

Ecology Response to Planning Consultation

Ian Holland
Senior Ecologist
Environment & Planning Service
Lancashire County Council

5th October 2023

Application Ref: LCC/2023/0030

Proposal: The extraction and processing of sand and gravel including the construction of new site access roads, landscaping and screening bunds, minerals washing plant and other associated infrastructure with restoration to leisure end-uses, agricultural land and biodiversity enhancement, using imported inert fill.

Location: Land off Bourbles Lane, Preesall

District: Wyre Borough Council

Applicant: Baxter Group Ltd

Planning Officer: Jonathan Haine

Thank you for your consultation in respect of the above planning application. I have reviewed the application documents with particular reference to ecological matters. The comments below have also been informed by a review of records accessible to Lancashire County Council.

The comments below are intended to inform Lancashire County Council's decision-making, with regard to the requirements of relevant biodiversity legislation, planning policy and guidance. These comments represent the professional opinion of an ecologist and do not constitute professional legal advice. You may wish to seek professional legal interpretation of the relevant wildlife legislation cited.

I am not qualified to comment on matters relating to pollution impacts from development. Lancashire County Council should seek advice from other appropriate specialists on these matters.

The main ecological issues arising from the proposal relate to:

- Statutory designated sites, including:
 - Morecambe Bay Ramsar and Special Area of Conservation (SAC)
 - Morecambe Bay and Duddon Estuary Special Protection Area (SPA)
 - Lune estuary Site of Special Scientific Interest (SSSI)
 - Wyre Estuary SSSI
 - Wyre Lune Marine Conservation Zone.
- Non-Statutory designated sites, including:
 - o Pilling Moss Head Dyke Biological Heritage Site (BHS).
- Irreplaceable habitats, including:
 - o Peat
- Habitats of Principal Importance, including:
 - Hedgerows
 - o Ponds
- Wintering birds
- Protected species and their habitat, including:
 - Breeding birds
 - Water voles
 - o Bats
- Species of Principal Importance, including:
 - Common toad
 - o Brown hare
- Biodiversity Net Gain

RECOMMENDATIONS

The application should not be approved unless or until all of the following matters have been adequately addressed:

- Natural England should be consulted as required, regarding possible impacts on the following statutory designated sites:
 - Morecambe Bay Ramsar and SAC,
 - Morecambe Bay and Duddon Estuary SPA

- Lune Estuary SSSI
- Wyre Estuary SSSI
- Within the Summary tables on page 69 and 70 of the Ecological Impact Assessment (EIA) (Ref: Envirotech, July 2023, report: 5115) an impact on Morecambe Bay and Duddon Estuary Special Protection Area (SPA) and Morecambe Bay Ramsar site is acknowledged. This indicates the need for a Habitats Regulations Assessment to be undertaken prior to determination of the application. Subject to Natural England's comments, the applicant should be required to submit all necessary information to enable the planning authority to undertake this assessment. It is recommended that this should be in the form of a 'shadow' Habitats Regulations Assessment. Decision making in relation to the Habitats Regulations assessment should be informed by appropriate specialist advice and should be fully documented. Further information on HRA requirements will be provided following receipt of Natural England's consultation response.
- The Ecological Impact Assessment identifies Morecambe Bay SSSI as the nearest SSSI to site. Morecambe Bay SSSI lies 11km north of site. The Ecological Impact Assessment makes no mention of either the Wyre estuary SSSI (located ~1.5km north of site) or the Lune Estuary SSSI (located ~2.5km west of site). The site falls within the SSSI impact risk zone for both the Lune and Wyre Estuary SSSIs. Natural England should be consulted with regard to these sites. The Ecological Impact Assessment must be updated to include a complete assessment of the Lune and Wyre Estuary SSSIs including;
 - o Potential for indirect impacts on either of these sites;
 - o Potential for impacts on supporting features of these sites; and
 - The significance of these features.
- The Marine Management Organisation should be consulted regarding potential impacts on the Wyre – Lune Marine Conservation Zone which appears to be hydrologically linked to the site.
- The proposed development will result in the loss of part of Pilling Moss Head Dyke BHS. The scheme should only be approved if Lancashire County Council is first satisfied that there is no satisfactory alternative location or design solution with a reduced ecological impact. It needs to be clearly demonstrated that the mitigation hierarchy (avoid/mitigate/remediate/compensate) has been applied to all elements of the scheme in accordance with the principles stated within the NPPF and the emerging requirements of the Environment Act 2021. In particular it seems likely that the scheme could be revised to avoid or mitigate impacts on Pilling Moss Head Dyke BHS. This should be considered and appropriate amendments made wherever possible.
- Information provided with the application identifies the presence of peat within the borehole samples from the site, however the detailed borehole logs are not provided. Prior to determination of the application further information on the presence of peat, an irreplaceable habitat, must be provided and it should be

