

PRELIMINARY ECOLOGICAL APPRAISAL & DAYTIME BAT SURVEY

JUNE 2026

Land at The Nook

Land between Snodworth Road and York Lane,
Langho,
Blackburn,
BB6 8DR

U R B A N
G R E E N



QUALITY MANAGEMENT

Project Number:	UG3174				
Project:	Land at The Nook				
Location:	Land between Snodworth Road and York Lane, Langho, Blackburn, BB6 8DR				
Title:	Preliminary Ecological Appraisal & Daytime Bat Survey				
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1 Executive Summary

- 1.1.1.1 Redwaters (Langho) ltd is proposing to erect 6 no. residential dwellings (Use Class C3) and associated landscape and access works within a residential garden associated to the existing property of ‘The Nook’. The proposal site (hereinafter referred to as ‘the site’) is identified as a garden in a non-built up area outside the settlement of Langho, Blackburn.
- 1.1.1.2 Urban Green has been appointed to complete a Preliminary Ecological Appraisal (PEA) and Daytime Bat Survey of the site. The objectives of the assessment are to identify the main habitats on site and determine the suitability for any ‘protected and/or notable’ species that may occur on site. Further ecological surveys and mitigation, where appropriate, are recommended which aim to minimise potential impacts on ecology, due to the proposed development.
- 1.1.1.3 The key results and recommendations from the PEA exercise are summarised in Table 1 (below):

Table 1. PEA summary results

Site Context	The site is located in the rural settlement of Langho in Blackburn, immediately surrounded by additional rural dwellings to the north, east, and west. The wider environment is dominated by an agricultural landscape, comprising grazing pasture, interspersed with pockets of woodland, various golf courses, and a number of reservoirs.
Key Statutory Designated Sites	The site is situated within 2km of one SSSI. It is assessed that the proposed development is unlikely to have any meaningful effect on the aforementioned designated sites.
Habitats	The site comprised a residential garden (u1) that included a mosaic of habitats, namely; grassland woodland, areas of scrub, hedgerows, lines of trees, and two watercourses.
Key Ecological Results	The following potential ecological constraints were identified during the assessment: • Two trees (T1 and T2) were assessed as PRF-I in relation to roosting bats; • Suitable habitats for common nesting bird species are present on site; • Invasive non-native plant species were recorded on site.
Recommendations	To comply with wildlife legislation, good practice guidelines and policy, we recommend the following: • A Precautionary Methods of Works document is produced, covering: nesting birds, bats, common amphibians (excluding great crested newt), badger, hedgehog, and other common mammals • Vegetation clearance should be completed outside of the core breeding bird season (March to August, inclusive); and • The lighting scheme for the site should be produced in line with current guidance (BCT and ILP, 2023).

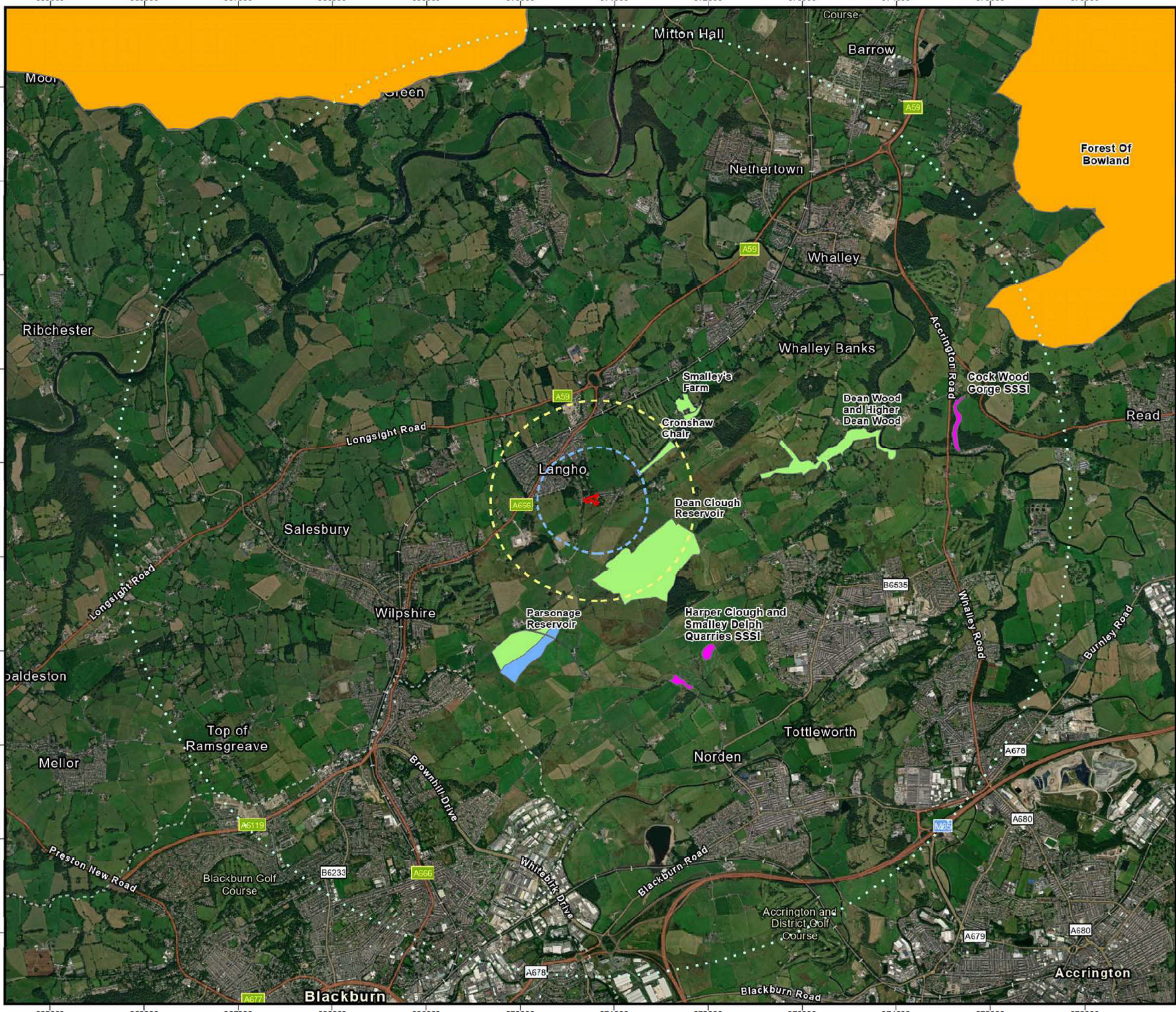
Ecological Enhancements

In line with the ecological objectives of the NPPF (2024) the following ecological enhancements are suggested for inclusion within the development:

- Enhancement of the woodland with the site bounds;
- Installation of four bat boxes and six bird boxes within the site.



