ON BEHALF OF HARLEYFORD AGGREGATES LTD

RESPONSE TO REGULATION 25 REQUEST

EXTRACTION OF SAND & GRAVEL

LOWER HALL FARM

SAMLESBURY

LANCASHIRE

Mineral & Resource Planning Associated Ltd

October 2023

1 INTRODUCTION

This document is a response to (i) the Regulation 25 request letter from Lancashire County Council (LCC) of 18th May 2021 (the Letter) as Mineral Planning Authority (MPA) for further information in relation to the above application at Lower Hall Farm (LHF); and (ii) to other matters arising through comments of consultees and the public subsequently submitted.

The Letter identifies matters arising from consultees and unsolicited representations made following consultation on the application. Such matters identified in the letter are raised by the Planning and Environment Department of LCC, by other departments of LCC, by statutory consultees and in representations made by non-statutory consultees and the public.

This response deals with most of the matters arising from the letter or in subsequent matters with the exception of some matters relating to air quality, noise, and flood issues which will be provided shortly.

The Letter notes that at time of issue that consultation comments had not been received from (i) the LCC landscape advisor (ii) Natural England, and (iii) the Samlesbury and Cuerdale Parish Council, who had been formally consulted. Such comments were subsequently received by LCC and this response addresses matters arising in those comments, subject to provisions noted above.

In addition, the comments of the Lead Local Flood Agency, which also had been formally consulted, were received after the letter. Those comments will be addressed shortly as part of a response on flood issues.

The MPA also formally consulted the Public Rights of Way section of LCC, the Ramblers Association and the Woodland Trust. At the date of this response no comments have been submitted from any of those consultees. It must be concluded that they are therefore content with the application as submitted in relation to their particular responsibilities or interests.

Some formal consultees responded noting that they have no objection to the application. It is concluded therefore that matters relating to their particular interests or responsibilities

are resolved or satisfied in the application and do not need further attention, even if raised by third parties.

The comments of the public have been supplied to the applicant by the MPA, but with the address redacted. I understand that LCC always redacts the address following an historical challenge, although other MPAs do not. That redaction makes it difficult for an applicant to address specific matters that may arise in such comments which might be of significance.

Such comments may come from persons resident a considerable distance from the site where there are no possible impacts on their interests. To that extent, due to redaction, HAL cannot put such comments into their proper context. Further, the specific matters and weight of public comments against the application cannot be judged fairly.

An attempt has been made to address the substance of those comments. By the contained comments it has been possible to identify the location of one public comment. This response therefore addresses the general scope of public comments but may also address particular matters raised where the comment location can be identified.

Those public comments typically reflect general concerns as to adequacy of protection of amenity (visual, noise, dust, etc) and the need for information to identify the scale of any such impacts. However, as all public comments have the address redacted and therefore, in most circumstances, it is not possible to identify the weight of the concern raised and how that may or may not relate to any impact at all, let alone a significant impact, and/or the need for any mitigation, at the home of the individuals concerned.

2 MATTERS ARISING

POLICY COMPLIANCE

A number of comments from within the Authority and both statutory and non-statutory consultees referenced in the Letter, or as subsequently received, focus entirely on what are perceived to be inadequacies in the application due to non-compliance with certain (mainly environmental) considerations including policies in the NPPF or in a relevant development plan. But those comments fail to consider and comment how the development complies with or assists other requirements in the NPPF, a relevant development plan or the fundamental objectives of the specific interest of the consultee.

Development plan policies etc will always pull in different directions. The proposed development at LHF may conflict with certain policies but may also support and be in compliance with other policies. The comments from within the Authority and such consultees should recognise and value how the development assists the overall balance of those objectives, and to that extent how that assists the achievement of sustainable development.

In that context the scheme at LHF provides for a very significant supply of mineral to meet the pressing demand for materials to enable the construction of homes etc and infrastructure necessary to meet the social and economic objectives for Lancashire. As the NPPF states "great weight" should be given to that supply. But it also, both during operation and at cessation, provides an extensive area and range of habitats, in themselves of considerable value but of greater synergistic value in linking the existing fragmented nature of isolated habitats in the area, providing a quiet sanctuary to support Brockholes, as well as substantial improvements 'off-site'.

This has been achieved through engagement with local biodiversity interests and by incorporation of responses from those bodies where possible. Future funding of the restored site lies in the capable hands of the Trustees which avoids compromises on the biodiversity objectives and ensures the 'quiet', undisturbed nature of the restored site. It avoids the conflicting compromises of more public access, or the development of other

harmful non-conservation activities, but also provides a substantial 'green' asset which enhances public health and well-being generally.

This response therefore does not just respond to the negative comments as seen by such consultees to be non-compliant but sets the development properly within a balanced appraisal within the full framework of the NPPF, such development plan policies and/or the objectives of a consultee party.

The Environment Act 2021 and the 25 Year Environment Plan

More specifically, the comments of consultees identified in the Letter completely fail to set the outcomes of the development in the context of achieving specific objectives in the Environment Act 2021 (the Act), and the 25 Year Environment Plan (the EP) as recently restated and clarified in the Environmental Improvement Plan (the EIP), February 2023 (the first revision of the Plan) and The Environmental Targets (Biodiversity) (England) Regulations 2023 (the ETB Regs).

Some of these objectives may have only recently been concluded in legislation or guidance and some (such as Biodiversity Net Gain (BNG)) are not yet in force and need tweaking to ensure they can be applied properly. But the main objectives were clearly set out in for example the Environment Bill which preceded the Act. The direction of travel and outcomes for the environment sought by Government, which were and are fundamental relevant considerations to be taken into account in comments on the development at LHF, were therefore known.

That clarified that the targets to be achieved in legislation, such as for biodiversity and woodlands, were to clearly focus on positive outcomes with mutual benefits for many aspects of the environment. For example, the application of Natural Flood Management techniques would provide flexible systems ensuring effective control of flooding. But it is also noted that such an approach compared with 'hard' flood control engineering, will significantly reduce resource use in 'hard' engineering structures; provide new and often rare or otherwise shrinking habitat; increase tree planting; lead to air quality improvements; and can be visually pleasing. All of these outcomes are desirable targets in their own right.

More specifically the targets include, inter alia, the creation or restoration of some 500,000 hectares of wildlife habitat, the provision of Nature Recovery Networks, etc.

Those objectives should therefore have been the primary basis for the comments on the application ("How does this development at LHF help to assist the objectives and targets in the Environment Act and the Environment Plan?"), but are mainly ignored.

More specifically, the recent EIP states that Government has defined improving nature as its "apex" environmental goal in which it will halt the decline in biodiversity by, inter alia, funding actions to create, enhance and restore habitats in over 500,000 hectares by 2042. The scheme at LHF clearly creates a significant area of new habitat and enhances existing habitat on site and in adjacent and more distant land, but significantly from private funding without the need to call on what are limited public funds.

The development at LHF will assist other goals in the EIP such as provision of woodland alongside rivers, maximising the sustainable and efficient use of resources and minimising their waste. It will also increase tree and woodland cover in England, etc, as sought in the ETB Regs and areas of the target 'wildlife-rich habitats' as listed in Schedule 1 of those regulations, namely, lines of trees; native hedgerows; scrub; native woodland; floodplain woodland mosaic; and ponds.

The Lancashire County Council Environment and Climate Strategy

LCC Cabinet Committee approved in March 2021 a programme of environmental improvement including, inter alia, tree planting alongside the Ribble and the development of a Local Nature Recovery Strategy to link up habitats and restore nature. That programme has been taken forward within the undated LCC Environmental and Climate Strategy 2023-2025 (ECS).

While the ECS has been published after the consultation period on LHF expired, the policy themes it sets out both underscored the previous LCC acknowledgement of an environmental and climate emergency and the conclusions of the Cabinet Committee as to how Lancashire should respond and should have been reflected in the response from consultees.

In that respect the ECS sets out in the introduction “a clear direction of travel for joint work with public, private (such as HAL) and third-sector leaders” to “provide for the recovery of nature in our outstanding county”. The ECS then identifies ten specific objectives including (i) conserving, restoring and re-establishing habitat quality and species diversity; (ii)using nature-based solutions to tackle climate change; (iii) reducing waste; (iv) improving air quality; (v) improving water quality; and (vi) managing flood risk and water resources.

The development at LHF will make a significant contribution to all those objectives, and to the Local Nature Recovery Strategy to be prepared by LCC. However, this contribution of LHF to the ECS has not been identified in any comments of consultees.

DETAIL

Comments may seek details of individual elements such as signing, the bridge across Bezza Brook, the cattle grids, the location of swales, etc.

There are numerous ‘off the shelf’ items which would meet the requirements and there is no need to tie down the consent and the operator to a specific design now. These details can be adequately controlled by condition.

‘POLICY’ STATUS

There have been significant ‘policy’ status changes or shifts in importance nationally and locally since the application was submitted. Some of these may bear directly or indirectly on the application. These include the implications flowing from the expiry of the CS and SP plan period, the dramatic fall in available reserves of sand and gravel in Lancashire together with the shrinkage in producing quarries, the capture by factory mixed mortar of most of the UK mortar demand, the substantial development proposals within the Central Lancashire Local Plan necessary to meet future development demands, as well as matters such as Ash Die Back, the objective of phasing out fossil fuel powered vehicles, etc.

These matters are not currently addressed by the MPA. There is considerable uncertainty as to when the Minerals Local Plan Review will be in place and in that absence no clarity as to how future supply can be achieved in the most sustainable manner.

They are considered in this response as they pertain to the application, the letter and the individual comments of consultees.

Of particular significance has been the adoption and/or enactment by Government of a range of measures in relation to improving the 'environment'. These relate to water management, pollution control and landscape and ecology/biodiversity enhancement and planning. They include provisions relating to Biodiversity Net Gain, the development of Nature Recovery Plans, the increased focus on the concept of 'working with nature' to provide greater biodiversity assets and 'natural' flood management, etc.

Underpinning this is the objective of significantly increasing the extent of 'natural' habitats across the country and increasing the extent of wetlands and woodlands not just for their biodiversity value but also to address climate change issues and pollution control.

These concepts and policies are fully supported by local authorities in Lancashire and agencies or organisations such as the LWT.

'UP TO DATE'

Some consultees reference that data, surveys or reports are not 'up to date' and need to be replaced by more recent data or surveys.

Though Regulation 26(1) and 26(2) of the 2018 EIA Regulations reference the need to be "up-to-date", that is in the context of the reasoned conclusion of the determining authority as to the significant effects, not the survey data. The relevant authority on this is Girling v East Suffolk Council (2020) EWHC 2579 (Admin).

There is no policy position that surveys undertaken for any planning application or as part of an ES are out of date merely due to the lapse of time. The requirement is that such surveys shall properly set out the current background conditions and representative data. If the background conditions are the same today as at the time of a previous survey, then the survey will satisfy the requirements as long as it is of sufficient quality.

Girling also states, inter alia, that the decision of a planning authority does not depend on a formal conclusion that the environmental information has to be recent. The consideration is if the quality of the environmental information, including historical data and data

collected over a period of time is adequate. Girling also confirms that where conditions might have changed then further surveys may be appropriate, but conversely therefore where conditions are the same then historical data as to impacts would likely be the same and would meet a test of quality.

Where however there have been significant changes in an application area or surroundings caused by human actions (such as might arise from woodland clearance on site, or the opening of a new highway in the vicinity, or the clearance of dereliction, etc); or by natural processes (such as by sea cliff or river cliff erosion, or by landslides, or karst collapse, etc); or by a change in land use or a significant increase in intensity of use (such as a significant increase in traffic on a highway adjacent to the site), all of which might have the potential to bear on the results of a previous survey or data, then it is essential to assess those changes.

The greater the degree of change, the greater the need for a new survey reflecting that change. Where there is no significant change there is no necessity for new surveys.

Similarly, if the data or surveys supporting the application were undertaken in unusual conditions such as extreme weather events (cold, storm or drought for example); or major traffic changes (due to highway closures associated with road works or a major accident); etc, then they would need to be replaced by surveys undertaken in more typically normal conditions where environmental and other conditions were 'normal' or were more truly representative of typical conditions.

In that respect there have been no physical changes let alone any significant changes in the site or the adjacent area. Equally the relevant surveys were undertaken in 'normal' conditions. The surveys and their conclusions are therefore typically representative of the relevant conditions at the time and, with one exception, they are equally typical for the conditions that pertain currently, are up-to-date in that context and do not need to be repeated merely due to the lapse of time.

That one exception is the temporary but significant impact of the Covid pandemic on traffic levels. Traffic noise from the M6 and the A59 dominates across the whole site and adjoining areas, such as in Samlesbury and at Brockholes. Similarly, traffic from the M6 and the A59 is a primary source of air quality pollutants locally.

The reduction in traffic levels over the Covid period therefore potentially created a significant reduction in noise and air quality pollution. That said, the traffic levels both before and during Covid on the M6 were some of the highest in the Country and pollutant levels are likely to have remained as very significant. However, the effects were uncertain and using data and assessing impacts of traffic during Covid and post Covid recovery should be avoided. Pre Covid data represents a more realistic basis. It is, for example, the requirement of National Highways that traffic assessments should not be based on the Covid period or the recovery period but should be based on the historic 'normal' situation pre-Covid.

Ecological surveys involving highly mobile species, are truly only representative of the species numbers on the survey period, but subject to a wide range of external factors. They are unlikely to represent the average numbers of species present or either the maximum or minimum numbers of individuals of a particular species that are commonly present on site. All such surveys merely represent the conditions on the date (a single day) of the survey. They therefore only represent a snapshot of conditions.

Surveys of the range and numbers of highly mobile species such as birds will, for example, fluctuate very significantly on a day to day basis over the short and the long term due both in terms of species present, and the number of each species, due to climatic conditions in the location and external impacts including factors such as disease (such as the current short and long term impact of 'bird flu' which has significantly affected numbers of birds, but not numbers of bird species, or the availability of suitable habitat and ecological niches), the degree and presence of human activity; and for migratory species factors affecting their numbers in other regions (breeding success, climatic impacts, persecution, etc).

These 'external' impacts can be particularly significant such that a survey this year can show a marked drop in numbers compared to last year. Such fluctuations will not be related to site carrying potential (unless there has been some fundamental change in the site) and are misleading if used to describe the biodiversity potential of a site.

In that context if a survey notes the presence of a highly mobile species that in itself may not demonstrate anything other than a species that is passing through and not resident.

Fundamentally, the need for a new survey would depend on the topic being surveyed and the type of survey undertaken and whether environmental conditions within the study area were "normal" or unusual at the time undertaken (e.g., extreme weather), or are likely to have changed or remained the same. With no change the need for a new survey is not demonstrated. If there has been change, the greater the recent change, the greater the need for a new assessment.

The need for a new survey would therefore need to be both proportionate to the change and reflect the mobility of the topic being surveyed.

There is a need to ensure that surveys undertaken for an EPS licence are up to date and relevant so as to demonstrate the scale of the presence of such species and therefore the extent of harm, or not, and the adequacy of mitigation/compensation proposed. Those surveys will be undertaken once consent has been granted and once the extent of works that might affect protected species becomes certain.

BIODIVERSITY NET GAIN

A report on Biodiversity Net Gain is under preparation. However, the current metric proposed to come into force does not properly address certain aspects of the habitat gains provided, notably, for example the off-site improvements to the Hodder. HAL will need to engage with LCC on how such matters shall be evaluated.

Nevertheless, it is patently clear, in principle, that the environmental gains provided at LHF very substantially exceed that required under BNG.

ASH DIE BACK

Ash Die Back is now endemic in the site, and the wider location. The rapid progress of the disease through the tree population of the area and the UK has been significant.

The disease was confirmed in the UK in 2012 and noted as widespread in the wider locality around Samlesbury a few years later. It probably arrived in the UK sometime before 2006. It spreads by spores associated with leaf litter. The spores may be blown by the wind for tens of miles.

Lancashire County Council reported in 2020 that Ash Die Back extended over 96% of Lancashire. The condition of trees so affected has declined since then. Some Ash trees in open urban settings may be little affected by the disease whereas others in dense woods and less managed rural situations may rapidly decline. The progress of the disease is often rapid showing significant harm in a matter of months. Young saplings may soon succumb to the disease. Older trees appear to take longer to die but over that period may shed vast amounts of spores. Some trees may recover or not be affected. These may provide a gene pool to re-establish ash in the UK but the identification of such immune trees is difficult and the success of natural immunity and regrowth is currently indeterminate.

In other parts of Lancashire or the UK where Ash woodlands are a distinctive component of the landscape or habitats, the impact of Ash Die Back could be a factor bearing on the significance of change in the landscape or the biodiversity value of the site. That change might need to be addressed by revisions to ecological or landscape assessments.

However, there are no Ash woods on site and the few Ash trees in the site are scattered throughout the site. Of these only a few are affected directly by the proposed works (so that they will have to be removed as part of the development).

Ash trees are therefore an insignificant component of the tree population on site and do not dominate the overall landscape character of the site or its biodiversity character to the same significant extent as in some other parts of the UK. The current and potential loss of such trees is therefore not of significance and does not justify revisions to either the landscape or ecology assessments.

Neither does such loss significantly affect the positive impacts of on-site provisions in relation to; (i) climate change mitigation, or (ii) flood alleviation or moderation, or (iii) the potential for mitigation of harmful air quality impacts generated outside the site.

All Ash trees on site which may need to be removed to enable the development appear to be affected to a varying degree. Those trees within or near the development works (including the route of the new access road) all show signs of the disease varying from recent significant peripheral leaf loss to almost total loss of leaf coverage.

All infected trees affected by or adjacent to the proposed works will be removed at commencement of works in the vicinity. Infected trees within the application area but not directly affected by the works will be removed where they are adjacent to public routes or structures which might lead to hazards to people or such features.

A new clause in the UU is provided setting out those obligations and for replanting with other species in such agreed locations as may be necessary.

New planting of Ash is not possible given the ban on movement of plants through a Public Health Order. The proposed development includes substantial new tree planting but Ash is not included within the proposed mix and therefore the mix of species to be planted as set out in the application does not have to be amended.

STORY HOMES, LOGIK & THE CENTRAL LANCASHIRE LOCAL PLAN

The applications submitted by Story Homes and Logik do not directly or indirectly affect the application at LHF. They clearly would significantly change the local environment beyond the LHF application area.

They do however, demonstrate the necessity to seriously considering releasing Green Belt land for development where there are 'exceptional circumstances'. In any rational sense, housing is not so essential as the provision of minerals, where 'great weight' should be given to that supply in the determination of applications.

The Preferred Options Central Lancashire Local Plan (CLLP) has incorporated the area of the above applications in a Growth Area option which extends the development area north of the A59. It thereby extends over the route of the proposed access road for LHF, but does not affect the extraction or processing area. The form of the development in this 'Growth' area (including access on to the A59) is unknown at this time, but there would appear to be

no problem in incorporating the access road as proposed or as might be amended to allow such development.

Again, this demonstrates the need to release land in the Green Belt to provide for development. But in this instance the release derives not from the speculative considerations of developers, but from the measured considerations of local authorities, including LCC as a consultee, that land in the Green Belt must be released to meet both the housing requirements and other social, environmental and economic objectives.

Again, such considerations apply, but with much greater force in relation to the proposal at LHF, because minerals may have to be worked where they are found including in the Green Belt.

The sustainable advantages of the 'Growth' option are clear given its location near to major urban areas, employment centres and transport networks. The timing/phasing of that development is unclear but the provision of construction aggregates locally at LHF to provide such material both for the 'Growth' option and/or other development in the near area would be a highly sustainable outcome.

The Local Plan sees no fundamental traffic or other constraint to the development of the Growth Area within that extended area.

3 REGULATION 25 LETTER

GEOLOGY & MINERAL RESERVES

Mineral Quality

The Claim of Poor Quality

The demonstrated quantity, quality and compliance with specification of the deposit at LHF goes to the heart of the necessity to release the reserves contained within the site. Those reserves can help to ensure a most sustainable supply of concrete aggregate for construction projects in Lancashire for many years.

The basis of the request for further information on quality and reserves is outlined in the introduction of this response to the Reg 25 Letter.

The MPA says in the letter that Tilcon stated (whether this was in a proof of evidence or verbally is not clarified) at the public inquiry into extraction at Higher Brockholes Quarry (HBQ) in 1992 that the site at LHF was (as quoted by the MPA in the Letter) "of lower quality with too high a proportion of silt for an economically viable deposit".

On that basis the MPA questions the quality of reserves at LHF. Other representations, notably from the Parish Council (PC) and local residents, also reference such comments and/or otherwise suggest that the deposit is of poor quality.

This suggestion first surfaced in initial discussions with the PC in 2014 when it was stated that the PC had such evidence. Despite promises to supply that to HAL no evidence has ever been produced by the PC.

The MPA did not provide the 'statement' by Tilcon nor any evidence submitted by Tilcon as to the claimed silt content at LHF either prior to the Letter or with Letter.

The MPA has subsequently confirmed that it cannot produce such evidence and does not have such evidence nor can it trace where such a claim was made at the HBQ appeal.

Neither the PC nor any other objector has produced such 'evidence' or any other information to support their claim of poor quality in relation to the submitted application.

Without the production of this supposed 'evidence' we cannot address its substance. We believe such comments must be disregarded as wholly without substance. In contrast the comprehensive data submitted with the application demonstrates its compliance with the relevant specification and its exceptional potential to meet demand for concreting aggregate for Lancashire.

However, to demonstrate the irrelevance of those claims and the vital significance that LJHF can play in meeting the need for concreting aggregate, and specifically 'high grade' sand, the applicant instructed an independent review of the deposit. This has been forwarded previously to the MPA and is summarised below.

Policy Requirement to Demonstrate Compliance with Specification

The primary policy objective of needing to demonstrate compliance with specification is set out at the start of Policy CS1 of the 2009 adopted Core Strategy (CS). This states that planning consent will be given only in circumstances where the application demonstrates compliance with the relevant specification (in this case that for concreting aggregate).

We understand the background for that essential test and agree with and fully support the objectives and requirements of that Policy. It arises because it is widely acknowledged that the landbank in Lancashire has for decades been severely distorted by consents granted where a significant proportion of the 'reserves' quoted (and which were included in the 'landbank') could not (and in some cases still cannot) economically and sustainably meet any relevant specification. This mainly applied to sand deposits or the sand in mixed gravel and sand deposits. It would appear that consents were granted without any comprehensive or reliable compliance data.

The thrust of policy in Lancashire has therefore been to try to overcome this problem by concentrating on releasing deposits that comply with specification and thereby supply 'high quality' sand. Policy CS1 in the adopted Core Strategy (CS) leads with that requirement to ensure that reserves in the landbank meet the needs of the construction industry.

It is the case that many deposits of sand and gravel (and indeed many other minerals) dismissed as being marginally uneconomic over 30 years ago are now being worked or progressed through planning. This is primarily because of the limited extent of good quality resources now available coupled with advances in processing technology which has made many such marginal deposits now viable economic propositions and where compliance can be demonstrated.

However, many sand only deposits that have been worked (specifically for mortar sand but also supposedly for concreting sand) in the past across the UK never met specification, because they were too fine. That is especially true of sand deposits in Lancashire.

Such sand deposits have generally fallen out of use because they are dominated by fine sand with large percentage of 'fines' outside specification. They did not and cannot meet specification and the construction industry standards required. Such deposits typically cannot be beneficiated by washing etc as noted above to meet specification without producing excessive and uneconomic volumes of waste.

Supplied Evidence of Compliance with CS1

However, that is not the case here at LHF where the deposit, as demonstrated in comprehensive information already submitted, meets the relevant specification and can provide 'high quality' sand.

The application therefore demonstrates (contrary to the quoted Tilcon, etc, 'evidence') a clean deposit in compliance with the relevant BS standard for both coarse ('gravel') and fine ('sand') concreting aggregate. It comprehensively meets the test of CS1.

Detailed evidence supplied with the application (particle size analysis) confirms that compliance. To our knowledge the evidence supplied is the most comprehensive analysis of a deposit in Lancashire in recent years.

That analysis was used by the applicants' experienced minerals expert (Richard Fox) to reach his conclusions as to quality and quantity as set out in his Geological Report (Appendix A) attached to the Planning Statement.

