

**ECOLOGICAL IMPACT
ASSESSMENT SCOPING
REPORT**

at

**Land at Chapel Lane
Moldgreen
Huddersfield
HD5 9BG**

**Client:
Skyline Funding (UK) Ltd.**

**Client Address:
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**JCA Ref:
22721/JF**

**Date of Report:
09/04/2025**



Quality Assurance

Version	Desktop Survey Completed:		Site Surveyed:		Report Completed:		Reviewed:	
	Date	Name	Date	Name	Date	Name	Date	Name
Planning	18/03/25	James Foster	18/03/25	James Foster	03/04/25	James Foster	07/04/25	Richard Westwood
							08/04/25	Alex Donovan

This report has been prepared and provided in accordance with the *British Standard 42020: Biodiversity – Code of practice for planning and development 2018* and the *CIEEM’s Code of Professional Conduct*.

Risk Assessment Completed	
Bio-security Procedure Completed	
Lone Worker Procedure Completed	



Summary

JCA Limited has been commissioned by **Skyline Funding (UK) Ltd.** to undertake an Ecological Impact Assessment (EclA) scoping of a site located at **Chapel Lane, Huddersfield**. The site is located at Ordnance Survey (OS) National Grid Reference **SE 15596 16333** with nearby postcode **HD5 9BG**.

A desk study and field survey were undertaken in order to assess the potential of the site to support protected habitats and species and species of conservation concern. Recommendations for further survey, avoidance, mitigation and enhancement – where appropriate - have been made and are summarised in Table 1 on the following page and are detailed in full in Chapter 7 of this report.



Table 1: Summary of ecological receptors at the site and recommended mitigation.

Receptor	Potential Risk to Project if No Action Taken	Cause of Impact Description of Affect	Further Survey Required	Mitigation Required
Designated sites				
Statutorily protected	None	None	No	No
Non-statutorily protected	None	None	No	No
S41 habitat	Moderate	Adverse affects to the deciduous woodland adjacent to site from inconsiderate building practises.	No	A Construction and Environment Management Plan (CEMP) is recommended. This is to ensure that the deciduous woodland adjacent to site is not adversely impacted during the works
Other habitats	Moderate	Adverse affects to the Wildlife Habitat Network adjacent to site from inconsiderate building practises.	No	A Construction and Environment Management Plan (CEMP) is recommended. This is to ensure that the Wildlife Habitat Network adjacent to site is not adversely impacted during the works
Protected species				
Flora (WCA Sch 8, CHSR Sch 5, S41, KBAP)	Low	Adverse affects to the flora species within the deciduous woodland adjacent to site from inconsiderate building practises.	No	A Construction and Environment Management Plan (CEMP) is recommended. This is to ensure that the flora within the deciduous woodland adjacent to site is not adversely impacted during the works
Invertebrates	Low	Removal of the habitats present on site could adversely impact a range of generalist invertebrates, as well as species which feed on invertebrates.	No	Native scrub and wildflower planting and the addition of insect refuge is recommended to compensate for any loss.
White-clawed crayfish	None	None	No	No
Fish	None	None	No	No
Great crested newt	None	None	No	No
Reptiles	None	None	No	No



Birds	High	Potential breach of legislation from destruction of nests or disturbance of nesting birds.	Dependent on timing of works.	A preconstruction site walkover is required prior to any vegetation or tree removal or building demolition commencing. If removal/demolition occurs outside of the breeding bird period (1st February until 31st August) and birds are found, the removal must cease immediately, and a suitably competent ecologist contacted.
Bats	High	There is one building on site planned to be demolished that has 'low' bat roosting potential, The overall site has low potential for commuting and foraging bats. Any disturbance to bats or a bat roost would result in a breach of legislation.	Yes – one emergence survey for the building with 'low' bat roosting potential between May and August inclusive.	Dependent on the results of the survey. If a roost is confirmed, a Mitigation Licence would need to be applied for from Natural England. Artificial lighting within the Development should follow guidance from Institution of Lighting Professionals (2023).
Badgers	Low	Potential breach of legislation from killing and injury of individual badgers.	No	Any excavation of the site should be covered overnight, or if not possible, a safe exit route provided for badgers to leave the site, such as an artificial ramp to aid their exit. Any open pipes must also be capped if left open overnight. A pre-construction walkover of the bramble scrub is required prior to removal to ensure no badger setts are present.
Otters	None	None	No	No
Water voles	None	None	No	No
Other Species e.g. S41 species	Low	Hedgehogs are a mobile species and may potentially be utilising the site for	No	Any excavations created during the development stage must be covered or appropriate escape



		dispersal, any construction works has the potential to disturb, harm or kill hedgehogs.		routes implemented. Planks are to be placed at a 45-degree angle for hedgehogs to escape safely. Any open pipes must also be capped if left open overnight.
Invasive Species (WCA Sch 9) Injurious Weeds (Weeds Act, 1959)				
Absence/presence of invasive species could not be determined due to the time of the survey.	Low	Potential breach of legislation from spread of invasive non-native species.	An invasive species survey during April – September is required to determine absence/presences of invasive species.	Dependent on results of the survey
<p>Key: S41 habitat/species – habitats and species listed as priority for conservation importance under Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006.</p> <p>WCA Sch – Wildlife and Countryside Act 1981 (as amended) Schedule</p> <p>CHSR Sch – Conservation of Habitats and Species Regulations 2017 Schedule</p>				



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1. Introduction

1.1 Background

1.1.1 In August 2024, JCA Limited was instructed by **Skyline Funding (UK) Ltd.** to undertake an Ecological Impact Assessment (EclA) scoping of a site located at **Chapel Lane, Moldgreen, Huddersfield, HD5 9BG** hereafter referred to as 'the site'. The purpose of the survey is to establish a baseline of ecological information and assess whether the proposed works, hereafter referred to as 'the scheme', have the potential to adversely affect any protected or notable habitats or species.

