D52

ccnw

creating living environments

Land at Further Lane/Woodfold Park

Ecology Update

Date: 14/02/2024

By: Dominic Rigby MCIEEM

Ref: JE 8150-23

Client: Shaw and Jagger

Owing to the historical presence of Badgers, the findings of this survey should not be disclosed outside of the intended purpose of this report

NOTICE

Our ecological reports are published on the understanding that nothing will be omitted, amended or misrepresented by the client or any other interested party. This report and its contents remain the property of Conservation Contracts Northwest Ltd. until payment has been made in full.

The results and any advice contained here is based on the information available during the agreed period of study and within the resources available. All reasonable effort has been taken to ensure that an accurate assessment of the subject is provided at the time of the survey. However, the absence of recorded evidence should not be taken as an absolute guarantee that the site was not being used by a particular species.

Any future readers should note that both the physical state of the site and the relevant environmental legislation may have changed since this report.

Revision Schedule				
Version	Date	Prepared by	For Comment	Checked by
1.0	**29/01/2024**	Dominic Rigby MCIEEM	Shaw and Jagger	**G Lowe** CCNW Director
1.1	**14/02/2024**	**DR**		
Section 2.4.1 whole ecology the reason for refusal text added				

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Land Adjacent to Woodfold Park

Ecology Update/BNG February 2024

Dominic Rigby MCIEEM

Senior Ecologist

Conservation Contracts Northwest Ltd.

February 2024

CONTENTS

1. SUMMARY

In 2022 Conservation Contracts Northwest Ltd. (CCNW) were contracted by Shaw and Jagger Architects to undertake a preliminary ecological appraisal (PEA) of several fields between Further Lane and Woodfold Park, Mellor Brook, Lancashire. The appraisal was to identify any ecological constraints and opportunities arising from a proposed private dwelling and parkland development on the land. In February 2021 a PEA covering a smaller area of the same land had been undertaken by CCNW. The 2022 report updated those surveys and extended its scope to cover the proposed parkland area and was undertaken following industry guidelines and this was reported using the standard report template.

For the study, the site was divided into several parcels and their boundary features. Using the UK Habitat Classification, the fields were identified as neutral and modified grasslands, these fields contained four mature oak trees; some areas of the fields were able to be compartmentalised further into different sub-divisions of neutral grassland: none were UK Priority Habitat. The boundary features on site were hedgerow, tree lines and agricultural/estate fencing. Off-site boundaries were composed of deciduous woodland and lines of trees. A wooden stable block was at the centre of the site and agricultural units were positioned at the western corner.

Regarding protected species, on- and off-site boundary features could host nesting birds and ground-nesting birds could occur on the site's fields. Barn owl was using the site, but the proximity of a nesting site was unknown. Badger evidence had been found in the 2021 survey in one of the fields and a sett discovered within 30m of the site; there was no badger evidence on the 2022 visit or another in 2024. Agricultural buildings at the west end of the site had moderate bat roost potential and trees on and bounding the site contained potential roost features; desk study records revealed a small bat-roost nearby.

Great crested newts were using ponds within 2km of the site but there were no ponds on site, and all but 0.46ha of the site were in the "green" zone (in the great crested newt risk zone, which was published after the PEA). The remainder was in the amber zone, of which more than half was currently unsuitable, urban habitat (UK Habs).

However, the terrestrial habitat on site could potentially host a amphibians, as well as hedgehog and would require method statements, prior to works starting.

The UK Habs data was used to create an Interim BNG assessment in January 2024, this was constrained by out of season survey/condition assessments for grasslands but mitigated by assuming the highest quality habitat/condition likely given the evidence at the time. BNG was more than 40%.

The following was recommended and have been addressed/updated in this report:

- Condition assessments of the habitats on site during late spring/summer: **these have been commissioned, but a provisional Statutory BNG calculation was done in January 2024, using "best habitat/condition" assumptions. The BNG was >40%.**
- Bat emergence surveys would be required if the agricultural buildings were to be demolished. **These were to be demolished to create additional parkland habitat. Emergence/re-entry survey with infra-red aids were commissioned for the emergence season (May to August/September 2024). There was enough habitat/area within the site to create mitigation should the surveys prove roosting. Moreover, the high BNG score was not dependent on the demolition of the buildings.**
- Breeding bird surveys for barn owl and potential, ground-nesting, red-listed breeding birds that could be affected by development. **These were commissioned for the 2024 nesting season (March to August). However, there was enough habitat/area within the site to create mitigation, through planning of tree planting to ensure appropriate areas of open habitat. Opportunities for barn owl nesting mitigation were afforded by erecting boxes onto the existing trees on site, should that be required.**
- Further bat roost surveys/inspections would be required if any of the mature trees were to be affected (by lighting or felling). **No tree felling was to occur.**
- Method statements should be prepared regarding timing of site clearance for nesting birds, great crested newt, toads and hedgehog to ensure that no offence in law was committed. **These should be conditioned.**
- Regarding bats, a dark corridor should be maintained along the treed boundaries and on-site trees. **An isolux survey was commissioned to ascertain light spill from the development. Bat activity surveys were commission for 2024, April to October. There was a large development-free habitat buffer surrounding/within the redline boundary providing opportunities to screen and augment any foraging/commuting areas that may be revealed by the surveys and buffer boundary.**
- A 30m disturbance-exclusion buffer would be required around any badger setts, with checks for new setts undertaken immediately prior to development. **The plans as originally submitted provided this. Further checks immediately prior to commencement, and regularly thereafter while the construction/landscaping phases are on-going. These should be conditioned.**
- Additional gaps and light-spill onto the Further Lane hedge to be minimised to reduce the need for bat activity surveys and mitigation. **See Isolux commission above.**
- Any hedgerow removal would need to be compensated by replacement elsewhere on site; a more species-rich replacement would provide net gain. **No hedgerow removal was planned.**
- A Biodiversity Net Gain Report should be produced following the habitat condition assessments and any habitat-based species mitigation designs. **A full BNG assessment was commissioned for May to July; the optimum time to assess grassland condition.**
- Enhancements such as a wildlife pond/marsh, more sensitive grassland management and additional hedging/tree planting to increase on- and off-site habitat connectivity, should be designed into the landscape plan. **These have all been incorporated into the landscape design and inputted into Interim BNG metric assessment; a habitat net gain BNG calculation was done to support this report, giving an interim gain of 41% (habitats) and 49% (hedgerow/lines of trees).**

2. INTRODUCTION

2.1 Principal Author

This report was compiled by Dominic Rigby MCIEEM, Senior Ecologist at CCNW. He had 35 years' professional experience in the ecology sector and held survey/disturbance licences in England and Wales for great crested newts, bats and barn owls. He was up to date with the latest developments in ecological assessment having attended Chartered Institute of Ecology and Environmental Management (CIEEM) courses on UK Habitat Classification, Biodiversity Net Gain and Calculating and Using Biodiversity Units with Defra Metric 2.0/3.0 in the last two years.

2.2 Guidelines

- The Report relies heavily on the 2022 PEA (CCNW. 2022) which followed Chartered Institute of Ecology and Environmental Management Guidelines on Ecological Report Writing (CIEEM 2017a; Dean, 2021), where a Preliminary Ecological Appraisal Report was defined as "a report that aims to provide general advice on ecological constraints associated with any site/development and includes recommendations for further survey."
- The process followed during this Preliminary Ecological Appraisal was that set out in the Guidelines for Preliminary Ecological Appraisal (CIEEM 2017b).

2.3 Site Description

2.3.1 Location

The 5.8ha site was adjacent to Further Lane and Woodfold Park, Mellor Brook. The central grid reference was SD6359129578.

County: Lancashire

Borough: Ribble Valley

Parish: Mellor Parish

Figures One and Two (p7, p8) mapped the location and provided a geographical sectioning of the site.

2.3.2 Description

The site was composed of several improved and semi-improved horse-grazed grassland fields. The south-western corner contained agricultural stables, storage and office buildings. A smaller stable was in the centre of the site. The eastern fields had been neglected and a semi-natural neutral grassy mosaic was developing; the western part of the site was still actively managed for horses and was composed of intensively grazed improved rye pastures and grazed neutral grasslands. Standard native trees occurred in some of the grassland parcels.