Therefore, as submitted, the application for LHF provides a comprehensive analysis demonstrating compliance with the relevant BS standard for concreting aggregate.

The submitted evidence thereby totally refutes the misleading claims as to poor quality and demonstrates and proves compliance with Policy CS1. The concreting sand resource is therefore of 'high quality' and the sand, and the proposed extraction, comply with the 'high quality' imperative as required by Policy CS3 in the CS. The quality of the aggregate has therefore been thoroughly demonstrated.

Neither the MPA nor any other party has actually challenged the detailed results of the particle size analysis as submitted or provided any evidence to justify the claim of poor quality or which refutes the quality (or quantity) of the mineral.

At this date neither the MPA nor any other party has to our knowledge instructed any expert to challenge the submitted data.

The assessment of the quality of the mineral was produced by Richard Fox, the mineral consultant to the applicant. His experience and knowledge as to sand and gravel deposits is both exceptional and comprehensive. He is one of the most experienced experts in the UK in relation to defining commercial sand and gravel deposits. His experience extends to sand and gravel deposit evaluation in many other countries and he has provided that advice in a 'real world' commercial environment.

Independent Confirmation of Compliance

However, given the continued, but un-evidenced, claim of poor quality and quantity and the questions as to those matters in the letter, and from representations, we have requested a further experienced expert to produce his own wholly independent assessment.

His instructions from Harleyford were for him to assess the exploration data 'de novo'. He was requested to produce his own expert conclusions and Harleyford did not influence the results of that assessment.

The resulting report, by Eddie Bailey of Tombstone Geological Services Ltd, has been forwarded to the MPA. The report includes his CV and demonstrates his competencies,

experience and professional status including reference to his involvement in PERC and CRIRSCO.

In summary the Tombstone report identifies an “excellent quality” concreting aggregate deposit.

The report notes that the site “is demonstrated” to contain a measured resource, under the PERC standard, of 2,575,000 tonnes. This excludes the potential from the previous working area. Richard Fox estimated a total resource of circa 3,000,000 tonnes including that from the previous working area.

The Tombstone report and the estimate by Richard Fox essentially describe a similar quantity of mineral.

The Tombstone report notes that crushing of oversize (circa 8% of the contained deposit) would release more sand and gravel. Crushing is not proposed.

In relation to the ‘Tilcon’ claimed high proportion of silt at LHF both the Tombstone report and the Richard Fox report show that silt content at LHF is virtually identical (7% and 9% respectively) to that reported for HBQ (8% - from Geoplan Ltd, Sand and Gravel Stage 2 Study, report to LCC, 2006).

Such overall gradings are set out in the table below which also describes overall gradings for other recently active sites in Lancashire.

TABLE 1 – Quoted Gradings

	Gravel	Sand	Silt	Source
LHF (unprocessed)	37	54	9	Richard Fox
LHF (processed)	40	60		Richard Fox
LHF(S&G)	51	42	7	Tombstone
LHF(Upper Sand)	0	82	18	Tombstone
LHF (processed)	40	60		Tombstone
HBQ	50	42	8	Geoplan 2006
LBQ	44	48	8	
Kellet Wood (Refused)	63	35	2	
Higher Hill House (Refused)	22	72	6	
Elston (Refused) processed	68	32		
Lydiate Lane	9	80	11	Application
Bradleys	0	83	17	Application
St Annes*	?	?	?	None available
Sharples S&G	67	30	3	Application
Sharples 'Sand'	22	70	8	Application
Runshaw	3	90	7	Application

*No grading has ever been supplied in relation to past workings at St Annes. The current application to renew extraction is not supported by any grading analysis. Previously the material was not subject to any processing and the current proposal does not propose processing. In bulk the material ex=site probably does not meet any aggregate specification.

The deposit at LHF has been demonstrated to be a PERC 'measured resource' and an "excellent" resource of concreting sand and gravel which will provide 'high quality' sand to the relevant BS specification.

It will provide a substantial volume of essential concreting aggregate in high demand in Lancashire and assist in meeting that total demand for many years providing security of supply to the construction industry and Lancashire as a whole.

It can be considered to be the most valuable and most sustainable source of such mineral in Lancashire as no other permitted or proposed deposit can match its high quality or its high volume.

The Richard Fox Report

The Richard fox report is an appendix to the planning statement. There are no appendices to that report.

Boreholes

The boreholes referenced are the same. The boreholes were drilled to inform the extent of the viable and suitable deposit. Some boreholes in the M & B report lie outside the extraction area but they have not been excluded from the report forwarded.

The boreholes proved the depth of the workable sand and gravel and the overlying sand. As noted in the Fox report the deposit is between 3-7 metres thick across the site. That is confirmed by the submitted borehole logs. This is a typical thickness for a non-glacial terrace sand and gravel deposit in Lancashire and across most of the UK. It is not 'shallow' in that respect as suggested in the Letter.

Buried channels are a feature in many terrace sand and gravel deposits. These represent relatively narrow and typically sinuous deeper cut channels of rivers in recent glacial stadials or from periglacial conditions of the current Ice Age. They may be sub-glacial in origin. They are often filled with coarse sediment derived from periglacial conditions on the general retreat of ice during the initiation of the current warm interstadial but may also be filled with fine sediments and peat where the channel was isolated from more active processes. No buried channels on site were identified in the borehole programme but geophysical data indicates that some such features may be present. No allowance has been made for an increase in supply from such features.

The particle size analysis is a detailed and comprehensive assessment. It is more detailed than supplied in other recent sand and gravel applications in Lancashire. It therefore is not just a 'fair' understanding of the whole resource but a robust and defendable assessment of

the deposit and as demonstrated in the Tombstone report can be considered to meet the relevant PERC standard. However, the additional volume in the previously worked area cannot be concluded with any degree of certainty.

Subsequent Questions on Boreholes

Questions have been subsequently raised in relation to information on boreholes and the mineral. I have answered those by email (11.01.23) but set out the main points of my reply below to put that into context.

Tables 1 and 2 in the Tombstone report refer to samples from boreholes, including where a borehole was sampled at various depths. These samples are identified in the graphic logs of the 2008 drilling programme. Sample data from boreholes outside the extraction area was excluded. The borehole numbering in all reports is common and can be directly correlated from original graphic log to the plans and then to the tables.

The upper sand is a distinctive horizon within the Drift terrace deposits and is found over part of the site. This has been sampled specifically.

The particle size analyses are totalled to 100% and clarify both the percentage of oversize and fines as well as that of gravel and sand grades. Waste factors are predominantly the fines percentage but in practical terms some fine sand will be lost to waste in processing to ensure compliance of sand to specification.

As noted above it would be virtually impossible to calculate the potential reserves in the previously worked out pit. However, it was common at that time to reject fine gravel and surplus sand over and above that required for a typical concrete mix. The deposit at LHF is sand rich and it is likely that the deposit in the former working was also sand rich leading to excess sand being replaced back in the excavation.

There are unworked reserves around the margins of the former working. The MPA has asked if those reserves could be worked leaving the 'restored' area in its current state. It would be exceptionally difficult to work those reserves without impacting to some degree on the former working area and in any event the restored area is of poor quality such that there is no merit in such preserving it as it is even if that were possible.

The MPA has also sought clarification as to depth of working in the old excavation. It is clear that the excavation proceeded to at least a similar depth as proposed at LHF but backfilling probably hides the actual extraction depth limit.

Policies in the Core Strategy

Policy CS4

The letter references Policy CS4 in relation to the release of 'high quality' sand. CS4 and the relevant supporting paragraphs relate to how the MPA will identify areas for extraction in the Plan (in the then subsequent Site Allocation & Development Management Policies Local Plan, the 'SP', adopted 2013) over the Plan period.

To that extent CS4 is not a policy directly relevant to the determination of an application. The relevant policies are CS1 (as noted above) and CS3.

It is pertinent to note however that Policy CS4 states that sites for sand and gravel will be allocated preferably on their ability to maximise the contribution of 'high quality' sand. In the event no allocations were made for the Plan period (or indeed to ensure a 7-year landbank at the end of the Plan period in the SP). The Plan period has now expired.

Paragraph 6.4.7 in CS4 does reference the basis of determining applications for sand and gravel outside any allocations. It states that an applicant would be required to demonstrate that, inter alia, it is suitable on its merits (this was not defined but would include its compliance with Policy CS1 on meeting specification), and also "that it is at least as good as the sites in areas identified for extraction".

As no such sites were identified in the SP it is not clear how this latter criterion could be applied. In any event the Plan period on which such applications might have been tested against allocations as required by 6.4.7 has now expired. Further, the site is a suitable site on its merits and is "at least as good" if not considerably more valuable as any possible other site, in that it will meet the need for 'high quality' concreting sand.

Policy CS3

The relevant policy for determining applications is Policy CS3. This includes, inter alia, the requirement for applications to maximise the supply of 'high quality' sand. Paragraph 6.3.6 notes the need for 'high quality' sand (as defined in that paragraph as sand which meets the relevant specification) and that in effect permissions should provide the maximum quantity of such sand.

Policy CS3 only addresses the quantity of mineral required in the Plan period to 2021. However, the table following paragraph 6.3.4 identifies not just the quantity of new mineral reserves to come forward during the Plan period, but also identifies the quantity of new reserves necessary to provide a 7-year landbank at expiry of the Plan period. That is tabled as circa 3.5 million tonnes.

The SP took no account of that end of Plan landbank requirement. However, that does confirm the then future obligation that should have been provided and needs to be provided now. That is a relevant consideration to this application bearing in mind that the Plan period has expired.

Other Construction Uses

The deposit demonstrates its compliance with the specification for concreting aggregate, including concreting gravel and for fine to coarse concreting sand. There is a significant demand for such sand.

The deposit could be worked to produce building sand for mortar etc but that would lead to wastage of coarse sand, and therefore be contrary to sustainability. Further, the landbank in Lancashire is already dominated by sand which is either only suitable for mortar end uses or which could only be processed into fine concreting sand. There is a substantial lack of concreting sand and particularly medium to coarse concreting sand which can be provided from LHF.

Of further most significant relevance is the structural change in the supply of mortar and hence the need for mortar sand. Over 80% (confirmed by the Mineral Products Association) of mortar used in the UK is now supplied from a very few mortar factories (supplying pre-

mixed or dry silo mortar) that are strategically located near major urban areas across the Country.

The need for local supply of such sand has therefore virtually disappeared over the last 10 years. The call on local supplies of mortar sand has therefore shrunk significantly and there is no commercial value or market incentive to produce mortar sand from LHF.

Borehole Location

The boreholes are located on Fig 10 in the Hydrogeological report.

Borehole locations in Northern part of site

There are fewer boreholes in the northern (north-western) part of the site as this is the area of former workings. Boreholes in the unworked part of that area are of similar distribution to the rest of the site. Boreholes within the disturbed ground would be of no or misleading value.

Assumptions as to reserves in previous worked area

From discussions and research locally, the informed assumption is that the working was mainly to source coarse aggregate and that much of the co-extracted sand was replaced in the excavations after screening. There is no reason to suggest that such sand would not share the characteristics of the unworked deposit and meet the specification for concreting sand once processed.

The quantity of recoverable mineral from this 'worked' site is clearly always going to be uncertain. Richard Fox has made an assessment of that quantity based on his extensive knowledge of historic workings.

Conclusions on Mineral Quality etc

The application and subsequent submitted information demonstrate that LHF contains a substantial commercial resource with 'high quality' sand. No evidence to the contrary has been produced by the MPA or any other party.

I understand that the MPA now fully accepts that the mineral at LHF has been shown to be a commercial resource which meets the relevant specification obligation of Policy CS1 and which contains ‘high quality’ sand as defined in Policy CS3.

SITE DESIGN

Cross section

The application uses a plant 'envelope' based on a potential plant layout located as shown on Plan PL26. That envelope provides for a plant with a height of no more than 7 metres above existing local ground level. The plant would be constructed on a concrete pad emplaced on the underlying 'rock' head, after the removal of the topsoil and subsoil and slightly below existing local ground level. The plant base would therefore be below ground level and the potential plant itself would be below the 7 metres design ceiling envelope.

The plant design used was a generic plant and layout. It was however based on certain design elements and principles such that the plant was at 7 metres in height and located towards the centre west part of the plant site. It was aligned with the feed located to the north west, with live stockpiles to the south east and load-out/weighbridge to the east immediately adjacent to the proposed 8 metre screening bund.

The assessment of the impacts of the plant in both noise and visual terms was based on a 7 metre above ground level envelope and design principles, but there was and is no commitment to a particular manufactured plant. Plant capabilities and the reduction in external impacts are improving all the time. In that respect the manufacturer, type and detail of the plant layout is not a material planning consideration. What is material is the ability to mitigate satisfactorily the general visual impact of the plant mass (lower and/or smaller being of less impact) and the ability of the plant layout to ensure that noise is minimised as far as possible and that noise at nearest residential or sensitive receptors does not exceed relevant thresholds (55dBALeq). Clearly, a wide permutation of plant types could meet such parameters. It is up to the operator to select a plant which satisfies those parameters.

There have been continuing improvements in the design of processing plant which have become more compact both in height and footprint. A newer more compact lower (less than 6 metres in height), plant design can therefore be used on site while still maintaining the proposed production of 150,000 tonnes per annum. In that context it is noted in the

application that the processing plant will not be operating continuously. That would also be the situation with a newer modern more compact lower plant design.

The Letter suggests that the 8-metre screening bund is potentially intrusive. A series of cross sections are to be provided shortly to show the relationship of the bund to the plant and to both the wider and immediate surrounding landscape and woodlands. These show that in the wider landscape the bund will not be a significant feature in the broad landscape, nor an intrusive feature but will be lost within the extensive horizontal landform and against woodland. This will also show that in the immediate landscape that the bund will itself be screened by or only seen against the higher woodland to the east.

The plant will (at less than 7 metres in height) fit within the 7-metre height envelope and will therefore be wholly screened by or seen against the higher bund. Further, the bund will be planted with scrub/tree vegetation on its sides and top increasing the visual height of the bund but also ensuring, together with adjacent planting at existing ground level around the bund to be undertaken at commencement, a varied (in colour and form) and undulating and therefore less obvious feature.

As the sections will show, the bund itself will be seen against and/or screened by the woodland to the east and south at the Nursery which woodland at up to circa 15 metres height considerable exceeds the height of the bund. This woodland therefore performs a valuable screening role, but it also demonstrates how such a 'tall' feature is not intrusive and does not dominate but is lost in the wider landscape, as would be the proposed bund.

Surfacing of plant area

The plant area will be founded on a concrete pad with falls to provide run-off to the west to a peripheral ditch to the west which will drain into the silt pond. Stockpiles will be located on a gravel surface allowing water to percolate into the ground and/or into a peripheral ditch to the west.

Bund Around Plant

Given the plant 'envelope' noted above the landscape screening/noise attenuation bund needs to be circa 8 metres high to be effective. This will not be a significant feature because

it is lost in the extensive horizontal landform. The bund will be planted with shrubs, trees and a variable herb layer which will ensure that it is not an intrusive 'engineered' feature in the landscape.

The landscape advisor raises no objection to the bund.

Most visitors to Brockholes are unaware that the bunds around that site are not natural. Those bunds which exceed 8 metres in height while not natural are not intrusive.

Bund to North

The bund to the north is planted to ensure that views from the farmhouse at Lower Hall Farm and Bezza House will be mitigated as workings advance eastwards in later phases. The bund will be retained as a feature at restoration and planting on both sides will assist 'naturalisation' of and the screening but also provide further landscape and biodiversity assets from day 1.

Method of Working

The extraction operations are phased. Essentially extraction will be a continuous process not the short 'campaign' process as used at LBQ. That said extraction and processing will not take place every day or every week nor throughout the day. Such operations will reflect the scale and fluctuations in demand as required.

There will therefore not be the construction of an extensive stockpile of extracted mineral waiting processing. There will be a small 'live' stockpile to feed into the plant to then provide 'live' loading-out to processed stockpiles. Provision is made for buffer stockpiles, to account for minor fluctuations in sales, but the use of those will be avoided as far as possible to mitigate costs of double-handling.

The site will therefore not have the large stockpiles as developed at LBQ etc.

Significant flooding events have been and will continue to be rare even with Climate Change. If they do occur all operations will shut down including load-out.

Outside flooding events the height of the water-table within the excavation may vary but this will not significantly affect extraction operations.

SOILS

Bunds

The bund around the plant site and that running north will be constructed using all the arisings from the area of soil stripping as shown in Plan 1040/PL16 Initial Set Up Plan. The core of the bunds will be constructed from overburden and subsoil with the topsoil used to cover the bunds and to provide the growing medium for planting on the bunds.

The shallow form of the bunds is shown in 1/1000 scale sections on that Plan.

It is generally undesirable to store topsoil in bunds as the qualities of the topsoil will rapidly degenerate if stored at depth and/or for a long time. If topsoil from phase 1 was stored until required to restore the final phase, then it would need to be stored for in excess of 20 years and mainly would no longer have topsoil properties. Other than at the screening bund, the scheme at LHF overcomes this unsatisfactory process by directly using excavated topsoil to immediately restore the previous phase.

At the cessation of the processing operations the plant will be removed and most of the bund will be taken down to restore the plant site and the last extraction phases.

Restoration Soils

The site consists of an unworked area and an area to the west which was worked and restored. The soils in and around the worked area are thin or non-existent or of poor quality.

The initial soil strip at set up (Plan 1040/PL16) diverts a substantial volume of soils in the initial worked area to the bund construction. Stripping in subsequent phases quickly moves into the area of the previous workings where there are limited soil resources (phases 3-5). Stripping in the latter phases (6 and subsequent) moves back into the unworked land producing more soils which are required to enable the restoration of Phase 4, 5 etc.

There may be some minor disparities in arisings and use of soils requiring some short-term small stockpiles but the intention is to retain all soils on site.

Naturalistic restoration

There are two considerations here

First, the plans can only show an indicative form of the restored land and they cannot show at any sensible scale the detailed or actual end state 'edge effects' at the margins.

As I am sure is properly understood, the 'chaos' of deposition is unknown but will produce at the micro and macro scale locally significant variations in the deposit including local pockets of non-mineral. These will not be worked and will be left as landform or locally deeper layers of overburden that will be worked to access the mineral but will then provide an increase locally in time and space of material for creation of landform. The restored excavation margin may therefore differ significantly from that indicated. It will be formed and planted into cliff or shallows as reflects that chaos. In reality the actual form of the excavation edge will be more irregular and 'natural' than can be shown on a plan either in detail or in concept.

Secondly, on a plan and therefore viewed vertically some planting areas are geometrical in shape. However, when viewed, as they will be, from a distance in a horizontal perspective such geometrical forms will not be apparent. That would not perhaps be the case if the planting was of a single species and particularly of a coniferous species, but the proposed planting is of a mixed and randomly mixed number of species of different form and colour and is significantly supported by an 'ecotone' fringe of mixed shrubs providing a graduated form.

In that situation the planting, as viewed, would create the naturalistic aspect sought and the geometric boundary would not be apparent.

In any event the scale of the plan prevents showing the degree of intimate detail that will naturally arise during the extraction operations which are taking place into a random 'chaotic' natural deposit.

Fundamentally it is not realistic to plan for or expect certainty in the precise form of the restored margins. That uncertainty is not a material consideration bearing on the determination of the application.

However, the naturalistic aspect will be enhanced by final restoration of the relevant phases once they are no longer required. Although the silt ponds and the adjacent margins will rapidly be naturally colonised while still operational by willow, rushes and reeds and create a natural looking landscape.

The relevant aftercare and planting maintenance programme will further enhance the 'naturalistic' aspect including by replacing failures.

Further, while the application does not propose planting within the 25-metre stand-off zone to the top of the bank, the UU provides a clause addressing the potential of planting within that zone. Such planting would further assist in resolving the concerns noted.

Given the above we believe the details of the scheme as submitted are proportionate and satisfactory and once established will not be perceived as unnatural.

Access Road

The detailed engineering of the crossing is shown on the attached relevant plans.

A survey of traffic on Potters Lane has been undertaken since the need to consider impacts on that traffic first surfaced in internal discussions. That is set out below which demonstrates negligible traffic movements of all types along Potters Lane and negligible risk arising from quarry traffic crossing Potters Lane.

That survey also considered other relevant conditions on Potters Lane including typical speeds and the speed limits which would apply to quarry traffic on the access road.

The UU provides for a scheme of signage on both routes but given the insignificant level of traffic on both Potters Lane and the new access road and the location it is considered that such signing should be low key and not intrusive. This is further justified given that most of the traffic along Potters Lane is local traffic generated from a very few properties where the users will be exceptionally familiar with the crossing and that the traffic on the access road will be restricted to contracted vehicles and staff who again will be very familiar with the route.

The engineering of the access road can be concluded as a condition and would be prepared following a detailed ground survey of the route so as to locate for example the optimal location of swales.

While the land rises somewhat steeply to the south of Potters Lane the access road makes use of a former mineral working to ascend this rise minimising the need for significant engineering works. The sides of this former working are stable. The impact on trees at this location is described in the tree survey (below).

The application indicates the minor cut and fill required as the access road turns south to run adjacent to the field boundary. Planting and a gabion 'stone wall' to the west will help to screen the route in this location from views from the west although the landform, existing hedge and mature trees on the east side of Potters Lane provide significant screening.

The road will be kerbed to ensure it remains in good condition and that the edge is not over-run and eroded. That kerb will be level with the road surface as the road crosses the flat field north west of Potters Lane but will mainly be a raised kerb for the rest of the route to contain traffic and manage surface water run-off and to enable any debris to be removed expeditiously. Dropped kerbs will be provided at water discharge points and can be provided elsewhere. That detail can be resolved as part of the condition noted above.

POTTERS LANE

Introduction

As part of access and design options assessment, a range of access options were considered concluding that a new route to the A59 was the preferred option. This would cross Potters Lane at existing levels north of Seed House Farm. Initial, pre-application surveys were undertaken to ascertain motor vehicle and other traffic levels along that part of Potters Lane where the proposed access road might cross the Lane and the scale of any traffic movement conflicts. Those surveys were extended to give a thorough assessment of traffic and potential conflicts given the identification of the route as a journey to work cycle route and expressed concerns of local residents.

A private new access road was proposed because the use of Potters Lane (including any widening) had been rejected due to impacts on residents, landscape and biodiversity and the poor and dangerous junction of Potters Lane with the A59.

The proposed crossing location of Potters Lane is on a private no through road and serves only a very few properties north of the crossing point (1 farm, a small parking area for a fishing club, a plant nursery closed to the public, and 5 residences). The initial surveys indicated negligible motor vehicle movements during the proposed operating hours of the quarry.

Potters Lane is however a bridleway providing the potential for through journeys by cyclists and walkers. The surveys also collected data on such traffic. Those indicated negligible movements of cyclists. It was common for no cyclists to be present in the survey hours of 09.00 to 16.00. Essentially walkers were so few as to absent for most of the survey periods. No horse-riders were noted.

It is considered unlikely that traffic on Potters Lane would significantly increase in the future (it is unsuitable for the 'Growth' option and any such development would need a new access or accesses onto the A59), given land ownership and that most of the 'catchment area' of land is within the wider flood plain and not developable. This indicates negligible conflicts at the access road crossing throughout the whole life of the quarry.

The 2013 Cycle Safety Scheme to BAE

In 2013 Potters Lane was proposed by LCC Highways to be improved (the improvement works were very limited with no certainty of maintenance) as part of a proposed designated Cycle Safety Scheme for work journeys for cyclists to BAE/Samlesbury Enterprise Zone.

Samlesbury & Cuerdale Parish Council (PC) objected to the scheme due to concerns as to conflicts with other users (including agricultural vehicles, other vehicles, walkers and horse riders) and the unsuitable surface, gradients and lack of lighting on the route. The PC considered the route would be hazardous, not significantly used and not effective.

In the relevant determining committee in November 2013 LCC concluded that the route would be adequate, there would be no significant conflict and, in any event, it was already

available for cyclists to use despite its limitations. The officers' report indicated that there would be a significant increase in use of the route by cyclists, but such increase in use by cyclists still did not create a significant risk.