1.2 Scheme Description and Location

1.2.1 The site is located at Ordnance Survey (OS) National Grid Reference **SE 15596 16333** with nearby postcode **HD5 9BG**. The site is situated in an urban area and bordered on the east, south and west by a mixture of commercial and residential properties with a deciduous woodland bordering to the north.

1.2.2 The scheme is to demolish the existing building on site and the development to form a student residence of 31 studio apartments and ancillary accommodation.

1.3 Aims and Objectives

1.3.1 The purpose of the survey is to establish a baseline of ecological information and assess whether the proposed development activities have the potential to adversely affect any protected or notable habitats or species. The following tasks have been undertaken:

- Desktop study – a review of environmental records for the surrounding area to obtain existing information on statutory and non-statutory designated sites of nature conservation interest, and the presence of protected and notable habitats and species within the site and its environs.
- Field surveys – an UKHab Habitat survey involving a site visit to record habitat types and dominant vegetation, including any invasive species. During this survey evidence of protected or notable fauna and habitats or habitat capable of supporting protected or notable fauna was recorded.



- Ecological report – an assessment of the potential ecological constraints to the proposed works at the site and recommendations for further survey, avoidance, mitigation, and enhancement where appropriate. Locations of any features constituting ecological constraints or of other ecological interest and vegetation recorded on and around the development are included in an accompanying UKHab Habitat Map (**Appendix 1**). This report and the maps are supported by photographs (**Appendix 5**) and information regarding current legislation (**Appendix 8**).



2. Methodology

2.1 Desktop Study

2.1.1 The desktop study involved conducting database searches for statutory and non-statutory designated sites and European Protected Species (EPS) licensing applications within a 2km radius of the site. The baseline conditions are based on a review of existing available information including:

- MAGIC (Multi-Agency Geographical Information for the Countryside) website (to identify statutory designated sites and EPS licences).
- Ordnance Survey mapping (to identify potentially notable habitats including ponds).
- Aerial photography (to identify potentially notable habitats).
- Data search for records of protected/notable species on and within 2km of the site within the last ten years (exempting bat roosts, of which all records are included) obtained from West Yorkshire Bat Group and West Yorkshire Ecology Service (WYES), the local environmental records centre for West Yorkshire, along with information for non-statutory wildlife sites.

2.1.2 The records were checked against species listed as priority species under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and the Bradford Biodiversity Action Plan to assess national and regional habitat and species status.

2.2 Field Surveys

2.2.1 A UKHab habitat survey of the site was conducted on 18/03/2025. All areas of the site were investigated and areas around the site where access permitted.

2.2.2 The vegetation and habitat types within the site were noted during the survey in accordance with the categories specified for a UKHab Habitat survey (The UK Habitat Classification, Habitat Definitions Version 2.01, UKHab, 2023). Dominant and abundant plant species were recorded for each habitat present.

2.2.3 The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Conservation of Habitats and Species (Amendment) (EU Exit)



Regulations 2019, the Wildlife & Countryside Act (WCA) 1981 (as amended), including those given a higher level of legal protection under the NERC Act 2006 and Countryside & Rights of Way (CROW) Act 2000, and those listed on the Local Biodiversity Action Plan. The following species were considered:

- Invertebrates (including white-clawed crayfish *Austropotamobius pallipes*).
- Great crested newt *Triturus cristatus* freshwater habitat potential within 500m of the site.
- Reptile habitat within the site.
- Nesting and foraging habitat for birds within the site.
- Bat roost potential and foraging habitat within the site.
- Badger *Meles meles* setts within 30m of the site, where accessible.
- Otters *Lutra lutra* and suitable habitat within 30m of the site, where accessible.
- Water vole *Arvicola amphibius* habitat within 20m of the site, where accessible.
- Other notable species.
- Invasive species.

2.3 Survey Constraints

2.3.1 To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. As a result, the survey undertaken focused on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to the National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2024), especially those given protection under UK wildlife legislation.

2.3.2 The optimum time of year for completing a UKHab habitat survey is between April and September, as many plant species have a seasonal expression in spring and summer only. The survey was undertaken on 18/03/2025. This is outside of the optimum time for conducting surveys as the flora species were not in flower/leaf and many faunal species are less active, meaning field signs are more likely to be scarcer. However, some flora species were still in flower/leaf and the habitat types can still be accurately identified and their potential to support notable and protected species correctly determined.



2.3.3 The weather conditions during the survey are given in Table 2 below:

Table 2: Weather conditions during the surveys.

Temperature (°C)	Wind speed (Mph)	Cloud cover (%)	Precipitation	Humidity	Visibility
10	12 East	5	None	54	Very good

2.3.4 The weather on the day of the survey was dry, clear, mild and calm. The weather leading up to the survey was similar but with scattered showers. This is unlikely to cause a constraint to the survey.

2.3.5 The details of this report will remain valid for a period of 18 months. If works have not commenced within this period or land use on site changes, it is recommended that a new review of the ecological conditions is undertaken.



3. Biodiversity Accounting Assessment

3.1 Introduction

- 3.1.1 Biodiversity is complex and so it is impossible to measure in its entirety. Therefore, metrics, which incorporate measures of different biodiversity attributes, are used to provide surrogate measures of overall biodiversity. This report uses the Statutory Biodiversity Metric, which was designed by DEFRA (2023) to define the biodiversity impacts and compensation requirements associated with development proposals. The metric works by providing a comparative measure of each habitat on site in biodiversity units (BU) by multiplying its area (square meters), distinctiveness (habitat type) and current condition (quality). The relative impacts (habitat loss) of the development, considering any additional onsite habitat creation or enhancement, can then be calculated to determine if a measurable biodiversity net gain will be achieved on site. If a measurable net gain is unable to be achieved on site, then the process of biodiversity offsetting must be undertaken.
- 3.1.2 Biodiversity offsets are conservation activities designed to deliver biodiversity benefits in compensation for residual losses, in a measurable way. Biodiversity offsetting is distinguished from other forms of compensation by the requirement for measurable outcomes. This is achieved by quantifying net biodiversity impacts caused by development; using the same metric to assess direct and indirect negative impacts to habitats and the value of any on site compensation, to set the framework of offsite compensation (offset) requirements and the biodiversity net gain generated by these offsets. Biodiversity offsetting ensures that offsite compensation proposed is both proportionate to the development concerned and that a measurable net gain for biodiversity can be achieved.
- 3.1.3 Biodiversity offsetting, like other forms of compensation, is the last step of the mitigation hierarchy (first avoid, then reduce, and finally, compensate) and is applied as a last resort to otherwise policy-compliant development proposals. 'Offsetting' – i.e. creating or restoring new wildlife habitat in a measurable way and in a different place to where it was lost.
- 3.1.4 In addition to providing a mechanism for quantifiable compensation and net gain, biodiversity offsets provide reliable biodiversity outcomes as they are long-term (30 years), monitored and enforceable with adaptable management plans for optimised success.