demonstrated prior to grant of planning permission that there will be no peat extraction.

- None of the hedgerows present on site have been classified as important under the 'Hedgerow Regulations 1997'. However, the EIA identifies hedgerows H1, H2 and H5 as containing bluebell, a protected species under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). The presence of bluebell would qualify a hedgerow as important under the Hedgerow Regulations. Clarification should be provided on the importance of hedgerows present on site.
- Based on the consultation response provided by Fylde Bird Club (Ref: BP-FLL-QRY-FBC-0001) a full assessment of the data provided to the applicant by Fylde Bird Club has not been undertaken. Prior to determination of the application the findings and conclusions of the report should be updated to take account of data and comments provided by Fylde Bird Club and an updated assessment of the sites potential to act as Functionally Linked Land should be completed. The significance of the site and land within the Zone of Influence for both pink footed geese and whooper swan should also be updated based on the information provided by Fylde Bird Club. This should also inform the 'shadow' Habitats Regulations Assessment discussed above.
- To date winter bird surveys have been undertaken on a reduced area of the site in 2019/2020 and 2021/2022 whilst a total of six surveys were undertaken across the site at monthly intervals between October 2022 and March 2023. Advice on wintering bird surveys is set out in Natural England's 2010 document TIN069, this describes best practice for wintering bird surveys as requiring fortnightly surveys undertaken across the entire site for 2 years. Although TIN069 is relevant to onshore wind farms, the methodology used is considered equally applicable to any onshore development where there may be significant impacts on wintering birds. The report should be updated to justify why surveys in line with TIN069 are not required or where this is not possible additional survey should be completed during the correct season. Any necessary additional surveys should inform the 'shadow' Habitats Regulations Assessment.
- A total of three Breeding Bird surveys were undertaken across the site (Report Ref: 5115) with one survey in May 2022, one survey in April 2023 and one survey in May 2023. These surveys have not been undertaken in line with current recommendations which advise a total of six surveys¹ be completed, spread between March and early July. Given only three surveys have been completed, and spread across just April and May, the report should be updated to give full justification for this reduced survey effort or where this is not possible additional survey should be completed during the correct season.
- The ecological appraisal (Ref: 5115, May 2019) states that the habitats on site
 would not be suitable for use by water vole. Given the presence of a number of
 lakes, ponds and ditches present on site further justification for the sites lack of

_

¹ https://birdsurveyguidelines.org/methods/survey-method/

suitability to support water voles is required. Where this cannot be adequately provided detailed water vole surveys should be undertaken.