The officers' report also noted that motor vehicle traffic movements at the A59/Potters Lane junction were 393 over a 12-hour period in a 2010 survey. It was noted that the 393 movements in the 2010 survey was dominated by traffic to the school and an agricultural contractor immediately adjoining the A59 junction and that residual traffic movements beyond those two sites along the whole length of Potters Lane would be far lower. The report concluded that conflicts between cyclists and other traffic would be minimal and of no significance. The scheme was put in place.

Consultation on LHF

In various subsequent consultations between Parish Council and the applicant the PC raised the potential for conflict between users of Potters Lane and quarry traffic crossing the Lane. The potential conflict with cyclists using the designated safe cycle journey to work route was also raised. General highway safety issues at the crossing with all users of Potters Lane have subsequently been raised in the Reg 25 consultation.

Detailed Surveys

Following the consultations with the PC and prior to concluding the application, a series of detailed surveys of all traffic at the proposed crossing point were undertaken and the data tabulated. The surveys have been extended to consider the implications of Covid and the encouragement of people to cycle, rather than use a car, in all journeys as part of reducing GHG. The survey results are shown in the following tables. The surveys noted weather conditions and if the road surface was dry or wet.

Table 1 relates to the surveys undertaken leading to concluding the details of the submitted application. These confirmed that even after the development of the cycle scheme that both cycle and motor vehicle traffic on Potters Lane at the proposed access crossing are negligible and that the proposed crossing does not raise any significant safety or other considerations. It was on these results that the scheme as proposed was prepared.

Table 2 provides further survey data including for the period after submission. The earlier surveys in Table 1 focussed mainly on dry warm days when conditions favourable to cycling to work or for leisure could be expected and which might therefore have overestimated typical average cyclist numbers throughout the year.

The data in Table 2 exclude the Covid lockdown periods and are for the period when (i) working from home was encouraged, and (ii) when workers were encouraged to return to work.

The Table 2 surveys show that use of the relevant section of Potters Lane by cyclists and motor vehicles during proposed operational hours for the quarry is still negligible, even with the provisions associated with the Cycle Safety Scheme in place and other subsequent encouragements to cycle to work.

Notably the 2013 the LCC projected significant growth in use by cyclists did not arise and nearly 10 years later has not occurred.

Main Survey

The survey Point was outside Bezzabrook Nursery, or by Seed House Farm. It therefore excluded traffic to and from the A59 for (i) houses to the south on Potters Lane, (ii) the school and church, (iii) to Seed House Farm and (iv) to the agricultural contractor.

Table 1 below sets out the results.

Table 1

Date	Time	Weather Condition	Road Condition	Cyclists	Walkers	Vehicles	Air Temp
18.05.15	15.25-16.25	Dry	Dry	0	0	2	8
18.05.15	17.00-18.00	Dry	Dry	3	0	7	8
19.05.15	10.10-11.10	Dry	Dry	1	0	1	9
19.05.15	13.05-14.05	Dry	Dry	2	0	0	12
19.05.15	15.55-16.55	Dry	Dry	1	1	2	10
19.05.15	17.20-18.20	Dry	Dry	4	0	4	10
21.05.15	07.05-08.05	Dry	Dry	1	0	6	10
21.05.15	08.30-09.30	Dry	Dry	2	0	5	12
21.05.15	11.00-12.00	Dry	Dry	0	0	1	12
21.05.15	14.05-15.05	Dry	Dry	1	1	2	13
21.05.15	15.50-16.50	Dry	Dry	2	0	2	12
21.05.15	17.20-18.20	Dry	Dry	6	0	6	11
22.05.15	07.55-08.55	Drizzle	Damp	4	0	6	9
22.05.15	10.00-11.00	Damp	Damp	0	0	0	10
05.06.15	12.05-13.05	Dry	Dry	1	2	1	14
05.06.15	15.00-16.00	Dry	Dry	0	1	2	14
05.06.15	16.00-17.00	Dry	Dry	3	1	4	13
05.06.15	18.00-19.00	Dry	Dry	0	0	6	10
06.06.15	07.00-08.00	Dry	Dry	2	0	6	14
06.06.15	10.00-11.00	Dry	Dry	2	2	2	16
06.06.15	12.05-13.05	Dry	Dry	0	0	2	15
06.06.15	15.55-16.55	Dry	Dry	1	0	4	?
09.06.16	12.30-13.30	Dry	Dry	0	0	1	24
09.06.16	14.35-15.35	Dry	Dry	0	0	1	26
09.06.16	16.00-17.00	Dry	Dry	0	0	2	24
09.06.16	17.00-18.00	Dry	Dry	1	0	5	21
10.06.16	07.00-08.00	Drizzle/Mist	Wet	1	0	5	13
10.06.16	08.45-09.45	Drizzle/Mist	Wet	0	0	3	16
25.05.17	07.25-08.25	Dry	Dry	1	5	3	15
25.05.17	08.30-09.30	Dry	Dry	2	0	2	18
25.05.17	15.50-16.50	Dry	Dry	2	0	2	19
26.09.17	07.05-08.05	Thick Mist	Wet	1	0	7	8
26.09.17	13.00-14.00	Dry	Damp	0	0	2	17
27.09.17	08.45-09.45	Dry	Dry	1	0	3	15
12.10.17	09.00-10.00	Dry/Showers	Damp/Wet	0	0	2	11
12.10.17	14.30-15.30	Dry	Damp	0	0	2	14
13.10.17	08.15-09.15	Dry/Rain	Damp/Wet	3	0	5	17
27.11.17	12.25-13.25	Dry/Shower	Wet	3	0	5	6
28.11.17	13.40-14.40	Dry	Wet/Damp	0	0	3	6
Total				37	13	96	
Range				0-4	0-5	0-7	
Average				1.09	0.38	2.82	

Table 1 records 'movements' of all types. A walker/cyclist/vehicle passing the survey point in either direction is 1 movement. A walker/cyclist/vehicle passing the survey point in one direction and then returning in the other direction is 2 movements. 'Vehicles' include cars, delivery vans, motorbikes (none noted), light goods and heavy goods (largest recorded being a single 6 axle tractor and semi-trailer combination). No horse traffic (or evidence of) was recorded on any survey period. Walkers were mainly dog walkers. Yellow highlight is outside proposed quarry operating hours. Total/range/average relates to operating hours.

In Table 1 the most intensive use by cyclists (6 or less) is in either the morning journey to work period or the evening return period (the quarry will be shut during most of that latter period). There are very few cyclists during the rest of the day. There appeared to be little or no recreational cycling during the proposed quarry working hours.

The number of walkers was negligible with in reality mostly no pedestrian use.

No horse-riders were noted in any survey.

Subsequent Survey

The primary survey point was located at the entry to the Church/School car park. Therefore, unlike the above survey, this survey may have picked up movements to residences etc located between the A59 and south of new access road crossing of Potters Lane. Those movements would not possibly be affected by traffic on the new access road.

Table 2

Date	Time	Weather Conditions	Road Conditions	Air Temp	Cyclists	Motor Vehicles	'White Vans'	Location
Pre Covid								
12.02.18	15.30-16.30	Dry	Dry	3	1			Car Park
13.02.18	08.30-09.30	Fine Rain	Wet	2	1			Car Park
13.02.18	10.00-11.30	Damp	Wet	3	0			Car Park
05.10.18	16.00-17.00	Dry	Damp	8	0			Car Park
02.12.19	07.45-09.00	Dry	Dry	1	1			Car Park
02.12.19	10.45-11.15	Dry	Dry	2	0			Car Park
Post Covid								
05.08.21	07.45-09.15	Dry	Dry	17	1	13	8	Car Park
05.08.21	11.30-12.30	Damp	Damp	18	0	5	3	Car Park
05.08.21	13.30-14.30	Damp	Damp	17	0	4	1	Crossing
16.08.22	06.45-08.15	Dry	Dry	19	2	14	7	Car Park
16.08.22	10.00-11.00	Dry	Dry	22	0	3	1	Crossing
16.08.22	12.00-13.00	Dry	Dry	25	0			Bezza
16.08.22	14.30-15.00	Dry	Dry	24	0			Bezza
16.08.22	16.30-17.45	Dry	Dry	24	3			Bezza

Pre-Covid Surveys

The main purpose of these surveys was to consider cyclist movements and pedestrian movements in the winter, when conditions might be unfavourable to cycling (poor natural light, light rain, standing water, mist, 'washed' in surface debris, etc).

Hours of darkness and extreme weather conditions (heavy rain, gales, fog, extreme cold, frozen ground, etc) were avoided/excluded. Such conditions are likely to occur frequently

during the winter when journeys to work by bicycle may well be avoided and when there will be very few pedestrians undertaking recreational journeys.

The surveys recorded movements of cyclists although there were no pedestrian or horse traffic at any survey times.

The survey period therefore also included the time of the year when at least one normal journey, typically that returning from work in the evening, would be in the dark or poor light conditions. That might dissuade cycling to and from work as an option given the length of no lighting along the route.

The surveys excluded cycle traffic to and from the agricultural contractors yard from the A59 as it was not possible to see movements to and from the yard.

The surveys show a reduction in the use of the route by cyclists in cold and wet conditions in the winter.

Post Covid Surveys

Surveys of all traffic were undertaken post Covid lockdown at various locations to consider (i) movements at the lower end of Potters Lane near the A59, (ii) at the crossing of the access road and (iii) at the east end of Bezza Lane (this survey was only of cyclists). The surveys were to assess if there were any significant changes in traffic movements following initial encouragement that people should work from home and subsequent encouragement that people should return to work.

The surveys were undertaken in the summer when more attractive conditions for cycling, including recreational traffic, could be expected.

The surveys did not take account of traffic to the school which was shut for summer holidays on both survey dates. There was no traffic to the Church. A decorators van was in the car park during the 2021 survey period.

The surveys excluded traffic to the agricultural contractors yard as it was not possible to see movements to and from the yard, although movements of powered vehicles leaving and entering the yard could be heard.

The decisions of employers to allow/require 'working from home' and the implications on any reduction in work journeys to Samlesbury Enterprise Zone or elsewhere was not known.

The substantial level of 'White Van' traffic (defined as light goods vans marked or unmarked) post Covid is notable but is generally consistent with the 'new' wider national delivery picture. These vehicles have increased traffic on the route. However, the relevant levels still remain negligible.

There was no pedestrian or horse traffic at the survey times.

The survey on the afternoon of 16.08.22 was to seek to pick up recreational cycling (as well as travel to work journeys). The survey was undertaken in the school holidays, in warm weather and dry road condition which would be optimal for recreational cycling. Of the three cyclists noted one was in the period between 16.30 and 17.00 and the other two were after 17.00 and therefore outside the proposed quarry operating hours. All three were eastbound and probably work related.

During the survey on 16.08.22 the A59 towards Preston from Junction 31 was shut to motor vehicles for roadworks.

CONCLUSION ON POTTERS LANE SURVEYS

The surveys extend over a number of at representative seasons and times and in a range of weather conditions (except for severe conditions) and give a comprehensive assessment of use and flows of all traffic at or near the proposed crossing.

Total motor vehicle traffic movements on Potters Lane at the crossing point of the proposed new quarry access road are on average less than 3 per hour and are negligible.

The level of such motor vehicle traffic is greatest during the morning journey to work times (7 or less per hour). Quarry traffic would have ceased in the main journey from work evening period.

During most of the quarry operation hours motor traffic was reduced to less than 2 per hour.

Deliveries by 'White Vans' have significantly increased since Covid. This has increased the total motor vehicle movements. Even so the total number of motor vehicle traffic is less than 10 per hour in the morning peak hour and 5 or less per hour outside that period.

Such level of traffic remains negligible and insignificant.

Potters Lane is severely constrained and there is no sensible scenario where motorised traffic on Potters Lane generated beyond the crossing point would increase in any significant level in the future due to development.

Potters Lane is wholly unsuitable to take the traffic that would be generated in the proposal in the Central Lancashire Local Plan to develop (as part of a major Growth Area) land to the south of Potters Lane/Dean Lane up to the A59. Serving that proposal would either require wholesale reconstruction of Potters Lane towards the A59 or more probably new access(es) onto the A59 to the east of the Potters Lane junction.

The use of the relevant section of Potters Lane by cyclists has been and is negligible (less than 2 per hour) with no growth since the 2013 journey to work scheme was adopted. Virtually no cyclists were recorded between 09.00 and 16.00.

There seems to be no recreational cycling and none during quarry operational hours.

Very few walkers use the road.

No horse-riders were noted.

LCC concluded in 2013 that the mixing together of existing flows of motor vehicles, including much higher levels of traffic along the busier southern end of Potters Lane to the A59 (adjacent to school and agricultural contractor), with postulated significant increased levels of cycling along the entire length of Potters Lane would not give rise to any significant risk.

The level of risk associated with the crossing point is negligible given the exceptionally low number of vehicles etc involved, the limitations on Potters Lane, the design and signing of the crossing and the proposed operating practice for HGVs serving the quarry.

Traffic on Potters Lane north of the crossing point is unlikely to grow during the life of the quarry and the level of risk at the crossing will remain negligible throughout the life of the quarry.

The draft UU submitted with the application provides for a scheme of signing at the crossing. Given the negligible level of all traffic north of the crossing on Potters Lane and the limited volume of traffic on the new access road such a scheme could be low-key and should be designed to fit within the locality. This scheme will include 'Give Way' signs on the access road giving priority to traffic on Potters Lane.

Such traffic on Potters Lane would in any event be dominated by movements generated locally by a few sources where drivers will be well aware of the existence of the crossing location. Cyclists on journey to work trips would equally become very familiar with the crossing presence.

As noted in the application, the form of Potters Lane in the relevant location naturally manages speed limits of all such traffic on Potters Lane to some 15mph. The UU requires quarry traffic to obey a 15mph speed limit along the access road which the operator will enforce.

The quarry will not be open to the general public for sales and movements of mineral will be via contracted vehicles. Contracted vehicles to and from the mineral working will be required to observe speed limits and other safety considerations.

Where the access road meets the public highway (at the A59 and at the crossing of Potters Lane) the access road will be closed and locked outside of operating hours preventing any unauthorised use of the access road and potential conflicts.

Given the above, the residual risk could be adequately covered by a simple "HGV Crossing" warning sign on Potters Lane in advance of both sides of the crossing and simple "Give Way" warning signs in advance on both sides of the new access road in keeping with and not 'suburbanising' or dominating the scene.

GREEN BELT

The letter questions the compliance of the development with the Green Belt (GB) and if 'very special circumstances' arise due to the potential impact on 'openness' of (i) the new junction; (ii) the access road; (iii) the plant area; and (iv) potentially other, but unspecified, features of the development.

Paragraph 150(a) of the NPPF confirms that mineral extraction (which term involves all associated activities) may in principle be not 'inappropriate' development (and as such be 'appropriate' development) in the GB and be compatible with the preservation of openness and all the purposes for which the GB is designated.

'Very special circumstances' and 'openness' are material considerations to be determined on the merits of the case, but as concluded by the Supreme Court in Samuel Smith Old Brewery (SSOB) it is a primary material consideration in relation to mineral working in that process that (i) minerals can only be extracted where they are found; (ii) that such extraction involves activities, such as but not exclusively, the provision of temporary screening bunds, access roads and processing plant as well as extraction operations themselves; and (iii) that restoration (a statutory obligation) can remove any visual or other negative impact. These considerations applied to the situation at SSOB and do so at LHF.

'Openness'

SSOB defined that 'openness' is related to the fundamental purpose of preventing urban sprawl and is not necessarily a statement about the visual qualities of the land with or without development. It concluded that a large quarry may be visually unattractive but that doesn't mean it harms 'openness'. Further, and significant given that at SSOB the operations involved deep hard rock quarrying, SSOB clarified that a quarry may be no less effective in preserving 'openness' as an area of agricultural land (or clearly other such extensive vegetation in any open landscape such as forest or moorland).

In relation to specific matters identified in the Letter the new junction and the access road create no feasible visible or other barrier to 'openness' lying as they do at natural ground level, or below local ground level within former historic excavations, creating effectively no

significant external visual feature or visual impact. What visual impact may arise is insignificant and would not materially harm, on an SSOB basis, the GB and specifically not harm or conflict with 'openness'.

The provision of planting alongside the access road and in adjoining land does not equate to a visual impact or a conflict with 'openness' in GB terms.

The plant site and its main surrounding bund are temporary features which will be removed at cessation of operations and the site restored thereby retaining 'openness' in accordance with SSOB.

Potential for Harming the Five Purposes of the Green Belt

Paragraph 138 of the NPPF lists the five purposes of the Green Belt. These are (i) to check sprawl of large built-up areas; (ii) to prevent neighbouring towns merging; (iii) to assist in safeguarding the countryside from encroachment; (iv) to preserve the setting of historic towns; and (v) to assist urban regeneration.

In relation to purpose (i) the development at LHF is not built development nor is it permanent development, nor does it lie adjacent to or fill gaps between large built-up areas and it does not harm that purpose.

In relation to purpose (ii) for the reasons noted in relation to purpose (i) LHF does not result to built-up areas merging, but effectively creates a permanent green space, and does not harm that purpose.

In relation to purpose (iii) the development at LHF is a typical rural land use, which as SSOB notes preserves 'openness', preventing urban encroachment and does not harm that purpose.

In relation to purpose (iv) there are no historic towns in the vicinity and what historic centres exist in towns such as Preston or Blackburn are surrounded by substantial areas of urbanisation of no historic value. The development will not harm that purpose.

Mineral working may in rare cases assist the urban regeneration of purpose (v) by enabling the recovery of spoil and the creation of an uncontaminated or more stable landform. That

opportunity does not arise here and this purpose is not relevant to LHF and therefore the development does not harm that purpose.

Very Special Circumstances

As noted in relation to the mineral quality and quantity, the deposit at LHF is of high quality and is a significant quantity and perhaps the most significant and sustainable such deposit to come forward in Lancashire for over a decade. It will make the most significant contribution to future sand and gravel demand in the County.

Such high-quality deposits are substantially found in river terrace deposits but most such deposits are commercially unavailable due to significant access problems. Those qualities and the accessibility of the deposit at LHF would in itself create 'very special circumstances' in relation to the Green Belt as defined in SSOB.

However, given the lack of a policy steer on the future supply of sand and gravel in Lancashire and the complete absence of any allocations, the poor quality of existing or alternative supply (such as at St Annes Foreshore) together with the significant problems with existing reserves and lack of production units, including issues of competition, such additional factors demonstrate that the 'very special circumstances' test is comprehensively satisfied at LHF, because this is where high quality mineral is present and extractable.

It is noted that the MPA has consistently taken the view over recent decades when determining applications that sand and gravel working in the GB (including the provision of junctions, access roads, plant, bunds etc) demonstrates no significant harm to openness or any other objective of the GB. The MPA has not raised a fundamental GB objection to any such submitted application. Given that the underlying purposes of the GB have not changed over that period (or as SSOB notes, since Circular 42/55) any contrary interpretation by the MPA would be inconsistent and contrary to the conclusions of SSOB and to the NPPF.

In conclusion, the development at LHF (including the access road, etc) is "appropriate" development in the GB. It does not create harm to "openness" and indeed assists in SSOB terms the preservation of 'openness'. It does not conflict with any of the purposes for which the area is included in the GB. If any harm were to arise there are "very special

circumstances” which outweigh that harm and which on balance would justify consent being granted.

TREE SURVEY

A survey of all trees within the lease area was originally undertaken to inform the proposed development and particularly to assess options for the route of the access road. The selected route was chosen partly because it would reduce impacts on woodland or trees and avoid Ancient Woodland or any Veteran Tree.

It is inevitable that most of the trees in the scrubby naturally regenerated part worked area will be removed. Other than that, there are only a few shrubby trees in the plant and extraction area that will be removed and only relatively few trees will be lost along the route of the access road.

Attached is a full and detailed survey undertaken by BHA Trees Ltd of all the trees on or alongside the access road which identifies those trees that will need to be felled and those that can remain. The survey assessed 74 trees (or small groups) of which 10 need to be felled due to the access road junction works and a further 21 which need to be felled along the route of the access road. That is a total of 31 trees.

Some of those trees (5) and some not affected by the works (4) are affected by Ash Die Back and will probably need to be removed anyway and the net loss due to the works is 26.

The UU provides for retention of all other trees within the application area (with the exception of those affected by Ash Die Back and which for safety reasons may need to be removed).

All trees removed to enable the works will be retained on site and used to enable biodiversity habitat gains via the creation of ‘log-jams’ in standing water, dead wood piles on land, ‘leaky dams’ in watercourses, ‘planted’ trunks, etc.

HIGHWAYS

CHANGES IN ROAD LAYOUT

The letter and the comments of the Highways advisor suggests that changes to the highway network and to traffic movements associated with other development since the date of the assessment supporting the application make the assessment out of date and that therefore such matters need to be reassessed. I have dealt with the generality of the out-of-date concept in the introduction to this response.

However, dealing with the specific points raised I would note that there have been no changes at all to the A59 between J31 of the M6 and the traffic lights at the 'Swallow' junction, and the roundabout to the immediate east of that junction, since the assessment. Indeed, the current layout has been in place since at least 2009. There are to our knowledge no approved significant changes proposed for the future.

There have been significant changes to junctions serving the Samlesbury Enterprise Zone and other developments considerably further to the east but these were included in the assessment undertaken by Jacobs and/or are located at least 2.5 kilometres further to the east where traffic from LHF will have no identifiable impact.

There are proposals in the Story Homes/LOGIK outline application(s) for significant residential and commercial development south of the A59. These proposals do not suggest any direct new access points onto the eastbound A59 and the route between the Potters Lane junction and the 'Swallow' junction, where the access to LHF is proposed, will remain in its present form if such development were to be approved and built.

However, those applications suggest minor works to increase right turning provision at the 'Swallow' traffic lights and more significantly propose traffic lights on the eastbound carriageway of the A59 where Vicarage Road joins the A59 at the Potters Lane junction. The purpose here is to provide a safe access to deal with an increase in traffic from the proposed development to the south via Vicarage Road at this difficult junction.

As Potters Lane is not to be used by the development at LHF then such proposed works are not relevant to the assessment, although if developed as proposed the traffic lights will

control traffic on the A59 providing clear gaps in the flow of eastbound traffic on the A59 as it passes the LHF access road junction and thereby assisting traffic exiting from the LHF access road.

You will be aware that the Preferred Options Central Lancashire Local Plan (the CLLP) allocates the Story/LOGIK scheme as part of a Growth Area. The identified Growth Area extends north of the A59 up to Potters Lane and Dean Lane encompassing the route of our access road. The type and disposition of land uses in that proposed area are unknown.

Potters Lane is totally unsuitable to serve that part of the Growth Area development (without major works which would require the felling of numerous mature and possibly Ancient or Veteran Trees) and a new significant access to the A59 eastbound between the Potters Lane and Swallow junctions would be required. This could incorporate our access road.

The submitted Highways report is therefore still wholly relevant and up to date and does not need reassessment.

CHANGES IN TRAFFIC FLOWS ON THE A59

The application assessment referenced the Jacobs assessment of the future highways impact of the development of the BAE and SEZ at Samlesbury prepared for LCC. The Jacobs assessment included traffic arising from the full 'build-out' of the BAE and SEZ site and is still a relevant report. The submission therefore fully takes account of such development and traffic arising.

Traffic levels on the A59, as on all roads in the Country, have been very significantly affected by the Covid Pandemic and its aftermath and subsequent adjustments to traffic generation.

It would therefore not be desirable to use recent data as that would give a substantially distorted picture. On that point National Highways (NH) will not accept as relevant any assessments made using traffic in the period from March 2020 to September 2021 or between December 2021 and March 2022. Further, it is considered by NH that traffic levels are still in a recovery to 'normal' pre-pandemic conditions and flows (because of economic

conditions and the continuing levels of home working), and are not yet at the peak pre-pandemic.

Nationally all movements fell on all roads during the height of the Pandemic. DfT published data (Provisional Road Traffic Estimate, December 2021) shows a severe fall (circa 30% nationally) and a subsequent climb back gaining some 15% by September 2021. The latest traffic counts show that traffic levels are at 90% of the pre Covid levels on the adjacent part of the M6 and at 80% of the pre Covid level on the section of the A59 at the proposed junction.