3.2 Biodiversity Net Gain Principles

3.2.1 Biodiversity Net Gain: Good Practice Principles for Development published by CIRIA et. al (2016) states that delivering biodiversity net gain goes beyond balancing relative gains and losses. It also involves doing everything to avoid biodiversity losses in the first instance. The application of the DEFRA metric detailed in this report supports developments to adopt this approach by:

- a. Providing a habitat balance sheet which can be used to identify those habitats with the greatest value and subsequently those with the greatest impacts if lost;
- b. Supporting and incentivising the mitigation hierarchy by quantifying the benefits of avoiding and mitigating impacts on high value features;
- c. Promoting the value of biodiversity enhancements and demonstrating the potential for additionality on retained habitats;
- d. Providing a balance of losses, enhancements or on site compensation to determine if a measure net gain contribution can be achieved;
- e. Providing transparent, robust and credible evidence to help inform the best possible Site options for biodiversity; and,
- f. Ensuring that any residual off site compensation required (e.g. through biodiversity offsetting) is proportionate to the impacts and can secure a measurable net gain contribution for biodiversity overall.

3.3 Biodiversity Offsetting Standards

3.3.1 Good practice standards for biodiversity offsetting are set out by the Business and Biodiversity Offsets Programme (BBOP, 2012). These standards inform the approach for selection and development of suitable Offset Sites and projects. Of these standards, the following provide the most relevant UK framework for the preliminary offset site search:

- a. The proposed offset site should be identified as suitable for the creation and/or enhancement of a target habitat within the vicinity of where the impact occurs;
- b. The site must be available and managed for a minimum specified term (30 years in this instance).
- c. The landowner must agree to an enforceable delivery mechanism to



secure the long-term management.

- d. The site must be available for monitoring to ensure appropriate management is being undertaken and to report biodiversity progress back to the local planning authority.

3.3.2 Further standards, with regards to offset site surveys and ensuring that appropriate target habitats and units can be achieved, will form part of the detailed site search that will proceed the preliminary site search.

3.3.3 In addition to biodiversity net gains achieved on site, off site enhancements can also achieve positive outcomes for nature in the local area.

3.4 National Policy and Guidance

3.4.1 Specific habitats and species of relevance to the Site receive legal protection in the United Kingdom under various pieces of policy and legislation, including:

- The Environment Act 2021 mandates that all planning applications will be required to demonstrate how a development will enhance biodiversity and protect habitats from November 2023. This is to be achieved through a measurable 10% Biodiversity Net Gain (BNG), in association with development through the use of the most up to date Defra Metric (currently Statutory Biodiversity Metric);
- National Planning Policy Framework (NPPF, as revised 2024) sets out how planning policies and decisions should contribute to and enhance the natural and local environment through amongst other things, ensuring BNG through development and protect ecological important sites and networks;
- The Conservation of Habitats and Species Regulations 2017 (as amended) (retained in UK law by CHSR (Amendment) (EU Exit) 2019) details the regulations for the protection of European Protected Habitat and Species. Such European Protected Species (EPS) of animals (Schedule 2) and plants (Schedule 5) include all species of bats, great crested newt *Triturus cristatus*, dormouse *Muscardinus avellanarius*, and European otter *Lutra lutra*, amongst others;
- The Wildlife and Countryside Act (WCA) 1981 (as amended) covers the legislation for endangered species in England and the framework for the designation of Sites of Special Scientific Interest (SSSIs);
- The Countryside and Rights of Way (CRoW) Act 2000 reinforces the wildlife legislation listed in the WCA and places a duty of government



departments to consider biodiversity, and provides governmental department powers for the protection and maintenance of SSSIs;

- The Natural Environment and Rural Communities Act (NERC) 2006 places a duty upon local authorities to promote and enhance biodiversity in all their functions. Specifically, habitats and species of principal importance to the conservation of biodiversity in regard to the planning process;
- The Management of Hedgerows (England) Regulations 2024 provides protection by prohibiting the destruction or damage to important countryside hedges; and
- The Protection of Badgers Act 1992 includes the protected of badgers under the act and that it is unlawful to wilfully kill, injure, take, possess or cruelly ill-treat badgers or attempt to do so.

3.4.2 Where relevant, this appraisal takes account of the legislative protection afforded to specific habitats and species.

3.5 Regional Policy and Guidance

3.4.3 Kirklees Local Plan 2013 - 2031 (Kirklees Council, 2019), adopted February 2019.

Kirklees Local Plan 2013 - 2031 sets out the council's policies and proposals for land use within the district to 2031. Policy LP30 – Biodiversity and Geodiversity of the Plan is therefore relevant to the Proposed Development.

Policy LP30: Biodiversity and Geodiversity states that proposals the council will support proposals that seek to protect and enhance the biodiversity and geodiversity of Kirklees, including the range of international, national and locally designated wildlife and geological sites, Habitats and Species of Principal Importance and the Kirklees Wildlife Habitat Network. that protect and enhance features of ecological and geological interest and provide net gains in biodiversity will be supported.

