

Date: 13<sup>th</sup> May 2021

Dear Jonathan,

### **Ecological comments**

Planning Application No: **LCC/2021/0012**

Proposals: **Extraction of sand and gravel including construction of new access road and new junction with A59 Preston New Road, creation of plant site, weighbridge and stockpiling area, silt ponds, landscaping including screen mounding, with progressive restoration to wetland and passive flood management facility, woodland and agriculture**

Location: **Lower Hall Farm**

I have reviewed the information submitted. At this stage there is insufficient information on which to determine the planning application and I am unable to provide fully detailed comments. I have however made a number of comments below, including detailing broad matters which need to be addressed prior to determination of the application and specific comments on certain issues. The application should not be approved until all these matters have been addressed.

### **Consultations**

Natural England SSSI Impact Risk Zones indicate that the proposed development has the potential to affect Red Scar and Tun Brook Woods Site of Special Scientific Interest (SSSI). Natural England will therefore need to be consulted prior to determination of the application.

Given that the application area is part of the Ribble corridor and includes proposals for "enhancements" elsewhere along the Ribble and its tributaries (within the draft Unilateral Undertaking), Lancashire County Council may wish to consult the Ribble Rivers Trust on the proposals.

### **Ecological surveys and assessments**

#### **Surveys**

The planning decision needs to be based on up to date ecological surveys and assessments. The BSI *Biodiversity: Code of practice for planning and developments* (BS 42020:2013) states that *all ecological information should be sufficiently up to date (e.g. not normally more than two/three years old, or as stipulated in good practice guidance)*. The most recent surveys were carried out in 2015. These provide useful back ground information however they are out of date and need to be updated.

I would expect to the following surveys / updated surveys to be submitted prior to determination of the application:

- Updated walkover / ground truthing of Extended Phase 1 Habitat Survey of the site and surrounding land to assess whether conditions have altered.
- Phase 2 Habitat surveys of any semi-natural habitats, priority habitats or habitats with the potential to support species of ecological interest. This should include mapped plant communities and full species-lists showing relative abundance.
- Breeding bird surveys
- Otter surveys of Ribble corridor, Bezza Brook and other suitable habitat identified in the Extended Phase 1 Survey
- Water Vole surveys of suitable habitat identified (including Bezza Brook)
- Bat activity surveys
- Bat assessment of trees that would be affected (directly or indirectly) and presence/absence survey of any trees that have potential to support roosting bats.
- Badger surveys of the site and surrounding area, including to establish the presence and usage of setts and to establish the usage of the area by foraging/commuting badger - with mapped badger signs across the survey area.
- Great Crested Newt surveys (unless the applicant decides to go down the route of GCN District Level Licencing – discussed below)
- Surveys/assessments to establish the use of ponds by other amphibians, including Common Toad.

All surveys need to be carried out by appropriately qualified and experienced individuals and at the appropriate time of year. Surveys should follow recognised guidelines and methodology. Surveys will need to be complete prior to determination of the application.

### Assessments

The *Ecological Assessment* submitted states that *the proposed access layout and associated locations for new planting were available for assessment, however detailed proposals with regard to the quarry development were not available at the time of writing.* All ecological impacts of the detailed proposals should be assessed. For example: (1) it is proposed to instal cattle grids and kerbs along the proposed access road along with fencing. Such measures would result in fragmentation of the land for terrestrial land species, including for amphibians, badgers and hedgehogs and needs to be adequately assessed (2) a temporary work compound is proposed (although no map is provided) and this is not mentioned in the *Ecological Assessment* - the impacts of all proposed works would need to be assessed and (3) the *Ecological Assessment* states that the access road lies near to four woodland BHSs (para 5.7), however the access road and junction onto the A59 would actually result in the partial loss of Wood by St Mary's Church BHS.

