposed site but did not demonstrate how site noise levels could vary at each assessment location during the life of the proposed scheme. As requested, the site noise levels predictions have now been presented for each phase of the proposed development. These are included in Tables 6 and 7 of the updated noise impact assessment. This additional information demonstrates that the worst-case noise levels are only likely to be realised for short periods when working is in closest proximity to residential dwellings.

- The noise mitigation measures are not fully detailed – see the same issue discussed above.

  The mitigation measures to be employed during the scheme are detailed in Section 6.0 of the updated noise assessment. In addition, screening bunds have been incorporated into the proposed quarry development plans to provide visual and acoustic screening of site operations, this is outlined in Section 5.3.2 of the updated noise assessment.

- There does not appear to be any assessment of noise impacts arising from additional HGV traffic particularly on those properties closest to the site access nor is there any assessment of noise impacts from dump trucks moving materials on internal haul roads where these pass close to properties. The second issue is probably more significant in terms of noise impacts.

The updated noise assessment, along with the previous assessment, did include dumptruck movements on haul routes and HGV movements on the site access road. It did not address the potential impacts of noise from development related traffic utilising the public highways to and from the site. Consideration of noise from off-site HGV traffic has now been included in Section 5.4 of the updated noise assessment

- Baseline noise measurements : these were measured at 7 locations for two 15 minute periods during the middle of the working day. It is possible that the background noise level could vary over time and there is no commentary on the degree to which noise levels vary over the course of the proposed working hours. The site is seeking permission to work on a Saturday morning and background noise levels could be lower during these times.

  Additional background noise monitoring has been undertaken to address these comments. This additional survey is detailed in Section 3 of the report and the noise monitoring data is presented in Table 4 of the updated noise assessment. Measurements were made over a wider time period on both a weekday and on a Saturday morning to provide additional information on the baseline acoustic environment. A summary of the results which have been used to determine the background noise level (LA90) used within the assessment is provided in section 3.5.

- The assessment demonstrates that for 'normal operations' noise levels are below 55 dB(A). At three receptors, noise levels are more than 10 dB(A) above background levels which should not be permitted unless meeting this imposes an unreasonable burden on the operator. The assessment has not shown if it would be possible to reduce noise levels so they are less than 10dB(A) above background. The assessment notes that exceedances above the 10 dB(A) above background will be short lived. However, there is no information to illustrate what is meant by 'short lived'. How many weeks would 'short lived' actually be?

  Table 7 shows that all levels are below the upper limit of 55 dB. Despite the presence of screening bunds the proposed working areas are in such close proximity to the above residential premises that the background + 10 dB is exceeded but this would be for a short period of time and lies below the upper limit of 55 dB. Context to this is provided in section 5.3.3 – 5.3.7

- Paragraph 5.3.3 states that noise levels 'from normal operations could exceed the background level by more than 10 dB at Woodlands, Red Lea and Bourbles Farm. However, the proposed screening bunds reduce potential noise levels to within the 55 dB(A) limit at all assessment locations….' There needs to be better demonstration of the screening bunds particularly at Woodlands. How long would it take before a screening bund could be erected and what would be the noise impacts of working this area without the screen bund being in place?

  The detailed phase 1 development plan is included the updated report.

**Highways**

You will note that LCC Highways conclude that planning permission should not be granted in its current form as the development would have an unacceptable impact on highway safety.

Highways have identified four main issues:

- The access plans fail to demonstrate that adequate sight lines are achievable
- The access plans do not show that a vehicle can enter the site safely whilst another is leaving
- The access plan does not provide a swept path for all vehicle movements
- The application does not demonstrate that there is adequate width on Lancaster Road between the site access and the junction with the A588 to allow two HGVs to pass safely.
- To address the Lancaster Road issue, I think it would be useful to include a drawing to show how two HGVs can pass safely on this section of highway particularly on the bend leading up to the A588 junction. It would also be useful to include some information on HGV flows on this road to demonstrate the frequency where HGVs might have to pass on this road.

I note that there is information within the TA on traffic flows but this appears to be only on the A588 from a Department of Transport traffic count. There does not appear to be any traffic count information for Lancaster Road. You will also note that highways have drawn attention to the lack of pedestrian facilities on this section of highway and the implications for road widths. Some information on pedestrian usage of this road might therefore also be of assistance.

The issues above are addressed in an updated Transport Statement dated 2nd December 2024.

# 2. REVISED PLANS (PA24-3, 4, 5, 6, 8 & 9)

# 3. REVISED PHASING PLANS & PHASE 1 – DETAILED WORKING SCHEME

# 4. UPDATED NOISE ASSESSMENT

# 5. UPDATED AIR QUALITY ASSESSMENT

# 6 UPDATED ECOLOGICAL IMPACT ASSESSMENT

# 7 UPDATED BREEDING BIRD SURVEYS

# 8 UPDATED OVERWINTERING BIRD SURVEYS

# 9 UPDATED BIODIVERSITY NET GAIN