Legend: Red Line Boundary		1 Kilometers		N		
Client:	Redwaters Langho Ltd	Issue:	01	Figure:	01	
Project:	The Nook	Scale @ A4	1:12,000		U R B A N G R E E N A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF T: +44 (0) 161 312 3131 wearurbangreen.co.uk	
Title:	Site Context	Approved by:	CL	Checked by:		TR
Drawing Ref:	UG_3174_SITE_CONTEXT	Author:	CL	Date:		20/01/2026



U R B A N G R E E N

Legend

- Red Line Boundary
- 500m Buffer
- 1km Buffer
- 5km Buffer
- Areas of Outstanding Natural Beauty
- Sites of Special Scientific Interest
- District Wildlife Sites
- Biological Heritage sites

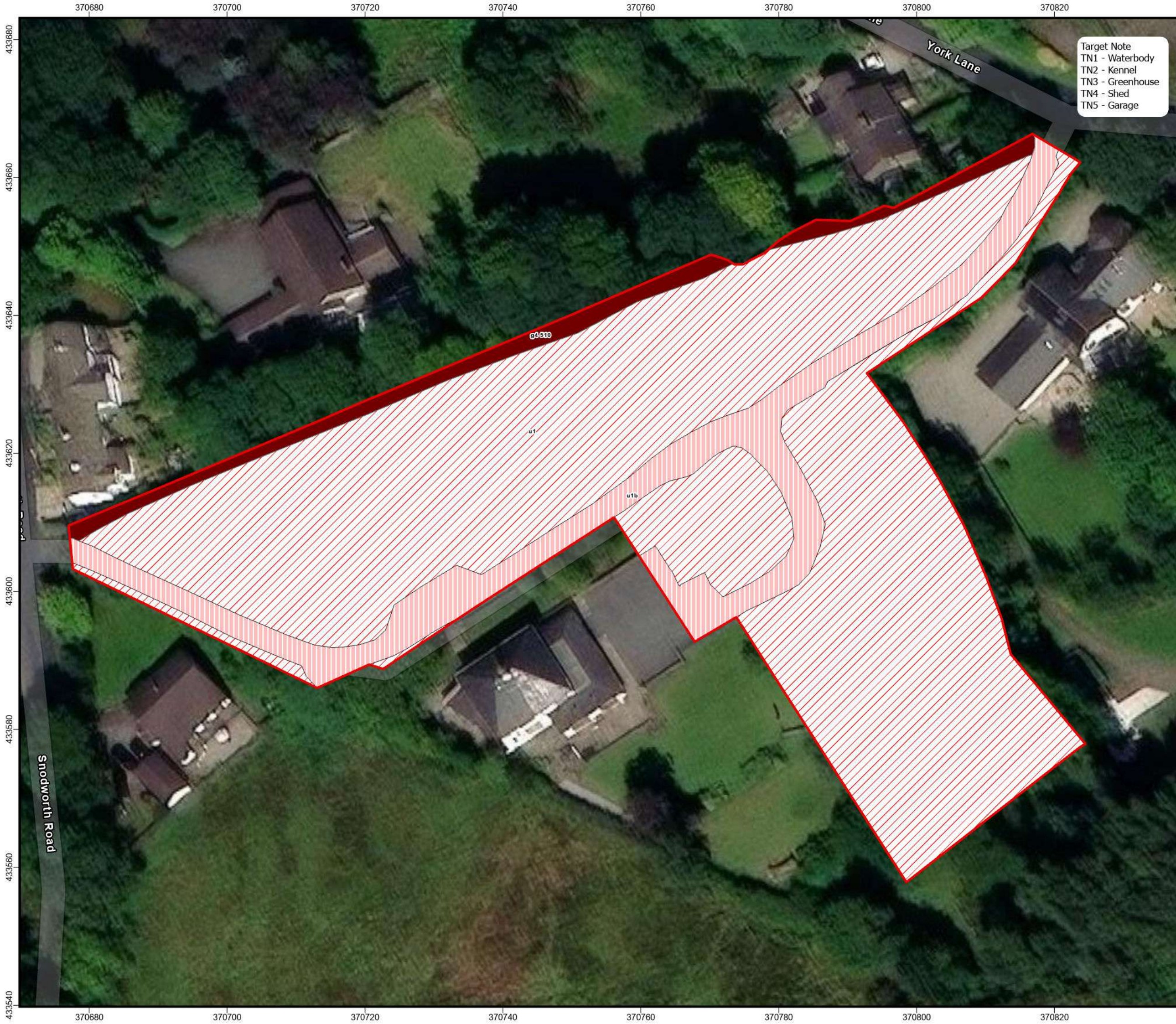


0 0.38 0.75 1.5 Kilometers



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Client:		Redwaters Langho Ltd	
Project:		The Nook	
Title:		Designated Sites Results	
Issue:		01	Figure: 02
Drawn:	CL	Checked:	JH
Project:	UG3174	Scale @ A3:	1:37,000
Dwg No:	UG_3174_ECO_DS_01		Date: 20/01/2026
		Revision:	01



U R B A N G R E E N

Legend

- Red Line Boundary
- Built-up areas and gardens
- Developed land - sealed surface
- Urban - Bare ground



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Client: Redwaters Langho Ltd		
Project: The Nook		
Title: UKHAB Habitat Map		
Issue: 01	Figure: 00	
Drawn: CL	Checked: JH	Approved: WG
Project: UG3174	Scale @ A3: 1:500	Date: 02/02/2026
Dwg No: UG_3174_ECO_HM_01		Revision: 01



U R B A N G R E E N

Legend

- Red Line Boundary
- Bat Building Potential (Negligible)
- PRF-I



0 5 10 20 Meters



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Client:		Redwaters Langho Ltd	
Project:		The Nook	
Title:		PRA & GLTA Results Map	
Issue:		01	Figure: 04
Drawn:	CL	Checked:	JH
Approved:	JH		
Project:	UG3174	Scale @ A3:	1:500
Date:	05/02/2026		
Dwg No:	UG_3174_ECO_GLTA_01		Revision: 01

Figure 5. Photographs of the Site



Photograph 1: Example of managed modified grassland habitat, which forms the large majority of the site.



Photograph 3: Example of central area of the site, including residential garden, access road, and garage.



Photograph 2: Example of sparsely vegetated urban land, present within residential garden with ancillary buildings.



Photograph 4: Ornamental pond located centre-east of site, in poor condition.



Photograph 5: Mixed scrub stand located within southern extent of site.



Photograph 7: Woodland habitat within southeastern corner of the site.



Photograph 6: Southern border of rhododendron scrub at eastern entrance to site.



Photograph 8: Woodland habitat, showing small natural, ephemeral pond.



Photograph 9: Artificially constructed basin, with aquatic flora, and waterlogged soils.



Photograph 11: Leylandii hedgerow at north-western extent of site.



Photograph 10: Native beech hedgerow within centre of site.



Photograph 12: Native mixed hedgerow forming boundary with adjacent property, heavily managed.



Photograph 13: Line of trees along eastern boundary of site.



Photograph 14: Line of trees along northern boundary of site.



Photograph 15: Small stream running through south-eastern extent of the site.



Photograph 16: Stream running through north-western extent of the site, main flow is pooling from culvert.



Photograph 17: Building 1; Freestanding greenhouse with negligible roosting potential.



Photograph 18: Building 2; Freestanding wood store with negligible roosting potential.



Photograph 19: Building 4; fixed garage with negligible roosting potential .



Photograph 20: T1; Horse chestnut assessed as PRF-I.



Photograph 21: T1; Compression fork PRF entering small sheltered cavity.



Photograph 22: T2; English oak assessed as PRF-I.



Photograph 23: T2; Hazard beam PRF providing small cavity.