The submitted *Ecological Assessment* does not adequately assess all the likely impacts (for example see discussion below regarding ancient woodlands). Although I understand that the application requires an EIA, the submitted *Ecological Assessment* is not to a level of detail or format I would expect to see in an ecology chapter of an Environmental Statement. Indeed, the submitted *Ecological Assessment* states that *the assessment set out in this report will inform an Ecology Chapter to be included within the ES.*

The *Environmental Statement* submitted appears to be more of a supporting statement than a true Environment Statement with an independent assessment of the impacts. The ecology section summarises the *Ecological Assessment* and provides judgements, however it is not

clear that these have been made by a suitably qualified and experienced professional able to make independent judgements on ecological matters. In any case the *Ecological Assessment* is dated 2017 and is based on out of date surveys. Up to date ecological assessments based on up dated surveys will need to be submitted.

An Arboricultural Impact Assessment does not appear to have been submitted and therefore the exact extent and nature of the losses and other impacts is not clear. This information should be provided.

### **Avoidance, mitigation and compensation for impacts**

Based on the (out of date) submitted information there would be a number of ecological impacts resulting from the proposals, including impacts on designated sites, significant habitats and protected and priority species. The potentially more significant impacts include (but are not limited to):

- Potential impacts on Red Scar and Tun Brook Woods Site of Special Scientific Interest (SSSI)
- Partial loss of *Wood by St Mary's Church* Biological Heritage Site (BHS 53SE10) (listed under BHS guideline Wd2: "*Other semi-natural woodland over 1hectare where field evidence indicates that they are ancient in origin*") and other indirect impacts.
- Direct and indirect adverse impacts on Biological Heritage Sites listed on the Provisional Lancashire Ancient Woodland Inventory (including Seed Park Biological Heritage Site (BHS 63SW01) and Samlesbury Wood Biological Heritages Site (BHS 53SE09)).
- Loss of woodland and stretches of hedgerow (Habitats of Principal Importance) and trees/shrubs.
- Loss of 3 ponds (including one used by breeding Toads and therefore being a Habitat of Principal Importance).
- Loss of a heronry of 2/3 pairs (the size of the heronry may have grown since the last surveys - 5 pairs would be of county level significance)
- Impacts on amphibians, including on Great Crested Newt (a European Protected Species) (impacts which the *Ecological Assessment* states a Natural England licence would be required) and Common Toad (a Species of Principal Importance).
- Impacts on badgers, including loss of badger setts (for which a Natural England licence would be required).
- Fragmentation resulting from the new access road.

The mitigation hierarchy should be applied: avoidance – mitigation – compensation.

The applicant should submit measures to demonstrate that impacts would be avoided and if unavoidable that they would be adequately mitigated and compensated for.

### **Avoidance**

Some information is included regarding avoidance of impacts, such as not undertaking extraction, processing or transport etc operation in the hours of darkness (Non-technical ES Summary, para 4.12), not lighting the access road or providing any external lighting aside from for any emergency or security purposes (Non-technical ES summary, para 5.12) and designing the Bezza Brook crossing to avoid impacts on the banks and bed (Planning Statement 5.14). Such measures are appropriate.

Evaluation of access route options in ecological terms does not however appear to have been carried out. The *Environment Statement* states that *a number of alternatives were fully evaluated in engineering and planning terms* (para 3.35). Avoidance of ecological impacts should be given weight when considering access route options. For example, consideration does not appear to have been given to avoidance of impacts on Great Crested Newt, rather the *Ecological Assessment* just states that there would be a need for a Natural England licence, and there has not been full consideration of avoiding impacts on woodlands (see also discussion below regarding impacts on woodland BHSs) or avoidance of fragmentation for species in the area (including amphibians, badgers, hedgehogs) resulting for the proposed creation and usage of a new access road with associated fencing, kerbs and cattle grids.

The proposed SuDS ponds and watercourses would link into existing ditches (Planning Statement, para 5.11), which has the potential to lead to pollution and siltation and should be avoided.