Proposals will be required to:

- i. result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;
- ii. minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;



- iii. safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;
- iv. establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone

3.4.4 Habitats included within the BAP for Kirklees (Kirklees Council, n.d) are as follows;

- Scrub;
- Other semi-natural grassland (wet/rush pasture and rough grassland); and
- Riverine.
- Hedgerows

3.4.5 Species included within the BAP for Kirklees (Kirklees Council, n.d) are as follows;

- Water vole (*Arvicola terrestris* - recently reclassified as *Arvicola amphibious*);
- White clawed crayfish (*Austropotamobius pallipes*);
- Twite (*Carduelis flavirostris subsp. bensonorum/pipilans*);
- Early marsh orchid (*Dactylorhiza incarnate*);
- Marsh helleborine (*Epipactis palustris*);
- Northern wood ant (*Formica lugubris*);
- Floating water plantain (*Luronium natans*); and
- Great crested newt (*Triturus cristatus*).

3.6 Baseline Data

3.6.1 A baseline analysis of the existing habitats on site was carried out from the information gathered during the site's survey and condition assessment.

3.6.2 To undertake the Statutory Biodiversity Metric calculations, the following information was recorded for each habitat parcel and/or linear feature:

- Habitat type;
- Area/Length (ha/km);



- Habitat condition;
- Strategic significance; and
- Whether that habitat will be lost, retained, enhanced, succeeded and/or created, and at what scale.

3.6.3 The habitat map for the Site was digitised and interpreted using QGIS Version 3.23.3 to calculate habitat area.

3.7 Impact Assessment

3.7.1 The existing baseline habitat plan for the site was overlain with the Proposed Site Plan (Dwg No: (SK)01) of the Proposed Development using GIS software to provide an area (hectares) of temporary and permanent habitat loss.

3.7.2 The area of any retained/enhanced or created habitats proposed as part of the development was also mapped to provide an area (hectares) (or length (Km) for linear features) of the on site compensation proposals being provided. An estimate of future condition, time until establishment and the likelihood of success was then calculated using landscaping data provided by the client and professional judgement).

3.8 Habitat Creation and Enhancement

3.8.1 The area of any retained/enhanced or created habitats proposed on site as part of the Proposed Development was mapped using Proposed Site Layout (Dwg No: (SK)01) of the final development, to provide an area (hectares) (or length (km) for linear features) estimate of on site compensation provided. This includes areas of developed land, which are assigned a very low (or null) value, notably, areas of buildings and/or roads.

3.8.2 Condition and strategic significance for each habitat or linear feature were projected using available ecological data or professional opinion about the likely value.

3.9 Residual Affects

3.9.1 The residual affects of the Proposed Development scheme were calculated using the Statutory Biodiversity Metric Calculator Tool. This subtracts the pre-development baseline values from that of the post-development values to determine the change in overall habitat value for the Site, considering any habitat trading.



- 3.9.2 Habitat trading is where the loss of a habitat must be compensated for through the creation or restoration of areas of equivalent or greater distinctiveness value. Guidance by DEFRA is that the loss of high distinctiveness areas, such as Habitats of Principal Importance (HPI, NERC Act, S.41), require compensation in a like-for-like manner (creation or restoration of habitat of the same habitat classification as that impacted). Within the Biodiversity Metric 'trading up' (where compensation through creation of a higher distinctiveness habitat) can occur, however, 'trading down' (compensation through creation of lower distinctiveness habitats) is not permitted. Therefore, if present, despite gains in lower distinctiveness habitats, these will not reduce the net gain requirement for the development. This also applies to the different habitat features i.e. habitats, hedgerows, rivers, and streams. Hedgerow creation gains will not reduce net gain requirements for either rivers and streams or habitats.
- 3.9.3 Where the resulting biodiversity balance is negative, a residual net loss of biodiversity is recorded. Where the balance is positive a residual net gain of biodiversity is recorded.



4. Baseline Ecological Conditions

4.1 Statutory Designated Sites

4.1.1 The MAGIC website revealed no internationally designated site within 2km of the site.

4.1.2 The MAGIC website revealed one nationally designated site within 2km of the site. Castle Hill is designated as a Local Nature Reserve (LNR) for its acid grassland, neutral grassland, woodland scrub and hedgerow habitats which supports a variety of butterflies, other invertebrates, small mammals and birds. Castle Hill is located 1990m south of the site and is also designated as a Local Wildlife Site.

4.1.3 The site does fall into the Site of Special Scientific Interest (SSSI) Impact Risk Zone.

4.2 Non-statutory Designated Sites

4.2.1 The site is included in the Local Wildlife Habitat Network.

4.2.2 Records received from WYES revealed seven non-statutory designated sites within 2km of the site, detailed in table 3 below.

Table 3: Non-statutory designated sites within 2km of the site, returned from WYES.

Site Name and Designation	Distance from Site (m)	Reasons for Designation
St John Ramsden Canal LWS	560 West	Standing open water habitats.
Longley Hill Plantation LWS	1420 South	Acid grassland, neutral grassland, scrub and woodland that supports bluebells and a variety of butterflies and birds.
Huddersfield Narrow Canal LWS	1560 West	Standing open water habitats that supports floating water plantain, otter and kingfisher.
Round Wood LWS	17880 East	Ancient semi-natural woodland that supports bluebells and a variety of birds,
Castle Hill LWS	1990 South	See Section 4.1.2
Key: LWS – Local Wildlife Site		



4.3 Habitats

4.3.1 h3d – Bramble scrub: 32 – Scattered trees, 33 – Line of trees, 81 – Ruderal or ephemeral, 202 – Young trees – self-set, 532 – Scattered grass.

The majority of the vegetation on the site is bramble scrub, which is located to the north of the site. The scrub contains a line of trees, scattered trees, self-set young trees, tall ruderal and ephemeral species and scattered grass. (see **Appendix 1 and Appendix 5 photo 1 - 3**). Species found here include sycamore *Acer pseudoplatanus*, hawthorn *Crataegus monogyna*, cock's-foot *Dactylus glomerata*, ash *Fraxinus excelsior*, cleavers *Galium aparine*, herb Robert *Geranium robertianum*, wood avens *Geum urbanum*, ivy *Hedera helix*, oval-leaved privet *Ligustrum ovalifolium*, perennial ryegrass *Lolium perenne*, wild cherry *Prunus avium*, dog rose *Rosa canina*, bramble *Rubus fruticosus*, goat willow *Salix caprea* and dandelion *Taraxacum officinale*.