- The Ecological Impact Assessment identifies no trees on the site with potential for use by roosting bats. However, the Arboricultural report (Ref: BTC2147) identifies features within trees that may be suitable to support bat roosting. Clarification should be provided on the suitability of features identified in the Arboricultural report to support roosting bats.
- Although not a purely ecological matter, the Arboricultural report provided covers only part of the site. An updated Arboricultural report is needed prior to approval which covers the entire redline boundary.
- Bat activity surveys were undertaken across the site comprising of two surveys (of a reduced site area) in April and May 2019 and two surveys in May and June 2023 of the full application boundary. Although justification is provided for the reduced survey effort, the report states that the surveys were undertaken for a period of 1.5hrs, this is not in line with current guidelines² which state that bat activity surveys should start at sunset and should continue for 2-3hrs after sunset. It is therefore possible that bat activity could have been missed. The report should be updated to give full justification for this reduced survey effort and reduced survey timing or where this is not possible additional survey should be completed during the correct season.
- Lancashire County Council provided a scoping opinion on this site in June 2022 which advised of the requirement for surveys specifically targeting Common Toad. The EIA identifies that observations for common toad were undertaken but provides no detail on the methods of this survey, when the surveys were undertaken or the number of surveys completed. Further clarification on surveys undertaken to identify the presence of common toad and their suitability to inform this assessment should be provided with reference to recognised guidelines.
- Section 4.6 of the ES (Ref: BCL/BFP/105) indicates that all mobile plant will operate
 with lighting fitted and that areas around the offices will be illuminated. Section 4.6
 goes on to state that "the proposed lighting on the site proposed will comprise low
 emission light where possible and will be directional and shielded to minimise their
 off-site impact". Any lighting impacts which could be relevant to the HRA or could
 impact on any other protected or priority species should be made clear and detail
 provided on how impacts will be avoided.
- Section 4.10.15 of the EIA details a methodology for Cumulative Impact Assessment, however there is no evidence within the EIA that a cumulative impact assessment has been undertaken and no list of sites/projects considered. The EIA should be updated to include a cumulative impact assessment.

²

 The ecological assessment, development and mitigation proposals should be updated to address the comments of other consultees, including those provided by the RSPB, Fylde Bird Club, the Environment Agency, Lancashire Wildlife Trust and Natural England.

Following submission of the above information it is likely that the comments and requirements given below will need to be reviewed and revised in line with any changes.

When all of the above matters have been adequately addressed, and if Lancashire County Council is minded to approve the above application (or any amended proposals), then planning conditions (or Section 106 agreements) will be necessary to address the following matters:

- Prior to the commencement of each quarrying Phase (excluding Phase A) an
 updated ecological assessment, including detailed survey for wintering bird and
 other protected/priority species must be undertaken for that phase and any land
 within the Zone of Influence. A report must be submitted to the council prior to
 commencement of that phase. Should the report evidence impacts on the wintering
 bird population or any other protected species then appropriate mitigation
 measures must be provided prior to that phase commencing.
- A Construction Environmental Management Plan (or similar document) shall be submitted for approval by Lancashire County Council in consultation with its ecological advisors. The approved document shall be implemented in full. The document shall be set out to cover each phase of quarrying operation and include (inter alia):
 - Precautionary working methods for the avoidance of any breach of legislation including (but not limited to):
 - The Conservation of Habitats and Species Regulations 2017 (as amended);
 - The Wildlife and Countryside Act 1981 (as amended).
 - Details of all licences/permits/consents/exemptions to be in place prior to commencement of works.
 - Details of responsible persons and organisations, including lines of communication.
 - The role and responsibilities and the operations to be overseen by an appropriately competent person (e.g. ecological clerk of works / on site ecologist).
 - The times during the works when specialist ecologists will be present on site to oversee works.
 - Training and/or briefing of site operatives on ecological matters and required working methods and procedures to ensure compliance with legislation and planning obligations.
 - An ecological constraints plan to be issued to the contractor, including (inter alia):
 - Identification of biodiversity protection zones / exclusion zones around sensitive habitats and species;

- Locations of demarcated working areas/exclusion zones, including details of barriers, fences and warning signs;
- Designated sites;
- Known locations of protected and priority species and their habitat;
- Tree root protection areas;
- Exclusion zones surrounding water bodies and water courses.
- Measures that will be taken to ensure compliance with relevant parts of BS42020 - Biodiversity Code of practice for planning and development.
- Procedures to be followed if the presence of protected species is detected or suspected at any stage before or during the works;
- Precautionary working methods, and pre-works surveys/inspections where required, for the avoidance of impacts on the following species and their habitats:
 - Bats
 - Water voles (if present on site)
 - Reptiles
 - Badger
 - Breeding birds
 - Wintering birds
 - Common Toad and any other amphibians
 - Brown Hare
- Avoidance of impacts on nesting birds, their nests and eggs, including appropriate timing of site clearance works to avoid the nesting season (March to August inclusive).
- A detailed pond/lake/ditch drain down methodology including fish rescue details and measures to prevent impacts on birds, amphibians and aquatic invertebrates.
- o Protection of animals from entrapment in open excavations, pipes, etc.
- Measures to prevent disturbance of sensitive species and habitats as a result of lighting, noise, vibration, vehicle movements, storage of materials or other causes;
- Protection of retained and replacement habitats from construction works and related operations, including:
 - Measures to protect designated sites.
 - Tree root protection measures in accordance with BS5837.
 - Demarcation of working areas
 - Measures to protect habitats from machinery and storage of materials.
 - Protection of water courses and water bodies from silt or other pollution.
 - Avoidance of soil compaction
- Biosecurity measures.
- No site clearance, site preparation, demolition, earth moving or development, shall take place, and no material or machinery shall be brought onto the site until a Biodiversity Gain Plan has been submitted and approved by Lancashire County Council. The approved plan shall be implemented in full and shall cover each phase of the quarrying application. It will include:
 - o Responsible organisations, personnel and lines of communication.