### Ancient Woodland

The proposed new access road is 20m away from Biological Heritage Site woodlands listed on the Ancient Woodland Inventory. The current submitted *Planning Statement* repeatedly argues that the woodlands are not ancient woodlands, even those actually listed on the Ancient Woodland Inventory. This is not correct.

The access road would have 50 HGV movements per day and 10 movements of other vehicles (Planning Statement, para 5.51). There are the potential for many impacts on the woodlands, including direct impacts (such as damage to roots), and indirect impacts (such as noise pollution (which can result in more homogenised/reduced breeding bird) and pollution from both dust and chemical drift (such as heavy metals and nitrogen) (*Impacts of nearby development on the ecology of ancient woodland* (Ryan, 2012)).

I am not clear whether the stand-off distance to ancient woodland would be sufficient to ensure that tree RPA are not damaged (no Arboricultural Impact Assessment has been submitted) or to avoid other indirect impacts. Available evidence would indicate that there may be impacts and that the buffer distances proposed would not be adequate.

In addition, the proposals would result in a partial loss of *Wood by St Mary's Church* Biological Heritage Site (BHS 53SE10) and the access road would run adjacent to the remaining area of this woodland. This woodland is listed under BHS guideline Wd2: "*Other semi-natural woodland over 1 hectare where field evidence indicates that they are ancient in origin*". It is important to note that the Provisional Ancient Woodland Inventory only includes woodland 2ha or greater as this was the national standard set for ancient woodland inventories at the time (as detailed within the BHS guideline justification). Therefore, there are ancient woodlands in Lancashire which are not included on the inventory as they do not meet the 2ha size threshold. The Lancashire Inventory is due to be revised to better reflect the extent of ancient woodland, including the inclusion of smaller woodlands which failed to meet the original 2ha size threshold. Such revisions have already taken place in some counties and are ongoing or due in others.

The Non-technical ES Summary (para 5.7) states that the woodland lost is not part of any identified Ancient Woodland and the operations will not affect any ancient woodland as defined by the NPPF (5.28). This is not correct. The BHS guidelines identify the woodland as having field evidence indicating it is ancient in origin. The NPPF defines ancient

woodland as an area that has been wooded continuously since at least 1600AD (which is the recognised definition of ancient woodland).

Ancient Woodland is defined in the NPPF as irreplaceable habitat and states that *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists* (para 175). The example given of wholly exceptional reasons is *infrastructure projects where the public benefit would clearly outweigh the loss or deterioration of habitat*. Notably the NPPF includes both loss and deterioration.

The impacts on ancient woodlands and Biological Heritage Sites have not been adequately assessed or evidenced. The *Ecological Assessment* does not in fact assess likely impacts on the ancient woodlands at all. This needs to be addressed.

## **Mitigation and Compensation**

Some outline mitigation measures are included within the *Ecological Assessment*; however these are not to the level of detail or coverage I would expect to see to allow Lancashire County Council to be satisfied that impacts would be adequately mitigated / compensated for. The applicant would need to submit information to demonstrate that all unavoidable impacts would be adequately mitigated / compensated for.

### Natural England Licensing

If a Natural England licence would be required (the submitted *Ecological Assessment* states that a NE would be required for GCN and badgers) then Lancashire County Council should not approve the application if there is reason to believe that Natural England would not issue a licence. Lancashire County Council should therefore have regard to the requirements of the Habitats Directive in reaching the planning decision. The licensing tests given in the Habitats Regulations should be given consideration. In summary, these are that:

1. The development is required for the purpose of
  - preserving public health or public safety,
  - for other imperative reasons of over-riding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.
  - for preventing serious damage to property.
2. There is no satisfactory alternative.
3. The proposal will not be detrimental to the maintenance of the population of the species at a favourable conservation status.

(see DEFRA Circular 01/2005).

If a Natural England licence is required then before the application is determined, information should be provided by the applicant to demonstrate how the above three tests will be addressed. This should include mitigation proposals, informed by adequate survey data in order to address the third test.