4.3.2 u1b – Developed land sealed surface.

The west of the site is composed of developed land; sealed surface in the form of a car park for the building on site. (see **Appendix 1 and Appendix 5 photo 5 - 6**).

4.3.3 u1b5 – Buildings

There is a single building on the east of the site. The building is a single story constructed of brick with a hipped roof made of composite roof tiles with soffit boxes and a small extension on the western aspect. Potential roosting features were observed on all aspects of the building. the building was, therefore, judged to have potential to support roosting bats (see **Appendix 1 and Appendix 5 photo 5 - 12**).

4.4 Section 41 of the NERC Act 2006 Priority Habitat Inventory

4.4.1 The MAGIC website revealed deciduous woodland adjacent to the north of the site.

4.5 Protected and Notable Species

4.5.1 European Protected Species (EPS) Licence Applications

The MAGIC website revealed eight bat EPS licence applications within 2km of the site.



4.5.2 Flora

The following flora records were returned from WYES:

Table 4: Flora records received from WYES.

Scientific name	Common name	Designation	Latest Date	Number of records	Distance from site (m)
<i>Alisma lanceolatum</i>	Narrow-leaved water-plantain	KBAP	2020	1	1965
<i>Centaureum erythraea</i>	Centuary	KBAP	2020	1	1965
<i>Hyacinthoides non-scripta</i>	English bluebell	WCA* KBAP	2020	8	1123

Key:

WCA: Schedule 8 of the Wildlife and Countryside Act 1981 (as amended).

* In respect of Section 13(2) only - offence to buy, sell, advertise, transport or be in possession for the purpose of sale.

S41: Section 41 of the NERC Act 2006.

KBAP: Kirklees Biodiversity Action Plan

There is no potentially suitable habitat on the site to support Narrow leaved-water plantain, centuary, bluebells or any other protected or notable flora species. However, the deciduous woodland adjacent to the north of the site is potentially suitable habitat for bluebells.

4.5.3 Invertebrates (including white-clawed crayfish)

No records of protected or notable invertebrate species were returned by WYES. The bramble scrub on site has the potential to support common and widespread invertebrates.

There is no potentially suitable habitat on or adjacent to the site to support white-clawed crayfish and limited to no potentially suitable habitat connectivity between the site, and potentially suitable habitats, further afield. White-clawed crayfish, therefore, will not be mentioned further in this report.

4.5.4 Fish

Two records of brown trout were returned by WYES. There is potentially suitable habitat adjacent to the site to support protected or notable fish species. Fish, therefore, will not be mentioned further in this report.

4.5.5 Amphibians

One record of common frog was returned by WYES. No amphibians were identified on the site. The bramble scrub on site has the potential to support



hibernating amphibians, however, there is no potentially suitable habitat for breeding amphibians within the zone of influence. The closest pond is over 500m away from the site. Due to the lack of ponds in the local vicinity and the limited habitat connectivity between the site and potentially suitable habitats further afield, amphibians, will not be mentioned further in this report.

4.5.6 Reptiles

No records of reptiles were returned by WYES and no reptiles were identified on site. The bramble scrub and brash pile on site has the potential to support hibernating reptiles. However, due to the limited habitat connectivity between the site and potentially suitable habitats further afield, reptiles, will not be mentioned further in this report.

4.5.7 Birds

The following bird records were returned from WYES:

Table 5: Birds records received from WYES.

Scientific name	Common name	Designation	Latest Date	Number of records	Distance from site (m)
<i>Carduelis carduelis</i>	Goldfinch	KBAP	2020	2	236
<i>Falco peregrinus</i>	Peregrine falcon	WCA KBAP	2016	2	658
<i>Prunella modularis</i>	Dunnock	S41 KBAP	2018	1	686
<i>Pyrrhula pyrrhula</i>	Bullfinch	S41 KBAP	2018	1	864
<i>Passer domesticus</i>	House sparrow	S41 KBAP	2018	1	864

Key:

WCA: Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).

S41: Section 41 of the NERC Act 2006.

KBAP: Kirklees Biodiversity Action Plan.

No notable or protected bird species were identified on the site. There is potentially suitable habitat on the site to support nesting birds. The bramble scrub, trees and building on the site have the potential to support a wide range of nesting birds.

4.5.8 Bats

The following bat records were returned from WYES and WYBG:

Table 6: Bat records received from WYES.



Scientific name	Common name	Designation	Latest Date	Number of records	Distance from site (m)
<i>Nyctalus noctula</i>	Noctule	EPS WCA S41 KBAP	2023	3	1587
<i>Pipistrellus pipistrellus</i>	Common pipistrelle	EPS WCA WYBAP KBAP	2023	27	226
<i>Plecotus auritus</i>	Brown long-eared bat	EPS WCA S41 KBAP	2017	1	1587

Key:

EPS: European Protected Species: Species listed under the Conservation of Habitats and Species Regulations 2019.

WCA: Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

S41: Section 41 of the NERC Act 2006.

WYBAP: West Yorkshire Biodiversity Action Plan.

KBAP: Kirklees Biodiversity Action Plan.

27 field records of three confirmed species and 45 roost records of one confirmed species was returned by WYES and WYBG. The scrub and trees on site and the woodland adjacent to the north of the site has the potential to support commuting and foraging bats. The building on the site has the potential to support foraging bats. No trees on the site contained any potential roosting features.

Preliminary Roost Assessment

The guidance for the determination of bat roost potential is present in **Appendix 6**.

Building 1

There is a single building on the east of the site.

Potential Roosting Features PRESENT: Gaps are present in at least 16 locations.