Changes in work related journeys first promoted during lockdown and other changes being promoted to reduce the use of motor vehicles may reduce such journeys. However, the growth in 'white van' deliveries may off-set that. It is not possible at this time to predict with any certainty at what date previous levels of traffic on the A59 will be reached or exceeded or not exceeded.

DfT published surveys for the A59 show that total movements from 2014 to 2019 hovered around the 31,000-33,000 AADF level with a manual count in 2018 of 32,894. These represent similar figures to that in the application transport assessment. A manual count in 2020 during the Pandemic gave an AADF of 22,402 (circa 70% of pre-Covid levels). Traffic has increased but to 80% of the pre Covid levels. Pre Covid surveys still represent the 'worst case' scenario in terms of traffic flows.

The data used in the submission are clearly fully representative of recent pre-Covid traffic figures on the A59 and clearly represents a 'worst case' scenario to assess the acceptability of the traffic produced by the proposed development. It would be wholly misleading and unacceptable to use traffic flow data from more recent years.

Both the Story/LOGIK schemes and the Local Plan 'Growth Area' proposal do not identify any insuperable traffic problems with those proposals. The negligible traffic numbers arising with the LHF scheme can be absorbed without any identifiable impact.

THE ACCESS

The access is a 'simple' junction in accordance with the DMRB given that it involves considerably less than 300 movements. Given its left-in and left-out layout on a two-lane single direction carriageway a 'ghost island' for right turning traffic is not required.

Site Lines

The A59 has a speed limit of 50 mph. The highway design statement states that the egress sight line to the to the west on the A59 from the new minor junction is some 295 metres. This is almost twice the distance required by the DMRB (160 metres) where the speed on the major highway is 85 kph (53 mph). A plan showing this is forwarded.

The internal sight lines on the access road also exceed standards in the DMRB and ensure that vehicles leaving the A59 or approaching the junction along the access road have an unobstructed view and can clearly see the entire junction and any waiting traffic on the minor road or joining traffic from the minor road. That compliance should be seen in the context of only 30 movements in and 30 movements out per day whereas the relevant standard adopted is for a considerably larger number of movements including those approaching a junction along the minor road at circa 30 mph whereas LHF will apply a 15mph limit.

You will also note that while the access road will mainly be a single-track width with passing places, that the first 200 metres of the road from the A59 will be constructed to provide two lanes thereby providing more than adequate capacity to enable traffic to leave the A59 without blocking back onto the A59 and to hold traffic leaving the site without that blocking entry traffic and causing vehicles to wait on the A59.

Deceleration/Acceleration Tapers

Given that the access is a 'simple junction', that there is a 50-mph limit on the A59 and that the diverging movements at 30 in total are well below the relevant threshold (more than 225 left turning movements) the DMRB does not require diverging/deceleration tapers. In any event most drivers accessing the quarry access road will be contracted drivers and very

familiar with the junction, although all drivers on the A59 eastbound will be advised of the quarry access approach by suitable signs to be erected.

Merging/acceleration tapers are not required by the DMRB as the AADT of joining traffic at 30 movements is less than 600 and regardless of percentage of HGVs or the presence of a gradient less than 225 movements.

Given the above there is no need to reduce the running lanes on the A59 to one to provide for deceleration/acceleration lanes at the access road junction.

Access Road at Junction

As shown on the attached plans the internal access road is level or near level as it approaches the A59 for in excess of 20 metres. It exceeds the DMRB requirement of 15 metres. Traffic on the access road will be travelling at no more than 15 mph. If a greater distance is required and proved essential then this can be provided by minor works to the road design as part of a condition.

Trees Lost

The trees lost due to the construction of the access on to the A59 are identified in the BHA tree report and plan attached. This shows that 10 trees mainly beech and oak will need to be removed to accommodate the access road its related works and sight lines.

Accidents

The recent pre-Covid accident figures are set out in the application. More recent figures would under-represent traffic levels and therefore potentially under-represent accident levels such that the existing data represents the 'worst case'.

'Pulse' of Traffic

Traffic lights at the m6 junction has a control on the pulse of traffic levels along the A59 but given the negligible impacts of the additional traffic generated this is merely an additional mitigating factor which is not significant in relation to those impacts.

ECOLOGY

The Letter (and the specific comments from the LCC Ecologists, NE, LWT, etc) raise various matters on ecology and biodiversity. Almost all of which are already dealt with within the submitted application and /or can be dealt with by condition or are already provided by the UU and almost all the comments relate to matters which are not EIA or otherwise 'significant'.

I deal here with the comments of the LCC Ecologist and subsequently with other matters raised by NE and LWT.

SIGNIFICANT EFFECTS

The EIA Regs require the ES process, and such relevant regulators, to only address 'significant' matters and impacts (including the positive aspects of an EIA development).

The relevant submissions on ecology in the ES are informed by and included within, where relevant, the detailed ecological assessment produced by TEP and in other relevant assessments (traffic, noise, lighting, etc).

The TEP report identifies no significant impact on habitat or species or on any protected designations. Impacts are almost wholly restricted to the loss of agricultural land of poor intrinsic biodiversity value or to the ecologically poor wet area of the former mineral working. Those impacts and effects are insignificant.

The TEP report concludes that the phased working and restoration will create a succession of habitats throughout the site and excellent opportunities for habitat creation which will benefit a wide range of wildlife. That would, it is noted, also complement Brockholes. Those positive impacts and effects are significant.

BIODIVERSITY ENHANCEMENT

Neither the Letter, nor the specific comments of the Ecologist (or indeed of NE and LWT), reference the extensive positive holistic and synergistic outcomes for biodiversity enabled by the development on-site and adjacent; in the surrounding area; for the biodiversity objectives at Brockholes; and at some distance from LHF.

This level of 'landscape scale' biodiversity benefits and connectivity can only be achieved with a development of the size proposed at LHF. Fundamentally the specific wetland habitats provided on-site, and the improvements to biodiversity off-site, can only be achieved by the scale of 'engineering', and the materials released, associated with the extraction of mineral at LHF.

Such significant gains for biodiversity as created here at LHF are recognised widely across Europe as highly sustainable and as providing the mutual benefits of mineral supply, 'natural' flood management and significant biodiversity gains (as in the Grensmaas project).

Currently, in the UK and in Lancashire such benefits may be sought to be achieved in accordance with relevant policy or guidance or objectives of the Government, the Authority or the relevant parties, but there is currently little commitment to such an approach and, in this location, no overall strategy in any form.

The value of a 'strategic' approach to resource provision, flood management and biodiversity enhancement is however now a required imperative to support the fundamental objectives for both the Climate Emergency and the ecological emergency and as required in the Environment Act. This includes the objectives of Nature Recovery Areas, and the concepts in policy of, Working with Nature, the adoption of Natural Flood Management, etc. The focus of the proposed Environmental Outcomes Reports (to replace the EIA process) being on 'outcomes' rather than impacts, resonates with increasing assets and maximising the use of assets.

However, assets such as natural flood management features, new wetland habitats and a sustainable supply of minerals to enable those other assets to be provided (without incurring substantial development and maintenance costs), must work with the grain of nature and where geological and geomorphological processes has formed suitable deposits.

It is a truism that minerals can only be worked where they occur. It is equally true that wetland habitat can only be enabled and maintained where suitable excavations can be created and assured of adequate water supply. Nature dictates where these assets can be developed and the location at LHF meets those strict natural constraints enabling the environmental benefits to be developed, and at no cost to the public purse. The Grensmaas

project is again a clear example of this relationship because not only has it managed flooding without 'hard' engineering but it has also created very substantial areas of riverine habitat and that achieved through the commercial provision of essential construction materials which has generated all the income to undertake the environmental works without any call on the public purse or via actions relying upon public donations to bodies such as the LWT.

Enhancement of local biodiversity provided by the development (from day one of operations on site and before extraction commences) are not new outcomes associated with mineral workings in the UK. English Nature in 1998 noted in its Research Report 279 ("The potential contribution of the mineral extraction industries to the UK Biodiversity Action Plan") that the mineral industry has "*a significant part to play in implementing the UK Biodiversity Action Plan, particularly because mineral companies have … the ability to create new habitats … this is an opportunity much more than a risk*."

The success of this "opportunity" is noted in the latest (2019) State of Nature report where it states that the restoration of sand and gravel extraction sites have provided "*an important opportunity for increasing the extent of wetland habitats*" and highlights that mineral sites have provided over 8,000 hectares of new habitat including over 2,000 hectares of wetland with specific and rare new habitat features and ecological niches that has benefitted rare species.

Relevant Enhancement Policies

The development at LHF should therefore be assessed in relation to its positive outcomes for biodiversity as well as any harmful effects. Indeed, the MPA is required to undertake an assessment of those positive outcomes through the EIA process itself but equally of importance through its own and other relevant policy.

The response on ecology matters by all ecological consultees fails to undertake that assessment, which is made below.

NPPF

The NPPF (2021) para 174 requires that "policies and decisions (my underlining) should contribute to and enhance the natural and local environment" and, 174(d) inter alia, by "providing net gains for nature".

It also requires the establishment of ecological networks.

Although there is no definitive strategy for providing 'ecological networks' in Lancashire, LHF substantially meets or contributes to both those objectives.

The 2015 Adopted South Ribble Local Plan

Policy G13 provides for "enhancement of existing tree, woodland and hedgerow cover" with any tree lost being replaced on a two for one basis.

Policy G16 requires that the biodiversity and ecological network in the Borough will be "enhanced" via "enhancing habitats", "enhancing the ecological network and providing links to the network", providing "net gains in biodiversity", and the "re-creation of priority habitats".

LHF complies with or substantially meets or contributes to both those objectives.

The 2012 Adopted Central Lancashire Core Strategy

Policy 22 in the CLCS seeks "opportunities to enhance … the biological assets of the area" and to promote "biological diversity having particular regard to the … restoration and re-establishment of priority habitats and species". That policy also seeks opportunities to "enhance and expand ecological networks".

LHF substantially meets or contributes to both those objectives.

Central Lancashire Local Plan Preferred Options 2022

This consultation document (CLLPPO) continues the same themes as in the 2012 Core Strategy.

Strategic Objective 10 is to "enhance the natural environment … and biodiversity".

Policy Direction 25 Biodiversity states that development must ensure the "enhancement of biological diversity … with particular regard to the restoration and re-establishment of priority habitats and species" and that "ecological networks should be conserved, enhanced and expanded".

LHF substantially meets or contributes to both those objectives.

The Lancashire Minerals and Waste Plan

Policy CS5 (i) in the Core Strategy requires that opportunities "are taken to enhance" biodiversity resources.

Policy DM2 in the Sites Plan requires that development should "make a positive contribution to … biodiversity".

LHF substantially meets or contributes to both those objectives.

The South Ribble Biodiversity Strategy 2022

The purpose of this Strategy is, inter alia, to highlight ways to "enhance biodiversity across the Borough", with a Strategic Vision of ensuring that biodiversity "is bigger, better and more joined up" and with biodiversity gains. The objectives require a partnership with landowners so as to "enhance biodiversity … create habitat connectivity" and to ensure that development "actually improves" biodiversity,

LHF substantially meets or contributes to all those objectives.

The Central Lancashire Biodiversity and Nature Conservation SPD 2015

This SPD notes that development can have "positive impacts for biodiversity". It references the value of ecological networks through providing connectivity via new biodiversity sites, using 'corridors' and 'stepping stones'. It notes that development that will "enhance, restore or add to features or habitats used by protected species" is "to be encouraged".

The SPD states that developers should "design in opportunities to improve habitats for biodiversity … by enhancing existing habitats or creating new areas … and even to create new links". Such opportunities are identified in the SPD including where SuDs provide 'soft'

engineering features “such as ponds, swales and wetlands” and that the positive impact such SuDs features have for biodiversity “should be taken into account in scheme design”.

LHF makes a substantial contribution to the objectives of the SPD.

The Lancashire Ecological Network, Approach and Analysis 2015

This report was prepared by the LWT with support from planning officers across Lancashire. It represents and sets out ways to develop an ecological network but does not identify specific actions at specific sites. The report relates to a spatial concept and suggests some opportunities in spatial terms to enable an ecological network, but the network shown on plans in the report is merely an indicative option with no statutory approval. It focuses on suggested woodland and grassland networks.

The document notes that protected sites alone are insufficient for protecting ecosystems and that the creation of ecological networks including the re-creation of habitat can assist in that objective. It shows potential woodland and grassland networks across Lancashire in a suite of plans and identifies the greater benefits of large, connected new habitat as being priorities for habitat restoration.

By chance the report includes (page 23) a ‘blown-up’ extract plan showing a possible woodland network to the east of Preston and it includes in that almost all of the LHF application area. This shows various ‘stepping stones’ and ‘corridors’ linking all the woods in the plan area. The scheme provided at LHF enables a different but similar network with more extensive planting.

LHF therefore makes a substantial contribution to the development of ecological networks in the locality as outlined in this document, particularly by the linking of existing woodlands and other habitats.

Conclusion on Biodiversity Enhancement Policy

The development at LHF makes a substantial contribution to biodiversity enhancement in line with policy at national and local level. It also makes a significant contribution to the development of an ecological network on site and linking beyond the site. Such contributions are provided prior to extraction operations commencing and expanded

throughout the life of the operations culminating in provision of further biodiversity assets as the last phase of working is restored and the plant removed.

These positive contributions to biodiversity in line with policy and the policy objectives have been ignored by consultees but are material considerations in the planning balance.

RED SCAR SSSI

The fact that the site lies within the demarcated impact zones for the Red Scar SSSI does not itself indicate that any harm to the SSSI will occur, it merely describes the need for NE to be consulted. The wood is an Ancient Woodland.

The Ecologist raises the potential for harm to the SSSI from the development. The possible causes of harm are not elaborated by the Ecologist and are fully considered in the application and shown to be either insignificant or will not arise.

The habitats created by the development at LHF will provide important and significant linkages to the SSSI enhancing the SSSI and biodiversity locally and protecting the SSSI in accordance with national and local biodiversity objectives.

Air quality impacts in the form of fine to ultrafine particulates with hazardous or complex chemistry may be extremely harmful to woodlands. The SSSI adjoins the M6 and the Red Scar Industrial Estate (RSIE). The SSSI has been and continues to be impacted by substantial inputs of potentially harmful ultrafine to coarse particulate and other air quality pollution from that road and the RSIE.

However, the negative air quality impacts on the SSSI which would be arising from a diverse range of ultrafine to coarse pollutants from the recently permitted incinerator, which immediately adjoins the SSSI, and in combination with other industrial and traffic emissions, were considered harmful but not significantly so harmful by NE, LWT or the LCC ecologist or LCC as the determining authority, for them to seek refusal when the application was determined.

The SSSI also immediately adjoins and is directly downwind of the former Higher Brockholes Quarry (HBQ) and the current LWT Brockholes centre. The type of operations at LHF are generically similar to those undertaken at HBQ. There was never any concern that the

operations at HBQ harmed in any sense the SSSI and given its favourable condition there is no evidence that those extraction operations harmed in any sense the SSSI. The operations at LHF will be at a lesser intensity and lower level of traffic movements than at HBQ and will take place laterally to the dominant wind direction and mainly at a substantial distance from the SSSI (the plant site and the movements of HGVs will be at least 450 metres from the SSSI with only extraction plant being closer). Those operations are unlikely therefore to produce the same level of impacts as HBQ. Given that the impacts of HBQ were not significant and produced no harm the lesser air quality and other impacts of LHF will also be insignificant and produce no harm.

Currently, traffic movements to and from the Brockholes centre substantially exceeds that generated by HBQ or as would be generated at LHF. It is acknowledged that most of that traffic is light vehicles although it does include coaches, but on a daily basis the number of movements are significant enough to generate air quality pollutants. However, that traffic generated pollution does not demonstrably produce any harm to the SSSI or indeed to the habitats created at HBQ.

The extraction operations at LHF will in the middle years of operation approach the SSSI on the other side of the Ribble but otherwise will be a substantial distance from the SSSI. The operations will handle mineral that is wet or damp. Air quality impacts from the extraction operations at LHF are effectively restricted to inert coarse dust which will drop out within the site. The EA advises that wet working of sand and gravel as proposed gives rise to negligible air quality impacts.

Noise from the operations will approach the SSSI also in the middle years. As demonstrated in numerous research papers, all animal species react to new, random or sudden impulsive noise particularly if it is associated with the visual threat presence of humans and/or other predators, particularly dogs, promoting flight or other precautionary actions. Where such threats do not arise, animals become accustomed (habituated) to the noise and are not disturbed. This is a well-documented feature of mineral sites ranging from Peregrine nesting on faces within active hard rock quarries to the immediate influx of waterbirds onto active wet workings and silt ponds and sand martins nesting in sand stockpiles as well as new ‘river’ cliffs created by the excavations.

Major Public Rights of Way (including the Preston Guild Wheel) passing through the SSSI provide for uncontrolled and random access by cyclists, people and dogs (including dogs both on and off lead) on and off the routes, creating significant noise and other disturbance, particularly for any ground species. Such species will, in the future, be able to utilise LHF, when it is both actively being worked and following the phased restoration, as an alternative habitat and sanctuary from such disturbance.

No lighting which might harm the SSSI is proposed except for emergency purposes.

There is no conceivable pathway to nor any significant negative harm from the proposed operations at LHF on the SSSI.

In contrast, LHF will become an exceptionally valuable mosaic of habitats and a sanctuary for species disturbed in the SSSI (and at Brockholes) and will support and enhance conservation of the SSSI.

As the Ecologist does not identify what specific harm might arise or the scale of that impact or if there is a pathway for such harm to travel to the SSSI from LHF the above comprehensively demonstrates that no significant harm will occur and no further specific cause of harm needs to be addressed in this response.

ENGAGEMENT WITH THE RIBBLE RIVERS TRUST

As noted in the application HAL engaged with numerous parties including the Ribble Rivers Trust (RRT).

Prior to concluding the application HAL engaged fully with the RRT in order to advise the RRT of the proposal and to, where possible, incorporate the views of the Trust in the submitted scheme. The RRT itself engaged proactively with HAL in this process particularly in relation to the phasing and restoration and the options for planting on the banks of the Ribble outside the application boundary (which planting the RRT has undertaken elsewhere on the banks of the Ribble), which is now provided in the UU.

Those discussions extended to wider concerns of the RRT in relation to the headwaters of the Hodder and the status of the eel in the Ribble. Those matters are now dealt with in the UU and provide a substantial opportunity to assist those significant conservation concerns

and objectives. Indeed, the extraction operations at LHF are the only viable source of material to improve the status of the Hodder, other than another sand and gravel extraction operation.

These substantial biodiversity protection or enhancement opportunities are set out in the application and the UU and fully explained. It is a pity that such matters are not recognised in the ecology comments and given the support they clearly should be given.

In addition to engaging directly with the RRT, I attended a Ribble Life Partnership Board meeting in October 2018 to set out the context of need for mineral and the restoration objectives for the proposal at LHF and to proactively seek comments and scope for further opportunities for HAL to work with those partners, before concluding the application.

The Board members (which included. Inter alia, the LWT, NE, EA, etc) supported the biodiversity and restoration objectives. Other than further discussions with the RRT, no comments were subsequently received from the Board on the development or the restoration scheme. No further matters arose which therefore HAL needed to take account of.

INSUFFICIENT INFORMATION & DATE OF SURVEYS

I have dealt with the relevance of comments as to surveys being out-of-date above.

Plainly there has been no significant change in either physical characteristics of the site or the distribution and size of habitats on site since at least 2005. Indeed, there has been no physical change at all other than to the gradual decline or failure of individual trees, hedgerows or shrubs and to the impact of Ash Dieback. In that situation, the survey information and the assessment conclusions remain as representative and relevant now as they did at the time of the survey in 2017. The results are not out of date as far as relevant policy and regulations require, or for the determination of the application.

The reference by the Ecologist to BS 42020 (which is guidance and has no statutory basis), should note that the BS concludes that the need for updating relates to the degree of change in environmental conditions in the relevant area. The BS states that the greater the

degree of change, the greater is the need to update a survey. There has been no change in the area and on that BS basis there is no need to update.

There have been changes in the number of individuals of each species noted using that habitat, such as the numbers of GCN and toads using the pond habitats. Any such changes in species numbers on site within individual habitats over time merely represent natural or external fluctuations and changes in the success of individual species from time to time. That is not relevant to the presence of, or the carrying capacity of, or the value of the habitats on site. Such changes are noted in relation to different survey years and are described in the ES and the supporting studies and confirm how individual species populations may fluctuate while the underlying potential of habitats remains the same.

The extent of standing water in ponds and in the former excavation has fluctuated over different survey years, primarily due to incident rainfall and normal climatic variation, such as variation in evaporation rates. It is unclear if this has any relationship to Climate Change drivers (has rainfall been more intense? have evaporation rates been greater?) over recent years. It will fluctuate in the future regardless and therefore the number of species and the population of each species using such features will fluctuate.

In that respect I will shortly forward confirmation that there have been no changes let alone any significant changes in the site or the habitats since the survey was undertaken.

Significant Impacts

It is a requirement in general and in relation to the EIA Regulations that an ES and information sought must relate only to “significant” factors and be “proportionate”. On that basis I do not accept that there is ecological insufficient information.

The application was accompanied by a comprehensive and detailed ecological assessment which considered all significant matters and if there were any significant harm arising. There is therefore no need to repeat the surveys given that the submitted surveys are of sufficient depth, range and quality to describe the habitats on site and their use by various species, and particularly as there have been no change in the extent or value of those habitats on site, let alone any significant changes.

Mitigation

It is noted in the Letter that the Ecologist considers that the mitigation measures have not been developed to the level that would normally be required. I cannot accept that comment, which wholly ignores the biodiversity gains provided both on and off site and which comment is not justified in any quantitative or qualitative manner. The gains clearly extend well beyond mere mitigation.

The comment is therefore contrary to the fundamental and demonstrated position that the habitat losses by the scheme (intensive agricultural land with subsidiary and limited poor biodiversity woodland, wetland and hedgerows), as existing, are fragmented, insignificant and of poor quality, but are replaced by and significantly enhanced by new woodlands and wetlands with numerous individual biodiversity niches (ponds, watercourses, 'cliffs', reed beds, 'islands', gravel beaches, scrub, woodland glades, etc), which provides for significant enhanced connectivity within and beyond the site. In addition, the development provides for a substantial biodiversity improvement off site, which would be impossible to achieve without extraction of minerals at a significant scale.

In that context the scheme both considerably exceeds the requirements of BNG and achieves the requirements of Policy. The Ecologist seems to have completely failed to note or consider these very significant benefits with the development, some of which can only be provided via the development operations, and which go well beyond mere mitigation.

The comments of the Ecologist should be seen properly in relation to the BNG obligations and that the scheme provides for a very substantial excess in biodiversity well beyond that required by BNG.

As to the mitigation measures being capable of being implemented and being successful, you will know of the exceptional experience of the minerals industry in achieving significant biodiversity gains and especially of otherwise lost habitats, including as here of wetland, reed bed, etc. That experience was clearly demonstrated at HBQ when even as an active quarry it provided in restored phases (and active areas) significant biodiversity assets and won awards for that habitat restoration work. That wider experience and future potential also formed the basis of the Nature after Minerals programme adopted by the RSPB

together with the minerals industry, to bring back substantial areas of habitats that were being lost by other forms of development.

As you will know, the success of that programme formed a central part of presentations to the RTPI North West, Planning for Minerals Conference held at Brockholes in March 2017. In that conference the RSPB noted (from the 2016 State of Nature report) that habitat creation was one of the most significant drivers for positive outcomes for UK wildlife, predominantly through the creation of new wetland sites and that "*much of this habitat creation has taken place at post-extraction sites, where old quarries are converted to new wetlands*". The County Council itself noted that the site had already acquired significant biodiversity interest even as an operational quarry.

The minerals industry and HAL have extensive experience in the restoration of sites to various valued habitats. There is no reason at all to suggest that the scheme of biodiversity enhancement (I will not call it "mitigation" because that substantially understates the exceptional scale of the habitat creation at LHF) is not capable of implementation and will not be a success and help in the provision of new biodiversity habitats of value.