2 Introduction

2.1 Scope

- 2.1.1.1 Urban Green has been instructed by Redwaters (Langho) Ltd to carry out a Preliminary Ecological Appraisal (to British Standard 42020:2013 guidelines) and a Daytime Bat Survey at Land at The Nook in Langho, Blackburn and detail the findings in a technical report. Specifically, the PEA comprises a desk-based assessment (using purchased biological records) and a UK Habitat Classification survey (UKHab), which is extended to include a search for protected species. The Daytime Bat survey includes a Preliminary Roost Assessment (PRA) of any buildings within the site boundary and a Ground Level Tree Assessment (GLTA) of all trees within the site boundary.
- 2.1.1.2 The development proposes the subdivision of the existing residential garden to create 6 new plots to allow for the erection of 6 no. residential dwellings (Use Class C3) with associated landscape and access works. It is understood that this will include the following the construction activities:
- Demolition of ancillary buildings within the site boundary;
 - Moderate level vegetation clearance;
 - Regrading of the land profile; and
 - Movement and regular operation of heavy plant.
- 2.1.1.3 The development proposals will hereafter collectively be referred to as ‘the development’.

2.2 Site Context

- 2.2.1.1 The site is located at National Grid Reference S D 70766 33632 and comprises a total area of approximately 0.6ha (see Figure 1).
- 2.2.1.2 The site comprises a residential garden within the curtilage of ‘The Nook’ located adjacent to the village of Langho, surrounded on all sides by residential development. The centre of Langho village is located approximately 500m north-west of the site bounds. The wider environment is dominated by an agricultural landscape, comprising grazing pasture, with interspersed pockets of woodland, various golf courses, and a number of reservoirs present. Dean Clough Reservoir is situated closest to the site located approximately 700m south.

2.3 Purpose of Report

- 2.3.1.1 This report has been produced to set out the methods, results and recommendations of the PEA assessment. The purpose of the PEA report is to identify the main habitats on site and determine the suitability of these habitats to support protected and/or notable fauna and flora, with the addition of potential impacts on designated sites. This will inform the need for any further ecological surveys and/or mitigation to minimise the potential impacts on ecology on site and within the zone of influence.

- 2.3.1.2 Further information and details of UK legislation for those species which are formally protected is defined in Appendix 1, which are considered throughout the assessment.
- 2.3.1.3 The National Planning Policy Framework (NPPF) (2024) and other Local Planning Policies are considered with the PEA. Ecological enhancements are advised to be in line with relevant Planning Policies.

2.4 Surveyors

- 2.4.1.1 The UKHab surveys were undertaken by Jake Healy (Senior Ecologist, MSc, MCIEEM) and William Gillis (Biodiversity Net Gain Consultant, MSc, MCIEEM). This report was authored by Jake Healy.

3 Methods

3.1 Overview

- 3.1.1.1 The PEA assessment and report follows the good practice methodology as detailed within the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2019).

3.2 Desk Study

3.2.1 Online Resources and Local Records Centre

- 3.2.1.1 Due to the size and scale of the development, combined with its geographical setting, a Xkm ecological data search (including the purchase of third-party biological records) was undertaken as part of the desk study exercise. This is deemed an appropriate distance, based on the estimated Zone of Influence for the development.
- 3.2.1.2 Sources of information used in the desk study are presented in Table 2.

Table 2. Ecological desk study sources

Source	Date Consulted	Information Sought
The MAGIC Website	02/02/2026	Locations of statutory designated sites within 2km of the site boundary. Locations of National Site Network sites (Ramsar, Special Area of Conservation (SAC) and Special Protection Area (SPA)) within 5km of the site boundary. Locations of European Protected Species Licences (EPSL) and Class Licences within 1km.
Natural England	02/02/2026	Relevant statutory designated site citations.
JNCC	02/02/2026	Information on former 'European' wildlife sites. Details of relevant Section 41 species and habitats.
Lancashire Environmental Records Network	23/01/2026	Locally designated wildlife sites within 500m of site boundary. Records of protected and notable species within 2km of the site boundary.
Lancashire Biodiversity Action Plans	02/02/2026	Species and habitats which are given special conservation status at the local level.

3.3 UK Habitat Classification Survey

3.3.1 Habitat Survey

- 3.3.1.1 The 29th January 2026 was selected to undertake the UKHab survey.
- 3.3.1.2 The survey methods were based on the standard methodology as detailed by The UK Habitat Classification User Manual (UKHab Ltd. 2023). The survey methodology was ‘extended’ to include a high-level search for signs of protected species (described in more detail below). A UKHab results figure has been produced to display the main habitats recorded within the site boundary (see Figure 3). The mapping techniques are based on The UK Habitat Classification User Manual (Butcher et al, 2020) guidance.
- 3.3.1.3 Plant species abundance is described using the DAFOR scale as shown in Table 3. Percentages are an approximate indication rather than a quantitative measure.

Table 3. Key to species abundance

Code	Category	Description	Indicative Percentage Ranges
D	Dominant	Covers most of an area	50% or greater
A	Abundant	Very common throughout the area.	30 – 50%
F	Frequent	Common or with many individuals stands	15 – 30%
O	Occasional	Occurs in several places but not throughout; populations are not large.	5 – 15%
R	Rare	Occurs in low numbers in relation to size of area.	Less than 5%
“L” will be used to indicate abundance in a localised area, e.g. LA = Locally abundant			

- 3.3.1.4 Any invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were noted during the UKHab survey visit.

3.4 Extended Protected Species Surveys

- 3.4.1.1 During the UKHab survey, the search was extended to include a high-level search for protected and/or notable species. In addition, habitats on site were assessed for the potential to support key protected species.
- 3.4.1.2 These assessments do not constitute dedicated phase II protected species surveys, rather, they provide an indication of what phase II surveys may be required in the context of the development.

3.4.2 Day Time Bat Survey

Preliminary Roost Assessment

- 3.4.2.1 The PRA methodology is based on information contained within the Bat Conservation Trust (BCT) guidelines, 4th edition (Collins, 2023). The categorisation within this report is based on that set out in Table 4, which is used as a basis for determining the requirement for further surveys.
- 3.4.2.2 All buildings present within the site boundary were assessed externally using torchlight, searching for suitable ingress and egress points and other Potential Roosting Features.
- 3.4.2.3 Jake Healy holds a Level 1 Bat Licence (2025-85561-CL17-BAT).

Table 4. Suitability of Buildings for Roosting Bats (adapted from Collins, 2023)

Category of Suitability	Typical Characteristics	Further Survey Requirements
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	A minimum of three separate survey visits. Surveys can be undertaken between May and September, with at least two surveys between May and August. Surveys must be spaced no less than three weeks apart.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but are unlikely to support a roost of high conservation status.	A minimum of two separate survey visits. Surveys can be undertaken between May and September with at least one survey between May and August. Surveys must be spaced no less than three weeks apart.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate condition and/or suitable surrounding habitat to be used on a regular basis by larger numbers of bats.	A minimum of one emergence/re-entry survey between May and August.

Category of Suitability	Typical Characteristics	Further Survey Requirements
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further work required.

Ground Level Tree Assessment

- 3.4.2.4 The survey involves a detailed inspection of trees from the ground to compile information about the tree, PRFs (or lack of), and any evidence of bats.
- 3.4.2.5 The inspection was conducted systematically and consistently around all parts of the tree (from all angles, both up close to the trunk and further away, where access permitted).
- 3.4.2.6 Binoculars were also used to focus in on features higher up the trunk and on upper canopy limbs when required.
- 3.4.2.7 All features identified were recorded utilising ArcGIS Field Maps, allowing for GPS data to be recorded for each feature.
- 3.4.2.8 During a GLTA, the suitability of trees and PRFs can be categorised according to the categories outlined in Table 5. However, at this stage, the PRFs are not inspected in further detail (aerially, with an endoscope etc.) and therefore this is only an estimate of their potential for supporting roosting bats.