- **Site Boundaries**

The fields were divided by post and rail fencing, temporary electric fencing and estate fencing. This fencing continued along most boundaries, with metal estate fencing along the eastern boundary and sheep netting along the site's hedgerow and gappy mortared stone walls along some SW boundaries.

The roadside hedgerow was a heavily flailed hawthorn hedge which ran parallel to Further Lane, along the northern boundary of the site. The western most boundary along Further Lane was hedged from a former line of deciduous trees. The north east boundary hedge ran parallel with a seasonally flooded drainage ditch. Over the eastern boundary there was a wide line of mixed deciduous trees. These overhung and occasionally straddled, the site. The tree line widened on the northern-eastern and southern boundaries, forming small, off-site mixed-deciduous woods.

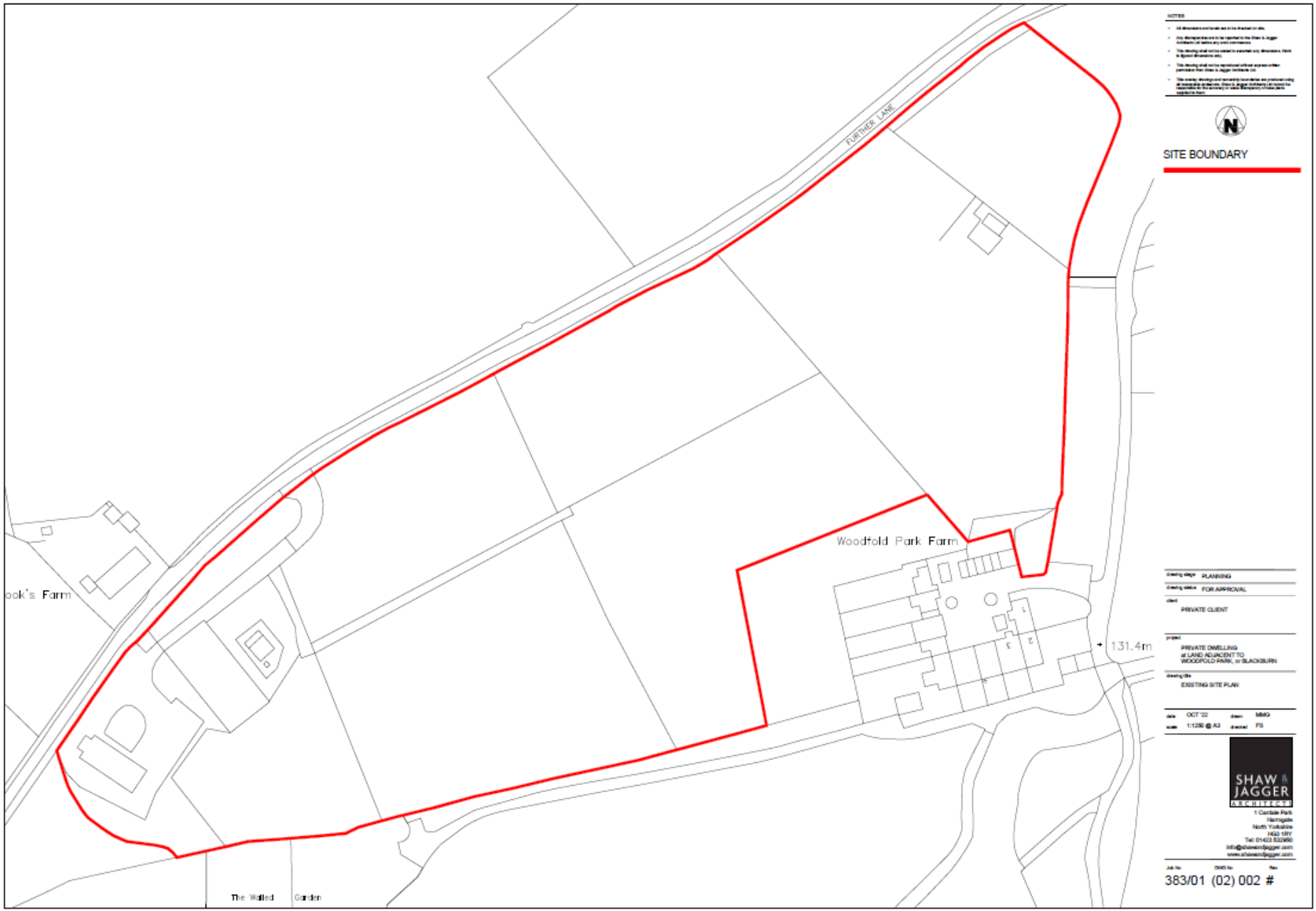
Figure One: Site Location and Surrounding Landscape

Redline: PEA/planning application site boundary

2.3.3 Planning Application Reference

Ribble Valley 3/2022/0988

Figure Two: Red Line Boundary Site Map (courtesy of Shaw and Jagger Architects)



2.4 Purpose and Scope of Report

2.4.1 Purpose of Report

The key objective of this report was to address the statements in the planning application refusal notice for application 3/2022/0988 (dated 01/09/20230), in relation to ecology (point 5).

These were:

The proposal fails to demonstrate that it has provided the necessary mitigation outlined in the submitted Ecology Report. In particular there are concerns about the landscape proposals which fail to provide and protect wildlife corridors and enhance their connectivity with the nearby Woodfold and Jeffery Woods Biological Heritage Site.

The submitted Ecology Report states that a Biodiversity Net Gain of more than 10% can be achieved. However, as this would be dependent on the outstanding survey work for Great Crested Newts, bats and nesting birds/barn owls this can not be substantiated.

The proposal fails to adequately protect and enhance protected species and habitat contrary to Key Statement EN4 and policy DME3 of the Ribble Valley Core Strategy 2008 -2028 as well as the National Planning Policy Framework.

2.4.2 Scope of Report

This assessment comprised a desk study and a field study. The desk study was supplied by CCNW using the Lancashire Environmental Records Centre (LERN) data. The field data was based on previous data collected during the previous PEA survey visits in 2021 (January) and 2022 (November) and a walkover on January 2024.

The previous field studies comprised of:

- Mapping habitats within the red-line boundary, and beyond where any development may impact those;
- Assessment of possible presence of protected or priority species and the likely importance of habitat features for such species;
- Noting of any invasive non-native species (INNS); and,
- Recording of incidental sightings or field signs of priority/protected species

Although CIEEM guidelines suggest ecology survey data is valid for 18 months (CIEEM, 2019), a further ground-truthing habitat walk over was undertaken on 22nd January 2024.

2.4.3 Constraints and Deviations from Guidelines

The following limitation was noted in the previous PRAs:

The PEA commissioned and undertaken in November 2022 (with a follow-up walkover in January 2024), with an earlier iteration done in February 2021. These were outside the optimal period for gathering specific details to inform comprehensive nesting bird information, bat surveying and grassland habitat assessments.

- *A comprehensive suite of species surveys was commission from March to October 2024. The implications of these are discussed in Section 4.*

- *It was not considered a constraint to broad habitat classification, but robust habitat type and condition monitoring of the grassland parcels could not be made. A work around for this was discussed with the local specialist in this area: BNG officers at Greater Manchester Ecological Unit (GMEU) and Merseyside Environmental Advisory Service (MEAS) and the east Lancashire Conservation Officer at Lancashire Wildlife Trust (LWT).*

2.4.4 Limitations

The appraisal focussed on ecology only. It did not make assessment or evaluation based on landscape or heritage features. For example, trees on site were assessed for their biodiversity potential only.

A separate Arboricultural report was commissioned (Godwins Tree Surveys, 2022).

3. LEGISLATION AND POLICY

This was detailed in the aforementioned PEAs. However, the following important update was relevant to this report.

Environment Act, 2021

The secondary legislation to mandate a 10% biodiversity net gain on all but the smallest developments was published in January 2024.

The Statutory Biodiversity Metric was published by Defra in November 2023 and was the standard by which the legislative 10% minimum gain would be calculated.

The November guidance Draft biodiversity net gain planning practice guidance - GOV.UK (www.gov.uk) also stated:

"The statutory framework for biodiversity net gain involves the discharge of the general biodiversity gain condition following the grant of planning permission to ensure the objective of at least 10% net gain will be met for a development. The determination of the Biodiversity Gain Plan under this condition is the mechanism to confirm whether the development meets the biodiversity gain objective. Development may not be begun until the Biodiversity Gain Plan is approved.