In addition, the large scale of the works proposed assist the synergistic biodiversity opportunities in line with the Lawton principles as set out in Space for Nature (DEFRA 2010) of bigger and better, and better connected, habitat creation.

While the pond(s) in the historic extraction area will be lost, they are demonstrated to be of low biodiversity value. This is primarily due to mucking by stock as well as margin damage by stock and pollution from nutrient enhanced agricultural surface water run-off. In any event they will be replaced prior to their loss by new wetlands created as part of the phased working and restoration scheme with the potential to be of much greater biodiversity value.

In addition, and to assist GCN and associated species, a series of ponds are to be created alongside the access road supplied by incident rainfall onto the access road.

As dealt with elsewhere in this response, the low level of any pollutants arising from traffic on the access road together with the buffering capacity of feeding ditches and swales will ensure suitable and adequate in quality and quantity water supply to those ponds. The restoration and landscaping plans show 7 new ponds alongside the access road. The

locations shown and the numbers of ponds to be created cannot be precisely confirmed now as that may vary to take account of local ground conditions etc but the plans show the general objective.

The Letter suggests that para 5.14 in the Planning Statement states that three new ponds will be created. That is incorrect. The Table after para 1.20 lists the 7 ponds as shown alongside the new access road plus the large pond in the extraction site, which itself may have subsidiary wet areas and ponds. Paras 5.11 and 5.12 note the provision of ditches, swales and ponds. Para 5.14 makes no reference to the provision of three new ponds.

I note that it is suggested that new ponds should be located close to any that are lost. That is precisely what is provided where the restored extraction area provides opportunities for ponds near those lost. The ponds alongside the access road are not provide to mitigate for any loss in the extraction area but as provided will enhance GCN and other species opportunities around the route of the access road which is located in the relevant vicinity of GCN ponds in the application area.

The detail of the replacement badger sett is a matter to be considered as part of any licence scheme. There is substantial successful experience in creating new setts and sufficient opportunities within the application area to locate such a new sett.

DETAILED MATTERS

The detailed aspects noted by the ecologist (cattle grids, kerbs, fencing, etc) are fully capable of being dealt with by condition.

CONSTRUCTION COMPOUND

The exact requirements for and the location and size of the construction compound has not been concluded. This will only become clear after consent and following discussions with the selected contractor. This can be dealt with by condition.

The potential locations for a construction compound lie adjacent to the new access and near the new junction onto the A59 and in land in the control of HAL. All such land has been included in the detailed ecology assessment by TEP and other relevant assessments.

PARAGRAPH 175 NPPF 2019

The provisions here relate to where significant harm arises. Now replaced by paragraph 180. No significant impacts or harm arises.

ACCESS OPTIONS

The ecological implications of the access road as proposed is set out in the ecological assessment. No significant harm was identified.

Ecological impacts were noted in relation to various alternative access options in the ES (using a barge with facilities at Samlesbury and downstream; using a route across Brockholes, etc) but as such options were concluded to be not viable or physically possible no detailed impact assessments were or are necessary or relevant.

I do however note the basic ecological impacts below.

Moving the access road junction to the east or looping the access road around the scrub/pond complex is not viable as that would then impinge on the route of the gas main and potentially the water mains which are a significant constraint. In relation to ecological impacts such a route would not avoid cutting through a hedgerow, it would extend over a larger area of GCN terrestrial habitat and would require felling of part of the woodland by the former telephone exchange.

Moving the junction to the west would not be possible as that is outside land in the control of HAL. In any event that would have an equal or greater impact on hedgerows and the wood by the A59 (as it would cut through more depth of that wood and not as proposed where the route would run through a thinner part of the wood developed in a former sand pit) and would require the route to run through part of Samlesbury Wood, which the proposed route does not.

In relation to the use of Potters Lane the ES notes (from 3.31) that this is not ecologically acceptable as, inter alia, it would require the removal of considerable lengths of hedgerow in good condition and of numerous mature trees of considerably greater number than affected by the proposed route.

Alternative routes to the proposed A59 junction location or to a junction considerably further east beyond the Swallow junction were assessed in the ES in 3.35 onwards. This noted that these would affect a 'greenway', hedgerows, numerous mature trees and cut through Seed Park Wood as well as running along the route of a PRoW. These alternatives would affect significantly greater areas of immediate GCN habitat.

The route across Brockholes was rejected as no agreement could be concluded because of conflict between the traffic movements and public visiting Brockholes. Detailed working up of a bridge design and its possible environmental impacts, such as the possible impact of structures within the river and on both banks, were therefore not assessed. It was noted that noise and visual impact may be a consideration.

It is significant to note that LWT concluded that the use of the road itself would not harm the fundamental conservation objectives at Brockholes.

The use of barges and the development of relevant loading and unloading facilities is fully explored in the ES in 3.61 onwards. The relevant environmental impacts including those on nature and geological conservation interests are substantially described.

THE PROPOSED ACCESS ROAD

Surface Water and Kerbs

It is essential to kerb the access road to prevent damage to the road edge by vehicle over-runs or by edge erosion initiated by surface water run-off. The design manages that run-off to provide swales and ponds to enhance biodiversity. The length of the swales ensures that sediment from the road surface will be trapped before it reaches a pond (but see below regarding pollutants). 'Dropped' kerbs can be provided at suitable spacing as part of a condition.

POTENTIAL FOR HARM

Comments by the Ecologist in the Letter and other comments in various submissions suggest that the development will harm in an unspecified manner habitats or species due to 'pollution' impacts. That is contrary to the detailed conclusions in the TEP report and no

quantification demonstrating 'significant' possible harm by pollutants is provided in the comments.

It is hypothesised in biodiversity research that pollutants may be harmful. Such research may often produce a correlation between measured pollutant levels and apparent effects. These are however often based on extreme 'emission' examples or on sensitive species rather than the negligible emission levels and relatively insensitive habitats such as at LHF.

Such research will in the main also not be able to identify confounding evidence which can be misleading particularly as here where the degree of impacts is negligible in scale. Confounding conclusions are endemic and difficult to counter in natural systems (is it the vision/scent of random approaching predators [people and dogs] that disturbs feeding wildfowl/deer and prompts flight, rather than the loud but unthreatening noise of passing steady traffic on an adjacent road?), particularly where species may become habituated to traffic or other steady noise as a non-threat. In such situations the hypothesised relationship of noise = threat = disturbance, appears to hold but is based on a totally false premise and is misleading.

That research may therefore often make the false step of concluding that a pollutant such as noise demonstrates 'correlation equals causality', when there is no such basis for that conclusion.

Random human/dog appearance/disturbance would appear to be much more significant in causing harm (see AQTAG 10 (2004); *Bird Disturbance Study North Kent*, Footprint Ecology (2011); *Morecambe Bay Bird Disturbance and Access Management Report*, Footprint Ecology (2015); *Poole Harbour Disturbance Study*, Footprint Ecology (2020)).

Thresholds used to define harm in such biodiversity research are frequently related to those we use for potential harm to humans. There is no physiological basis for concluding that what effect we know/perceive as threatening/harmful to us (such as noise) is harmful or threatening to other species. What evidence exists shows that it is misleading to use our human thresholds. Such examples whereby species are unaffected by noisy (but unthreatening) environments, such as airports, motorways, bell towers, etc are well known. Similarly, our visual perception of the 'attractiveness' or the 'naturalness' of a location (with

an absence of harsh surfaces, or hard boundaries, or litter) may not appear to have any negative connotations to animals.

I deal with harm below in relation to air and water quality pollutants and noise as they may arise from the proposed operations and as they may potentially affect the site and biodiversity, but first address the specific matter of Ancient Woodland.

Ancient Woodland

There is no Ancient Woodland on site as determined by the parameters set out in the NPPF (to have demonstrably been in place continuously since 1600). The ES is therefore wholly correct on this point.

The inclusion of woodlands in the Provisional (my underlining) Ancient Woodland Inventory list was based entirely on the presence of any woodland supported by very limited ground survey, limited species data and the size of the woodland. The inclusion in that list is not demonstrably proof that a wood is Ancient Woodland. The Inventory did not demonstrate that the relevant wood has been in place since 1600.

Field evidence as to species present (as in BHS guidelines) is not conclusive and will produce false positives as known non-Ancient Woodland may have a greater proportion and diversity and concentration of the indicator species than proven NPPF Ancient Woodland.

Ancient or Veteran Trees

The impact of the development on trees and woodlands is described in general in the application. The extraction operations to take place in the former mineral working will remove the naturally regenerated trees in that area which are clearly relatively young and naturally regenerated over the period of 1935-1960. They are neither of Ancient or of Veteran status.

The trees to be removed in the remaining part of the extraction area are limited to a very few isolated and grazed small former 'hedgerow' trees, again neither Ancient or Veteran.

The BHA tree report identifies the few trees that will need to be removed to construct the junction on the A59 and the access road (31 trees), again none is of Ancient or Veteran status.

Impacts of Junction on St Mary's Wood BHS

This is not an Ancient Woodland as defined. The impacts on the wood are identified within the BHA assessment report on trees. In effect 10 trees will need to be removed to accommodate the access junction and the approach. This includes trees now growing in a former sand pit. This is an insignificant impact. The landscape and ecological value of the Wood as it lies alongside the A59 from Potters Lane will not significantly be diminished.

Impacts on Trees and Woods

The access road has been designed to minimise harm to or loss of trees or woods. As shown in the BHA report it avoids as far as possible coming within the root protection area (RPA) of individual trees or woodlands which are proposed to be retained or otherwise not disturbed. Where intrusion into an RPA occurs (in relation to 5 trees) this is minimised and is unlikely to produce significant harm to such individual trees.

The access road maintains elsewhere a buffer of at least 10 metres to existing woodlands which buffer protects the RPA of such woodlands (although the current agricultural operations extend right up to the woodland boundaries).

The buffer is to be planted with trees and shrubs with a 'grass' margin (and provided with water features) to create an ecotone and to provide further protection to existing woodland, soils and ground flora from any possible pollution or impact or physical damage to the trees or roots in the RPA or beyond. The provision of such a buffer is recognised as good practice and will reduce impacts from adjacent agricultural activities as well as increasing the value of each section of woodland and the connectivity between each woodland.

Contrary to statements by the Ecologist the new access road does not fragment the woodlands. Conversely, the associated planting will significantly strengthen the woodlands but perhaps more significantly will link the existing isolated fragmented woodlands.

The comments of the Ecologist suggest that the access road has the potential for many (harmful?) impacts on the woodlands, including damage to roots and indirect impacts such as noise and air pollution (citing Ryan L, 2012, *Impact of nearby development on ancient woodland – addendum*, The Woodland Trust). Ryan specifically relates to Ancient Woodland.

As noted above the works mainly lie outside any RPA for retained trees and woodlands and as such damage to roots will not arise or be insignificant.

The access road will have some 60 movements per day. At the scale of such movements the likelihood of anything other than a negligible effect and insignificant effect from air pollution or noise is most unlikely.

HARM FROM AIR QUALITY POLLUTANTS

There is no statutory or 'policy' threshold for considering air quality pollutants on woodland or other habitats/species and in particular to 'protected' habitat/species.

The processing plant is to be powered by electricity and the only potential sources of air pollution would be associated with fugitive dust emissions from bare dry surfaces and emissions from extraction plant and traffic to and from the A59. At less than 60 movements per day this traffic in negligible as is that involved in the extraction and processing operations.

The ES references guidance or advice on air quality pollutant thresholds but such guidance relates to urban roads or where traffic levels very greatly exceed that which would use the access road at LHF and/or in relation to 'protected' sites and/or where such 'protected' sites are particularly sensitive to such pollution.

There is no guidance or advice for non-statutory sites. The IAQM advice notes that the quantity of dust arising from a mineral working would have to be very high to create a 'significant' effect. Such situations may arise within or near crushed rock quarries (or sand pits where the mineral is crushed or dry screened) but as noted by the EA dust arising from wet workings, as here at LHF, will be insignificant.

Current guidance issued by NE in relation to advising competent authorities on traffic pollution emissions potentially affecting sites relevant to the Habitats Regulations is set out in NEA 001 (2018) *'Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations'*. That is not directly relevant to LHF but the thresholds for such more sensitive sites would, if used here, ensure no harm. NEA 001 sets out screening thresholds to 'screen out' insignificant development from assessment.

The relevant screening out thresholds in LA105 are that (i) traffic does not exceed a total AADT of 1,000 or more, and (ii) that HGVs do not increase by an AADT of 200 or more. The proposed traffic on the LHF access road is very substantially below both those thresholds.

In any event, NEA 001 notes that the thresholds do not themselves represent any intrinsic environmental effects threshold at which harm will occur. The purpose of the threshold is to set a limit below which no credible significant effects arise. The thresholds are to be used as a trigger for further investigation, which will in many circumstances demonstrate 'no significant effect' even when the threshold is significantly exceeded.

The thresholds are therefore considered by NE to be suitably precautionary with emissions below such thresholds as being both imperceptible and of no significant effect. The thresholds do not actually define a lower limit above which an effect is significant. 'Significance' may well be considerably above that threshold.

In any event, while it is often postulated or hypothesised (where capable of being measured and evaluated accurately), that high pollution levels generated from traffic are harmful to biodiversity the evidence at actual locations may not confirm that, even where traffic levels are very significantly greater than on the access road.

Red Scar Wood, an Ancient Woodland and an SSSI, demonstrates this clearly. The Wood (and its original natural extension) lies on the steep north edge of the Ribble Valley and is bisected by the M6. This is one of the busiest sections of the UK Motorway network (pre-Covid AADT of circa 160,000) giving rise to potentially the highest levels of traffic generated air quality pollutants (dust and chemicals) nationally.

The Wood is also adjacent to a major industrial complex with significant volumes of various fugitive and other releases of dust and other air quality pollutants including those of complex chemistry. This industrial complex was formerly the site of a major chemical plant with an associated railway complex and various uncontrolled landfills giving rise to unknown groundwater contamination.

The Wood is also subject to significant light pollution from traffic on the M6 and lighting in the industrial complex. Due to traffic levels on the M6 the Wood is also subject to continuous and high noise day and night (LAeq 55-70dB, Lnight 50-65dB).

Nevertheless, despite the perceived high level of all 'harmful' pollutants the SSSI is in favourable condition. In essence historic pollution and the level of traffic and industry generated air quality pollution could be perceived as being harmful but the reality on the ground is that such a level of pollution is not harmful to the Ancient Woodland or indeed to any individual species in that wood. Equally potentially significant pollution by noise, light or of any groundwater has not produced any significant harm.

This burden on the Wood of noise and air pollutants will increase in the future when the approved adjacent EfW incinerator is under construction and in operation. It will also increase with the further build-out of other pollutant producing developments proposed on the adjacent Red Scar Industrial Estate advance towards the SSSI.

However, despite this position, neither the LCC ecologist nor NE, nor the LWT, pursued an objection to that incinerator as harm could not be demonstrated, with or without in-combination effects from the M6 and existing surrounding industrial activities (or other pollutants). None of those agencies have pursued any objection to the further intensification of industrialisation and increase in pollutants associated with the build-out of the existing industrial area, nor to further extensions to the industrial allocation adjacent to the Wood.

The traffic flows on the access road are very substantially below the relevant pollutant thresholds, the emissions are therefore "imperceptible" and the harm, if any harm, negligible and not significant. Further, the additional 60 movements will, in combination

with existing traffic in the wider area make no perceptible increase in traffic generated pollution levels in combination with existing or approved development in the wider locality.

Potential for Harm

While Ryan is focussed on harm to Ancient Woodland the evidence and conclusions may be relevant to woodlands in general. However, Ryan draws on only a few studies and sometimes highly specific and non-typical studies. It hypothesises harm but provides only limited quantitative and/or qualitative evidence as to demonstrate actual harm, the risk of harm, or the extent to which harm can be prevented. Further while it accepts that harm is in direct but undefined relationship with traffic levels, no evaluation or quantification of impacts in relation to traffic levels is provided.

To that extent it repeats the previous study issued by The Woodland Trust (Corney et al, 2008, *Impacts of development on the ecology of ancient woodland*), to which Ryan is an addendum. Corney also used only a few unrepresentative examples in relation to quarrying activities (sometimes extremely unrepresentative examples, eg where it focusses on air quality pollution from a few non-aggregate examples such as base metal smelting, acid mine drainage, etc, without identifying pathways) and where, in relation to impacts from highways, it references only a few research studies related to motorways and other major or urban roads or roads in significantly different climatic regimes.

Corney also accepts that pollution is related to the scale of traffic flows but also provides no correlation between traffic levels and actual or perceived harm, or indeed any benefits.

Undoubtedly, high levels of traffic do produce potentially negative harm to adjacent habitats (although not always is such harm caused or is it significant; see re Red Scar Wood above), but the level of traffic at LHF at 60 movements per day can be considered to be so negligible in producing harm as to be 'de minimis'.

In that context most of the cited research in the UK referenced in Ryan or Corney or subsequently undertaken is misleading in respect of LHF and not representative of the conditions at LHF access road primarily due to (i) the exceptionally low level of traffic as noted above involved at LHF; or (ii) because of locational factors of the research sites, such as the degree of urbanisation, elevation and extreme climatic conditions (arid or sub-Arctic);

or (iii) because the research was focussed on designated sites with sensitive habitats and species (calcareous grassland, lowland and upland heathland, high level woodland, over-grazed moorland or woodlands with significant epiphytes, etc).

For example, in Angold (1997); Bignal et al (2004) in EN Research Report 580; Kirby (2007); Bignal et al (2008); Ricardo-AEA for NE (2016), NE Commissioned Report NECR200; Ricardo-AEA for NE (2018), NE Commissioned Report NECR199; etc, the research either involved traffic flows on major roads or Motorways at over 10,000 AADT to over 100,000 AADT (and very significantly in excess of the 60 movements AADT at LHF), and at high speeds, and/or commonly in relation to sensitive designated sites or species.

Similarly, research on dust and air pollutants from sources other than traffic is based on extreme examples such as near cement works or sources of fly ash, with no examples from negligible/low emission activities.

Such research also commonly alludes to impacts but provide no quantitative data on the impacts or the traffic flows (although these are obviously massively in excess of that at LHF), background levels or potential pathways.

Where traffic data is referenced, all such research affirms the common statement that pollution and potential harm is in direct relation to the amount of traffic on the road and as influenced by the speed (and hence the extent of dispersal of pollutants by turbulence into the adjacent land), with other factors making a varied contribution.

Confounding factors may be identified but are never assessed.

However, the speculative 'potential' for harm (other than negligible harm) postulated at LHF is clearly not proven in the case of Red Scar Wood and the hypothesised impacts in such research are misleading if translated to LHF.

No research considers the miniscule traffic flows, the low speeds and the temporary nature of the flows over a bound road surface, with associated drainage, as proposed at LHF. Low flows over unbound surfaces are commonly exampled from elsewhere outside the UK but with significantly different climatic regimes. However, Lee (2012) and (2013) consider a number of sensitive sites, including what is described as a "low trafficked site" (this had the

lowest traffic flows of any site studied and does have a low level of traffic compared to most 'A' class roads, but does very substantially exceed traffic flows on the access road).

This is a calcareous grassland habitat located at Martin Down NNR on the A354 between Salisbury and Blandford Forum. The AADT was circa 6,600 at the time of the survey, which is still massively in excess of that at LHF. As Lee (2013) notes, calcareous grasslands may be particularly sensitive to pollutants because the typical plant species are adapted to a relatively narrow range of ecological controlling conditions.

Lee (2012 and 2013) again affirms the direct relationship between traffic levels and emission pollutant levels and how all pollutants decay rapidly and exponentially away from the road. In relation to the concept of harm at LHF, it shows that pollutant levels at Martin Down become insignificant within a few metres, even at the substantially greater traffic levels.

While Lee does provide traffic levels the research does not address confounding factors which complicate the simple relationship that traffic numbers are the primary source of pollutants.

The area is relatively elevated and exposed to strong winds and salt from gales and winter treatment. The surrounding area immediately adjoining the site is dominated by intensive arable farming with large inputs into the NNR of potentially polluting nutrients (as identified in the research). There is a significant highway verge where the well-drained margins (as surveyed) are sought as preferred grazing by large populations of rabbit, hare and a substantial deer population, which grazing recycles nutrients via mucking back into the road margins maintaining higher nutrient levels near the road. The verge is not cut for hay which would otherwise remove nutrients.

Traffic on this open section of the A354 travels at the national speed limit of 60mph (but frequently at higher speed) creating significant turbulence mobilising particulates high into the air and increasing the drop-out distance and hence the extent of pollutants at a lateral distance into the NNR.

Applying such results to the level of traffic on the access road at LHF clearly demonstrates that any pollution impacts would be negligible.

However, while Lee notes the presence of pollutants and considers the potential for harm, more recent analysis (Phillips et al 2021) in a comprehensive review of noise, turbulence, particulates and heavy metals shows that the net positive biodiversity potential of the habitat alongside road margins for pollinators is significant, regardless of pollutants. In the conditions surveyed by Phillips traffic levels and pollutants and other effects substantially exceeded that at LHF as did traffic speeds.

Mortality by collision occurs along busy high-speed routes but this is not seen as significant in relation to the total population and the ability to re-populate the habitat.

The biodiversity value of habitat alongside roads for pollinators has recently been emphasised outside the UK and notably in a series of State volumes by the National Academies of Sciences (USA) 'Pollinator Conservation Along Roadways', 2023 which concludes that roadsides "are an opportunity for pollinator habitat".

HARM FROM NOISE

As with air quality pollutants, there are few studies that enable strong conclusions as to the harmful impact of 'normal' anthropogenic noise on animals. Most show a lack of strong evidence for or against harm by noise.

They also note, but do not quantify, how species have different auditory responses, or indicate a huge range of noise levels where 'effects', be they harmful or not, are observed (ranging from 45-80dB – noise is measured logarithmically, where every 10dB increase equals a doubling of 'loudness', so this range provides no clear thresholds).

They are uncertain as to any harm that might actually arise and, very significantly, either ignore or do not assess problems with conclusions of effects contaminated by confounding conditions (ATKINS for EA (2003); Ormerod (2004) AQTAG 10 for EA; Radford et al (2012) for DEFRA NO0235; Shannon et al (2015); Erbe Ed (2022) Exploring Animal Behavior Through Sound, ASA/Springer).

Most research relates to birds, but as Dooling notes (The Effects of Highway Noise on Birds (2007) for CDOT), birds have a different auditory response and recovery compared to humans and our simple perception that typical traffic noise (that we may perceive as both

intrusive and harmful) is also harmful to birds (physically or in relation to activities) is unproven. Dooling concludes that there are no studies which conclusively identify traffic noise as a critical effect on producing harmful effects on birds. In any event, confounding effects, as noted above need to be taken into account and noise is often not the proven exclusive or the definitive cause of any bird response.

As with air quality pollutants the level of traffic noise is in direct relation to the quantity of vehicles, all other things being equal. Studies indicate that there are no perceivable harmful effects on animals (be they related to noise or other factors) where traffic is below 8,000-15,000 AADT. Those 'effects' are not necessarily correlated with harm and appear to represent a precautionary threshold below which no harm arises and above which harm might occur. The level of traffic on the access road is clearly very substantially below that level/threshold.

HARM FROM SURFACE WATER RUN-OFF

The quality of surface water run-off is also in a direct relation to the level/speed of traffic on a road given that incident rainfall on the relevant area is the same regardless of the traffic flows, but traffic generated contaminants are related to the traffic flow.

Research has again demonstrated higher levels of pollution in run-off from roads with high traffic volumes, but some of that research is based in climatic regimes where particularly the degree of road 'salting' (producing chemical pollutants), the use of winter tyres (producing fine and coarse particulates of rock, metal or compounds), and traffic speeds/congestion correlating with braking induced pollutants, will be significantly greater than at LHF.

The generally adopted threshold for the need to treat run-off to remove excessive sediment or pollutants is where the AADT exceeds 10,000, although LA113 notes that there is a low risk where the AADT is less than 50,000.