There is missing mortar, gaps in the soffit box, air vents and missing bricks on the northern aspect. Gaps in the soffit box on the eastern aspect. Gaps in the soffit box, gaps in the ridge tile and roof tiles on the southern aspect and missing mortar and gaps in the soffit box on the western aspect (**see Appendix 4 and Appendix 5 photo 5 - 12**).

Bat Roost Potential: Low



Trees

There are small young trees on the north of the site, none of which contained any potential roosting features.

4.5.9 Badgers

Records of badger *Meles meles* were returned by WYES and the site falls outside the area of increased probability of badger activity. No field sign for badger or badger setts were identified during the survey. The bramble scrub habitat on site has the potential to support foraging badgers and the woodland to the north could potentially contain badger setts. Badgers are also a highly mobile species and may be utilising the site for dispersal.

4.5.10 Otters

No records of otter *Lutra lutra* were returned by WYES. No field signs of otter were identified on site and there is no potentially suitable habitat on or adjacent to the site to support otter and limited to no potentially suitable habitat connectivity between the site and potentially suitable habitats further afield. Otter, therefore, will not be mentioned further in this report.

4.5.11 Water Voles

No records of water vole *Arvicola amphibius* were returned by WYES. No field signs of water vole or water vole burrows were identified during the survey. There is no potentially suitable habitat on or adjacent to the site to support water vole and limited to no potentially suitable habitat connectivity between the site and potentially suitable habitats further afield. Water vole, therefore, will not be mentioned further in this report.

4.5.12 Other Notable Species

One records of hedgehog *Erinaceus europaeus* was returned by WYES. No hedgehogs were identified during the survey. However, there is potentially suitable habitat on site to support hedgehogs. The bramble scrub on site and the woodland adjacent to the site has the potential to support foraging, resting, breeding and hibernating hedgehogs.

4.5.13 Invasive Species

The following records were returned from WYES:

Table 7: Other notable species records received from WYES.



Scientific name	Common name	Latest Date	Number of records	Distance from site (m)
<i>Cotoneaster simonsii</i>	Himalayan cotoneaster	2018	1	864
<i>Fallopia japonica</i>	Japanese knotweed	2019	91	914
<i>Heracleum mantegazzianum</i>	Giant hogweed	2016	2	985
<i>Impatiens glandulifera</i>	Himalayan balsam	2016	3	1843
<i>Lamiastrum galeobdolon subsp. argentatum</i>	Variegated yellow archangel	2015	1	2015
<i>Pacifastacus leniusculus</i>	Signal crayfish	2019	5	1331
<i>Rosa rugosa</i>	Japanese rose	2018	1	864
<i>Rhododendron ponticum</i>	Rhododendron	2018	1	864
<i>Sciurus carolinensis</i>	Grey squirrel	2015	2	1789

No invasive species were identified on site. However, the timing of the survey is considered to be a constraint as absence of invasive plant species cannot be determined.

Table 8 below summarises all important or legally protected ecological features identified within their respective zones of influence, along with their geographic context of importance and/or protection status.

Table 8: Summary of important ecological features and their geographic/legal context

Ecological Feature	Geographic Context of Importance and/or Protection Status
SAC, SPA	International – none present within 2km
LNR	National – one present within 2km
LWS / LGS	County – five present within 2km of the site.
Invertebrates	White-clawed crayfish is a Protected Species (The Wildlife and Countryside Act 1981 (as amended). Cinnabar moth and other notable species are included in the Species of principle important under the NERC act (S41).
Fish	Brown trout and other species are included in the Species of principle important under the NERC act (S41).
Great crested newt	Protected Species (The Wildlife and Countryside Act 1981 (as amended); The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
Reptiles	Protected Species (The Wildlife and Countryside Act 1981 (as amended); sand lizard and smooth snake receive additional protection under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
Birds	Protected Species (The Wildlife and Countryside Act 1981 (as amended); The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
Bats	Protected Species (The Wildlife and Countryside Act 1981 (as amended); The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
Badgers	Protected Species (Protection of Badgers Act 1992); Protected Species (The Wildlife and Countryside Act 1981 (as



	amended) and the Protection of Badgers Act 1992.
Otters	Protected Species (The Wildlife and Countryside Act 1981 (as amended); The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
Water voles	Protected Species (The Wildlife and Countryside Act 1981 (as amended).
Hedgehogs	Wild Mammals Protection Act (1996); Species of principle important under the NERC act (S41); (The Wildlife and Countryside Act 1981 (as amended).
Invasive species	Invasive species (Schedule 9 of The Wildlife and Countryside Act 1981 (as amended)

4.6 Biodiversity Metric Calculation

4.6.1 The assessment was carried out by JCA Limited using the ecological data gathered during the site's ecological assessment survey carried out on 18/03/25.

4.7 Existing Site Value

4.7.1 The existing biodiversity value for each habitat, together with the cumulative value of all habitats is provided in Table 9. Existing on site habitats can be found in **Appendix 2**.

4.7.2 No irreplaceable habitats have been identified on site.

Table 9: Baseline habitats on site and their ecological value as categorised by the Statutory Biodiversity Metric calculator.

Biodiversity Metric Reference Number	Biodiversity Metric Habitat Type	Total Area on site (Ha)	Distinctiveness	Condition	Strategic Significance	Ecological Baseline Habitat Unit
1	Bramble scrub	0.0131	Medium	Condition Assessment N/A	Formally identified in local strategy	0.06
2	Bramble scrub	0.0084	Medium	Condition Assessment N/A	Formally identified in local strategy	0.04
3	Developed land; sealed surface	0.047	V.Low	N/A – Other	Area/compensation not in local strategy/ no local strategy	0.00
4	Urban tree	0.0041	Medium	Moderate	Formally identified in local strategy	0.04
5	Urban tree	0.0041	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	0.03
	Total (excl. indiv. Trees)	0.07	-	-	-	0.17



4.7.3 The urban trees on site were judged to be of 'Moderate' condition as the trees failed the following condition assessment criteria.

- Criteria C: The tree is mature (or more than 50% within the block are mature).
- Criteria E: Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.

4.7.4 Detailed assessments of the condition of each habitat can be found within the accompanying habitat condition spreadsheet.