- Baseline ecological survey data for all habitat creation and enhancement locations. This shall demonstrate that habitat creation will not be at the expense of any existing priority habitat or populations of protected and priority species.
- Full and complete biodiversity gain calculations, calculated using the current DEFRA biodiversity metric and accompanied by supporting plans and a copy of the excel metric, demonstrating biodiversity gains in accordance with current requirements.
- o Responsible organisations, personnel and lines of communication.
- Clearly stated aims and objectives with reference to the site survey, evaluation and assessment of impacts.
- Habitat creation and management for populations of protected and priority species affected by the works.
- Restoration and enhancement of designated sites.
- Habitat creation for the enhancement of habitat connectivity and buffering of designated sites.
- Details of all target habitats to be created, re-established or enhanced on and off site, including in-situ habitat reinstatement, other on-site habitat creation and offsite habitat creation to compensate for ecological impacts of the scheme and to deliver biodiversity net gain.
- Planting and seeding mixes, comprising native species appropriate for the location, soil, hydrology and site conditions.
- Protection measures for seeded/planted areas and suitable tree guards/stakes for newly planted trees.
- o Planting plans and habitat management compartment plans.
- Detailed habitat creation proposals, including site preparation and habitat establishment methods including watering.
- Targeted measures for species likely to be affected by the proposed scheme, including:
 - Bats
 - Water voles (if present on site)
 - Reptiles
 - Badger
 - Breeding birds
 - Wintering birds
 - Common Toad
 - Brown Hare
- Full details of nest boxes, roosting boxes, hedgehog shelters, hibernacula, habitat piles, other wildlife shelters, their proposed locations, installation proposals and their maintenance.
- A work programme, including timing of all works for each development phase.
- No site clearance, site preparation, demolition, earth moving or development, shall take place, and no material or machinery shall be brought onto the site until a habitat management and monitoring plan has been submitted and approved by Lancashire County Council. The approved plan shall be implemented in full and shall include.

- A description and evaluation of the sites, habitats and features to be managed (or reference to this information in other documents).
- o Responsible organisations, personnel and lines of communication.
- Measures that will be taken to ensure compliance with relevant parts of BS42020 - Biodiversity Code of practice for planning and development.
- Clearly stated aims, objectives and success criteria.
- Management options and constraints.
- A rationale for all prescribed management
- Detailed maintenance, management and monitoring prescriptions for all retained and replacement habitat, to achieve the stated aims and objectives.
- Disposal of arisings.
- Weed control methods.
- Management of recreational pressure.
- A 5-year establishment maintenance plan for all habitats.
- A further 25-year management plan (Years 6-30).
- o Monitoring locations, timing and durations.
- o Collection of baseline data to inform the monitoring proposals.
- A monitoring plan, including details of data collection methods, to demonstrate successful habitat creation and achievement of stated objectives and to inform the need for adjustments to the approved management regime. This shall include submission of monitoring reports in years 2, 5,10, 20 and 30.
- Contingency plans and remedial action to be implemented in the event of failed habitat establishment or other mitigation measures.
- o A detailed habitat compartment map.
- A detailed work programme.
- Periodic review of the management plan including reporting and consultation with the planning authority.
- Stated legal, contractual and funding mechanisms to secure long-term management.
- Lodge owner packs should be provided as detailed within section 9.1.13 to 9.1.14
 of the EIA. These lodge owner packs must be submitted to and approved by LCC
 prior to occupation of any lodges on site.
- A plan showing fencing or other suitable barriers which must be erected around the lodge site must be provided to ensure that there is no access for people or dogs on to the proposed neutral grassland habitat.
- Plans should make clear which ponds are being created for wildlife enhancement purposes. These ponds should not be subject to stocking of fish at any point during or post development.
- If the approved development does not commence within 3 years from the date of the planning consent, the approved ecological mitigation measures shall be reviewed and, where necessary, amended and updated. The review shall be informed by further ecological surveys.