The 10,000 AADT threshold does not equate to the existence of harm but represents a precautionary limit above which harmful impacts may, or may not, occur. The use of that threshold has however been described by the Conference of European Directors of Roads as frequently resulting in over-provision of mitigating measures for perceived negative impacts, which mitigation was not justified.

The level of traffic on the access road is well below the 10,000 AADT threshold and any pollutants in run-off from the access road will be negligible or at an unidentifiable level.

POSITIVE BENEFITS

The above demonstrates that any negative impacts from activities on site or the level of use of the proposed access road on existing species, habitats and biodiversity are well below any threshold of harm, are negligible and potentially incapable of being identified at all.

In relation to traffic movements on site or on the access road, research has noted the substantive positive biodiversity assets that can be provided alongside highways in existing verges and new verges/hedgerows/buffer zones such as will be provided at LHF. Some such existing features have been identified across wide swaths of the country as local Roadside Nature Reserves and in a number of locations as SSSI's due to their flora.

As with potential negative impacts most of that research relates to roads with very substantial levels of traffic compared to that at LHF, but where positive impacts still predominate. Given the exceptionally low level of use of the access road any pollutants and any harm arising will be negligible such that the positive outcomes for biodiversity will dominate and be more significant at LHF than they are on busier parts of the highway network.

The known and potential value identified of the immediate roadside environment reflects the diversity of habitats provided (scrub; grassland; ditches swales and ponds; bare surfaces; as well as light and exposure), together with their linear/connecting attributes. This diversity will be enabled at LHF on the access road.

This combination is of particular value for certain flora and then for invertebrates and especially pollinators, even given the high levels of pollutants that may be present along major roads. As Phillips et al note (*Enhancing road verges to aid pollinator conservation: A review*, Biological Conservation 2020) in their global literature review "*road verges are often hotspots of flowers and pollinators*" and that the benefits of verges to pollinators "*far outweigh the costs*".

Such benefits have been outlined in reports by Plantlife ('Road Verges: Last refuge for some of our rarest wild flowers and plants') and by Buglife ('Road verges and their potential for pollinators' 2019) which noted that "*road verges are important habitat for pollinators … making them a key habitat that can supplement the role of conservation priority habitats*".

This value was part of the matters explored at the 2020 conference 'On the Verge' into the contribution of both existing and new verges to protecting and enhancing biodiversity. That noted, inter alia, the high biodiversity value and success in new verges created alongside wholly new roads, drawing particularly on the analysis of the position of the Weymouth Relief Road.

That road was constructed in 2008-2011 involving substantial excavation into subsoil/bedrock with seeding onto near bare surfaces. By 2012 Small Blue butterflies were already present and by 2018 a count showed over 30 species of butterfly present. As noted by Sterling (Butterfly Conservation and formerly Environmental Services Manager for Dorset County Council) in defining the success and value of the new verge "*if you create it, they will come*".

This positive value of road margins for biodiversity, both in terms of habitats provided and the enhanced connectivity, is widely reported in research across Europe, in North America and elsewhere.

The significant and relevant point to note is that even though verges and roadside margins will be undoubtedly impacted by pollution, that the level of such pollutants, even from roads with very significantly greater traffic levels than ay LHF and hence greater pollution levels, has, on balance limited harmful effect which is more than off-set by the positive benefits of the habitats provided alongside roads.

CONCLUSION ON HARM

Guidance published emphatically notes that the acknowledged threshold for starting to assess any potential harm to biodiversity from traffic on the access road or from other operations on site, by air pollution, water pollution or noise, relates to traffic flows and activities at a level very significantly above that exceptionally low level proposed in the application.

Those thresholds are not where harm might then occur if the levels are exceeded. They are devised to be so low as to capture any conceivable harm that may start to arise above the threshold. The thresholds are set at an exceptionally precautionary level.

At the level of the negligible traffic movements on the access road at LHF, which are very substantially below the thresholds, there is no evidence or quantified scientific research which hypothesises, or suggests, or more significantly indeed, proves that any harm, let alone significant harm, would be caused by any of the factors on adjacent woodlands or other habitat.

Research indicating harm does not adequately account for or describe confounding factors. Such research studies are focussed on public roads open to traffic 24 hours a day. The activities at LHF are to be restricted to daylight hours limiting direct harm to nocturnal individual animals.

Under no demonstrable scenario would the negligible traffic on the access road cause significant harm by noise or pollution to the woodlands adjoining or to the flora or fauna within or using those woodlands or the existing surrounding farmland.

On the contrary, published research and guidance note that the habitats and biodiversity assets provided alongside the access road will make a significant new contribution both at the micro and macro scale to those existing habitat assets and support the objectives in policy to improve such assets and their connectivity as well as contributing towards a Nature Recovery Network in the location. Any pollution associated with the scale of activity proposed at LHF would be negligible and irrelevant.

PONDS

The development will lead to the loss of the recent pond(s) and naturally regenerated woodland in the former mineral working. The precise extent of the pond feature here fluctuates and at times there may be one large pond or a number of small ponds or only one small pond.

The TEP ecology survey notes that the pond(s) are of no significant ecological value, notably because they are accessed into and mucked by cattle. Direct agricultural run-off from the

application of chemicals, muck spreading, etc also affects the quality of the waters contained.

The restored excavation provides a substantial new wetland consisting of a large pond or lake with island features and associated woodland. The phased working provides for pond and wetland features as the development proceeds and these features are not limited to the ultimate restoration of the site as the Ecologist comments but will be available for colonisation as soon as excavations commence. The requirement of the Ecologist for waterbodies to be available from the early stages is therefore already enabled in the submitted scheme.

The intricate detail of the margins cannot be specified exactly now but that will contain shallows, gravel and sand bars, river cliffs and damp to wet areas of various size and number. No stock will be able to access or approach the wetland which will be buffered from agricultural land by woodland in excess of 80 metres width.

A string of new ponds is to be created alongside the new access road, linking the woodlands and the new large pond in the excavation and other habitat provided. This will create connectivity between both wetlands and woodlands.

The Ecologist comments that these ponds would be subject to run-off/pollution and cannot be counted as ecological mitigation. That is based on an incorrect assumption. As demonstrated above ponds and ditches in verges or adjacent to roads with very significantly higher traffic flows than proposed at LHF do not suffer from a degree of pollution which precludes them from becoming valuable biodiversity rich habitat in their own right.

Further, and as noted above, the potential traffic level threshold for considering the potential of pollution from run-off, be that likely to create any harm to habitat, however insignificant in scale and however much off-set by the benefits, is well above the insignificant level of traffic (60 movements) that would be using the access road.

There is therefore no justification in discounting the substantial biodiversity gains provided in the new ponds and associated water and other habitat created along the access road.

TOADS

At the time of the survey the presence of Toad was noted in one pond in the former mineral working, but not in the two others in the general location. Toads were not noted outside that location. No GCN or other significant amphibians were noted as being present in any pond in the extraction area.

Both the risk to and presence of toad are 'low' in this location ('Common toads and roads', undated, Amphibian and Reptile Conservation). The loss of the habitat of these pond(s) will have no significant impact on the conservation status of the Toad.

The phased working and restoration scheme means that the relevant pond containing Toad will remain in place unaffected in the initial years while a variety of new habitats, including ponds and 'damp' habitats (including a silt pond), are created both in the working and the restored phases. This will provide numerous opportunities for toads to naturally colonise these extensive new habitats, which will be unpolluted by stock as opposed to the condition of the existing pond(s), while the existing pond remains undisturbed.

Similarly, the new ponds and woodland created alongside the access road will provide a chain of new habitat which will be unpolluted by stock in comparison with the existing ponds in the vicinity of the access road. This chain will assist habitat and population connectivity which is currently fragmented.

As noted above the exceptionally low traffic volumes on the access road will ensure that any pollution from the road will be negligible while the catchment of incident rainfall and its transport by swales to the new ponds will further reduce any pollutants both ensuring an adequate water supply and a supply of suitable quality to the new ponds

Toads migrate into new territories in the early spring at night. Relevant operations in the location will consist of extraction and haulage of the unprocessed mineral to the plant site. These operations are restricted in time and will only take place in daylight. They will not be taking place during the potential migration periods and will not harm any migrating Toads.

If any Toad(s) are still present in the relevant pond(s) and have not naturally colonised the suitable habitat created then a translocation programme can be undertaken prior to

entering the relevant phase. This can be provided by condition as can the incorporation of dropped kerbs.

HERONRY

The loss of the heronry is not of significance due to its small size. The heronry is located in trees that have naturally regenerated in the old mineral working. While the existing ponds in the relevant location are of poor quality as a food source, the heronry is protected from human and associated disturbance by its isolation and lack of public access.

The phased working and restoration scheme means that the heronry will remain in place unaffected in the initial years while a wide variety of new habitats and food source habitats, are created both in the working and the restored phases which will not be subject to 'threat' disturbance.

These new habitats will support the retention and possible expansion of the existing heronry colony and also provide new 'quiet' and undisturbed opportunities for other waterbird species notably the Bittern.

LICENSING

Relevant licences will be sought in due course in accordance with the current NE guidance on European Protected Species (EPS) after consent is granted and as and when development commences and activities may or may not affect the relevant locations. It may for example be a number of years before development affects the badger sett in the old mineral working and the licence application should not be sought now when the extent of any harm will be unclear.

The current advice as set out in the EPS licence application form(s) is that:

(i) In relation to Badgers an application for a licence will be rejected if a consent (planning permission) to allow the development has not been granted.

(ii) In relation to Great Crested Newts a licence may be granted prior to consent if it is required to undertake site investigation works (not required here now as such works have either been undertaken or will not be undertaken until consent is granted), but otherwise should be sought when the consent has been granted

and the approved details of the activity are known (this is because the details of actual works and any 'harm' may be different from that proposed in the application and involve different impacts on the species).

(iii) In relation to bats a licence should normally be granted only after the relevant consent (planning permission) has been granted, but may be granted prior to that grant but only where the presence of the species is informed by a survey in the current season of the proposed works (the removal of a tree in this case). The relevant works are not likely to be undertaken this year and the licence should be sought once consent has been granted.

Licenses are therefore not required at LHF in advance of the determination of the application.

However, the MPA is required to consider the likelihood of such licences being granted. The MPA is required to assess that likelihood in relation to three tests and to only grant consent where it appears that those three tests are likely to be satisfied.

The is no fixed advice on how those tests may be satisfied and each case must be considered on its merits. However, advice on that process is set out in *'Natural England Guidance Note: European Protected Species and the Planning Process, Natural England's Application of the 'Three Tests' to Licence Applications'* (NE 292 January 2010). That references in paragraph 11 to the uncertainties as to the level of detail in a planning application compared to that required for a licence and therefore the need to postpone a licence application until the details of the works and the certainties of their impact are known.

In determining an application where an EPS licence may subsequently be required, an LPA/MPA must address (i) avoidance, mitigation and compensation measures as provided in a development application or as may be provided by a condition or a S106 (but such provisions are now substantially incorporated in the objectives of BNG), and then (ii) address the 'three tests'.

Avoidance, Mitigation and Compensation

The submitted application as demonstrated in the application and in the UU and in this response avoids harm as far as possible and the residual harm to habitat and species is as noted in the application and in this response, of less than minimal impact and is mainly of negligible impact or of unidentifiable insignificant impact.

And, as also demonstrated in the application and in the UU and in this response, the mitigation and compensation for any harm is exceptionally substantial providing for both extensive new habitat for numerous species (from commencement) but also substantial enhancement in connectivity of such existing isolated and/or fragmented habitats in the location at present and offsite. Translated into obligations under the BNG objective the application vastly exceeds the minimum mitigation and compensation levels.

In a determination the LPA can therefore be certain that the development has avoided harm where possible, that any residual harm is negligible and that the development will provide substantial biodiversity assets well in excess of that required to mitigate and/or compensate for the negligible harm.

The Three Tests

The three tests are:

1 Is the development in the public interest?

2 Is there no satisfactory alternative that would cause less harm to the species?

3 Does the development harm the long-term conservation status of the species?

The tests are to be applied on a case-by-case basis and on a 'proportionate' basis. The existence of harm does not itself indicate that the tests have not been satisfied and a planning authority can be assured that a licence will be granted where harm is shown but that mitigation and compensation resolve the harm.

While there are no definitive thresholds or standards set out in any guidance, NE 292 addresses and helpfully gives five examples of cases where NE was satisfied that the three tests were passed. These are illustrative examples and do not set a standard or threshold

but they do give a steer on the application of the three tests. Taking perhaps the most significant example as being most relevant to LHF (large scale housing development of a greenfield site where the development would lead to the loss of both the aquatic and terrestrial habitat of GCN and where mitigation included alternative habitat and ponds), the conclusion of NE was that the tests were satisfied.

Specifically, NE concluded that there was a public interest benefit in the new housing, that the alternatives were not viable, that the mitigation was acceptable and secured.

The public interest benefit in the provision generally of mineral resources is clearly set out in the NPPF at paras 209 and 211 including that "*great weight should be given to the benefits of mineral extraction*". The NPPF confirms that, unlike housing, minerals can only be provided where they are found, whereas housing sites can be located effectively anywhere where there is no over-riding constraint.

The NPPF sets out obligations on an MPA to ensure sufficient supply and to provide a planning framework for that and to determine applications as well as ensuring an adequate landbank for sand and gravel of at least 7 years including at the end of any Plan Period. None of those NPPF obligations as to supply are currently satisfied in Lancashire and given the continuing delay in replacing the current out of date CS and SP are unlikely to be satisfied for a number of years.

Further, the MPA is under obligations in its own adopted Plan to provide sand and gravel mineral resources via the Spatial Vision, Objectives and policies in the CS. While the Plan is now out of date in terms of the Plan period those obligations still provide the essential determination background which the MPA must comply with.

Currently the resource provision falls far short of those policy obligations. The landbank is inadequate and there are no policies or allocations in the CS or the SP which will resolve the impending future supply crisis. This mineral supply crisis is of much greater significance than that of housing in the NE example.

The public interest benefit in the supply of mineral is therefore exceptional and significant and the test is satisfied

As demonstrated in the application there is no alternative development that would resolve the above severe supply problem and as noted above there is no provision in the adopted CS and SP to meet supply obligations. As noted in the application and in this response, there are no alternative arrangements on site that would produce less harm. What harm arises is substantial mitigated as far as possible and compensated to a scale which extends and enhances biodiversity on site and in adjacent land.

There are therefore no alternatives producing less harm and this test is satisfied.

As to long-term conservation objectives, in comparison with the NE example the development at LHF would not affect or lead to the loss of any aquatic GCN habitat (or any other significant loss of habitat for any other species) but would only marginally affect the terrestrial habitat and would provide substantially greater mitigation and compensation for both GCN and numerous other habitat and species. In that context the development at LHF would not just 'not harm' the long-term conservation of GCN (and other species) but will dramatically enhance their conservation.

There are therefore no long-term negative impacts on conservation objectives on any species but in fact substantial long-term conservation gains for a range of habitats and numerous species.

The long-term conservation objective test is therefore both satisfied and assisted.

The Authority can therefore be certain that the development will satisfy the three tests such that an EPS licence will be given by NE.

HABITAT CREATION IN ADVANCE OF FINAL RESTORATION

The habitat loses are insignificant. The affected pond in the former mineral working has been shown to have some residual biodiversity interest but is of no significant biodiversity interest. The hedgerows that are proposed to be removed are in a very poor condition, fragmented and of very limited conservation value. The losses of woodland and trees are insignificant and do not affect their overall value. No Ancient Woodland or Ancient or Veteran tree is affected or required to be removed.

Contrary to the Letter the submitted scheme provides for significant tree and hedgerow planting and the creation of a number of new ponds and waterways before extraction commences.

The scheme then provides for phased restoration from the completion of the first phases and throughout its development and thereby, and contrary to the perception of the Ecologist, provides significant biodiversity assets in early years and well before final restoration. In that respect it is widely recognised that wet sand and gravel workings become habitat attractive naturally to numerous species of flora and fauna immediately operations commence.

The UU already provides for further off-site biodiversity improvements at the fringes of the site (and at distant locations during operations), which could significantly improve biodiversity around the site and along a very substantial section of the Ribble.

Phasing of Habitat Creation

The phasing of the habitat creation is as noted above and shown in each phase plan.

There have been differences of opinion in relation to planting on the margins of rivers. The UU provides for a scheme of such planting to be prepared as agreed.

Very substantial areas of further planting unrelated directly to mitigating development impacts are already proposed at areas A, B, C, D, E, F, G and L (as shown on Plans 1040/PL39-PL41) which will support the existing woodland and hedgerows in landscape terms but which will also help to link currently isolated habitat.

PLANTING MIX

The planting mix can be concluded as part of a condition if a change is deemed to be essential. HAL is willing to accept such a condition and amend the scheme, within reasonable limits.

I have dealt with comments on the shape of the planting blocks above. It is agreed that the planting at Brockholes still looks rather 'blocky' but that is now fading and is of no landscape consequence now. In any event, the shape of the planting is of no negative ecological

significance. It is also the position that the scheme at Brockholes did not provide the ecotone around the woodland planting as proposed at LHF, nor has significant ecotone planting been undertaken subsequently by LWT.

The proposed ecotone scheme at LHF will significantly ameliorate or remove any perception of regularity. In any event this is a human landscape perception. We should not anthropomorphise our visual perception of visual attractiveness into the perceived effects on animals as there is sufficient evidence to demonstrate that animals neither perceive nor are harmed by nor benefit from what we as humans might consider to be 'un-natural' or 'naturalistic'.

RESTORATION DETAIL

The comments as to marginal areas and slopes are details which will be affected by the actual extraction operations, the volumes of overburden and interbedded waste and the form of that waste. None of these factors can be concluded now. The landform at Higher Brockholes is a clear example of a restoration landform reflecting the actual conditions created by the extraction operations.

The scheme of restoration therefore sets out the generalities and design concepts but could never define the precise details of the restored landform, islands and margins at a particular location.

However, for lake margins representative cross sections are provided in Plan 1040/PL42 indicating the type of landforms and the mosaic of ecological niches that can and will be provided which answers the comments of the Ecologist on this point.

LONG TERM MANAGEMENT

The 10-year period is the period of aftercare, not the management period as suggested in the comments, which thereby substantially exceeds the normally accepted aftercare period and should be willingly accepted. The management period will be in accordance with BNG obligations.

As to long term management the current proposed basis of management (excluding for the moment such considerations that arise due to BNG) is for the site to be managed by the

Trustees as part of its management of the whole of its Samlesbury estate where it has access to a range of physical and financial resources.

I note that it is suggested that the site could be managed by a the LWT but with respect the LWT has continuing problems with funding its existing obligations at Brockholes and elsewhere and is thereby forced to accept activities on site at Brockholes which at the very least diminish and constrain the full biodiversity potential of the site and require a degree of public access and disturbance contrary to ideal conservation objectives.

ARCHAEOLOGY

As advised, we have undertaken various surveys to address the matters raised by the Historic Environment Service. The relevant reports have already been forwarded. These provide a body of evidence which shows that there are no identifiable archaeological features within the operational area or adjacent. There are historic features outside that area notably the remains of Lower Hall in the environs of Lower Hall Farm itself, etc, but the development will not harm those features or their setting.

The Letter identifies two main issues, (i) an earthwork postulated by a researcher to be a motte and bailey castle, and (ii) a "high potential" for Neolithic and Early Bronze Age material given 'finds' found at Lower Brockholes Quarry. I deal with these two matters below.

Postulated Motte and Bailey Castle

This was postulated by one researcher but others did not support that contention. It was evaluated by a preliminary investigated by LCC officers with myself prior to the application submission to determine its location in relation to the access road route (there was uncertainty as to the location and extent of the feature) and its potential significance.

That concluded that the feature was too disturbed to confirm the postulated castle but that in any event the disturbed land was located at least 50 metres beyond the access road works, such it was concluded that the construction and use of that road would not have any physical impacts on the feature or its setting.

The Letter suggests that realignment of the road may be required if the feature is of significance.

HAL instructed archaeological consultants to further investigate the feature. The report of that investigation by Oxford Archaeology is attached. That concludes that the disturbed ground is unlikely to be a motte and bailey but is more likely to be a marl pit or other mineral working and of no archaeological significance. The report suggests that if the access road were to impinge on the feature (which it will not), then further investigation should be undertaken at that time.

The feature is not of archaeological significance. The access road does not impinge on the feature and further investigation works are not required. Given the above the access road does not need to be realigned.

No further work is required in relation to this feature and the proposed development has no significant impact on the feature that needs to be mitigated or compensated.

Potential for 'Finds'

Further evaluation work has been undertaken and this has established that there are no significant likely areas of such interest. It is possible that individual items may be discovered during operations which can be managed as part of an agreed work programme after favourable determination of the application.

Conclusion

It is now accepted by LCC Archaeology that there is no evidence of any significant archaeological features on site and that any further archaeological investigation can be postponed until after determination and works commence. That requirement can be satisfied by a condition.

4 CONSULTEE RESPONSE NOT IN REG 25 LETTER

LANDSCAPE ADVISOR

Comments

The comments of the landscape advisor to LCC were received on 4 June 2021. These comments come to different conclusions as to the scale of both the impacts of landscape change and visual impacts compared to that in the LVIA supplied by the advisor to the applicant.

However, despite those differences in judgement of impacts the advisor concludes that in landscape and planning policy terms:

"the landscape and visual impacts of the proposed restored application site are deemed to be acceptable"

The advisor notes in support of that conclusion that the landscape effects during operation will have a *"moderate adverse"* effect. However, he concludes that the resultant restored site would have a *"moderate beneficial"* effect to the landscape including a noticeable improvement in landscape character and the provision of landscape features such as wetlands, woodlands, reed beds, etc.

In that respect he notes that there would be no net loss of key features of landscape character and that there would be an enhancement of views which together would be in keeping with landscape character.

He considers that this would enable 'openness' of the Green Belt to be maintained.

He further notes that he believes that the site would become *"a locally valued landmark"* through its diverse mix of habitats and 'fit' within landscape character, with *"added visual interest"* to those using the footpath network.

He notes concern as to the timescale of change suggesting that this may extend to some 40 years. Clearly there will be a period of change but we would suggest that given that such change is phased (such that only part of the site is worked at any one time and landscape

works are therefore not proposed to be left to the conclusion of extraction but will be put in place at day 1 and then in phases as work progresses) that the scale of that change is mitigated to an acceptable level. Given his overall conclusion as to impacts, that would also appear to be the final conclusion of the advisor.

In that context, the scheme shows that restoration of phases 3-4 will be complete by year 10 and such phases will by completion of extraction already have in excess of 10 years to mature, and would be 30 years old on a 40-year timetable. The application also provides that very significant landscape benefits (tree planting and the provision of small wetlands) will be put in place prior to commencement of extraction.

We believe that such concerns of the advisor should also reflect that the habitats created by immature landscapes are those which are becoming more significantly scarce and which offer opportunities for rare colonising species which are everywhere under threat (see detailed response in relation to ecology). Thus, the scheme not only provides a more diverse landscape and diverse biodiversity, but also many important and otherwise rare ecological niches which form important elements of landscape and biodiversity succession. The scheme thereby creates the reality and understanding that we live in a dynamic changing landscape not one preserved at a certain stage.

The timescale of extraction reflects the needs of the market and ensures that the supply is made in a sustainable manner and not wasted to meet local need. The phased extraction also thereby ameliorates and mitigates the landscape impacts to a smaller scale which is therefore less intrusive at any one moment in time.

The advisor makes suggestions for some changes which are addressed below.

Reversing of Phasing

He suggests in effect reversing the phasing so as to delay effects as seen from Brockholes. We take the view that landscape implications to Brockholes of either phasing direction option are similar but that the general attitude of the viewing public to any changes is to prefer actions and impacts to move away from them rather than towards them (impacts get less rather than increase). It is thus preferable to keep to the existing phasing.

However, and of more significance, we have devised the clockwise working from proposed phase 1 so that we can then ensure that tree planting etc on the screening bund to the north of the plant site will be at least 10 years old as extraction operations move eastwards towards Bezza House and Lower Hall Farm. This maximises the visual screening of operations to those properties (which screening will become more effective over subsequent years as workings advance eastwards in the late phases towards these properties) and ensures no visual impact.