4.7.5 The habitats on site (Ref: 1, 2 & 4) are included within the Local Wildlife Habitat Network and are therefore listed as 'Formally identified in local strategy' within the strategic significance section

4.7.6 The other habitats (Ref: 3 & 5) on site are not included within the Local Wildlife Habitat Network or the Local Biodiversity Action Plan and are therefore listed as 'Area/compensation not in local strategy/ no local strategy' within the strategic significance section.

4.6.1 The existing biodiversity value for each hedgerow, together with the cumulative value of all hedgerows is provided in Table 2.

Table 10: Baseline hedgerows on site and their ecological value as categorised by the Biodiversity Metric calculator.

Biodiversity Metric Reference Number	Biodiversity Metric Habitat Type	Total Length on Site (Km)	Distinctiveness	Condition	Strategic Significance	Ecological Baseline Habitat Unit
1	Line of trees	0.017	Low	Moderate	Formally identified in local strategy	0.08

4.6.2 The line of trees on-Site has been judged to be of 'Moderate' condition, as the hedgerow failed the following condition assessment criteria.

- Criteria C: The tree is mature (or more than 50% within the block are mature).
- Criteria E: Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.



4.6.3 The line of tree on-Site is located within a Local Wildlife Site and is therefore listed as “Formally identified in local strategy” within the strategic significance section.

4.7.7 To ensure a 10% net gain in biodiversity is achieved as part of the Proposed Development the following measures can be employed:

- Habitat retention; and/or
- Habitat enhancement; and/or
- Habitat creation.



5. Proposed Development Impact Assessment

5.1 Description of the Proposed Development

5.1.1 The scheme is to demolish the existing building on site and the development to form a student residence of 31 studio apartments and ancillary accommodation.

5.1.2 The scheme will impact areas of bramble scrub, scattered trees and line of trees.

5.2 Habitats to be Retained

5.2.1 Any development should apply the Mitigation Hierarchy (British Standards Institution (BSI), 2013; shown below in Figure 1).

5.2.2 Development proposals should first seek to **avoid** impacts by retaining habitats. Second, development proposals should look to **minimise** the impact by producing plans that are designed to limit habitat disturbance, damage, and loss, thereby mitigating against any unavoidable impacts. Third, proposals should look to **restore** any damaged or degraded habitats. Then, only as a last resort should proposals **compensate** for unavoidable residual impacts to damaged or lost habitats that remain after avoidance and mitigation measures.

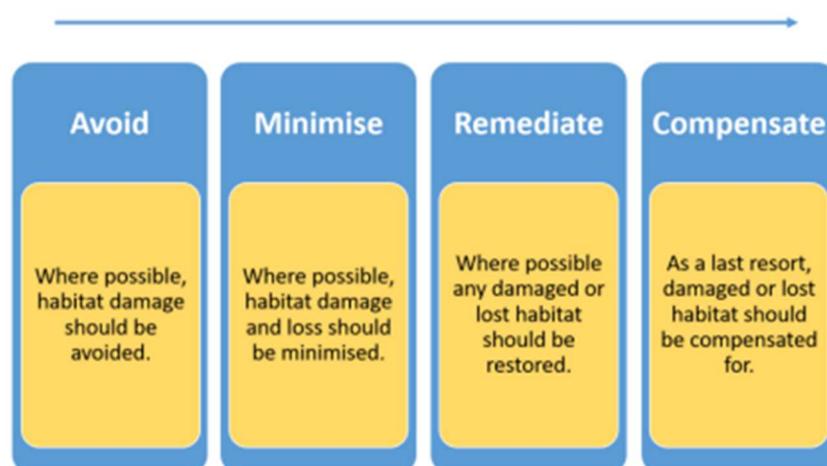


Figure 1: The mitigation hierarchy (BSI, 2013)

5.2.3 The Proposed Development will not see the retention of the habitats on the site (other than null value habitats).



5.3 Habitats to be Lost

5.3.1 It is anticipated that the Proposed Development will include the removal of the on-site habitats to facilitate the development.

5.3.2 The bramble scrub on site is classified as 'Medium Distinctiveness'. Under the current development plans, this habitat is anticipated to be lost, to facilitate the development and for habitat enhancement. The adequate enhancement of habitats on site will mitigate for this loss. With mitigation the loss of this habitat is considered to be minor.

5.3.3 The urban trees on site are judged to be 'Moderate' condition and are classified as 'Medium Distinctiveness'. Under the current development plans, two small trees are anticipated to be lost. Tree planting post-development will mitigate for this loss. With mitigation the loss of this habitat is considered to be minor.

5.4 Overall Impacts

5.4.1 The retention, enhancement and loss of habitats as a result of the Proposed Development are quantified in Table 11.

5.4.2 The result of the metric calculation indicates that a total of 0.13 BU for habitats are to be lost as a result of the Proposed Development, with 0.00 BU retained and 0.04 BU generated through habitat enhancement (Table 11).

Table 11: Summary value of baseline habitat biodiversity value through retention, loss and enhancement

Biodiversity Metric Habitat	Retained		Enhanced		Lost	
	Area (Ha)	Unit	Area (Ha)	Unit	Area (Ha)	Unit
Bramble scrub	0.00	0.00	0.00	0.00	0.01	0.06
Bramble scrub	0.00	0.00	0.0084	0.04	0.00	0.00
Developed land; sealed surface	0.0428	0.00	0.00	0.00	0.00	0.00
Urban tree	0.00	0.00	0.00	0.00	0.0041	0.04
Urban tree	0.00	0.00	0.00	0.00	0.0041	0.03



Total excluding areas of urban trees	0.04	0.00	0.01	0.04	0.02	0.13
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5.1.1 The loss, retention and enhancement of hedgerows as a result of the Proposed Development are quantified in Table 12.

5.1.2 The result of the metric calculation indicates that a total of 0.08 BU for hedgerows are to be lost as a result of the Proposed Development, with 0.00 BU retained and 0.00 BU generated through habitat enhancement (Table 12).