 The applicant should be made aware of the following matters: Licences from Natural England are likely to be required if protected species or their habitat would be affected.

JUSTIFICATION FOR RECOMMENDATIONS

LEGISLATION AND PLANNING POLICY

In determining this application, the requirements of the following legislation, planning policies and guidance should be addressed:

- The Environment Act 2021 (Subject to secondary legislation);
- The Town and Country Planning (Environmental Impact Assessment) Regulations 2017:
- The Conservation of Habitats and Species Regulations 2017 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- The Natural Environment and Rural Communities Act 2006;
- The Countryside and Rights of Way Act 2000;
- The Protection of Badgers Act 1992.
- Government Circular: Biodiversity and Geological Conservation Statutory Obligations and Their Impact Within the Planning System (DEFRA 01/2005, ODPM 06/2005).
- The National Planning Policy Framework (NPPF)
- Lancashire Minerals and Waste Development Framework Policies;
- Wyre Local Plan policies.
- Relevant Planning Practice Guidance, including (but not limited to) Environmental Impact Assessment and Natural Environment. https://www.gov.uk/government/collections/planning-practice-guidance
- Recognised survey and mitigation guidelines, including (but not limited to) current Natural England standing advice, guidelines and Technical Information Notes.
- Any emerging guidelines relating to compliance with the requirements of the Environment Act 2021.

Further information is required in order to demonstrate that the proposed development would comply with the above legislation, policies and guidance.

ECOLOGICAL ASSESSMENT

Information submitted with the planning application does not include an adequate assessment of the ecological interest on the site. Further survey/assessment is necessary in order to inform the need for mitigation/compensation as follows:

- Wintering birds
- Water vole
- Common toad

Detailed assessment of these species including any relevant mitigation and compensation requirements are discussed in detail below.

Following review of Fylde Bird Club data, and any other available sources, an updated assessment of the sites potential to support wintering birds must be completed and included within an up-to-date EIA assessment. Conclusions should also be drawn on the sites suitability to act as Functionally Linked Land based on a complete review of this

information. This will also need to inform a 'shadow' Habitats Regulations Assessment as discussed below.

The Ecological Appraisal (Ref: 5115, May 2019) states that the habitats on site would not be suitable for use by water vole. Given the presence of ponds, lakes and ditches on site, further justification is required for the lack of water vole surveys, where this cannot be provided detailed survey will be needed for this species.

Clarification is required on the surveys undertaken to identify common toad on site. Clarification should be provided on the suitability of surveys undertaken or, where this is not possible, additional survey for common toad should be completed in line with current best practice guidelines.

All surveys should be carried out at an appropriate time of year, in accordance with recognised methodologies and best practice guidelines, and be carried out by suitably competent and experienced individuals. All survey methods used should be detailed in the ES, along with any survey limitations and a rationale for any unavoidable departures from recognised survey standards.

DESIGNATED SITES

Statutory Designated Sites

The following European and internationally designated sites lie within the sites Zone of Influence:

- Morecambe Bay Ramsar and SAC,
- Morecambe Bay and Duddon Estuary SPA

The local planning authority is a competent authority for the purposes of the Habitats Regulations and has a duty to consider whether the proposals would result in likely significant effects on the European site.