Given this, it would generally be inappropriate for decision makers, when determining a planning application for a development subject to biodiversity net gain, to refuse an application on the grounds that the biodiversity gain objective will not be met."

However, decision makers may need to consider more broadly whether the general condition is capable of being successfully discharged".

3.1 Implications for Current Project

The Statutory Biodiversity has been used for this project. The seasonal limitation (2.4.3) was somewhat overcome by classifying habitat types at their highest possible distinctiveness and condition (within limitations of what was feasible from field and desk searches) and this resulting in > a 40+% gain.

This should suffice in enabling "*decision makers may need to consider more broadly whether the general condition is capable of being successfully discharged".*

4. METHODOLOGY

4.1 Desk Study

The objective of the desk study was to review the existing information, available from the local records centre (LERN) and in the public domain, concerning species and habitats to identify the following:

- Relevant designated sites for wildlife or geology on or neighbouring the site, using LERN database and the Multi Agency Geographic Information for the Countryside (MAGIC) website (Defra, updated 2024);
- Protected and locally significant species records using local searches of reliable, up to date data. Protected Species distributions were checked using the NBN Atlas (NBN Atlas Partnership, 2017, updated 2022), LERN and Lancashire and Cheshire Fauna Society (bird records to 2022);
- Aerial photographs and Ordnance Survey (OS) maps were reviewed to identify features of ecological interest surrounding the Site, nearby areas of ecological interest and features connecting these habitats (hedgerows, watercourses, railway lines, ponds); and,
- Ecological and Arboricultural reports relating this and to neighbouring planning applications from the previous ten years were studied and information considered as necessary.

4.2 Field Survey

An ecological walkover was undertaken on 22 January 2024, this was to ensure that the data provided from the field survey for the PEA on 10th November 2022, and an earlier iteration of the PEA on 5th February 2021 were still appropriate.

4.2.1 Habitat Survey

4.2.1.1 UK Habitat Classification (UKHab)

The habitats were surveyed using the UKHab. The surveys were undertaken by Dominic Rigby (DR) on 10th November 2022 and checked again on 22nd January 2024.

The following metadata was collected, as recommended in UK Habitat Classification User Manual version 1.1 (Butcher *et al*, 2020).

- **Survey Scope**

  The habitat classification was applied to the redline boundary as defined in the Figure Two (p8). Boundary features potentially affecting or affected by the site were surveyed.

- **UKHab Edition**

  The Professional Edition (v2.0) was used to maximise the future value of the habitat data. Thus, habitat compartments were keyed out to Primary Code Level 5, where this level was appropriate.

- **Minimum Mapping Unit (MMU)**

  The finer scale 25m^2 polygon/5m length MMU was used to determine habitat compartments for classification and condition assessments.

- **Secondary Codes**

  Secondary Codes (from version one) 10-200 were used alongside the primary codes. Habitat mosaic (codes 10-18), habitat complex (19-32), origins (33- 49), management (51-85) and environmental qualifiers (117-138) were treated as mandatory (where relevant). There published in the PEA (CCNW, 2022)

- **Habitat Transitions**

  A compartment was assigned a habitat code when it was covered by 70% of the ground; a well-used convention recommended in the UKHab User Manual.

- **Recording**

  Data was collected in the field, following the UKHab Field Key v2.1 (UK Habitat Classification Working Group, 2020). Field data was collected by writing over a 1:1250 paper map, provided by the client (see Figure Two, p8). This map had been cross-referenced with current Google Earth view prior to the field visits. The new field data were then transferred onto fair-copy versions at the desk, checked (see below) and digitised using QGIS v3.28.

- **Mapping**

  The habitat maps were digitised using QGIS v3.28 at a minimum scale of 1:100 and using the Statutory Biodiversity Metric – QGIS template.

  The Statutory Biodiversity Metric GIS Import Tool was then used to convert the data ready for use in the Statutory Biodiversity Metric Calculation Tool (published in November 2023).

4.2.1.1 Condition Assessments

The habitat condition of each compartment was assessed using the appropriate area-habitat type as set down by Natural England (Panks et al, 2021 – the latest version at the triome). However, the following was noted;

"Habitat surveys can be undertaken year-round, though it is important to note that the optimal survey season is April to September inclusive for most habitat types. Surveys outside of the optimal survey period should use a precautionary approach to assessing condition criteria which are not measurable at the time of year the survey is undertaken."

From: The Biodiversity Metric 3.0 Technical Supplement Para 1.6 *(there is no Technical Supplement yet published for the latest (Statutory) BNG iteration)*

In the light of this statement only the Lines of Trees and Hedgerows on site were subject of robust Condition Assessments, with a recommendation that all Condition Assessments are undertaken/reviewed in May/June 2024 as part of a Biodiversity Net Gain report and Plan.

(See Constrains 4.3.1 below)

4.2.2 Species Surveys

4.2.2.1 Plants

All plants were listed to enable correct UKHabs classification; any notable plants seen during the UKHabs survey were recorded.

4.2.2.2 Amphibians

Terrestrial habitat was checked for suitability for foraging, dispersal and hibernation.

4.2.2.3 Birds

Birds detected by sight/call were noted and habitat assessed for potential nesting species.

4.2.2.4 Water Vole

The ditch running parallel to Further Lane was checked for water vole suitability/evidence.

4.2.2.5 Bats

- **Potential Roost Features in Trees**

As part of the habitat surveys consideration was given to trees and tree-groups with potential roost features using criteria in BTHK (2018) and Collins (2016). Trees within the red-line boundary (mapped on Figure Six, p23) were assessed for potential roost features.

- **Stables (Compartment 21)**

The stable block was subject to a potential roost assessment (following Collins, 2016), using high-powered torch and endoscope. Detailed examination of the inside was undertaken searching for droppings, urine stains and smoothed surfaces.

- **Agricultural Buildings (SW corner)**

These were assigned a bat roost potential suitability from an external inspection.

- **Bat Activity**

Potential for the site to provide bat commuting/foraging was assessed by habitat provision.

4.2.2.6 Badgers

The site was checked for badger signs and a search for setts around a 50m buffer around the site was undertaken.

4.2.2.8 Other Protected Species

Habitat suitability for hedgehogs and reptiles was noted during the habitat surveys.

4.2.2.9 Invertebrates

The potential importance of the site for invertebrates was assessed via the habitat classification and provisional condition assessments.

4.2.2.10 Invasive Non-native Species (INNS)

Any species relevant to INNS legislation (Wildlife and Countryside Act, Schedule Nine) was noted during the habitat survey and assessment.

4.3 Constraints and Implications

The following constraints, conventions and deviations from national guidelines were noted.

4.3.1 Time of Year

The surveys took place in November and January. This led to the following constraints:

- **Plants and habitats**

Few plants were in flower at the time of the survey. However, the surveyor was able to identify grasses at the vegetative stage (although some species were known to be hard to detect in winter, particularly *Cynosurus cristatus* which can be characteristic of some neutral grasslands, thus its absence was not considered as diagnostic). Most of the perennial wild flowers present were identifiable at their rosette stage and habitat indicator grass species, such as rye grass (*Lolium perenne)* and Yorkshire fog (*Holcus lanatus*) were identifiable.

a. Grassland Habitat Types

The time of year was not considered a material constraint to habitat categorisation; however, a cautious approach was taken and only those grassland compartments dominated by rye grass and with a near-absence of forbs were categorised as modified grassland; if any doubt arose, they were classed as other neutral grassland – a category of higher distinctiveness in the BNG calculator.

These would be revisited in June/July.

b. Condition Assessments

Winter was an unsuitable time for grassland condition assessments. Therefore, a precautionary approach was taken, and unless there were obvious reasons to downgrade the condition (excessive poaching, over grazing, undesirable species) the condition assessments were defaulted to “Moderate”.

None of the neutral grassland compartments were likely to be “good condition” given their heavily horse-grazed nature, or their recent neglect.

NOTE

This approach was adopted following conversations with biodiversity net gain officers at GMEU (Emma Marston, per. comm 10/1/24), and at MEAS (Rachael Rhodes pers. comm 18/01/24).