The *Ecological Assessment* does not provide sufficient details of the mitigation proposals to address the 3<sup>rd</sup> test, for example (1) it is stated that a new badger sett will be created however a location plan is not provided (2) it is stated that measures will be implemented to ensure entrapment or other form of harm to badgers is avoided during works but no measures to demonstrate that this would be the case are detailed (3) it is stated that a

detailed mitigation strategy will be designed in support of the GCN licence application but no details are provided.

For Great Crested Newts, there is now an alternative option in Lancashire: District Level Licencing (DLL): <https://www.gov.uk/government/publications/great-crested-newts-district-level-licensing-schemes> If the applicant chooses to use DLL then this would remove the need for the applicant to carry out updated surveys for GCN. If the applicant chooses to go down the DLL route then they will need to send the required information to Natural England (please see the link above). If Natural England accept the development into DLL they will send the applicant an Impact Assessment and Conservation Payment Certificate Document (IACPC).

LPAs may take a countersigned IACPC into account when determining a planning application, as being confirmation of Natural England's view that the development in question is suitable for DLL and that the Conservation Payment will suffice to compensate for its impacts on GCN. In order to do this the LPA will need to check that the IACPC has been signed for and on behalf of Natural England and that the site details and boundaries of the IACPC are the same as the planning application. If the details match, the IACPC can be relied upon by the planning authority as confirmation that the impacts of the development on GCN are capable of being fully addressed in a manner which complies with the requirements of the Habitats Regulations.

#### Replacement habitats - Losses and gains

Compensation for all unavoidable losses would need to be provided. The applicant has not demonstrated adequate compensation for losses would be provided.

It should be noted that ancient woodland is an irreplaceable habitat and by definition cannot be adequately compensated for through planting.

For the following reasons in my opinion there should be sufficient habitat creation in advance of the final restoration:

- Due to the long time lag between habitat losses and final restoration
- To support priority species which would be impacted by the habitat losses, including breeding Common Toad and breeding birds.
- As priority habitats will be lost.
- To ensure habitat creation is protected from disturbance and deterioration/damage from the quarrying activities and usage of the access road.

The amount of habitat creation proposed at the earlier stages is limited to planting alongside the new access road and surrounding working area. These areas are limited in scale and will be subject to disturbance and deterioration/damage.

#### Woodland, trees and hedgerows

A table detailing habitat gains and losses is provided in the *Planning Statement* and the *Environmental Statement*. The figures provided do not appear to be correct. I am not clear where the figures have come from. No Arboricultural Impact Assessment and associated mapping has been submitted to detail the losses.

The submitted gains and losses table states that 2.5h of woodland would be lost. However, based on my measurements, using aerial photographs and with reference to the Phase 1

Habitat Mapping provided in the *Ecological Statement*, the area of woodland which would be lost from the proposed quarry area equates to at least 7ha. In addition, there would be additional losses of woodland and trees from the main site and due to the creation of the access road. The woodland which would be lost is a Habitat of Principal Importance.

The table states that 450m of hedgerow would be lost but by my measurements significantly more than that would be lost. The hedgerows are a Habitat of Principal Importance

An Arboricultural Impact Assessment should be provided to establish what the scale and nature of the losses of trees, woodland and hedgerow would be.

It is proposed to plant woodland and hedgerows alongside the access road in the next planting season following completion of the road (*Planning Statement*, para 5.2) and to plant woodland around the quarry site (some at this early stage and then in phases as the quarrying area are restored). It is worth noting that the table indicates that there would be 5ha of woodland planting at the start of works, however these areas (area of proposed woodland alongside the access track, alongside Bezza Brook and screen planting north of Bezza Brook nursery) appear by my measurements to equate to a maximum 2.5ha.