That benefit would not arise if phasing is reversed. On balance we believe the direction of working as proposed is preferable.

Advance Planting of Eucalyptus

As a related point to his suggested reversal of phasing he considers that advance planting of fast-growing Eucalyptus species could be undertaken along the southern boundary of the site opposite Brockholes. He notes that this planting would have to be removed and replaced by native species as part of the final restoration.

We believe this suggestion is not desirable because it is preferable to keep to the proposed phasing and because it is preferable, in biodiversity and landscape terms to plant native species as soon as possible so as to maximise biodiversity gains and to ensure the creation of a native ecosystem and landscape at the earliest opportunity. With the proposed scheme such native planting would be undertaken shortly after operations commence and have a circa 20-year advantage over replacement native planting if the scheme suggested by the advisor is adopted.

We also believe that the wholesale planting of Eucalyptus would create an incongruous aspect and landscape feature.

Tree Survey

The advisor notes that a survey of impacts on trees should be produced prior to determination. Such a survey is now provided.

Summary

The conclusion of the landscape advisor is that the proposed scheme has considerable landscape benefits and is in compliance with policy. The tree survey has been provided. We believe the changes he suggests are not required or not desirable but if the MPA believes that they are essential then we are willing to discuss such matters further.

NATURAL ENGLAND

Introduction

I have dealt with a number of the comments of Natural England (NE) earlier in my specific response to comments of the LCC Ecologist or in the Introduction to this response and will only briefly respond on the principal points.

I note that the statutory purposes of NE include, inter alia, seeking to ensure that the natural environment is enhanced to the benefit of current and future generations, thereby contributing to sustainable development. The potential for enhancement has been an obligation for decades and NE has contributed towards good practice on restoring mineral workings to enhance biodiversity. More recently it has published guidance on the provision of Nature Networks to grasp opportunities to enhance, reinstate and provide connectivity between protected sites which includes accounting for the dynamism of the natural state to allow for complexity and diversity ('Nature Networks Evidence Handbook' NE Research Report ERR081, 2020), and taking forward the Lawton principles set out in 'Making Space for Nature'.

NE will have a responsibility to take forward the environmental targets set out in the Environment Act to create or restore in excess of 500,000 hectares of wildlife-rich habitat outside protected areas, to reduce pollution from agriculture and to increase tree cover.

Commenting on this, Tony Juniper, the Chair of Natural England, noted the need to *"invest in large-scale (Nature) recovery*" and that the ambitious targets will enable the Country *"to recover some of what has been lost"* and that NE will work with government *"and other partners to help to achieve these important new environmental targets"* that *"restores our depleted natural world, contributing to England's Nature Recovery Network"*.

The development at LHF will assist the general objective of providing new wildlife-rich habitat etc, an increase in tree cover and enhancing connectivity (as well as assisting flood management, pollution control, etc) enabling the development of a local Nature Recovery Network.

None of these positive outcomes at LHF, which NE are statutorily required to address, are referenced in the comments from NE. These positive outcomes considerably counterbalance any speculative harm to biodiversity in the NE comments. NE should properly consider these outcomes in line with its wider obligations.

Age of Surveys

Reference is made to the CIEEM guidance on the validity of ecological reports in relation to their age. I have dealt with the age point already in this response.

I note that the CIEEM view is merely very broad guidance and has no statutory basis. The CIEEM guidance itself does not conform to guidance in BS 42020 (which also has no statutory basis) in that the CIEEM view does not properly address or relate to the extent of significant change which will justify or not the need to update any biodiversity surveys.

As noted in relation to the comments of the Ecologist, following the clarification in 'Girling' the only relevant consideration as to the age of surveys is if the surveys do not adequately represent the conditions on the site. If there have effectively been no changes on site and if the relevant surveys were of high quality, detailed and undertaken by suitably experienced persons, then the surveys remain fit for purpose.

There have effectively been no changes on site at LHF (other than a few trees being affected by Ash Dieback and the incremental insignificant deterioration of the hedgerows), let alone any significant changes. The original surveys were of high quality and undertaken by suitably experienced persons. The conclusions are sound, accurate and relevant.

The existing surveys remain relevant and therefore there is no need or justification for further surveys as sought.

The SSSI

The works at LHF are temporary and only approach the Red Scar SSSI for a short period of extraction and restoration before retreating to a distance from the SSSI. The SSSI is in a favourable condition despite the presence of substantial levels of pollutants impacting on the SSSI from traffic on the M6 and from industrial activities on RSIE, both of which immediately adjoin the SSSI and which have been continuously depositing pollutants on the

SSSI for decades and will do so in the future. The SSSI is also subject to harm by public access.

No harm was ever been evidenced as arising from the operations at HBQ, which lay upwind of the SSSI. No harm has been demonstrated from the considerably more intense traffic levels (in comparison with that which would be generated at LHF), now visiting the Brockholes Centre, including traffic at night and associated with random light pollution and noise pollution both during the day and at night.

Air Quality

NE criticise the use in this application and the ES of the information and the decision of NE (and others with biodiversity interests and obligations) in relation to the ES and the decision of the Waste Planning Authority on the EfW incinerator (approved recently), which immediately adjoins the SSSI. That incinerator was noted as producing a significant pollutant load on to the SSSI of a suite of exotic chemicals including as fine particulates. The only relevant pollutant arising from LHF would be insignificant volumes of natural mineral dust.

In relation to that application NE noted the additional input of pollutants and their characteristics that would arise from the EfW on the SSSI. While initially objecting NE finally concluded that there was no evidence of harm from the existing heavy pollutant inputs and that the additional level of pollutants from the EfW would not create a level of harm sufficient for it to seek refusal.

As noted in this ES, Regulation 18(4)(c) of the 2017 Regulations requires that an ES "must (my underlining) be prepared taking into account the results of any relevant environmental assessment". The ES for LHF was therefore required to address the EfW ES. The conclusions and decision of NE (and others) in that case are both necessary to consider here and bear on the determination. That is because the purposes of the amendments to the Regulation is, inter alia, (i) to 'streamline' the ES process and reduce the need to repeat survey information and conclusions and (ii) to focus on 'significant' new issues.

The criticism of NE to the reference to that ES or its conclusions is legislatively wrong and not justified. In its comments on LHF NE itself does not comply with the spirit and purpose

of the amendments to the Regulations in that respect because it has already adopted the stance that 'no harm' arises from more potentially harmful significant pollutants from adjacent permanent and more intense activities.

Further, and as noted in the application and previously in this response, research or guidance on the likelihood of harm from air quality pollutants, including that as issued by NE and others, demonstrably shows there is no scientific basis for concluding that any significant harm will be caused to the SSSI, or any other biodiversity interest, by the scale of the development at LHF.

There is no need or justification for revising the air quality assessment. NE should properly consider its response to the EfW incinerator in its conclusions on LHF in relation to Regulation 18(4)(c) and the extent to which 'significant' additional harm does not arise from LHF affecting the SSSI.

To that extent the ES complies with Schedule 4 of the Regulations in that it considers the effects (be they direct, indirect, etc) on the SSSI in so far as it only needs to consider the 'significant' effects.

Noise and Vibration

As with air quality the ES only needs to consider 'significant' effects of noise and vibration on either designated sites or other biodiversity interests. And as also with air quality, research or guidance on the likelihood of harm from noise and vibration, including that as issued by NE and others, shows there is no scientific basis for concluding that any significant harm will be caused by noise or vibration to the SSSI, any other designated sites or those other areas of biodiversity interest, given the negligible scale of the effects at LHF.

Climate Change

The application deals proportionately with relevant Climate Change issues.

The development at LHF will provide a local supply of mineral to meet demand for construction in the area. This may be a very local demand given the proposed scale of built development in immediate locality as shown in the CLCS and the CLLPPO. In this respect the development at LHF assists, in comparison with other actions or alternatives, in the

reduction of haulage distances and minimises GHG production as well as reducing the need for materials for use in vehicles and transport systems. It thereby assists directly the reduction in GHG and other climate forcing effects.

The response of NE fails again to consider the positive outcomes provided by the natural flood management opportunity and woodland which will help to mitigate Climate Change impacts.

NE suggests that the provision of nature-based solutions to assist climate change objectives should be discussed. Such solutions are fundamental drivers to the management and restoration of the land in the application and are comprehensively and clearly described in the application.

NE references the IEMA document on climate change resilience and adaptation. This is a very broad 'Practitioner Note' which has no statutory basis. However, the note does reflect on the limits of the application of resilience and adaptation concepts and actions in ES reports, where it states that the treatment of the subject in an ES should be "proportionate in their approach and not include superfluous assessment that does not address likely material (significant?) issues" and should "define significance of effects pragmatically".

The existing references in the application are proportionate to the temporary nature of the scheme and deal pragmatically with the insignificant and potentially significant impacts of the development on climate change and its abilities to off-set or mitigate those local or wider impacts.

SOILS

The application affects an area of BMV agricultural land in the extraction and plant site and other agricultural land on the route of the access road. Contrary to the comments of NE the soils assessment considers <u>all</u> of area of land affected by the physical works, including non-agricultural land, but excludes other land within the application area not otherwise affected by the works.

Soils stripped from the initial operations in the extraction/plant site will be used either to construct permanent planted bunds or the main 8 metre bund around the plant site which

will be in-place for in excess of 20 years. Subsequently, the phased works in the extraction area will use the soils extracted from each phase in the restoration of previous phases so as to otherwise limit long-term storage of soils, which should be avoided.

The main 8 metre bund will be constructed with a core of subsoil and overburden capped by topsoil on which shrubs etc will be planted. On completion of operations the bund will be removed and the soils used to restore the former plant site.

The soils will not be used to recreate agricultural land (which would not be possible without substantial imports of fill) but used to create biodiversity assets. This potential loss of soil from agricultural use is an unfortunate but unavoidable outcome of the pressing need to supply minerals, but is also counterbalanced by the habitat provided and the flood mitigation.

NE references the NPPF and guidance on soils/agricultural land but that relates to the policies enhancing in general holistically all local environmental assets, which is achieved here by the substantial biodiversity and other gains (landscape, flood management, air quality, etc) in total. Further in the absence of an up-to-date SP (and that the SP made no allocations), there is no strategic advice as to meeting need for minerals in accordance with any broad or detailed assessment of the hierarchy of impacts as sought by NE.

The extraction and handling of the soils will be undertaken in accordance with normal accepted good practice and can be the subject of a condition to that end.

The development will lead to the loss of BMV land used for agricultural purposes but the soils will be retained on site and used for other purposes.

Further detailed evaluation of the soils on site as suggested by NE is neither required nor justified.

SPECIES LICENSING

I have already dealt with this matter in my response to the LCC Ecologist.

MARINE CONSERVATION ZONE ASSESSMENT

NE suggest that a Marine Conservation Zone (MCZ) Assessment is required due to the site lying adjacent to the recently defined River Ribble MCZ. This MCZ has been designated for one feature which is the presence of Smelt. Smelt are naturally found in the marine environment and non-marine freshwaters to which they migrate and spawn like other fish species.

The upstream freshwater limit to which Smelt migrate in the Ribble is not known. The potential physical barrier to such migration caused by the weir at Samlesbury has been removed with its demolition. The next potential physical barriers are many kilometres upstream on both the Ribble and its tributaries.

S118(2) of the Marine and Coastal Access Act 2009 (MCAA) defines that the landward boundary of an MCZ designation should normally be the limit of mean high-water spring (MHWS) tides. The Normal Tidal Limit (NTL) is the limit to which a river is affected by the ebb and flow of all tides including the MHWS tides. The NTL is shown on relevant OS plans.

Provision is made in S118(4) of the MCAA for that landward boundary to extend over an area of the seashore beyond MHWS and the NTL where the ecological interest is contiguous and where in accordance with S118 (5)(c) there is the situation where a sensible boundary cannot be drawn or operated precisely at MHWS/NTL. This would include situations such as extensive saltmarsh/mudflat or mobile shorelines. The objective here is to ensure practical boundaries that would not create impossible or impractical impacts on an agency exercising functions under the Act, which would clearly otherwise arise at defined saltmarsh NTL limits.

The defined NTL on the Ribble lies further downstream at Fishwick Bottoms which is circa 5.5 kilometres downstream from the nearest limit of the application. Smelt may pass this boundary but the river is narrowly and precisely defined beyond that point such that the requirements and provisions of S118(4) and S118(5)(c) do not apply.

The Ribble adjacent to LHF is not tidal.

This is confirmed hydrologically by the downstream hydrometric station (station 71001) located on the left-hand bank of the Ribble at the rear of the school in Samlesbury and lying approximately 900 metres downstream from the nearest area of development proposed at LHF adjacent to the Ribble.

This hydrometric station is described in the National River Flow Archive maintained by the UK Centre for Ecology and Hydrology as "the most downstream on the Ribble, just upstream of the tidal limit" (my underlining).

The station is one of only 146 stations which form part of the UK Benchmark Network. Such stations are selected because they are most suited for assessing long-term hydrological variability and change in rivers as they provide 'near-natural' non-tidal river conditions. An additional hydrometric station was located at the weir adjacent to application area but that was removed in 2010 and the weir itself was removed completely in 2019.

The Ribble MCZ upstream boundary was originally defined at the Fishwick Bottoms NTL. Following suggestions from third parties who considered that the Fishwick Bottoms NTL did not represent the 'true' NTL the designated boundary was erroneously extended to Samlesbury Weir.

As noted above the weir has been removed and the current MCZ boundary therefore bears no relationship to actual tidal limits or any natural physical feature or any human constructed barrier and is now wholly arbitrary and undefined by any physical feature or mapped feature. Further, in extending to the former Samlesbury Weir the MCZ clearly extends beyond the Samlesbury hydrometric station and beyond the defined NTL and/or the known tidal limit.

While the Fishwick Bottoms NTL may not represent the 'true' tidal limit (which is a debatable and unproven point), the tidal limit clearly lies downstream of the Samlesbury hydrometric station and the application site does not lie next to the tidal Ribble.

While provisions in S118 (5)(c) allow for extension of the MCZ beyond MHWS and the NTL the relevant physical location here does not relate to the exception as provided and indeed now replaces a known physical location (the NTL) with a location that is beyond the tidal limit and of no practical certainty being just a point of no physical or ecological significance

on the river above the demonstrable tidal limit. There is no S118(5)(c) justification for maintaining the upstream boundary of the MCZ on the Ribble at its current location. An MCZ Assessment is neither justified or required.

The boundary of the MCZ needs to be redefined to a practical location downstream at the NTL.

Notwithstanding the above the development at LHF will not impact on the MCZ considerations noted by NE in its consultation letter in that as an entirely land based activity with no direct or indirect impacts in or on the river:

(i) It does not involve any activities which will abrade or disturb the substrate of the 'seabed' – which is many kilometres downstream – nor of the river bed

(ii) As it does not involve any physical works in the river it will not provide a physical barrier to the movement of any species

(iii) It will not discharge any material into the river and therefore it will not lead to any changes in suspended solids be they significant or not

(iv) And as no material will be discharged into the river it will not lead to an increase in smothering or changes in siltation rates be they 'heavy' or 'light' or of any significance at all

(v) There are no development activities in the river and therefore no changes to underwater noise or vibration (although such limited research undertaken in relation to noise and Smelt suggests that there is only weak evidence of harm by noise to the species)

(vi) If there are any visual considerations, they are clearly not in the river but on land and of no significance to the MCZ relevant species or to the determination of this application.

Lastly, I understand from the MMO that it is for an 'appropriate authority' (in this case LCC as the MPA) to complete an assessment.

LANCASHIRE WILDLIFE TRUST

It is somewhat disappointing to see the objection from LWT. The content of its response displays an underlying support for the range of environmental gains (biodiversity and other) that would be provided, but only limited acknowledgement of the substantial contribution that the site will play in meeting biodiversity objectives of LWT and others and extending biodiversity gains or to biodiversity connectivity or that such gains can only be provided through the extraction operations.

In essence the objection of LWT is contrarian. It objects in relation to details or matters which are not material to the consideration of the application, yet that objection is contrary to the significant biodiversity assets that would arise and would support and/or be in compliance with policy and also the biodiversity objectives which LWT strenuously seeks generally to be made available across Lancashire.

Clearly the supporting habitat created at LHF from day one and the restored site will make a significant and valuable contribution to creating new biodiversity habitats of value and linking what are currently isolated habitats. It will enhance existing sites directly and synergistically and thereby help to create the core of a Nature Recovery Network along the Ribble in line with Government objectives. The site will therefore help to meet those objectives of Government of providing (i) a further 500,000 hectares of wildlife rich habitat, (ii) creating more diverse and better-connected habitats, (iii) by increasing woodland cover and (iv) by other benefits such as nature flood management, carbon capture, pollination services and air pollution mitigation.

These are not new objectives but they now have greater force. It is up to the relevant authorities and interested parties (which will include businesses such as HAL as well as LWT) to see that these concepts are now put into action rather than just approved as an idea. Such concepts have been widely adopted in Europe and North America creating a win for biodiversity as well as providing other gains including resources, flood control, air quality improvements, etc. It is a pity that this strategic potential has not been recognised by LWT whose objections are based on vague detail considerations.

LWT has described Brockholes as the “flagship” of its reserves. That position only pertains due to the extraction operations undertaken by the mineral operator, the associated landscaping and habitats put in place by that operator (which provides the ‘backbone’ of the current biodiversity subsequently expanded by LWT), the protection and encouragement of wildlife by the operator during those operations (HBQ was a notable bird site during operations), and the core restoration works. LWT has added and increased the value but without the previous extraction the ‘flagship’ would not exist and virtually none of the most significant biodiversity and environmental assets now on site would be present.

The objection from the LWT seems to relate mainly to details some of which are not capable of conclusion or which LWT itself suggests could in any event be resolved by condition.

Concern as to what in effect are minor management details (which are themselves debatable and not significant) may be a matter of choice and are not fundamental to the purpose of the application or to the biodiversity potential and are not material planning considerations. They are also sometimes inaccurate, confused and contradictory

In relation to the consultation reply I would note the following.

The River Ribble

The Ribble is not tidal at this location as stated on page 1. This error has produced a confused response.

There is for example reference to the “tidal River Ribble” and the concerns of LWT as to the adequacy of the 25m stand-off distance in relation to the protection of Sand Martin nest holes, although, LWT actually accept then that this distance should “protect the colony” and therefore its concerns are removed.

A tidal regime would naturally restrict existing nest hole opportunities and make existing nesting holes vulnerable to harm. As the river is not tidal here the stand-off zone of 25m will therefore ensure protection of existing opportunities while the excavation will provide new future opportunities for Sand Martin nesting holes.

Sand Martin natural nest holes are normally excavated in soft sandy sediments along low river cliffs. Mineral working into sand and gravel deposits often replicates that natural low

cliff face and is acknowledged as often providing extensive new nest hole opportunities in locations away from disturbance. The proposed working and restoration scheme at LHF will provide such extensive new nesting opportunities.

The works will specifically not approach the existing bank and those existing nesting opportunities will remain. Together the existing and new opportunities will provide for a substantial increase in suitable habitat for Sand Martin nesting opportunities in excess of a 10% increase in habitat. The comments of LWT do not recognise the gain potential nor note that as being desirable and positive for biodiversity.

LWT reference NPPF para 170(d) (2019 version) regarding net gain for biodiversity and the establishment of coherent ecological networks, where the LWT note this "is particularly apposite" in the context of "the current and potential future value of the lower tidal river floodplain".

HAL agree that the biodiversity opportunity of the restored LHF should be seen in a wider and integrated network for biodiversity, working towards a coherent ecological network in which LHF would be a significant core asset. However, despite general support for such a network, such a coherent network strategy has yet to be prepared for the Ribble by the relevant agencies, authorities and NGOs.

However, this is not "tidal" river floodplain and the scheme proposed represents its true biodiversity potential as wetland in the floodplain together with the concurrent important objective of significantly increasing woodland in that floodplain for biodiversity, Climate Change mitigation and flood management. This will make a substantial contribution to biodiversity connectivity and the potential to provide a core ecological asset helping to provide a continuous ecological network in the area.

Prematurity

The LWT response states that the application is premature, *"in that no pre-application discussions have taken place with us prior to submission; other than two years ago, when a putative vehicular access route to the application site through our Brockholes nature reserve and across a new bridge over the River Ribble was suggested"*. That is wholly incorrect.

HAL is also criticised for missing an opportunity to work with LWT as neighbours. That statement belies the active engagement by HAL and at the instigation of HAL with LWT.

Discussions were first initiated by HAL with LWT in February 2009 with the Project Manager for Brockholes who, it is understood, took the substance of those discussions to the LWT trustees and managers. Those discussions focussed on (i) future relationships as a neighbour in relation to extraction operations and Brockholes (noise, dust, lighting, landscaping and screening, the scope for providing interpretative material on geology and mineral extraction, etc), (ii) the potential to incorporate comments of and inputs by the Trust into the phasing and restoration objectives etc of the site, and (iii) access.

In those discussions LWT fully supported the concept of LHF becoming a 'quiet' area to provide suitable undisturbed habitat for birds and other species to rest, nest and feed away from the inherent and actual risk of disturbance from the public at Brockholes. Those first discussions also noted (i) concerns by LWT as to the uncontrollable conflict at Brockholes between access by large numbers of the public (using Public Rights of Way, with or without dogs) and species conservation at Brockholes, (ii) confirmed general support for a new reserve area at LHF to not to be open to public access, (iii) noted the various positive and negative aspects to LWT of a potential access across Brockholes, and (iv) the opportunities for views of or screening of the proposed new workings so as to demonstrate how Brockholes came to be, the land use choices that have to be made and the potential for restoring significant environmental outcomes.

HAL took full account of those comments in preparing the subsequent draft restoration scheme. Subsequently the restoration scheme and associated matters were discussed with officers of the LWT a number of times both at meetings and in other conversations. Meetings were held in July 2012, April 2014 and March 2017. They were attended by management and scientific staff of the LWT and were primarily focussed on (i) the objectives of the restoration and habitat creation considerations; and (ii) access. Other telephone conversations also took place. The comments of LWT were incorporated in that evolving work where applicable.

In all these discussions, the LWT supported the general thrust of the restoration habitat objectives and noted the substantial biodiversity potential of a quiet reserve with no public

access at LHF which would support and provide a refuge for species subject to disturbance at Brockholes. LWT officers sought details of the precise form of the restoration but generally accepted that such details could not be provided now due to the variability and unknown nature of the extraction arisings.

It had in the interim been concluded by both by parties that while an access across Brockholes would probably not conflict with nature conservation objectives due to disturbance by movements of vehicles or harm by noise etc, and could produce valuable annual income to the Trust, that there would probably be conflict between the large number of casual visitors and the movement of goods vehicles. That access option was therefore dropped. In any event HAL had concluded that security concerns with the bridge, given its position adjoining public access areas would be difficult to resolve.

HAL had therefore prepared the alternative access to the A59. LWT was provided with details of that draft access to the A59 in the above discussions from 2014 onwards and its comments were incorporated in that evolving work where applicable.

Following a public meeting in 2017 and a request from local residents to revisit the concept of an access from Brockholes the matter was again noted with LWT in 2018, but again jointly rejected.

Contrary to the primary objection on 'Prematurity', there has been thorough, open and frank engagement with the LWT over many years. These have mostly been related to joint interests such as access, habitat creation and the provision of a supportive 'quiet' reserve. The LWT supported the provision of the new habitats and the 'quiet' reserve. HAL has taken full account of those comments where relevant.

Engagement was initiated by HAL and HAL advised LWT that it was open to further engagement and the views of LWT. No further comments outside those discussions or subsequently were received by HAL from LWT.

Current Ecology

LWT note that the 25m stand-off should protect Sand Martin colony and is welcomed.

The LWT state that an opportunity should be taken to "create additional Sand Martin habitat". One cannot "create additional Sand Martin habitat"; but one can create a habitat where Sand Martin may choose to construct their nest holes. In other words, one cannot normally force that colonisation by a particular species; but one can create habitats which a particular species or a range of species will naturally colonise, if they choose to.