- **Nesting Birds**

The survey was done out-of-season for most species, consequently a comprehensive understanding of the importance of the site was not attained by field survey data alone. However, desk study records coupled with field observation were appraised, but further field surveys recommended.

- **Bats**

The importance of the site for bats could be assessed by the suitability of habitat and site-structure only, as these mammals were likely to be in hibernation at the time of the survey. The presence of some features, such as droppings, were less likely to be encountered in winter. Desk study records coupled with field observation were deemed adequate for the PEA.

Subsequent to the PEA, a 4th Edition of the industry-standard Bat Survey Guidelines (Collins, 2023) has been published, to inform surveys from October 2023 onwards. The new guidelines will not change the design of the surveys planned in 2024, nor compromise the data used to inform the 2022 PEA.

- **Reptiles, Hedgehog and Invertebrates**

The likelihood of the site to host these species/species groups was derived from habitat suitability and known local status only (via LERN data), as there would be no activity during winter. This was deemed adequate for the PEA.

5. PLANNING ISSUES

The key objective of this report was to address the statements in the planning application refusal notice for application 3/2022/0988 (dated 01/09/20230), in relation to ecology (point 5).

These were:

The proposal fails to demonstrate that it has provided the necessary mitigation outlined in the submitted Ecology Report. In particular there are concerns about the landscape proposals which fail to provide and protect wildlife corridors and enhance their connectivity with the nearby Woodfold and Jeffery Woods Biological Heritage Site.

The submitted Ecology Report states that a Biodiversity Net Gain of more than 10% can be achieved. However, as this would be dependent on the outstanding survey work for Great Crested Newts, bats and nesting birds/barn owls this can not be substantiated.

The proposal fails to adequately protect and enhance protected species and habitat contrary to Key Statement EN4 and policy DME3 of the Ribble Valley Core Strategy 2008 -2028 as well as the National Planning Policy Framework.

The points are addressed in Section 5.1 to 5.3 below.

5.1 Provision, Protection and Connectivity of/to Protected Sites and Habitats

5.1.1 Designated Sites

There were eight county wildlife sites (known as Biological Heritage Sites – BHS, in Lancashire) within 2km of the site (Figure Three, below). All were designated for their semi-natural woodland. Of those within 1km of the project site, only Woodfold and Jeffrey Woods lay within Ribble Valley Borough.

5.1.1.1 BHS Within 250m of the Site

None

5.1.1.2 Sites Within 1km of the Site

Woodfold and Jeffery Woods 62NW17

This 50ha BHS was 445m SE from the site with a ground flora indicative of ancient woodland. The site adjoined Alum House Wood Biological Heritage Site (BHS 62NW16) and along with Wild Bottom's Wood (BHS 62NW12) formed a large, contiguous area of woodland occupying 94.6 ha.

Hoolster Wood 63SW14

This 4.4ha site comprised of ancient semi-natural woodland. The wood was situated along the banks of a small brook. The site was 800m NW of the project site.

This site was a continuation of 62NW17 and was abutting its southerly boundary.

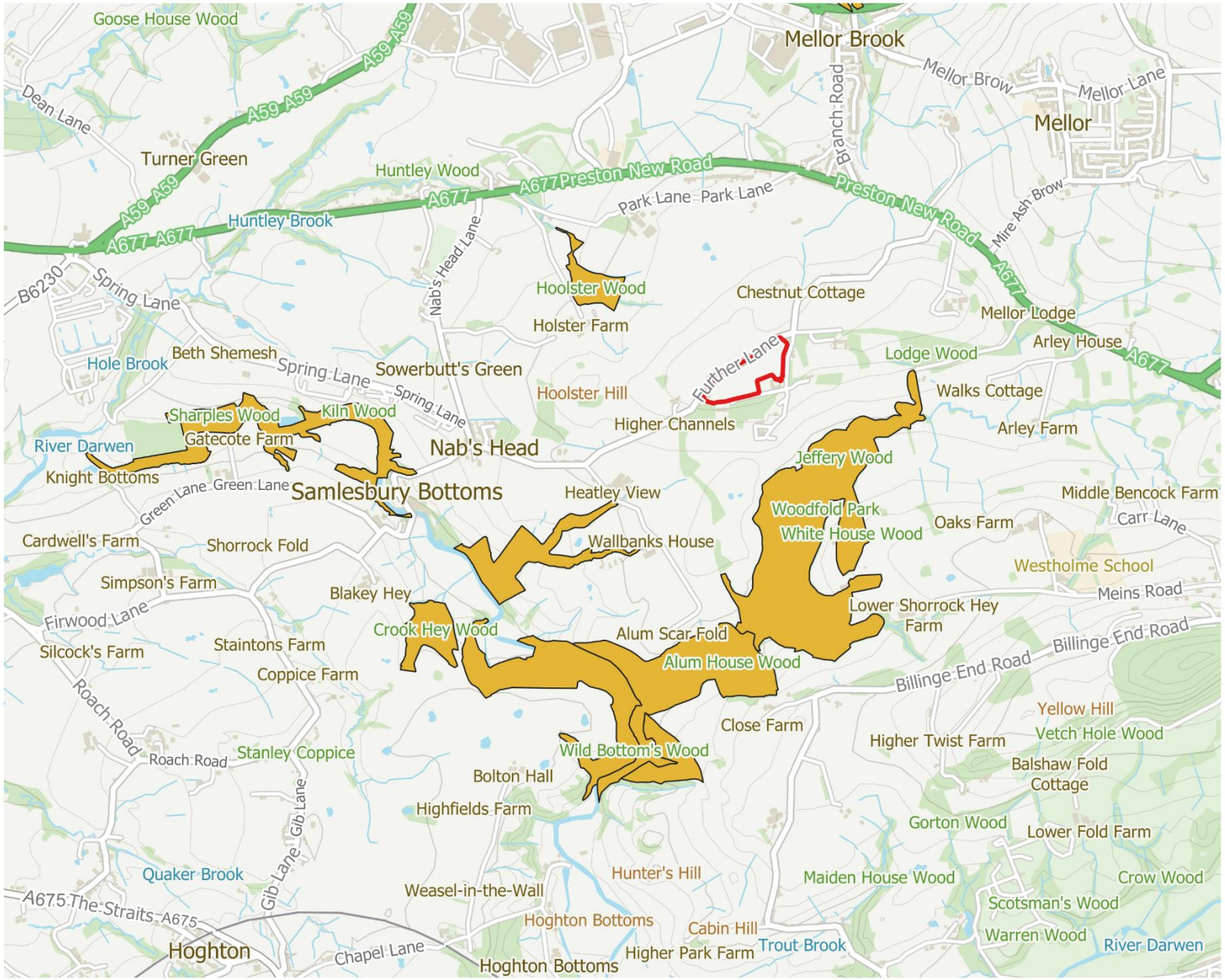


Figure Three: Protected Sites

Site
Red line boundary
BHS

North

Created by Dominic Rigby
Date/Version 15/11/2022 v1

0 500 1,000 m

5.1.2 Ecological Networks in Lancashire

Lancashire County Council has published ecological network maps covering contiguous grassland and woodland networks comprising corridors of up to 3km. These are incorporated into “Networks” map in Figure Four, p20.

The woodland network abuts the project site and thus the proposed landscape plan for Woodfold provided an opportunity to extend the area of the woodland network.

The closest grassland network was 1km NE from the project site.

5..1.3 Priority Habitats

There were no habitat-based priority habitats (PH) on site. However, both lowland deciduous woodland and Wood Pasture and Parkland PHs abutted the site (see Figures Four and Five below).

5.1.4 Enhancing Connectivity

Figure Five (p21), which incorporates the post development site habitats, displayed how the development would enhance the ecological corridors in the area.

Jeffrey Woods/Woodfold BHS was connected to the site by woodland and wood pasture/parklands PHs as well as the woodland ecological network.

The proposals for a woodland compartment at the SW corner of the site would extend PH woodland and woodland network to within the project site, within the lifespan of the BNG plan (See Figure Six for Proposed post-development habitats, p22).

This would extend the connectivity the BHS and contribute to the county ecological network.

The proposed habitat improvements on site, with good-moderate condition neutral grassland with scattered trees, would within the lifespan of the BNG plan, develop a wood pasture/parkland habitat (Figure Seven, p23), which would expand the current PH which stretches to the BHS south and expand it significantly north to the Further Lane.