Although the submitted information indicates that the restoration of the quarry would provide enhanced ecological benefits, it is not clear to me that the total amount of woodland planting proposed across the site (including in the restored quarry area) would actually be sufficient to offset the losses for the following reasons:

- The table shows that around 16ha of woodland would be planted to offset (by my measurements) at least 7ha of losses. Although this would be greater than a 1:2 ratio, however the DEFRA Biodiversity Metric 2.0 indicates that more than this should be provided due in part to length of time until the maturity.
- The majority of this planting will not be carried out as advance planting – which for the reasons outlined above should be provided.
- The planting along the access road and around the quarry will be subject to disturbance and deterioration (chemical fumes, dust) during the quarrying activities

No planting of scattered trees proposed.

There is space within the red line boundary for additional planting.

### Ponds

The proposals would result in the loss of 3 ponds, including one used by breeding toads (a Species of Principal Importance), although the gains/losses table submitted indicates that one large waterbody would be lost. In addition, one pond (P3) may be adversely affected/damaged due to the proximity of the works (*Ecological Assessment*, para 5.13). The *Ecological Assessment* states that "new ponds will be constructed within 500m (ideally 250m) of an existing retained pond". However, there is no compensation detailed or shown on the submitted drawings for loss of these ponds. The gains/losses table shows that 7 small ponds would be provided, however these (alongside the watercourses) are part of the proposed SuDs and therefore cannot be counted as ecological mitigation as they will be subject to runoff/pollution etc. Although the ultimate restoration of the site would result in creation of waterbodies, replacement ponds should be provided in the early stages due to the time delay until restored waterbodies are available and to support populations of Priority Species (there would be loss of a toad breeding pond).

There is space within the red line boundary to provide replacement ponds, however the applicant should provide measures to demonstrate that ponds would be adequately compensated for (including a plan showing locations and sizes of replacement ponds). Replacement ponds should be located to be in proximity to retained ponds in the surrounding area.

In order to demonstrate that there would be sufficient habitat creation to offset the losses (as a minimum), I recommend that the applicant use the DEFRA Net Gain Biodiversity Metric. The Metric takes into account a time lag for how long the habitat would take to reach the required maturity and quality (termed "time to target condition"). This does not however take into account the delay between the impact and the initial creation of the habitat.

### Restored quarry

In addition to the comments above I have the following specific comments to make regarding the proposed restoration of the quarry:

- Key to the restoration of the quarry will be the re-working of the waterbody slopes in order to create optimal conditions for biodiversity. This is proposed but only in some areas and some of the proposed slopes are quite steep. There would need to be detailed plans and slope re-working should be designed and overseen by an appropriately qualified and experience ecologist/organisation in order to maximize biodiversity potential.
- The overall restoration scheme proposals submitted do not optimise potential biodiversity value. The current proposals are simple, comprising blocks of woodland planting with some glades, reedbeds and waterbodies. The design of the quarry restoration would be improved for biodiversity by having more gradation and a better mosaic of habitats (i.e. open water - reedbeds – marginal habitat - wetlands - bare areas - open grassland areas – rough grassland - scrub - denser scrub - woodland) and to allow some natural succession. However, it should also be noted that there should be sufficient woodland planting overall to offset the losses (discussed above).
- It may be preferable to provide better ecological connectivity from the river corridor to the waterbodies (i.e. open areas), to allow better flight lines and colonisation by birds.
- It may be preferable for any islands to be kept open rather than planted, in order to provide habitat for ground nesting bird species.
- There is scope to provide enhancements for sand martins and breeding ospreys.
- The scheme will only reach its ecological potential if the design, restoration and management/after care is overseen by suitably experienced and qualified Ecologist(s) / a suitably experienced organisation. The *Planning Statement* states that the applicant is actively involved with the RSPB on restoration of operations to wetland at another site Hampshire (Para 1.41), however there does not appear to be any proposals to work in partnership with an experienced organisation to restore this site.