Natural England should be consulted on the requirement for an HRA. Where this is required the planning application should include sufficient information to enable the planning authority to establish whether or not there would be a likely significant effect on any European Protected Site. If there would be a likely significant effect, then the planning application should include sufficient information to enable the planning authority to undertake an appropriate assessment in accordance with the requirements of the Habitats Regulations and related case law. It is recommended that this should be in the form of a shadow Habitats Regulations Assessment.

Lancashire County Council should seek specialist advice when assessing the information submitted to inform any necessary Habitats Regulations Assessment.

The application site and surrounding land may have the potential to be used by qualifying bird species from nearby statutory designated sites. The planning application should address the potential of the application site and surrounding land to be functionally linked

land. 'Functionally linked land' is a term used to describe areas of land or sea occurring outside a designated site which is considered to be critical to, or necessary for, the ecological or behavioural functions in a relevant season of a qualifying feature for which a Special Areas of Conservation (SAC)/ Special Protection Area (SPA)/ Ramsar site has been designated. These habitats are frequently used by SPA species and support the functionality and integrity of the designated sites for these features.

The following nationally designated sites lie within the sites Zone of Influence:

- Lune Estuary SSSI
- Wyre Estuary SSSI

As detailed above a full assessment of potential impacts on these sites or the features they support must be undertaken and included within an updated Ecological Impact Assessment.

The Natural England SSSI Impact Risk Zone indicates that the proposals have the potential to result in adverse impacts on statutory designated sites. This includes (but may not be limited to):

- Lune Estuary SSSI
- Wyre Estuary SSSI

The impact risk zone(s) are relevant to the following development types:

- All applications (except householder)
- Planning applications for quarries

Natural England should be consulted prior to determination of the application.

Biological Heritage Sites

Planning decisions should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity value (NPPF Para 174)

The proposed development would affect the following Biological Heritage Site:

Pilling Moss – Head Dyke BHS

The proposed development will result in the direct loss of designated habitat and will impact upon the qualifying features of the site which includes its ornithological importance as a winter-feeding ground for flocks of Pink-footed Geese and Whooper Swans with bird numbers exceeding 0.5% of the British wintering population. The planning application should detail alternatives considered which would reduce the impact on this BHS.

IRREPLACEABLE HABITATS

Paragraph 16.2.8 of the Bourbles Quarry ES (Ref: BCL/BFP/105) states:

" All of the boreholes in which mineral was present encountered overburden materials overlying the mineral. These mostly comprised 0.2-0.7m of topsoil/subsoil, however, in a few exploratory boreholes (boreholes BFP 21-11, -12 and -23) additional layers of overburden were present beneath the topsoil/subsoil, extending to 2.3-3.4m depth above the mineral, comprising silt and occasionally peat."

Paragraph 211 part (d) of the NPPF states that planning authorities should not grant planning permission for peat extraction from new or extended sites. It should therefore be demonstrated prior to grant of planning permission that there will be no peat extraction.

In order to ensure the development is in line with the NPPF further information on the presence of peat should be provided including a copy of the borehole logs for the site and an assessment of the sites potential to contain peat.

Although not strictly an ecological issue Lancashire County Council should also consider the implications of peat removal in relation to carbon emissions and climate change.

HABITATS OF PRINCIPAL IMPORTANCE (Section 41 NERC Act 2006)

DEFRA Circular 01/2005 indicates that UK Biodiversity Action Plan Priority Habitats (Habitats of Principal Importance, NERC Act 2006) are capable of being a material consideration in the making of planning decisions.

The following Habitats of Principal Importance would/could be affected by the proposed development:

- Hedgerows
- Ponds (if common toad are present)

Impacts on these habitats during development should be avoided or, where avoidance is not possible, adequately mitigated.

WINTERING BIRDS

It is considered that the desktop information submitted with the application does not provide the most up to date information in relation to wintering birds. The EIA should be updated to reflect the latest information provided within the Fylde Bird Club response including, but not limited to:

- The number of wintering birds;
- The species of wintering birds;
- The Zone of influence; and
- The appropriateness of proposed mitigation measures.

The significance and impacts on these species during and post development are also likely to need to be updated following the review. Once the above information has been provided LCC can provide further details on the suitability of the EIA.