Thus, the project provides a unique opportunity to make an important contribution to the connectivity of the current protected sites, habitats and ecological networks in the area.

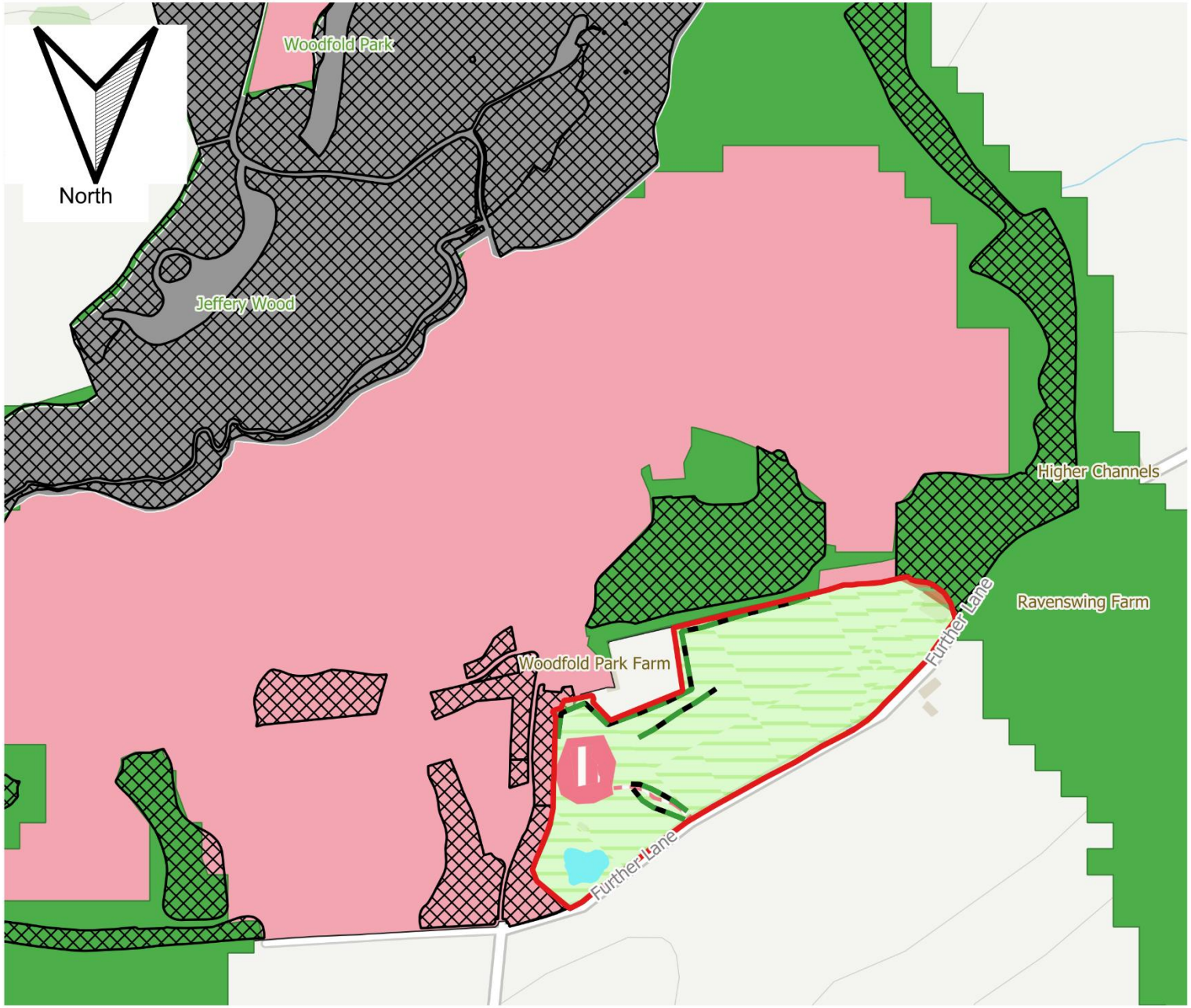


Figure Four Ecological Networks around Proposed Development

Redline Boundary

HEDGEROWS

Hedgerows

Line of trees

HABITATS

Habitats

Construction Imprint

Lowland mixed deciduous woodland

Other neutral grassland

Ponds (non-priority habitat)

BASE MAPS

County Woodland Network

BHS

Woodland Priority Habitat Inventory

Wood Pasture/Parkland Priority Habitat Inventory

Created by Dominic Rigby
Date/Version 26/01/2024 v1

0 100 200 m

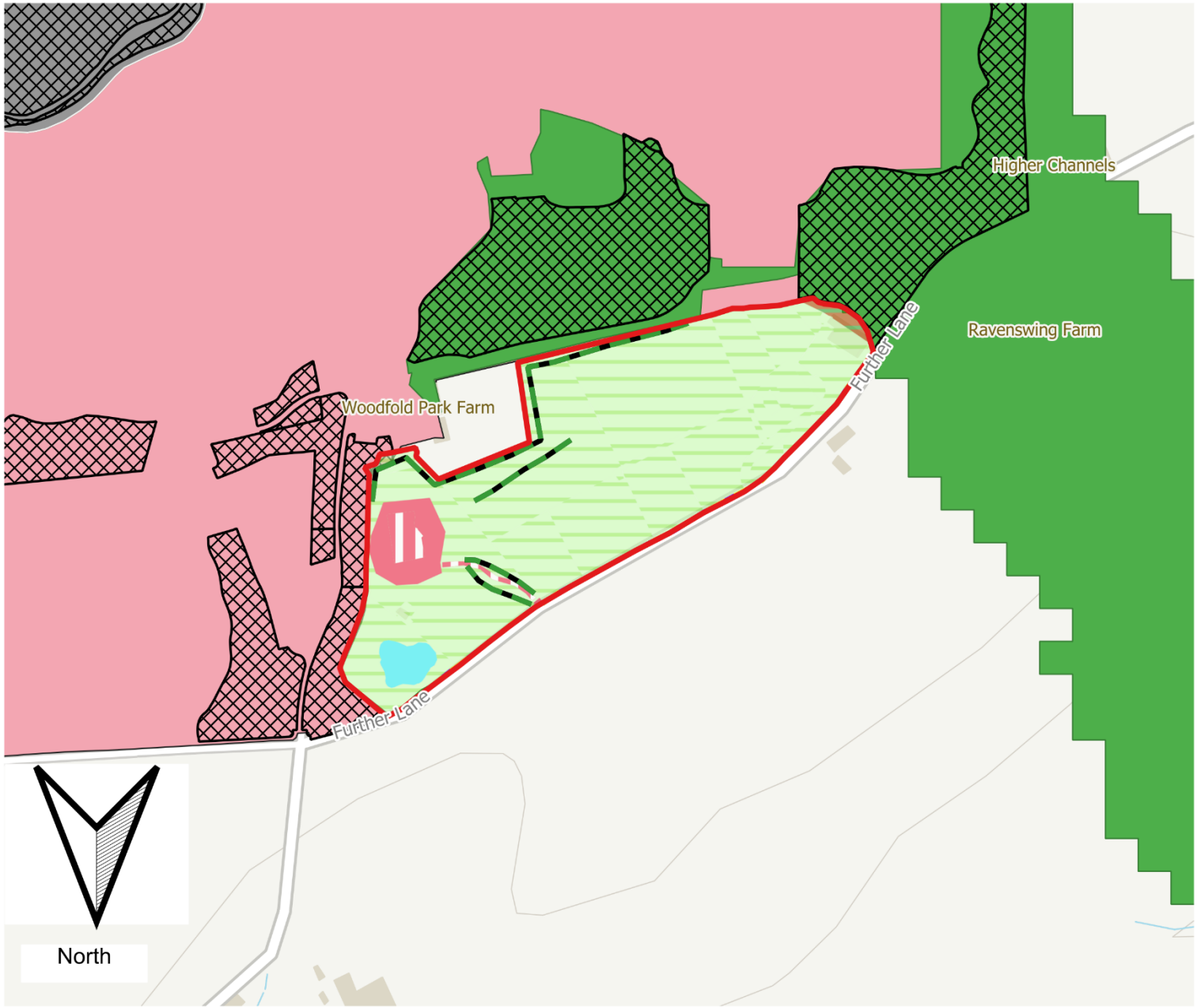


Figure Five Ecological Networks around Proposed Development Close Up

Redline Boundary

HEDGEROWS

Hedgerows

Line of trees

HABITATS

Habitats

Construction Imprint

Lowland mixed deciduous woodland

Other neutral grassland

Ponds (non-priority habitat)