Table 5. Suitability of Trees for Roosting Bats (adapted from Collins, 2023)

Category of Suitability	Further Survey Requirements
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further assessment required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony

Commuting & Foraging Assessment

- 3.4.2.9 The site was assessed for its suitability for use by commuting and foraging bats.
- 3.4.2.10 The commuting and foraging assessment methodology is based on information contained within the Bat Conservation Trust guidelines 4th edition (Collins, 2023). The categorisation within this report is based on that set out in Table 6, which is used as a basis for determining the requirement for further surveys.

Table 6. Suitability of site for foraging and commuting bats

Category of Suitability	Habitat Characteristics
High Suitability	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting or foraging bats such as; river valleys, streams, hedgerows, lines of trees or woodland edge. Site is close to or connected to known roosts.
Moderate Suitability	Continuous habitat connected to the wider landscape that could be used by commuting bats such as lines of trees, scrub or linked back gardens. Habitat connected to wider landscape that could be used for bats for foraging such as; trees, scrub, grassland or water.
Low Suitability	Habitat that could be used by small number of commuting bats such as; defunct hedgerow, isolated features not well connected to surrounding habitat or Isolated habitat that could be used by a small number of foraging bats such as a lone tree or patch of scrub.
Negligible Suitability	No features on site suitable for use by commuting and foraging bats.

3.5 Ecological Constraints

- 3.5.1.1 Whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.
- 3.5.1.2 This PEA does not constitute a comprehensive botanical survey, however, is sufficient to inform the assessment.
- 3.5.1.3 The high-level protected species assessment provides a likelihood of protected species occurring on or near the site based on the known distribution of species and the suitability of the habitat.
- 3.5.1.4 October to March (inclusive) is considered a suboptimal time for undertaking UKHab surveys as plant species are less conspicuous during this period. This is not considered to be a significant constraint as the majority of habitats were successfully categorised under the UKHab survey methodology.

- 3.5.1.5 The conclusions and recommendations detailed in this report are based upon the redline site boundary and the development proposals as outlined by the client at the time of writing. Should there be any changes to the redline boundary or proposals at a later stage, this assessment should be reviewed to determine whether any amendments or additional survey work is required.
- 3.5.1.6 Internal access was not possible within the garage building within the site during the PRA survey, however based on the external inspection and general structure/construction of the building, this is not anticipated to be a constraint.
- 3.5.1.7 The findings of this report represent the professional opinion of qualified ecologists but does not constitute legal advice. The client may wish to seek professional legal interpretation of any wildlife legislation or corresponding recommendations cited within this report.

3.6 Report Validity

- 3.6.1.1 In accordance with CIEEMs Advice Note on the Lifespan of Ecological Reports and Surveys (CIEEM, 2019), the details of this report will remain valid for a minimum period of **18 months** from the date of the survey (i.e. until 29th July 2027). After this date, this assessment should be reviewed by an ecologist to determine whether any updates are required.

3.7 Protected Species Definitions

- 3.7.1.1 For the purposes of this report, the term ‘protected’ and ‘notable’ species relates to:
- Species included on Schedules 2 and 4 of The Conservation of Habitats and Species Regulations 2017 (as amended);
 - Species included on Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended), excluding species that are only protected in relation to ‘sale’ (see Section 9[5] and Section 13[2]);
 - Invasive non-native species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended);
 - Species of Principal Importance as defined under Section 41 of the Natural Environment and Rural Communities Act 2006 (England), Section 7 of the Environment (Wales) Act 2016, Section 2[4] of the Nature Conservation (Scotland) Act 2004;
 - Species specifically listed on relevant biodiversity action plans or similar; and
 - Badger and their setts; protected under the Protection of Badgers Act 1992.

4 Results

4.1 Desk Study Exercise

4.1.1 Designated Sites

- 4.1.1.1 There are no sites that form part of the National Site Network with 5km of the site boundary, with only one Site of Special Scientific Interest (SSSI) present within 2km of the site.
- 4.1.1.2 Furthermore, no non-statutory designated sites are located within a 500m radius of the site.
- 4.1.1.3 Details of the relevant statutory and non-statutory sites can be found within Table 9.

Table 7. Designated sites returned during the desk study

Designated Site	Distance from Site	Site Description
Statutory Designated Sites		
Harper Clough and Smalley Delph Quarries SSSI	1.9km south-east	These quarries provide excellent exposures of a series of rock layers originally formed in the Namurian period of geological time, about 315 million years ago. In general, the quarries are of special geological interest as reference sections for study of rocks of Namurian age.

- 4.1.1.4 The site also falls within the Impact Risk Zone of the Harper Clough and Smalley Delph Quarries SSSI (as detailed in Table 7.), based on consultation with MAGIC.
- 4.1.1.5 In addition to the above the Forest of Bowland Area of Outstanding Natural Beauty (AONB) is located within 5km of the site.

4.1.2 Protected Species

- 4.1.2.1 Data supplied by Lancashire Environment Record Network for the closest and most relevant records. Notable bird species listed in Table 8 may utilise boundary habitats for nesting, with all wider features used for foraging. Species records over 10 years old have been omitted. Only bird species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) or red or amber species on the Birds of Conservation Concern (BoCC) list are included. Only invertebrate species that are legally protected or locally listed are included below.
- 4.1.2.2 Records relating to certain protected species, including badger sett locations, is sensitive information, and due to the risk of public interference, remain confidential.

Table 8. Desk study records for protected species within 2km of the site boundary

Common Name	Scientific Name	Key Legal Protection / Policy Consideration	Total Number of Records	Closest Record to Site Boundary	
				Distance (m)	Year
Birds					
Canada Goose	<i>Branta canadensis</i>	WCA 1981, Schedule 9	1	1500	2017
Cuckoo	<i>Cuculus canorus</i>	S41 NERC, BoCC5 Red, LBAP	1	730	2018
Lapwing	<i>Vanellus vanellus</i>	S41 NERC, BoCC5 Red, LBAP	1	900	2021
Merlin	<i>Falco columbarius</i>	WCA 1981, Schedule 1, BoCC5 Red, LBAP	1	1330	2017
Amphibians					
Common toad	<i>Bufo bufo</i>	WCA 1981 Schedule 5 (sale only); S41 NERC, LBAP	1	1200	2023
Common Frog	<i>Rana temporaria</i>	LBAP	3	1620	2020
Bats					
Brown long-eared	<i>Plecotus auritus</i>	WCA 1981 Schedule 5; Hab Regs 2017, Schedule 2, LBAP	1	580	2020
Noctule	<i>Nyctalus noctula</i>	WCA 1981 Schedule 5; Hab Regs 2017, Schedule 2, LBAP	1	580	2020

Common Name	Scientific Name	Key Legal Protection / Policy Consideration	Total Number of Records	Closest Record to Site Boundary	
				Distance (m)	Year
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	WCA 1981 Schedule 5; Hab Regs 2017, Schedule 2, LBAP	1	580	2020
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	WCA 1981 Schedule 5; Hab Regs 2017, Schedule 2, LBAP	1	580	2020
Unidentified Myotis	<i>Myotis sp.</i>	WCA 1981 Schedule 5; Hab Regs 2017, Schedule 2, LBAP	1	580	2020
Terrestrial Mammals					
Badger	<i>Meles meles</i>	Badger Protection Act 1992	1	1350	2017
Brown hare	<i>Lepus europaeus</i>	S41 NERC, LBAP	6	1300	2019
Grey squirrel	<i>Sciurus carolinensis</i>	WCA 1981, Schedule 9	1	1800	2023
Hedgehog	<i>Erinaceus europaeus</i>	Wild Mammals Act 1996; NERC Act 2006	1	460	2019
Otter	<i>Lutra lutra</i>	WCA 1981, Schedule 5; Hab Regs 2017, Schedule 2	1	650	2023
Invertebrates					
Ringlet	<i>Aphantopus hyperantus</i>	LBAP	20	1380	2017
Small Heath	<i>Coenonympha pamphilus</i>	S41 NERC, LBAP	3	640	2016
Wall	<i>Lasiommata megera</i>	S41 NERC, LBAP	2	760	2023
White-letter Hairstreak	<i>Satyrrium w-album</i>	S41 NERC, LBAP	2	1160	2018
Dark Green Fritillary	<i>Speyeria aglaja</i>	LBAP	1	920	2019