As the EIA currently undervalues the area for wintering birds (based on the data provided by Fylde Bird Club) it is considered that the avoidance, mitigation and compensation measures provided will need to be updated to reflect the new baseline. Therefore, detailed comments on the proposed site-specific mitigation (section 9 of the EIA) are not provided at this point. Comments can be given following an update to the EIA.

The applicant should also complete any updates to the EIA with reference to the RSPB written response which is considered to provide appropriate recommendations throughout.

Natural England Technical Information Note TIN069, Assessing the effects of onshore wind farms on birds, recommends that winter bird surveys are undertaken fortnightly and that a total of two years' worth of survey data is provided. Although relevant to wind farms, the methodology is considered relevant to any onshore development where there may be significant impacts on wintering birds. The EIA should be updated to justify why surveys in line with TIN069 are not required or where this is not possible additional survey should be completed during the correct season. Any additional surveys will also need to inform the 'shadow' Habitats Regulations Assessment.

PROTECTED SPECIES

DEFRA Circular 01/2005 (ODPM Circular 06/2005), referenced in Footnote 61 of NPPF 2021, states that "It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted" and that "the survey should be completed and any necessary measures to protect the species should be in place, through conditions and/or planning obligations, before the permission is granted" (Paragraph 99).

Documents submitted with the planning application/Records accessible to Lancashire County Council indicate that the proposed development could affect protected species, including (but not limited to):

- Water voles
- Bats

Water voles

The Ecological Appraisal (Ref: 5115, May 2019) states that the habitats on site would not be suitable for use by water vole. Given the presence of ponds, lakes and ditches on site, further justification is required for the lack of water vole surveys, where this cannot be provided detailed survey will be needed for this species in line with current best practice guidelines ³.

Should water vole be found to be present on-site measures will need to be put in place to ensure there is no impact on this species or, where that is not possible, a licence may be required from Natural England to enable works.

³ Water vole mitigation Handbook, Dean, M. et al (2016) Mammal Soc.

Bats

The Ecological Appraisal (Ref: 5115) states that:

"The majority of trees on site are less than 20 years old, and densely foliated willow. Where other tree species are present, such as alder, they are in good condition and free from any potential roosting features."

However, the Arboricultural report (Ref: BTC2147) identifies a number of features such as wounds, broken stems and dead branches that may be suitable to support bat roosting. In particular;

- Tree T5 is identified as containing a large tear on the northwest side.
- Group G3 includes a Rowan to south which has a large open cavity approximately 200mm long and 10mm wide at its base.

Clarification should be provided on the suitability of these features to support roosting bats.

PRIORITY SPECIES

DEFRA Circular 01/2005 indicates that UK Biodiversity Action Plan Priority Species (Species of Principal Importance, NERC Act 2006) are capable of being a material consideration in the making of planning decisions.

The planning application will need to include an assessment of likely impacts on species of nature conservation value and mitigation/compensation measures for unavoidable impacts. This should include Species of Principal Importance (NERC Act 2006), red list species and any nationally or locally rare or scarce species.

The following Species of Principal Importance or their habitat would/could be affected by the proposed development:

Common Toad

Lancashire County Council provided scoping opinion on this site in June 2022 which advised of the requirement for surveys specifically targeting Common Toad. The EIA lacks detail of the surveys undertaken to identify the presence of common toad including type of survey, date of survey or number of surveys. Further justification should be provided on the suitability of survey undertaken to date and the drawing of conclusions on potential impacts.

ECOLOGICAL IMPACTS

Unavoidable impacts on sites, habitats, species and features of ecological value will need to be assessed in accordance with recognised guidelines. All temporary and permanent impacts should be stated and assessed, including (but not limited to):

habitat loss,

- habitat degradation and disturbance,
- habitat fragmentation, severance and isolation,
- ecological impacts arising from hydrological changes,
- potential killing, injury and disturbance of protected and priority species,
- destruction or disturbance of habitats used by protected and priority species,
- impacts arising from temporary or permanent lighting, noise, vibration, dust etc.
- Impacts of all construction and related works should be included in the assessment, including the construction footprint, compounds, storage areas, access routes etc.

Planning decisions should limit the impact of pollution from artificial light on nature conservation (NPPF para 185).