BASE MAPS

County Woodland Network

BHS

Woodland Priority Habitat Inventory

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Created by Dominic Rigby
Date/Version 26/01/2024 v1

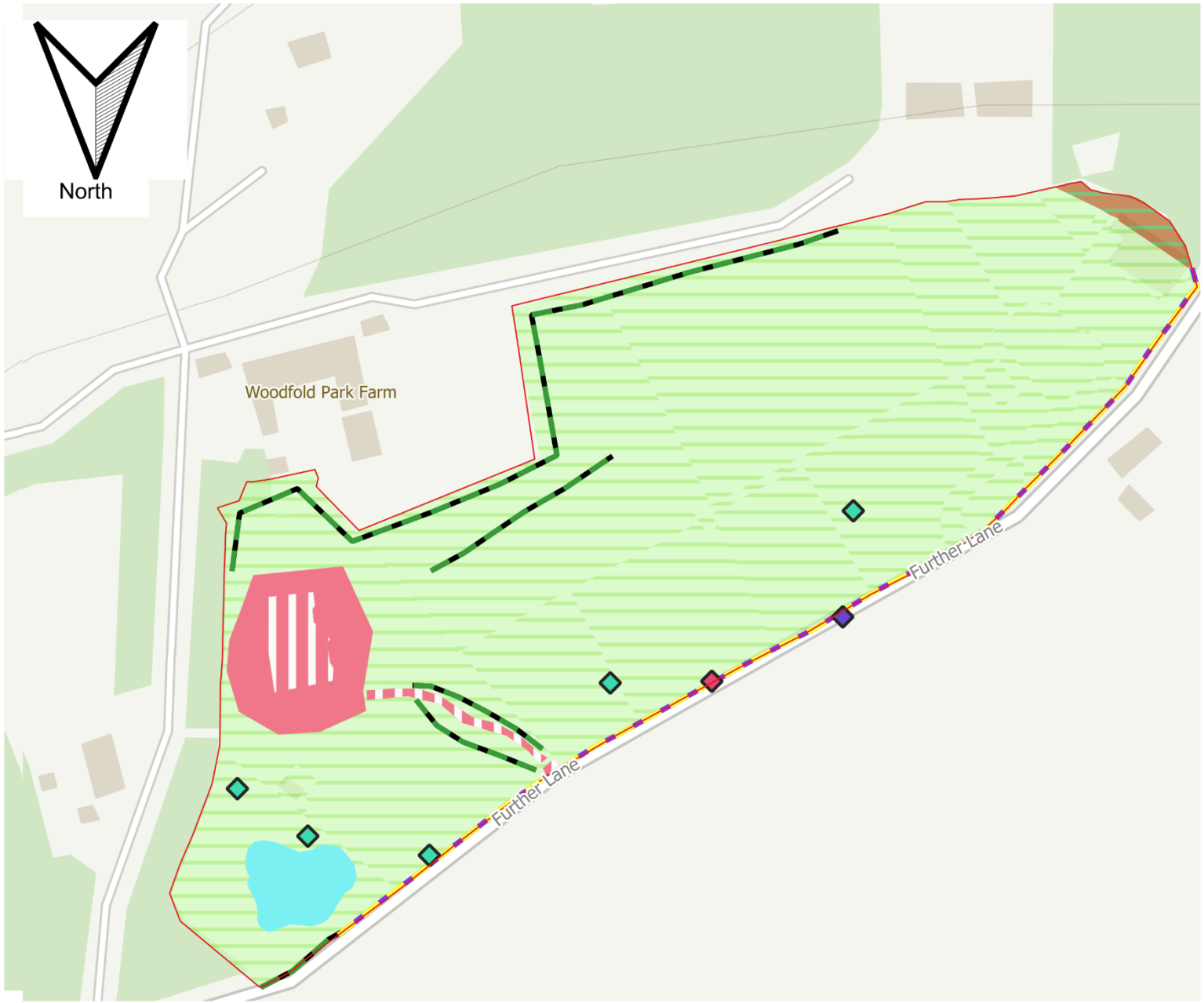

Figure Six
Post Development Habitats

Project Redline

INDIVIDUAL TREES

Existing Standards

- Large
- Medium
- Small

HEDGEROWS

Hedgerows

- Line of trees
- Native hedgerow

HABITATS

Habitats Proposed

- New Property
- Lowland mixed deciduous woodland
- Other neutral grassland
- Ponds
- Vegetated garden

Note:
Newly planted trees < 7.5cm trunk (dbh) do not shoew up on BNG proposals maps)

0 25 50 m

Created by Dominic Rigby
Date/Version 26/01/2024 v1

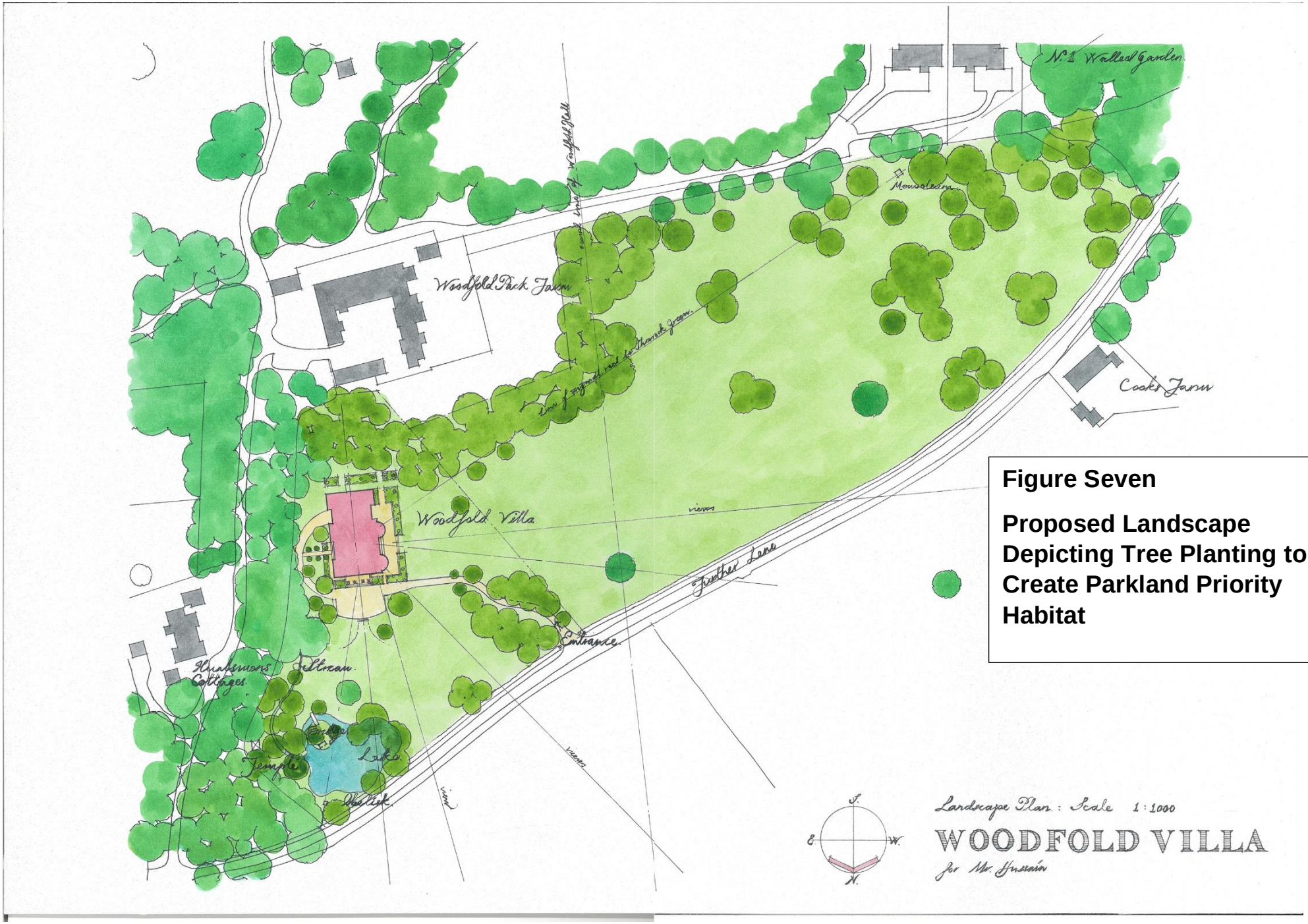

Figure Seven

Proposed Landscape Depicting Tree Planting to Create Parkland Priority Habitat

5.2 Protected Species Protection and Enhancement

The planning refusal raised concerns that without the outstanding protected species surveys the plans could not be accepted as there was no evidence that the development would protect/enhance protected species and their movements.