4.1.3 Protected Species – Additional Considerations

- 4.1.3.1 Of the bat records returned within the data search, three records related to a bat roost at the same location comprising, brown long-eared, common pipistrelle, and soprano pipistrelle.
- 4.1.3.2 In addition to those species listed in Table 8, a high volume of additional records covering common and widespread species were also returned. This included records of rabbit (*Oryctolagus cuniculus*) and roe deer (*Capreolus capreolus*).
- 4.1.3.3 No European Protected Species Licences (EPSLs) were returned within 1km of the site, based on consultation with MAGIC.

4.1.4 Priority Habitats

- 4.1.4.1 A search for priority habitats, within 500m of the site, using purchased biological records from LERN and MAGIC, highlighted eight areas of deciduous woodland and two areas of lowland fen in the surrounding area.
- 4.1.4.2 The closest area of priority woodland was located within the site extent, however, during the field survey a ground truthing exercise was completed and the habitat was assessed as not qualifying as woodland (see Section 5.2. for further details). The second closest area of priority woodland, as mapped by MAGIC) was located approximately 70m west of the site.
- 4.1.4.3 The closest area of priority lowland fen was located approximately 200m west of the site.

4.1.5 Ancient Woodland

- 4.1.5.1 One stand of ancient woodland was returned during the desk study within 500m of the site boundary, located approximately 340m east of the site.

4.2 Extended UK Habitat Classification Survey Results

4.2.1 Habitats

- 4.2.1.1 The broad habitat types recorded during the PEA (see Figure 3) are detailed below. Supporting target notes are provided in Appendix 2 with photographs of the site shown on Figure 4.

Built up areas and gardens (u1)

- 4.2.1.2 The site comprises a residential garden associated with the existing property of the Nook that is used recreationally and managed for aesthetic purposes. The majority of habitats present provide low ecological value and qualify as built-up areas and gardens under the UKHab definition.
- 4.2.1.3 The mosaic of habitats present includes areas of grassland, woodland, scrub, hedgerows, lines of trees, and two watercourses.

- 4.2.1.4 The majority of the site consists of short sward, modified grassland, sparsely vegetated urban land, and various ornamental shrubs and flower beds, as well as hardstanding access road that serves the site as a private driveway.
- 4.2.1.5 As the garden is regularly used and actively managed by the residents on site, signs of maintenance activities were present including brash piles and log piles from pruning activities.
- 4.2.1.6 The grassland habitat in these areas provide low species diversity, with only common species recorded, including perennial rye grass (*Lolium perenne*), white clover (*Trifolium repens*), red clover (*Trifolium pratense*), annual meadow grass (*Poa annua*), Yorkshire fog (*Holcus lanatus*), creeping buttercup (*Ranunculus repens*), and fescue (*Festuca* sp.). Various ornamental shrubs were also interspersed throughout the garden, in particular a single stand of rock cotoneaster (*Cotoneaster horizontalis*), located adjacent to the ornamental pond onsite.
- 4.2.1.7 As the garden is regularly used and actively managed by the residents on site, signs of maintenance activities were present including brash piles and log piles from pruning activities.
- 4.2.1.8 The grassland habitat in these areas provide low species diversity, with only common species recorded, including perennial rye grass (*Lolium perenne*), white clover (*Trifolium repens*), red clover (*Trifolium pratense*), annual meadow grass (*Poa annua*), Yorkshire fog (*Holcus lanatus*), creeping buttercup (*Ranunculus repens*), and fescue (*Festuca* sp.). Various ornamental shrubs were also interspersed throughout the garden, in particular a single stand of rock cotoneaster (*Cotoneaster horizontalis*), located adjacent to the ornamental pond onsite.
- 4.2.1.9 The southeastern corner of the site is distinctly different to the other habitats present within the site extent, comprising a small area of woodland that extends south beyond the site boundary.
- 4.2.1.10 This woodland area had a dominant canopy, providing a substantial level of shading, with a varied understorey, comprising scrub and other ground flora. The ground conditions were heavily saturated, and a small stream runs through the woodland and feeds the surrounding soils, therefore tree species and flora species associated with wet soils were present.
- 4.2.1.11 Species composition included alder (*Alnus glutinosa*), willow, and downy birch (*Betula pubescens*), with occasional oak (*Quercus* sp.), beech (*Fagus sylvatica*), and elder (*Sambucus nigra*), Leyland cypress (*Cupressus x leylandii*) and spruce (*Picea* sp.). The ground flora includes bramble, ferns (*Polypodiopsida*), dense ivy (*Hedera helix*), reed canary grass (*Phalaris arundinacea*), soft rush (*Juncus effusus*), herb Robert (*Geranium robertianum*), creeping buttercup, spear thistle (*Cirsium vulgare*), tutsan (*Hypericum androsaemum*), Yorkshire fog, cleavers (*Galium aparine*), and hogweed (*Heracleum sphondylium*).
- 4.2.1.12 Areas of scrub vegetation are also present, including a parcel of rhododendron (*Rhododendron* sp.) scrub within the north-east corner of the site and a parcel of mixed scrub in the southern extent of the site comprising a mixture of common box (*Buxus sempervirens*), bramble (*Rubus fruticosus* agg.), holly (*Ilex aquifolium*), willow (*Salix* sp.), and a single rhododendron (*Rhododendron* sp.) stand.
- 4.2.1.13 At the western extent of the site, an artificially constructed basin has been created around a natural stream that runs through the site. The stream flows through the depression but does not flood and hold water as intended.