External lighting associated with the development should be directional and designed to avoid excessive light spill and shall not illuminate bat roosting opportunities within the site, the roof or eaves of the nearby buildings or trees and hedgerows in the area. The principles of relevant guidance should be followed.

MITIGATION, COMPENSATION AND BIODIVERSITY NET GAIN

Based on a review of the sites conceptual restoration strategy it is considered that this proposal lacks significant enhancement for wintering birds. Following completion of the EIA updates, the site proposals should be reviewed to ensure appropriate mitigation, compensation and enhancement is being provided.

The results of surveys and impact assessments undertaken should inform the design of the proposed development and associated mitigation, restoration, compensation and enhancement measures.

It should be demonstrated that impacts will be mitigated, that compensation will be provided for all unavoidable impacts and that enhancement measures will provide an overall net gain in biodiversity value. It should be demonstrated that mitigation and compensation proposals meet the requirements of legislation, policy and guidance listed above.

Mitigation measures should include protection of retained habitats, species and features of ecological value, including tree root protection measures. Details can be included within a Construction Environmental Management Plan or similar document.

Planning decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures (NPPF Para 174).

The planning application should include proposals for maintaining, restoring and enhancing habitat connectivity within the application area and the wider landscape.

Habitat creation should not be at the expense of existing habitats or features of ecological importance. Habitat creation proposals should comprise native plant communities

appropriate to the location, soils, hydrology and site conditions. Guidance on native species selection is given on Lancashire County Council's Ecology webpages:

- http://www.lancashire.gov.uk/council/planning/planning-application-process/ecology/ecology-advice-for-developers/habitat-re-establishment.aspx
- Plant-species-appropriate-for-habitat-creation-in-Lancashire.pdf

The embedded and site-specific mitigation outlined in section 8 and 9 of the Ecological impact Assessment should be adhered to throughout the development. Additional requirements for the protection of species during development are noted below.

- A Precautionary Working Method Statement (PWMS) should be produced for the site detailing measures to avoid harm to reptiles, common toad and other common amphibians during development. This should include a requirement for staged vegetation clearance in areas where there is a risk to these species.
- Brown hare should also be included in the PWMS, particularly measures for avoidance of leverets during the breeding season.
- At least one of the new ponds proposed on site should be designed for use by amphibians with a suitable profile and planting mix included, the inclusion of amphibian hibernacula should also be considered.
- Habitats proposed on site for breeding birds should be targeted towards those
 identified in the breeding bird surveys and associated desk study. Features should
 be made available to support both ground nesting and tree/scrub nesting species.
- A new hedgerow is proposed across the centre of the site, however, connectivity to Phase 1 of the quarrying operation is currently limited. The inclusion of a hedgerow along the retained access track should be considered as should additional connectivity running north to south across the site.
- I would recommend that all new hedgerows should contain at least 7 native woody species suitable for planting in Lancashire. Suitable species are noted in the guidance document above.

Wildlife ponds should be designed to provide ample shallow water as well as deeper water. Wildlife pond profiles should have gently sloping wide marginal areas, with 1:15-1:20 slopes, before sloping gently down to deeper water. Details of the design of the compensation ponds can be dealt with by planning condition.

Biodiversity Net Gain information has been provided within the application. Following a review of all information in this consultation response, the metric should be updated to include any changes and it should be ensured that alongside the report the Biodiversity Metric spreadsheet is included within the application.

MANAGEMENT AND MONITORING

Establishment maintenance and long-term management and monitoring proposals for retained, restored and replacement habitats should be provided. As discussed above this can be secured via a Biodiversity Gain Plan. The timescale of the management and monitoring commitment should be stated. It is recommended that this should cover a 30-

year period. This will be a statutory requirement when mandatory biodiversity net gain is in force.

It should be stated how the necessary maintenance and management will be secured for the lifetime of the anticipated planning obligations. Copies of any relevant third-party agreements will need to be provided.

Monitoring measures should be sufficient to measure the success of mitigation and compensation measures, to inform the need for remedial measures and to inform establishment maintenance and long-term management.

I hope these comments are helpful.

Ian Holland

Senior Ecologist Environment & Planning Service Lancashire County Council