The full habitat proposals have now been received by the ecologist (DR), and great crested newt impact maps have been subsequently published and although a full suite of surveys is still recommended and commissioned (for March -October 2024) the site proposals do enable some broad assumptions to be made regarding ecological impacts on protected species.

5.2.1 Amphibians

There was no breeding amphibian habitat on site, however terrestrial habitat was suitable.

- **Great crested newt**

Lancashire's great crested newt (GCN) risk zones were published in March 2023; after the PEA was submitted.

All but 0.46ha of the 5ha site was covered by a green zone. Green zones contain sparsely distributed GCN and are less likely to contain important pathways of connecting habitat for this species. Amber zones contain main population centres for GCN and comprise important connecting habitat that aids natural dispersal. Of the amber zone on site only 0.25ha provided suitable terrestrial habitat, and that habitat was at the SW of the site outside of the construction imprint, in an area where habitat was to be converted - from urban to neutral grassland (0.21ha); and enhanced - scrub to woodland (0.05ha) and modified and poor neutral grassland to neutral grassland (0.14ha).

A terrestrial survey for the site was no longer required. However, there was a GCN breeding record 1km from the centre of the project site - separated by the busy Preston New Road. Consequently, *GCN should be included in a conditioned Protected Species Method Statement.*

- **Toad**

The closest toad record was 600m to the south within the Woodfold and Jeffery Woods BHS. *Common toad should be included in a conditioned Protected Species Method Statement.*

5.2.1.1 Enhancement

The conversion of the site to a better-quality grassland with scattered trees, and the creation of a (fish-free) wildlife pond within the project area should increase the suitability of the site for all amphibians at both breeding and terrestrial phases. The increased connectivity with the neighbouring priority woodland and parkland habitats would increase likelihood of amphibians reaching the site. And the mowing regimes necessary to increase the condition and distinctiveness of the grassland would suit amphibians.

5.2.2 Nesting birds

- **Barn owl**

Barn owl pellets were found in the small wooden stables in the centre of the site. These stables were to be removed. There was no evidence of nesting in those stables.

The bat roost assessment of the farm buildings (targeted for demolition for ecological gain) also revealed no evidence of breeding barn owls, as did the on-site mature trees (mapped on Figure Six, p22).

An inspection during the January 2024 walkover, confirmed that the off-site tree line at the rear of the proposed Woodfold Villa did not contain suitable nest holes.

A barn owl survey was commissioned for March to August 2024 to better understand how the species used the site. This may help inform the exact positioning of some of the standard oaks to be planted across the western side of the site (see Figure Seven, p23) to maximise feeding and nesting opportunities. There was ample suitable habitat being created/enhanced to create suitable open spaces for foraging.

- **Other nesting birds**

The PEA visits revealed no evidence of nests in wooden stables block in the centre of the site, but these provided potential.

The farm buildings/stable in the western corner provided nesting opportunities.

Ground-nesting birds may be using the site, and this will be confirmed by the commissioned breeding bird survey in 2024.

The surveys may help inform the exact positioning of some of the standard oaks to be planted across the western side of the site (see Figure Seven) to maximise/locate open species, if appropriate. There was ample suitable habitat being created/enhanced to create suitable open spaces for ground nesting birds.

A Nesting Birds Method Statement should be conditioned, this should advise that demolition works only take place outside the nesting season or following thorough and regular nesting bird checks by a competent ecologist, with consequent avoidance measures.

5.2.2.1 Enhancement

The folly buildings to be erected (mausoleum, temple) provided opportunities to mitigate for potential loss of nesting habitat, consequent of the stables/farm building demolition; including bespoke provision for red-listed species: house martin, starling and house sparrow; this could be irrespective of whether they were found nesting on site.

The better-quality habitats (mosaic of grasslands and standing trees) will provide more nesting niches for a suite of birds.

5.2.3 Bats

- **Roosting Bats**

The potential for bat roosting (following potential roost assessments (PRAs) of on-site and abutting trees) was restricted to the stables/farm building at the western corner of the site. These were assessed as having “moderate” roost potential – triggering the **commissioning of a minimum of two emergence/re-entry surveys for 2024**.

If a bat roost/s were discovered (there was no evidence during a PRA in November 2022), a European Protected Species Mitigation Licence (EPSML) would be required. These can only be granted once planning permission is granted.

The project site afforded several opportunities for bat roost mitigation should it be required. The follies of the mausoleum and temple provided opportunities to mitigate for any potential bat roosts that may be revealed by the May-September surveys in 2024.

- **Bat Activity**

The proximity of residential dwellings, farm buildings and matures trees (all of which could provide roosting opportunities) in a connected landscape raised the potential that the project site could provide commuting and foraging opportunities for bats. **Activity surveys have been commissioned for April to October 2024.**

The only potentially negative impact of the proposed project on bat activity would be the addition of artificial lighting on a currently dark site. Lighting could disrupt commuting and foraging activity.

A lighting survey has been commissioned to confirm the lux spill from the development, with a view to designing a scheme that ensured there is no more than a 1 lux spread (equivalent of full moon) onto boundary habitats to the south, east and west (it was unlikely that Further Lane- north- was used as a bat corridor given poor, heavily flailed hedge provided little protection and there was occasional traffic).

Most of the site would remain light free.

5.2.3.1 Enhancement

The good-condition grassland and scattered tree habitat being created would provide much more bat-friendly environment than is currently present; creating shelter, linear corridors and increased foraging opportunities.

The follies on site would provide opportunities for roosting bats; the activity and emergence surveys will inform the targeting of species-specific boxes and designs, in addition to any mitigation measures that may be legally required.

As the new native trees and tree-lines mature further roosting and foraging opportunities would be created and the 5ha parkland habitat would form a continuous woodland and parkland south to West Pennine Moors and north beyond the Ribble.

5.3 Biodiversity Net Gain

An interim Biodiversity Net Gain calculation was undertaken. BNG used habitat as a proxy for biodiversity.

As explained in the previous sub-sections (5.1-5.2) the proposed habitat provided protection and enhancement for the protected species likely to occur on site.

The Statutory Biodiversity Metric calculation revealed an area habitats gain of 41% and a hedgerow/lines of trees gain of 49%.

As explained in sections 2.4.3, 4.2.1.1 and 4.3.1 the habitat surveys were undertaken at a time of year when assigning grassland type was difficult and when grassland condition assessment was largely unsuitable. This was overcome by assigning the likely habitat type with the highest distinctiveness rating and the best condition possible given the habitat as it presented in autumn/winter (hence boosting the baseline value of the site).

This major limitation resulted in a (probably) undervalued BNG, and hence the reason for it being an interim BNG.

A further UK Habs survey, with robust condition assessments was commissioned for May-June 2024.

However, the current calculation is sufficient to prove that a substantial BNG will be created by this project.

This report should be read in conjunction with the completed Biodiversity Metric Calculation Tool spreadsheet.