- 4.2.1.14 Therefore, water from the stream percolates through the surrounding soil, creating a heavily waterlogged area that is distinctly different from the modified grassland surrounding. This area supports a range of flora that are associated with aquatic habitats, such as iris, reed canary grass, soft rush, bulrushes (*Typha latifolia*), and willowherb (*Epilobium* sp.).
- 4.2.1.15 Additionally, a small ornamental pond is located within the garden (centre-east of site). This waterbody was choked with leaf litter and debris and completely covered by algae growth, with minimal aquatic vegetation present, which was limited to *Iris* sp.
- 4.2.1.16 Five native hedgerows are located within the site boundary, all of which are actively managed for their aesthetic value and form boundaries to adjacent properties and between habitats.
- 4.2.1.17 The two hedgerows along the access track within the centre of the site are exclusively beech, whilst the remaining three hedgerows comprise a mixture species including, Leyland cypress, box, holly, and privet (*Ligustrum ovalifolium*).
- 4.2.1.18 Two lines of trees are present within the site extent.
- 4.2.1.19 The first is located along the northern boundary of the residential garden, forming a distinction between the garden area and public footpath. It measures approximately 80m in length and provides additional screening from adjacent properties. The majority of similar age and structure with little damage present. Species present include Leyland cypress, sycamore (*Acer pseudoplatanus*), European larch (*Larix* sp.), and Lawson cypress (*Cupressus lawsoniana*), with cherry laurel (*Prunus laurocerasus*) and privet within the understorey. See Photograph 14.
- 4.2.1.20 The second is located along the eastern boundary of the site, again providing screening to adjacent properties and measures approximately 40m in length. Species composition includes dominant Leyland cypress with occasional horse chestnut (*Aesculus hippocastanum*) and sycamore in the understorey. See Figure 4, Photograph 13.
- 4.2.1.21 Two watercourses are present within the site boundary and originate from a common source located to the south-east of the site, where a small rock face and associated waterfall feature are present.
- 4.2.1.22 The first watercourse flows from the waterfall into a defined channel that runs northwards around the site boundary before entering a culvert off site. It re-emerges within the north-western part of the site, where it flows briefly through an area of neutral grassland before continuing off site to the north. See Figure 4, Photograph 16.
- 4.2.1.23 The second watercourse appears to emerge from groundwater percolation downslope of the waterfall feature, surfacing within the area of woodland. It flows in a north-easterly direction through the site into a small pond, where surface flow ceases. During periods of high rainfall, it is likely that flow continues beyond the pond when overflow occurs. See Figure 4, Photograph 15.
- 4.2.1.24 In addition to the line of trees, woodland, and hedgerows several scattered trees are also present around the site. Comprising a mixture of age groups and species, including elder, downy birch, ash, sycamore, and holly.
- 4.2.1.25 Finally, four small ancillary buildings are present interspersed throughout including, a single storey garage (TN5), glass greenhouse (TN3), timber woodstore (TN4), and dog kennel (TN2) (see Appendix 3 for details on each building).

4.2.2 Protected Species

- 4.2.2.1 The results of the extended UKHab survey, as it pertains to protected species, will be detailed below. As part of this, an assessment of the suitability of habitats for protected species on or near the site may also be stated. If the results of these assessments conclude that habitats or features on the site have negligible suitability for a given protected species and/or desk study records do not indicate likely presence, then protected species/groups may be ruled out within this section.

Amphibians

- 4.2.2.2 Two waterbodies and two streams are present within the site boundary. No additional ponds or other standing waterbodies were identified within 250m of the site during the desk study, although a network of minor watercourses is present within the wider landscape. A large pond is shown within the site boundary on the MAGIC dataset; however, this feature was assessed during the field survey as wet grassland (see Paragraph 4.1.2.22) and does not function as a pond.
- 4.2.2.3 The two waterbodies within the site comprise an ornamental pond in poor condition, characterised by dense algal growth, and a small natural basin supporting limited aquatic vegetation and anticipated to be highly ephemeral in nature. Neither feature is considered to provide suitable breeding habitat for great crested newt.
- 4.2.2.4 On this basis, great crested newt have been reasonably discounted as likely to occur within the site, due to the absence of suitable breeding habitats, the ephemeral or suboptimal nature of on-site waterbodies, and the lack of hydrological or functional connectivity to other ponds within 250m of the site.
- 4.2.2.5 However, the presence of common amphibian species such as common toad (*Bufo bufo*) cannot be reasonably discounted. Terrestrial habitats within the site, together with minor watercourses that traverse the site and surrounding landscape, may provide dispersal and commuting corridors. In addition, there may be ornamental ponds within the surrounding area that could support common amphibian populations.

Aquatic Fauna

- 4.2.2.6 The minor streams that flow through the site are considered unsuitable to support notable aquatic fauna, including otter (*Lutra lutra*), water vole (*Arvicola amphibius*) and white-clawed crayfish (*Austropotamobius pallipes*), which have been considered as part of this assessment.
- 4.2.2.7 The small scale of these watercourses, characterised by limited and potentially intermittent flow and narrow, shallow channels, means they do not provide suitable habitat for breeding, foraging or resting for these species.
- 4.2.2.8 On this basis, notable aquatic fauna have been reasonably discounted as likely to occur within the site.

Badger

- 4.2.2.9 No evidence of badger was recorded within the site boundary. No setts, latrines, snuffle holes or other field signs indicative of badger activity were identified during the field survey.
- 4.2.2.10 A single badger record was returned within the data search, confirming the presence of the species within the wider landscape. However, the site itself is assessed as highly unlikely to support a resident badger population. More suitable commuting and foraging habitat is present within the surrounding landscape and, as such, badger may occasionally pass through the site while commuting or foraging.

Bats

- 4.2.2.11 The site provides limited potential for roosting bats. All buildings within the site were assessed as having negligible roost potential. Two trees, one located within the site boundary and one in the immediate vicinity of the site, were identified as supporting Potential Roost Features (PRFs). These features were assessed from ground level as PRF-I, based on the nature of the features and the small extent of the cavities present. Full details of the Preliminary Roost Assessment and Ground Level Tree Assessment are provided in Appendix 4.
- 4.2.2.12 In addition, the site was assessed as providing low value for bat foraging and commuting. Habitats of higher interest are largely associated with woodland and tree lines along the site boundaries, which offer some connectivity within the wider landscape. The central areas of the site are dominated by an actively managed residential garden with low species diversity, which is unlikely to support high invertebrate prey availability.
- 4.2.2.13 On this basis, bats may be present within the site in a roosting, commuting and foraging context; however, any use is anticipated to be limited to small numbers of common bat species.

Birds

- 4.2.2.14 The site provides a range of opportunities for nesting birds within the habitats present, including tree lines, hedgerows, scrub and woodland.
- 4.2.2.15 A timber store building within the site was observed to contain an old, disused bird nest, providing evidence of previous nesting activity associated with built structures.
- 4.2.2.16 Regular management of the site, together with frequent disturbance from resident dogs, is likely to discourage ground-nesting bird species. In addition, the small size of the site and its managed character, relative to the wider landscape, render it unsuitable for supporting overwintering bird assemblages.
- 4.2.2.17 Birds of prey may occasionally use the site for foraging or commuting purposes. A record of merlin was returned within the desk study; however, nesting opportunities on site for raptors, including those listed on Schedule 1 of the Wildlife and Countryside Act 1981, are assessed as limited.
- 4.2.2.18 On this basis, common nesting bird species are anticipated to be present within the site.

Invertebrates

- 4.2.2.19 Owing to the managed nature of the site, floristic diversity is limited and the habitats present are unlikely to support a high diversity or large assemblages of invertebrates. The waterbodies and watercourses within the site may provide some limited value for common and widespread invertebrate species.
- 4.2.2.20 However, the presence of a significant or diverse invertebrate assemblage, or of notable invertebrate species, has been reasonably discounted.

Reptiles

- 4.2.2.21 No reptile records were returned within the data search, and the site is considered unlikely to provide suitable habitat for reptiles due to regular disturbance associated with garden maintenance and the presence of resident dogs.
- 4.2.2.22 On this basis, reptiles have been reasonably discounted as likely to occur within the site.

Other notable mammals

- 4.2.2.23 Desk study records for other notable mammals, including brown hare (*Lepus europaeus*), were returned within the data search area, confirming their presence within the surrounding landscape. In addition, rabbit droppings were recorded within the south-eastern part of the site during the field survey; however, no rabbit warrens were identified within the site boundary.
- 4.2.2.24 The surrounding habitats, particularly to the south of the site, provide more suitable and extensive habitat for mammals such as red fox (*Vulpes vulpes*) and small mammals and are therefore likely to be used preferentially over the site itself. Nevertheless, the occasional presence of other mammals within the site cannot be reasonably discounted.