The restoration scheme does exactly the latter; it creates the suitable habitat and leaves it to nature to occupy the various ecological niches thus provided. That is not only 'working with nature' but is clearly the only way to ensure a stable and successful ecological diversity and succession. This realistic working with the grain of nature as opposed to trying to force a particular detailed scheme or species introduction concept has been the underlying objective of HAL in the restoration scheme.

EPS Licences

The ES has undertaken the necessary surveys to identify species. Relevant EPS licences will be sought as required and as HAL are obligated to seek.

Detailed Planting

As noted, and we believe understood following pre-application discussions, LWT accepted that the intimate detail of restoration cannot be concluded. The scheme precisely allows for natural regeneration and successional habitat. Natural regeneration is just that – a 'natural' process whereby species naturally invade the random ecological niches created by the seemingly chaotic nature of the restored landform.

LWT would seem to prefer grassland to woodland in restoration. The restoration scheme includes mainly woodland (but with glades and ecotone) because of the positive ability to then link otherwise isolated woods and the greater value of woodland in flood control. We understand the LCC ecologist supports woodland. This is an example of restoration choice and is not a material consideration.

HAL sees more value to a wider audience in woodland and we suggest that no change should be made. The matter of tree/shrub species to be planted can be resolved via a condition.

Ecological Concerns

No Quantitative Certainty of Species

In discussions noted above the LWT accepted that while habitats can be provided, that details in relation to outcomes in relation to species which may subsequently colonise those habitats cannot ever be quantified or assured. Species cannot somehow be forced to occupy successfully the various habitats and ecological niches provided. Even where species may be directly introduced there is never any certainty that they will either remain in place or thrive.

In that context LWT misquote Policy CS 5 which seeks suitable restoration and aftercare. That relates to the restoration landform and habitats. It sets out no obligations in relation to species.

The LWT then accepts ("In part, we accept that the uncertainties") the uncertainties which confound its objections.

I have already dealt with the irrelevance in biodiversity terms of the comment of the (underlined) objection to a "blocky" outcome. In any event the application does not replicate the original planting form at Brockholes and provides ecotone planting, neither originally provided at Brockholes, nor subsequently provided by LWT, and still absent at Brockholes despite the expressed concerns of LWT on this point.

LWT repeatedly confuse the aftercare period proposed of 10 years (not the 5 years LWT states), with long-term maintenance. This is now covered by BNG obligations.

Strategic Approach

It is for the relevant regulatory agencies including LCC, EA and district councils to produce a strategic approach Plan (a Nature Recovery Network) to enhancing the network of habitats etc. Policies may support that objective but no such Plan existed during the development of the application nor does one exist now. The absence of such a Plan and that subsequent inability to maximise outcomes on biodiversity and other gains was a matter raised in discussions by HAL with LWT and others.

The works proposed at LHF could assist the objectives of such a Plan but it is not, as inferred by LWT, an obligation on HAL to produce the Plan. The absence of that Plan is not relevant to the determination of the application at LHF although the provision of the habitat gains is a material consideration in relation to the objectives of such a Plan and should therefore support the application at LHF.

Flood Management

The concept developed at LHF is fully aligned with the requirements of a Natural Flood Management flood containment basin both as to its flood capacity and other benefits.

It is incorrect to correlate the position at Brockholes previously and now under LWT management, with that at LHF. At Brockholes the original excavation works provided extensive bunding for screening purposes which also acted partly to prevent flood inundation. Brockholes has generally very limited flood storage capacity now because the bunded landform helps to exclude flood ingress. Capacity for enhanced flood alleviation could be enabled at Brockholes but that could put at risk various fixed assets on site. It is understood that LWT has no intent, and would resist works, to enhance the flood capacity at Brockholes.

It is however true that flooding is a continuing problem for LWT at Brockholes due to the access road under the M6 being subject to very localised but impassable flooding.

Impact on Brockholes

The potential impact on visitors to Brockholes of the operations at LHF was a matter raised in discussions between HAL and LWT. It was agreed that it would be impossible to screen the operations at LHF from Brockholes but it was also agreed that the visual impact was effectively restricted to that limited area to the north-west of the bund on which the 'stone circle' is now located. The bund at Brockholes in this location appears to be some 5-8 metres above local ground level and any planting on the Brockholes side of the river would probably be too immature to offer any screening value while working is at its nearest to Brockholes.

The whole matter of impacts on Brockholes was considered in those discussions to be turned into a land use decision reality check. Brockholes is not a natural feature but a former mineral working which supplied essential materials over a short time but which is now a valuable new habitat and greenspace. It was agreed that the asset of Brockholes would not exist but for the mineral extraction. This history and its downstream gains are accepted by LWT but this often escapes public understanding about resource choices.

It was suggested by HAL that this process should be properly explained on site at Brockholes and that the ability to see and understand the processes of mineral extraction at LHF as viewed from Brockholes would be a valuable public education feature as to the use of land and resources by society and the difficult land use choices that must be made. HAL offered to assist with that approach. This concept was not taken forward by LWT but is now included in an additional clause in the UU.

Dewatering is not proposed. Dust issues are negligible as noted elsewhere in this response. Restoration is phased, but, as at Brockholes, it is to be expected that nature will rapidly invade and colonise both the active and the worked out restored areas.

Subsequent to consent being granted HAL will engage with LWT to achieve their mutual interests.

SAMLESBURY & CUERDALE PARISH COUNCIL

The comments of the Samlesbury & Cuerdale Parish Council (SCPC) were received subsequently.

Ancient Woodland

As set out in the application no Ancient Woodland as defined in the NPPF is affected.

Ecology

The impacts on the species noted are demonstrated in the application to be not significant. The existing "wildlife corridor" is significantly fragmented. Proposals in the application would link these fragmented sections and further link them to external areas of nature conservation value thereby increasing synergistically the overall conservation and sustainability value of the area.

Historic Elements

No evidence has been produced to justify the claims as to historic importance be they made by the SCPC or by others mentioned in the consultation response of the SCPC

Potters Lane

Safe Cycleway

The conflict with cyclists at the crossing point on Potters Lane is shown by the attached survey above to be negligible and insignificant.

The LCC website on cycle routes does not show this route. It shows a proposed route to the SEZ and BAE site adjacent to the A59.

Access to the A59

The PC comments that traffic accessing the A59 via the new junction will have a major impact on the A59 and could "potentially cause more accidents". It references a "statement from a local HGV operator" to support this contention.

There is no other information supplied to support that contention.

The “statement” is a note prepared by Harry Wilson of Wilson Contracting. Wilson Contracting are based on Potters Lane. The note relates to one turning movement undertaken by Wilson Contracting exiting eastwards from Potters Lane onto the A59.

Wilson Contracting run a major agricultural and associated contracting business out of their extensive premises on Potters Lane. The site extends to some 3.0 hectares of open storage with some 4,800 square metres of workshop buildings and associated staff parking. The junction of Potters Lane with the A59 is the only vehicular access/egress to the business from the public highway.

The company website notes that they cover the whole of the UK and Ireland (and beyond) with the hiring and contracting out of agricultural equipment and also forestry harvesting equipment. According to the website, this includes operating the largest fleet of self-propelled foragers in Europe. Such hired out or contracted equipment will leave the site on Potters Lane on the back of an articulated or other low-loader HGV, except for work in the immediate local vicinity. Such loads may exceed the width of the flatbed of the low-loader and may be ‘wide loads’. This necessitates frequent movements of HGVs from and to the premises.

The planning status of the buildings and open storage being used for this significant contracting business is unclear. Apparently, the Highway Authority has not commented on any previous planning applications to intensify the activities nor sought any restrictions on use, or vehicle numbers entering or leaving by size or time. It must be presumed that the Highways Authority is therefore satisfied with the scale and increase in movements over the years on and off the A59.

Potters Lane rises sharply to the junction with the A59 (from circa 15m to circa 20m) with the actual junction on the severest part of the rise where it appears to exceed 1 in 5. This steep approach affects the drivers’ difficulty in concentration when holding the vehicle on this rise and then moving off. It significantly affects the perceived ‘window of opportunity’ to exit safely from Potters Lane.

The sight lines when exiting from Potters Lane to the east, where there is a bus stop on the A59 immediately after the junction, are poor. This is due to a wall, other features and

vegetation associated with the residential property known as 'Ribble Bank'. In practice the sight lines could not be improved without demolition of these features.

Due to narrowness of Potters Lane an incoming or outgoing HGV and trailer may typically extend into both lanes of Potters Lane. Due to that narrowness and the tight radius of the corner for both outbound and inbound traffic the swept path of articulated or long vehicles leaving or joining Potters Lane would have to extend over both lanes of the eastbound carriageway of the A59. This will restrict the drivers' perceived 'window of opportunity' to exit safely from Potters Lane with an HGV.

In that context, that 'wait' time (even if of 4.28 minutes) is an example of the 'wait' time for a safe exit from the difficult access of Potters Lane onto the A59. It has no bearing on the wait time to leave the new access.

The vehicle involved was a Scania 3 axle tractor and a 3 axle semi-trailer with a glw limit of 44 tonnes.

Many of the details relating to the vehicle movements seem to be confused.

The acceleration on leaving Potters Lane (from a standing start on Potters Lane) of 1.48 seconds to 40mph is faster acceleration than any typical car. The time to the 'Swallow Roundabout' of 2.09 seconds.

The 'load' is described in kilogrammes (37.82 kgs, but presumably that is the gross laden weight of the HGV, semi-trailer and load in <u>tonnes</u> – it can't be the total weight in kgs).

The waiting time to exit is stated to be 4.28 minutes. That is excessive and not a realistic average figure. Typical average 'wait' times for normal (not oversize vehicles) leaving Potters Lane timed by the applicants are all less than 30 seconds and mostly less than 15 seconds. However, the vehicle/load in the example is a long articulated vehicle (which may have been a wide load on a long flatbed), necessitating a very cautious exit from Potters Lane due to the swept path of the movement intruding into both lanes on Potters Lane and both lanes on the A59.

The new access road to the quarry will be of sufficient width to allow two HGVs to pass on the access road leading to and at the junction. Satisfactory sight lines are provided at the

proposed new access in accordance with the DMRB and the design ensures that the swept path of any vehicle arriving or leaving does not extend outside the inside lane.

The new access road approaches the new junction with the A59 on the level or on a slightly falling gradient in accordance with the DMRB and does not suffer the problems noted above at Potters Lane.

Mr Wilson provides information only on a single movement event of a single HGV exiting Potters Lane. The weight etc details in that note are confused and conflicting. It is not clear what size of vehicle or trailer is involved. The width of the load is not described.

In relation to the new access proposed by the application Mr Wilson makes no comment at all. He does not state that in his experience that such traffic from the new access would be hazardous, or a potential cause of accidents.

The note supplied by Mr Wilson does not therefore support the PC contention in relation to the new access.

The note merely describes the everyday difficulties Mr Wilson experiences with exiting from Potters Lane.

However, despite all the access difficulties with the existing junction of Potters Lane to the A59, Mr Wilson does not identify that the Potters Lane junction is unacceptable. While the HGV vehicles he operates may have to wait to turn out onto the A59, such a wait period clearly must be acceptable to Mr Wilson otherwise he would not continue to use and expand his operations off of Potters Lane.

There is no record of the Parish Council, the Local Planning Authority or the Highway Authority raising any concerns with regard to HGVs from Wilson Contracting using Potters Lane and the junction with the A59.

The comments of the PC and others on supposed difficulties with joining the A59 using the new access are drawn wholly on the irrelevant current difficulties with using Potters Lane. Those difficulties at Potters Lane are considered acceptable by the Contractor (and others) but will not be experienced at the new access due to compliant engineering design and low usage (3 per hour) compared to that using Potters Lane (up to 30 per hour).

Flood Issues

Contrary to statements by SCPC no flood defence works are proposed but the development will provide a natural flood management facility in the event of a major flood which will provide a significant element in flood control downstream. There is no conceivable upstream flood event outside the site.

Pipelines

Contrary to the statements of the SCPC, and as clearly shown on the application plans, the gas line neither runs through the extraction area nor is it crossed by the proposed access road. The water mains lie further outside the site and are not crossed by the access road. There is no issue here.

Mineral Quality

The SCPC has consistently stated since 2014 that the mineral at LHF is poor and that it has evidence to prove that. The mineral quality has been demonstrated to be of high quality as shown in the application and subsequent independent report attached.

The SCPC has not produced the claimed evidence to support its comments. Such comments of SCPC are therefore irrelevant.

Claimed Out of Date Surveys

The ecological report accurately describes the relevant conditions which have not changed to any significant degree. The transport assessment is pre Covid and represents a worst-case scenario.

BALDERSTONE PARISH COUNCIL

The comments of the Balderstone Parish Council (BPC) were received on 1 June 2021. BPC is an adjacent parish council. BPC makes various comments or points of objection.

Insufficient Knowledge of the Mineral

BPC suggest that there is insufficient information to justify that the resource is of high quality. This is dealt with on the specific matter below which demonstrates a high-quality resource. BPC gives no evidence to support its contention which can therefore be discounted.

Ecological Surveys and Impacts

BPC suggest that surveys do not consider species on site and are out of date. The surveys undertaken meet the relevant requirements and are up to date in relation to the site conditions. The scheme avoids more sensitive locations in the location and provides substantial biodiversity gains.

Access Road and Safety

The access road will be a private road and it has been designed to full engineering standards part with a 'blacktop' surface and part with a concrete surface. The length of private road will ensure that there is no significant deposit of material on either Potters Lane at the crossing or on the A59 at the junction. Any significant spillage will be dealt with by suitable cleaning including the use of road sweepers. The road will be kept clean. It will have a 15mph speed limit. Access will be restricted to contracted vehicles or staff.

BPC suggest that the access road is not safe due to ground conditions. This seems to indicate that BPC think that there are some underlying ground instabilities.

The route of the access road does not pass over any known areas of major geological or geomorphological instability. The route is not subject to karst processes, shrinking clay or running sand. There are no active or fossil landslides and the topography, geology or geomorphology do not create potential landslide conditions. The site is not undermined and there are no shafts or drainage adits in the site or vicinity. The former small clay and

sand pits on the route are shallow stable features. The headward erosion of the minor stream will be managed by a stabilising gabion structure. There are no ground stabilities to consider further.

Environment Agency

The EA has agreed in principle to the development subject to clarification of various points. The application will not make any significant impact on the aquifer.

Topography & Infrastructure Services on the A59 and Access Road

The 'topography' has not changed. There has been no change to the layout or any other aspect of the A59 since at least 2009 over its length from Junction 31 to the Swallow Roundabout and beyond.

The highway information supplied with the application therefore remains relevant. The additional traffic generated by the application is negligible and insignificant. The proposed junction and the approach etc provisions exceed required standards. The works do not impinge on the routes or the stand-off zones of any pipelines.

Public Rights of Way

There has been no objection or comments from the Rights of Way section of LCC. There are no substantive conflict issues.

Archaeology

The speculative suggestion of a motte and bailey has been shown to be false. The location is more probably a former mineral working.

Supply

BPC conclude that the application is unnecessary. It offers no information on demand and supply of sand and gravel nor does it address the desperate shortfall position in Lancashire.

Summary

Contrary to the comments of BPC the scheme is proven to provide high quality mineral, is up to date, necessary, produces no highway conflicts and avoids any significant infrastructure or biodiversity or other asset.

PIPELINES

National Grid made a holding objection. Contrary to the objection none of the development will cross the relevant gas pipeline and that is clearly shown on the plans.

Cadent advised that they and National Grid have no objection because the works will not affect any of its assets.

COMMENTS OF THE PUBLIC

Copies of the redacted comments of members of the public have been supplied. As noted in the introduction to this response as names and addresses have been redacted it is not possible to identify the spatial relationship of the comments to the proposed development at LHF and, in virtually all cases, neither is it therefore possible to respond and provide additional mitigation, if necessary, to resolve any legitimate concerns raised.

However, one objection comes from the Ribble Fisheries Consultative Association and one objection clearly comes from a resident located at one of the two properties at the junction of Potters Lane and Dean Lane. I deal with points raised in those objections first before responding to the issues raised in the other comments.

The Ribble Fisheries Consultative Association

The Association objects first on grounds of prematurity. It is incorrect to say that no pre-application discussions have been held on fisheries issues. In a wider sense fisheries were discussed with the EA, but more significantly, detailed discussions were held with the secretary of the fishing club (the Ribchester and District Angling Club) that has rights on the relevant bank of the Ribble. Those discussions covered, inter alia, issues relating to access, flooding, fish capture following a flood event, pollution, after-use of the restored site, etc.

Those discussions assured the Club that their car park will not be affected by the development. The Club supported the provision of an access footpath to the bankside near Bezza Brook. The Club noted that it had difficulty in accessing the bank upstream near Lower Hall Farm itself (other than walking all the way round from Bezza Brook) and the draft operational scheme was modified to provide a new access footpath direct from the car park north to that location.

The issues of flooding and the need to capture fish that might be swept into the pond was noted to be an unknown and unquantifiable risk that could be dealt with an agreement and was not a material consideration bearing on the decision. Following those discussions, the Club declared itself content with the scheme. The Club itself has not raised objection to the development.

Subsequent to being notified of the objection of the Association I contacted the Honorary Secretary of the Association and appraised him of the matters discussed and agreed with the Club. He was not aware of those discussions and of the outcomes. The concerns raised by the Association have been resolved.

Objection from Resident at the Junction of Potters Lane and Dean Lane

This objection raises, inter alia, matters raised by other members of the public which I deal with below, but also raises matters which can be identified as specifically relating to their location which I deal with now.

Noise

The whole of the area of LHF and the specific location is dominated by continuous traffic noise from the M6/A59. As shown in the England Noise Map (Environmental Noise (England) Regulations 2006), traffic noise extends over a very significant area. That interactive map shows that the relevant property benefits from mitigation of this noise by the buildings located immediately the other side of Potters Lane in the Nursery and from the wood which lies to the west of that.

Nevertheless, the Noise Map indicates a weekday average day-time level of circa 50-55 dBLAeq (07.00 to 23.00) and an average night-time level of circa 45-50 dBnight (23.00 to 07.00) at those properties. The immediate unscreened surrounding area is shown on the Noise Map to be at least circa 5dB higher.

The resident includes within their objection their own noise readings at their property. This ranges from 49.3 dB to 54.9 dB giving an average daytime noise of 51.7dB. That confirms the average day-time LAeq range in the Noise Map, but given its survey date is not adequately representative of traffic levels and under-records noise.

Nevertheless, despite this under-recording, both the Noise Map and the residents' own recording show that this is not an area of quiet countryside and of "peace and tranquillity" as claimed nor, given the noise environment, does it justify being protected as an area of tranquillity as outlined in the PPG.

While the operations at LHF will only take place during the day, traffic noise is pervasive over the location 24 hours per day, and every day, including Sundays and Bank Holidays. The Noise Map shows that in the evening (when operations at LHF will have ceased), and throughout the night, the average noise levels approach and considerably exceed the desirable thresholds (42 dB(A) LAeq at night) as noted in guidance included in the PPG.

Policy for noise as set out in The Noise Policy Statement for England (NPSE) states (para 2.1) that "Noise is an inevitable consequence of a mature and vibrant society" and that noise should not be considered in isolation and that (para 2.7) the "wider benefits" of a particular development should be given adequate weight when assessing noise implications.

The NPSE sets out a Vision to provide effective management of noise. The aims of NPSE policy are to avoid significant adverse impacts, to mitigate and minimise such adverse impacts and, where possible, to produce improvement. The PPG notes that if noise crosses the 'lowest observed adverse effect' (LOAE) boundary as set out in the NPSE it may start to impact on people and consideration needs to be given to mitigating those effects.

The operational noise may be capable of being identified at the relevant property; however, the development scheme provides for a screening bund around the plant site which will screen and/or mitigate both the noise and visual impact of the operations on the relevant properties to levels such that noise from the operations will not cross the LOAE either in isolation or in combination with existing noise. The screening bund itself will not be visible from the property due to the woodland to the west of the nursery screening that bund.

The current noise assessment included with the application concludes that with the mitigation provided by the bund around the plant site that noise levels at the properties at the Potters Lane/Dean Lane junction from the operations would be in the less than 50dB. It is acknowledged that there is an error in the distance calculation but that taking that into account the noise level would be less than 55dB. There is scope for further mitigation by, for example, the provision of a vegetated acoustic fence, so as to ensure that noise from the operations will not exceed 55dB(A) LAeq.

This further mitigation can be resolved by a suitable planning condition as suggested in the PPG.

It is noted that the proposed bund around the plant site will not just mitigate noise from processing during the day but will assist in improving the noise environment at night at the property which is in excess of that accepted threshold limit.

Clearly, the property does not enjoy a tranquil environment. Traffic noise from the M6 is pervasive and continuous 24 hours a day. It is intrusive at night. Noise from the development at LHF can be mitigated to prevent any significant increase in the noise environment. That mitigation will assist in reducing night time noise from the M6.

No significant harm from noise will arise.

Visual Impact

The existing woodland to the west of the Nursery and surrounding the Nursery screens any view from the property of any extraction and processing operations.

Conclusion

No significant harm to affect the relevant property is proven in the comments.

Other Resident Comments

The other comments of residents suggest that, inter alia, the mineral is of poor quality; the development would conflict with the Green Belt; and/or give rise to harm to amenities or biodiversity; increase flooding and would generate significant traffic conflicts.

No evidence to justify the claim of poor quality is produced. As concluded in the application and previously in this response to the Letter, the development would not harm the Green Belt or other relevant environmental considerations. The traffic impacts are negligible and insignificant. The development will provide flood management facilities as desired by the relevant agencies and mitigate flooding outside the site. The site will provide significant new biodiversity assets.

No significant other harm is proven in such comments.

UNILATERAL UNDERTAKING

I note your comment as to the use of planning conditions or the UU, we can discuss these further closer to determination.

In relation to clauses 29 and 30 I would note that 29 has via the off-site mitigation provisions included in BNG become a material planning consideration.

In relation to 30 the UU is an effective vehicle for HAL to demonstrate to the MPA and others its commitment to understanding the environmental processes in the immediate locality and for that to be registered as part of a consent. That could not be required by condition. While CIL payments are not linked to mineral development, such payments are not in themselves requisite for the development to physically happen but are compensation into the wider off-site infrastructure and green space environmental works off-site. Further, the funding of Suitable Alternative Natural Greenspace (SANGs) is directed at environment protection and improvement. Both set the principle into the planning process.

I note your comment as to the involvement of other organisations in management of the site. With great respect to such organisations in such management their net experience is considerably less than that of the minerals industry which has the resources, the skills and the experience to effectively manage the site together with the landowner. Further, and vitally important, lack of financial resources inhibits the work of other organisations and may, as at Brockholes, require the organisation to develop unrelated activities on site that reduces or even harms the biodiversity potential.

That does not preclude discussions with such organisations or any mutual agreement at any time now or in the future.

In any event the provisions in BNG cater for this point.

CONCLUSION

None of the comments or objections reported in the Letter or in subsequent representations demonstrate any significant harm. Only significant harm is relevant to the determination of this application.

The comments may indicate a potential negligible or insignificant (and purely speculative or unproven) harm, but normal and demonstrably proven effective mitigation on-site will reduce even that level of harm. Such mitigation can be assured by condition and/or the UU.

Detailed matters can be resolved by condition.

None of the comments actually undermine or challenge, in any serious and proven way, the net benefits in relation to ensuring an adequate supply of high quality mineral; providing significant biodiversity gains, exceeding substantially that required or sought in legislation or policy; and in the provision and value of a natural flood management facility, which facility extends benefits not just to flood mitigation but provides other environmental improvements in terms of pollution control and mitigation, and water quality.

The availability of the mineral next to a major area of consumption together with the biodiversity and flood control gains demonstrate a sustainable development which improves, utilises and maximises all the potential resources and assets at LHF and in adjacent areas, and assists in mitigating GHG and resolving the Climate Change emergency.

The development provides assets which will enhance the biodiversity of land within the application area and the wider locality, including that in the SSSI, by the physical increase in biodiversity habitat; by significantly increasing connectivity of currently isolated and fragmented biodiversity sites; by buffering protected areas; and by the provision of a ‘quiet’ area to support the biodiversity objectives of Brockholes. These considerations are central to and priority objectives of government in relation to improving Nature and the provision of a Nature Network.