Key notes re: the calculation

- Ecological networks in Lancashire were used to determine strategic significance in the absence of a Local Nature Recovery Map.
- Tree Preservation Orders were used to determine local importance of existing standing trees.
- The Statutory Metric defines “small tree” as those between 7.5cm and 30cm dbh *at time of planting*. Extra heavy standards are only *ca*.5cm when planted and therefore the extensive native tree planting that forms an important biodiversity element and legacy of this project cannot be/has not been used in the BNG calculation.
- Where proposed woodland and ecologically valuable tree lines abut ecologically significant habitat (PH/ecological networks) they were classed as “formally identified in local strategy” in the proposed habitat tab.
- The extensive Parkland (other neutral grassland with scattered trees) being created was classed as “locally ecological important but not in local strategy” when current neutral grassland was being enhanced, whereas when current modified grassland was being enhanced the neutral grassland, this was classed as “area not in in local strategy.” This may be upgraded following the condition assessments and biodiversity net gain plan – further increasing the BNG and strategic importance of the post-development site.

6. CONCLUSIONS AND RECOMMENDATIONS

The following was recommended in the PEA and have been addressed/updated in this report:

- Condition assessments of the habitats on site during late spring/summer: **these have been commissioned, but a provisional Statutory BNG calculation was done in January 2024, using "best habitat/condition" assumptions. The BNG was >40%.**
- Bat emergence surveys would be required if the agricultural buildings were to be demolished. **These were to be demolished to create additional parkland habitat. Emergence/re-entry survey with infra-red aids were commission for the emergence season (May to August/September 2024). There was enough habitat/area within the site to create mitigation should the surveys prove roosting.**
- Breeding bird surveys for barn owl and potential, ground-nesting, red-listed breeding birds that could be affected by development. **These were commissioned for the 2024 nesting season (March to August). However, there was enough habitat/area within the site to create mitigation, through planning of tree planting to ensure appropriate areas of open habitat. Opportunities for barn owl nesting mitigation were afforded by erecting boxes the exiting trees on site, should that be required.**
- Further bat roost surveys/inspections would be required if any of the mature trees were to be affected (by lighting or felling). **No tree felling was to occur.**
- Method statements should be prepared regarding timing of site clearance for nesting birds, great crested newt, toads and hedgehog to ensure that no offence in law was committed. **These should be conditioned.**
- Regarding bats, a dark corridor should be maintained along the treed boundaries and on-site trees. **An isolux survey was commissioned to ascertain light spill from the development. Bat activity surveys were commission for 2024, April to October. There was a large development-free habitat buffer surrounding/within the redline boundary proving opportunities to screen and augment any foraging/commuting areas that may be revealed by the surveys and buffer boundary.**
- A 30m disturbance-exclusion buffer would be required around any badger setts, with checks for new setts undertaken immediately prior to development. **The plans as originally submitted provided this. Further checks immediately prior to commencement, and regularly thereafter while the construction/landscaping phases. These should be conditioned.**
- Additional gaps and light-spill onto the Further Lane hedge to be minimised to reduce the need for bat activity surveys and mitigation. **See lighting commission above.**
- Any hedgerow removal would need to be compensated by replacement elsewhere on site; a more species-rich replacement would provide net gain. **No hedgerow removal was planned.**
- A Biodiversity Net Gain Report should be produced following the habitat condition assessments and any habitat-based species mitigation designs. **A full BNG assessment was commissioned for May to July; the optimum time to assess grassland condition.**

- Enhancements such as a wildlife pond/marsh, more sensitive grassland management and additional hedging/tree planting to increase on- and off-site habitat connectivity, should be designed into the landscape plan**. These have all been incorporated into the landscape design and incorporated into Interim BNG metric assessment giving a habitat net gain of BNG calculation was done to support this report, giving an interim gain of 41% (habitats) and 49% (hedgerow/lines of trees).**

Table One: Further Ecological Surveys Commissioned in 2024

Species	Survey Season	Number of Surveys	Report
Breeding barn owl/birds	March-August	6	From August
Grassland Condition Assessments	June-July	2	From June
Bat emergence surveys	May-September	2 or 3	From August
Bat Activity Surveys	April -October	7	October
Biodiversity Net Gain Report and Plan			Following grassland surveys

Recommended Ecological Planning Conditions

- Protected Species Method Statement: covering amphibians, badger and hedgehogs.
- Nesting Birds Method Statement
- Biodiversity Net Gain Calculation and Plan

NOTE: ODPM Circular 06/2005/Defra Circular 01/2005 Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System paragraph 9, stated that bat surveys should not be conditioned. This was re-iterated in BS42020.

7. REFERENCES

BCT (Bat Conservation Trust) and ILM (Institute of Lighting Professionals) (2023) *Bats and artificial lighting in the UK Bats and the Built Environment series. Guidance Note 0823*. BCT, London

BTHK (2018) *Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals.* Pelagic Publishing, Exeter.

BUTCHER B, CAREY P, EDMONDS R, NORTON L and TREWEEK J (2023) *The UK Habitat Classification User Manual. Professional Version 2.0* at http://www.ukhab.org/

CCNW (2022) *Woodfold/Further Lane. Preliminary Ecological Appraisal*. Conservation Contracts North West Ltd.

CIEEM (2019) *Advice Note on the lifespan of ecological reports & surveys*. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2017a) *Guidelines on Ecological Report Writing. 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2017b) *Guidelines for Preliminary Ecological Appraisal, 2nd edition.* Chartered Institute of Ecology and Environmental Management, Winchester.

COLLINS J (ed.) (2023) *Bat Surveys for Professional Ecologists (4th edition).* The Bat Conservation Trust, London.

DEAN M (2021) *Writing Effective Ecological Reports. A Guide to Principles and Practice.* Pelagic Publishing. Exeter

DEFRA (2013) *MAGIC Interactive Map* [Online] Available at https://magic.defra.gov.uk . [last accessed 12/12/2022].

GODWINS TREE SURVEYS (2022) Arboricultural Impact Assessment with Arboricultural Method Statement. Land Adjacent to Woodfold Park, Mellor. 11/2022

Gov.uk (2023) Draft biodiversity net gain planning practice guidance - GOV.UK (www.gov.uk) [Last accessed 14//01/2024]

Gov.uk (2023) Great Crested Newt - Risk Zones (Lancashire) - Dataset - data.gov.uk (publishing.service.gov.uk). . [last accessed 16/01/2024].

Gov.uk (2019) *National Planning Policy Framework - GOV.UK*. [online] Available at: https://www.gov.uk/governmentpublications/national-planning-policy-framework--2 [Last accessed 14/01/2023]

Gov.uk (2005) *Circular 06/2005/Defra Circular 01/2005 Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning Syste.m*

MORRIS P (2015) *Hedgehogs (3rd Edition*). Whittet Books Ltd. Stanstead.

NATURAL ENGLAND (2013) *Standing Advice Species Sheet: Eurasian Badger (Badger)*. Natural England, Peterborough.

NATURAL ENGLAND (2006) *Badgers and Development: A Guide to Best Practice and Licensing.* Natural England, Peterborough.

NBN ATLAS PARTNERSHIP (2017) *National Biodiversity Atlas Partnership: Species atlas – nbnatlas.org* [online] Available at: https://species.nbnatlas.org/ [Last Accessed 14/11/2023].

PANKS S, WHITE N, NEWSOME A, POTTER J, HEYDON M, MAYHEW E, ALVAREZ M, RUSSELL T. SCOTT S, HEAVER M, TREWEEK J, BUTCHER B and STONE D (2022). Biodiversity metric 4.0: Auditing and accounting for biodiversity – User Guide. Natural England.

/References continued

PANKS S, WHITE N, NEWSOME A, POTTER J, HEYDON M, MAYHEW E, ALVAREZ M, RUSSELL T. SCOTT S, HEAVER M, TREWEEK J, BUTCHER B and STONE D (2021). Biodiversity metric 3.0: Auditing and accounting for biodiversity – User Guide. Natural England.

RIBBLE VALLEY BOROUGH COUNCIL (2014) *Core Strategy 2008 – 2028 A Local Plan for Ribble Valley. Adoption Version.* Ribble Valley Borough Council.

THE PROPERTY CARE ASSOCIATION (2018) *Practical Management of Invasive Non-Native Weeds in Britain and Ireland.* Packard Publishing Ltd: Chichester.

STANBURY A, EATON MA, AEBISCHER NJ, BALMER D, BROWN AF, DOUSE A, LINDLEY P, MCCULLOCH N, NOBLE DG, AND WIN I. (2021) *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. **British Birds** *114*, 723–747.

UK HABITAT CLASSIFICATION WORKING GROUP (2020) UK Habitats Classification Field Key v2.1. http://www.ukhab.org/