5 Ecological Assessment and Recommendations

5.1 General Recommendations

- 5.1.1.1 The following ecological recommendations apply at a site wide basis; species, habitat and/or designated site-specific recommendations are provided in Table 9 (below).
- 5.1.1.2 Should the scope of works change significantly, it is recommended that an ecologist is consulted to review this report and assess if the recommendations remain fit for purpose.
- 5.1.1.3 Should the development not commence with one year of this report, any bat surveys undertaken as part of the works should be repeated. Should the works not commence with 18 months of this report, all ecology surveys will likely require repeating.
- 5.1.1.4 An Ecological Clerk of Works following a Precautionary Method of Works (PMoW) document, should be implemented for all proposed vegetation clearance and earthworks on site. The Precautionary Method of Works document will be specific to the site and will detail the methods the Ecological Clerk of Works (ECoW) and operatives must follow during the clearance works. Specifically, this document will cover nesting birds, bats, common amphibians (excluding great crested newt), badger, hedgehog, and other common mammals. Further justification for the inclusion of each protected species or group may be provided in Section 5.2.

5.2 Designated Sites, Habitats & Protected Species

- 5.2.1.1 Designated sites, protected habitats, species, and INNS will be considered in the context of 1) the results of the UKHab Survey and desk study 2) the development proposals, and 3) the legislation or policy that applies to each. Recommendations to overcome these ecological constraints in the form of further surveys, mitigation and (optional) enhancement measures are systematically detailed for each in Table 9 (below). To clarify, ecological enhancements stated below are suggested, rather than required to demonstrate compliance with wildlife legislation.

Designated sites

- 5.2.1.2 The site falls within the Impact Risk Zone of the Harper Clough and Smalley Delph Quarries SSSI based on Consultation with MAGIC, however, residential development is not listed as an activity that may result in a significant impact to the aforementioned site. Within this zone.
- 5.2.1.3 Additionally, no non statutory sites are located within 500m of the site and as such no impacts are anticipated to occur as a result.
- 5.2.1.4 On this basis, no likely significant effects on designated sites are anticipated as a result of the Proposed Development, and impacts on designated sites have been reasonably discounted.

Amphibians (excluding great crested newt)

- 5.2.1.5 Common amphibian species could not be reasonably discounted from occurring within the site boundary and may be present in a commuting, foraging, and resting context.
- 5.2.1.6 Common amphibians, such as common toad are listed under Section 41 of the NERC Act 2006 meaning that they are a material consideration within the planning process.
- 5.2.1.7 As detailed in Section 5.1, a PMoW document is recommended to be produced that includes a section on common amphibians.

Badger

- 5.2.1.8 Foraging and commuting and badger have been assessed as potentially present within the site boundary.
- 5.2.1.9 Badgers and their setts are protected under the Protection of Badgers Act (1992), which makes it an offence to kill, injure, or take a badger or interfere with a badger sett.
- 5.2.1.10 The proposed development is unlikely to directly contravene this legislation through destruction or damage to a badger sett; however, there is a risk that individual badgers could be injured during the construction phase without appropriate consideration,
- 5.2.1.11 Table 9 (below) provides further detail on recommended mitigation measures.

Bats

- 5.2.1.12 Two trees (T1 and T2) were assessed as PRF-I as part of the GLTA conducted on site, meaning that they have the potential to support individual or small numbers of roosting bats.
- 5.2.1.13 All bats and their roosts are protected under the Habitats and Species Regulation 2017 and the Wildlife and Countryside Act 1981, which makes it illegal to kill or injure a bat, destroy or damage a bat roost, or disturb a bat in its roost.
- 5.2.1.14 It is understood that the proposed development will seek to retain the majority of trees within the site boundary and that T1 and T2 will not be impacted. Therefore, further survey work is not deemed necessary; however, appropriate mitigation is recommended in Table 9 (below).

Birds

- 5.2.1.15 Common bird species are expected to utilise the habitats on site during the nesting season.
- 5.2.1.16 All wild birds, their eggs and nests are protected under the Wildlife and Countryside Act 1981, which makes it an offence to kill or injure wild birds or damage or destroy a wild bird's nest while it is in use or being built.
- 5.2.1.17 The proposed development will require some level of vegetation clearance prior to construction works and the ancillary buildings will need to be demolished, which may result in the contravention of the aforementioned legislation in the absence of appropriate consideration.

5.2.1.18 Appropriate mitigation is recommended in Table 9 (below).

Other notable mammals

- 5.2.1.19 Other notable mammals such as hedgehog, rabbit, fox, etc may be present on site in a commuting and foraging context.
- 5.2.1.20 All wild mammals are protected under The Wild Mammals (Protection) Act 1996 which makes it an offence to intentionally cause unnecessary suffering to any wild mammal.
- 5.2.1.21 There is a risk that notable mammals could be injured during the construction phase in the absence of appropriate consideration.
- 5.2.1.22 Table 9 (below) provides further detail on recommended mitigation measures.

Invasive Species

- 5.2.1.23 Invasive plant species rhododendron and cotoneaster were found to be present within the site extent. The rhododendron plants on site could not be identified to species level.
- 5.2.1.24 These plant species are listed under Schedule 9 of the Wildlife and Countryside Act 1981, which makes it an offence to cause the spread of such species into the wild.
- 5.2.1.25 As such it is recommended that these plants are dealt with prior to construction phase by a specialist contractor, see Table 9.

Table 9. Summary of ecological constraints, survey, mitigation and opportunities

Ecological Constraint	Further Survey Recommendations	Recommendations for Mitigation	Enhancement Opportunities
Designated Sites	No further survey of assessment required.	n/a	n/a
Habitats	All habitats have been sufficiently surveyed.	Tree protection must be enforced in accordance with BS 5837 (2012) for retained habitats. A PMoW document should be produced that includes a chapter on sensitive habitats i.e. the woodland and watercourses onsite and detail appropriate buffer zones and other mitigation measures throughout the construction phase.	Any additional proposed soft landscaping at the site should aim to provide a <u>minimum</u> 10% net gain in biodiversity.
Badger	No further survey of assessment required.	A PMoW document should be produced that includes a chapter on badger and details appropriate mitigation measures throughout the construction phase.	Inclusion of linear habitat features around the boundary of the site, with native, fruit bearing species, that may provide an additional food source for the species group.
Bats	Two trees (T1 and T2) were assessed as PRF-I and are to be retained within the development. All ancillary buildings were assessed as negligible for roosting bats and are to be demolished. As such, no further survey work is required. The site was assessed as providing low commuting and foraging value for bats, and no further survey work is required.	Trees and buildings containing Potential Roost Features (PRFs) to be retained as part of the design, and a suitable buffer zone implemented to prevent potential impacts to roosting bats as part of the proposed development. The lighting strategy should be developed in line with current guidance (BCT and ILP, 2023).	Proposed landscaping should seek to increase connectivity to the wider landscape for foraging and commuting bats. The provision of 4 bat boxes as part of the detailed design will provide roosting opportunities for local bat species, such as common pipistrelle and soprano pipistrelle. A detailed plan should be produced by a suitably qualified ecologist, detailing the type of boxes to be used, specifications and locations.