### Replacement habitats - species mixes

Landscaping and habitat creation schemes should comprise native species and habitats appropriate to the locality. Appropriate guidance is given on the 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>

Proposed species mixes of the planting are provided:



- It proposed that the riverside planting be a mixture of Alder, Black Poplar, Aspen, White Willow, Dogwood and Goat Willow. Black Poplar is a rare tree in Lancashire. Black Poplar would have traditionally grown on river flood plains and sand and gravel banks, so the site would be a good location. Whilst it would be great to see Black Poplar planted it is important to use the correct genetic variants and any Black Poplar planting should only be from cuttings of genetically appropriate local species and not commercially bought plants. Dogwood should not be planted – replacement species could include Guelder Rose (*Viburnum opulus*) and Osier (*Salix viminalis*). White Willow should be replaced by other appropriate willows from the table in the link above, such as Crack Willow. It would be preferable to have a greater variety in the species mix/planting areas, so the riverside planting is not a uniform mix of a limited 6 species. It may be appropriate to include some species of drier ground conditions.
- Underplanting of hedgerow and trees is proposed within the BHS woodland - see comments above regarding avoidance of impacts on this woodland.
- The tree planting mix proposed alongside the new access road and in the initial site set up should be revised: Black Poplar, Field Maple and Dogwood should be omitted from the mix. Aspen and White Willow would not be appropriate, in part as the woodland would presumably be dry. The target woodland should be appropriate to the locality. A more appropriate mix may include Common Alder, Silver Birch, Hazel, Hawthorn, Holly, Wild Cherry, Blackthorn, Common Oak, Goat Willow, Elder, Rowan, Wych-Elm, Dog-rose with some Downy Birch and Sessile Oak.
- Peripheral underplanting of woodland areas would be in rows – this is not appropriate – planting should not be in rows of other geometric patterns. An average spacing with maximum and minimum spacings should be specified.
- There should be a mixture of trees and understorey through the woodland planting areas with a greater proportion of understorey shrubs to the edges – currently the proposed planting is segregated such that there are only trees in the centres and only shrubs in the fringes.
- Two different hedgerow mixes are given on the *Roadside Planting Plan* sheets 1 & 2. I am not clear which is the proposed mix – only one mix should be provided. The proposed hedgerow mixes comprise Hawthorn, Field Maple, Hazel, Blackthorn and Dogwood. Field Maple should be removed from the mix – it is not native to the locality. Dogwood should also be removed from the mix. Smaller amounts of Holly, Field Rose, Dog-rose and Guelder Rose could be included instead. It would be appropriate for some hedgerow trees to be included, such as Common Oak, to help compensate for the losses of hedgerow/scattered trees.

#### Replacement habitats and restored quarry – establishment maintenance and management

- The draft Unilateral Undertaking includes a clause to maintain tree, shrub and hedgerow planting for a period of 5 years from the completion of planting works. Whilst 5 years is the standard establishment maintenance period for planting, there should be ongoing longer-term management of replacement habitats outside the quarry area in line with the length of time the habitat would take to reach the maturity / condition of that which would be lost. This does not appear to be proposed.

- The long-term aftercare proposed for the restored quarry area is for 10 years and for it to be subsequently managed by the owners as part of their wider estate. (*Planning Statement*, para 1.16). 10 years is not long enough to allow such a site to establish and develop, for example woodland would take many more years to reach maturity and the condition of existing woodland / hedgerow which would be lost. I would expect to see a longer management period.
- There does not appear to be any proposals to actively manage the site during this period. The site will need ongoing management in order to maximise its biodiversity value and to prevent rapid deterioration. For example, it is proposed that the site will be subject to natural flooding. Invasive species are present along the Ribble (including Giant Hogweed and Himalayan Balsam) and flooding will bring seeds of these species into and across the site. The result will likely be a spread of invasive species across all areas subject to flooding.

I will be able to provide further comments once further information is submitted.

The above comments are based on a review of documents submitted with the planning application as well as a review of ecological records, maps, aerial photographs and images accessible to Lancashire County Council.

I hope these comments are helpful.

Yours sincerely,

Rebecca Stevens  
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Lancashire County Council