Ecological Constraint	Further Survey Recommendations	Recommendations for Mitigation	Enhancement Opportunities
Birds	No further survey or assessment required.	Vegetation clearance on site should ideally be undertaken outside of the core bird breeding season which is March-August, inclusive. A PMoW document should be produced that includes a chapter on nesting birds and details appropriate mitigation measures throughout the construction phase.	Retention and enhancement of existing habitats on Site, such as trees, scrub and broadleaved woodland, and the provision of nest boxes as part of the soft landscaping will increase nesting opportunities available for breeding birds. 6 bird boxes could be installed on the new buildings / retained trees. A plan to show the locations of these boxes and the specifications should be produced by an ecologist once the layout is finalised. This would increase the carrying capacity of nesting birds on the site.
Common Amphibians	No further survey or assessment required.	A PMoW document should be produced that includes a chapter on common amphibians and details appropriate mitigation measures throughout the construction phase.	Proposed soft landscaping at the site should aim to incorporate habitats suitable for amphibian species, such as the creation of a new pond with suitable aquatic planting, areas of rough grassland and log piles. Arisings from vegetation clearance should be retained and used to create hibernacula/refugia suitable for amphibians where possible.

Ecological Constraint	Further Survey Recommendations	Recommendations for Mitigation	Enhancement Opportunities
Other Protected/Notable Species	No further survey or assessment required.	A PMoW document should be produced that includes a chapter on other notable mammals and details appropriate mitigation measures throughout the construction phase.	The implementation of ‘hedgehog highways’ within fencing should maintain and increase connectivity to the wider landscape. Arisings from vegetation clearance should be used to create suitable hibernaculum on site for hedgehog.
Invasive and Non-native Species (INNS)	No further survey or assessment required.	Non-native invasive flora species rhododendron and cotoneaster were identified during the survey visit. As such, it is recommended, prior to the development, that an invasive species specialist should be contracted to map the extent of invasive species present within the site and produce a detailed management plan for the removal and eradication of such species	Native shrubs of local provenance should be planted as part of the soft landscaping.

6 References

CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM.

CIEEM (2019). Guidelines for Preliminary Ecological Appraisal. CIEEM. Rivers Ecology Series No. 10. English Nature, Peterborough.

Collins (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (Fourth Edition). The Bat Conservation Trust, London.

UKHab Ltd (2023). UK Habitat Classification Version 2.0

Appendix 1 - Relevant Legislation

Legislation Relating to Protected Species

European Protected Species (EPS) and their resting places (e.g. bat roosts) are protected under:

- The Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way (CROW) Act 2000
- The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 transposes the European Union's 'Habitats Directive' (Council Directive 92/43/EEC) into UK law. The Regulations provide for the designation and protection of 'European Sites', the protection of EPS, and the adaptation of planning and other controls for their conservation. EPS are listed on Schedule 2 of these Regulations.

Under the Wildlife and Countryside Act 1981 (as amended), it is an offence to:

- Intentionally kill, injure or take certain animals listed in Schedule 5;
- Intentionally or recklessly damage or destroy any structure or place used for shelter or protection by an animal listed in Schedule 5;
- Intentionally or recklessly disturb any such animal while it is occupying such a structure or place; or
- Intentionally or recklessly obstruct access to any such structure or place.

The Conservation of Habitats and Species Regulations 2017 makes it an offence to:

- Deliberately capture, injure or kill any EPS;
- Deliberately disturb EPS in a way that affects their ability to survive, breed, rear young, hibernate, migrate, or significantly affect their local distribution;
- Deliberately take or destroy the eggs of EPS; or
- Damage or destroy a breeding site or resting place of EPS.

Several EPS, including great crested newt (*Triturus cristatus*), otter (*Lutra lutra*), and various bat species (Chiroptera spp.), are also listed as Species of Principal Importance (SoPI) under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Legislation for Amphibians (excluding Great Crested Newt)

Under the Wildlife and Countryside Act 1981 (as amended), four widespread amphibians (smooth newt (*Lissotriton vulgaris*), palmate newt (*Lissotriton helveticus*), common toad (*Bufo bufo*), and common frog (*Rana temporaria*)) receive limited protection under Section 9(5).

Common toad (*Bufo bufo*) is also listed as a SoPI under Section 41 of the NERC Act 2006.

Legislation Relating to Breeding Birds

All wild birds, their nests, and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). It is an offence to:

- Intentionally kill, injure, or take any wild bird;
- Intentionally take, damage, or destroy a wild bird's nest while in use or being built;
- Intentionally take or destroy a wild bird's egg;
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while nesting, or its dependent young.

Schedule 1 species (e.g., peregrine falcon (*Falco peregrinus*), barn owl (*Tyto alba*), black redstart (*Phoenicurus ochruros*)) receive additional protection against disturbance.

A number of bird species are SoPI under Section 41 of the NERC Act 2006.

Legislation Relating to Badgers (*Meles meles*)

Badgers are protected under the Protection of Badgers Act 1992 (as amended), making it an offence to:

- Wilfully kill, injure, or take a badger;
- Intentionally or recklessly damage, destroy, or obstruct access to a badger sett;
- Disturb a badger while it is occupying a sett.

Legislation Relating to Invasive Plant Species

Several invasive plant species (e.g. Himalayan balsam (*Impatiens glandulifera*), Japanese knotweed (*Reynoutria japonica*)) are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), making it an offence to plant or cause these species to grow in the wild.

Regulations covering invasive species also include:

- The Environmental Protection Act 1990 (covers disposal of controlled waste, including Japanese knotweed contaminated material).
- The Hazardous Waste Regulations 2005 (regulates hazardous waste disposal when herbicides have been applied).

Appendix 2 - UK Habitat Classification Codes

Hierarchical code	Code	Meaning
Primary Code	g4	Modified grassland
	u1	Built-up areas and gardens
	u1b	Developed land - sealed surface
Secondary Code	510	Bare ground

Appendix 3 – Results of Preliminary Roost Assessment

Building Reference	Building description	Assessment
B1	Building 1 comprised a single storey freestanding greenhouse. The construction comprised an aluminium or steel frame with glass panels. No roofing felt, roof tiles, timber boards/frames, or other features commonly associated with potential roosting features were present. The green house was highly exposed and will be subject to large temperature fluctuations making it unsuitable for roosting bats. No evidence of roosting bats was identified during the survey, i.e. droppings, or feeding remains.	Negligible
B2	Building 2 comprised a single storey freestanding woodstore. The construction comprised a single layer of timber boards with affixed to a timber frame, with a pitched corrugated metal roof. There were no PRFs present and the nature of the single layer boarding construction does not lend itself to providing suitable environment for roosting bats. No evidence of roosting bats was identified during the survey, i.e. droppings, or feeding remains. However, a disused birds nest was present internally within the timber frame.	Negligible
B3	Building 3 comprised a single storey freestanding dog kennel. The construction comprised a small shed like structure built entirely of timber boards and frame with a single PVC window present. The structure held no suitability to support roosting bats.	Negligible
B4	Building 4 comprised a single storey, fixed garage building. The construction comprised a breezeblock building, covered in pebble dashed cladding externally. With a slightly pitched corrugated metal roof supported by timber beams and a metal garage door. The building itself was well sealed with no obvious ingress or egress points and no suitable PRFs identified. The garage was locked, restricting external access. However, it is expected that roosting opportunities would be limited.	Negligible

Appendix 4 - Results of Ground Level Tree Assessment

Tree Reference	Tree Species	Location (what3words)	Tree description	Assessment
T1	Horse Chestnut	///lions.grabs.calculate	T1 supports a single PRF located 1m from the ground on its western aspect, comprising a compression fork where the tree bifurcates. The feature faces diagonally up and leads into a small, sheltered cavity, that would be suitable for a day roost for individual or a small number of bats.	PRF-I
T2	English Oak	///pods.lifetimes.prank	T2 supports a single PRF located 2.5m from the ground on its north-western aspect comprising a hazard beam. The hazard beam itself is a large split that provides a small cavity at its end, towards the tree stem.	PRF-I