Table 12: Summary value of baseline hedgerow biodiversity value through retention, creation and enhancement

Biodiversity Metric Habitat	Retained		Enhanced		Lost	
	Length (Km)	Unit	Length (Km)	Unit	Length (Km)	Unit
Line of trees	0.00	0.00	0.00	0.00	0.02	0.08

5.5 Proposed Habitat Creation

5.5.1 It is proposed to create mixed scrub of 'Moderate' condition, other neutral grassland of 'Moderate' condition, developed land; sealed surface, plant five small urban trees of 'Moderate' condition and plant two native hedgerows (**Appendix 3**).

5.5.2 In total, 0.12 BU for habitats are to be created within the Proposed Development. Table 13 below summarises the value of all habitats that are to be created as part of the Proposed Development.

Table 13: Summary value of on-site habitat proposals.

Biodiversity Metric Reference Number	Biodiversity Metric Target Habitat Type	Total Area on site (Ha)	Distinctiveness	Target Condition	Strategic Significance	Biodiversity Unit Value
1	Other neutral grassland	0.0005	Medium	Moderate	Area/compensation not in local strategy/ no local strategy	0.00*
2	Other neutral grassland	0.0017	Medium	Moderate	Formally identified in local strategy	0.01
3	Mixed scrub	0.0037	Medium	Moderate	Formally identified in local strategy	0.03
4	Developed land; sealed	0.0114	V.Low	N/A – Other	Area/compensation not in local strategy/	0.00



Biodiversity Metric Reference Number	Biodiversity Metric Target Habitat Type	Total Area on site (Ha)	Distinctiveness	Target Condition	Strategic Significance	Biodiversity Unit Value
	surface				no local strategy	
5	Urban tree	0.0204	Medium	Moderate	Formally identified in local strategy	0.07
	Total excluding areas of urban trees	0.02	-	-	-	0.12

*The area is so small the biodiversity value has been rounded down to 0.00 BU by the Biodiversity Metric Calculator Tool.

5.5.3 The other neutral grassland to be created on site has been given a target condition of 'Moderate'. In order to achieve this at least three of the following condition assessment criteria must be passed. It is advised to target criteria A, B, C, D or F

- Criteria A: The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type. **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**
- Criteria B: Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.
- Criteria C: Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens.
- Criteria D: Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.
- Criteria E: Combined cover of species indicative of suboptimal condition and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA) are present, this criterion is automatically failed.
- Criteria F (for non-acid grassland only): There are 10 or more vascular plant species per m² present, including forbs that are characteristic of



the habitat type. **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**

The urban trees to be planted on site have a target condition of 'Moderate'. At least three of the following condition assessment criteria must be passed to achieve this. It is advised to target criteria A, B, D or F.

- Criteria A: The tree is a native species (or at least 70% within the block are native species).
- Criteria B: The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).
- Criteria C: The tree is mature (or more than 50% within the block are mature).
- Criteria D: There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.
- Criteria E: Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.
- Criteria F: More than 20% of the tree canopy area is oversailing vegetation beneath.

5.5.4 The habitats to be created on site (Ref: 2, 3 & 5) are included within the Local Wildlife Habitat Network and are therefore listed as 'Formally identified in local strategy' within the strategic significance section.

5.5.5 The other habitat to be created on site (Ref: 1 & 4) are not included within the Local Wildlife Habitat Network and are therefore listed as 'Area/compensation not in local strategy/ no local strategy' within the strategic significance section.

5.5.6 In total, 0.09 BU for hedgerows are to be created within the Proposed Development. Table 13 below summarises the value of all habitats that are to be created as part of the Proposed Development.

Table 14: Summary value of on-site hedgerow proposals.



Biodiversity Metric Reference Number	Biodiversity Metric Target Hedgerow Type	Total Area on site (Ha)	Distinctiveness	Target Condition	Strategic Significance	Biodiversity Unit Value
1	Native hedgerow	0.019	Low	Moderate	Formally identified in local strategy	0.07
2	Native hedgerow	0.006	Low	Poor	Formally identified in local strategy	0.01
	Total excluding areas of urban trees	0.03	-	-	-	0.09

5.5.7 The native hedgerow to be created on site (Ref: 1) has been given a target condition of 'Moderate'. The hedgerow must not fail more than four criteria; and does not fail both attributes in more than one functional group. To achieve this, it is advised to target criteria A1, B1, B2, C1, D1 or D2.

- Criteria A1: Height >1.5 m average along length: The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).
- Criteria A2: Width >1.5 m average along length: The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn *Prunus spinosa* suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).
- Criteria B1: Gap - hedge base: This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).
- Criteria B2: Gap - hedge canopy continuity: Gaps make up <10% of total length; and No canopy gaps >5 m: This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access



- points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).
- Criteria C1: Undisturbed ground and perennial vegetation: >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and is present on one side of the hedgerow (at least).
 - Criteria C2: Nutrient-enriched perennial vegetation: Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground. The indicator species used are nettles *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.
 - Criteria D1: Invasive and neophyte species: >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species. Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website, as well as the BSBI website where the 'Online Atlas of the British and Irish Flora contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website.
 - Criteria D2: Current damage: >90% of the hedgerow or undisturbed ground is free of damage caused by human activities. This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).

5.5.8 The native hedgerow to be created on site (Ref: 2) has been given a target condition of 'Poor'. No condition assessment criteria are needed to be passed to achieve this condition. However, the hedgerow must meet its definition as listed in the UKHab Habitat classification (2023).

5.5.9 The native hedgerows to be created on site are included within the Local Wildlife Habitat Network and are therefore listed as 'Formally identified in local strategy' under strategic significance.

5.6 Habitats to be Enhanced

5.6.1 The Proposed Development will see the enhancement of 0.0084 ha of bramble scrub into mixed scrub of 'Moderate' condition, delivering 0.07



BU. The enhancement of these habitat will restore any indirect impacts as a result of the Proposed Development.

5.6.2 The mixed scrub to be created on site have a target condition of 'Moderate'. At least three of the following condition assessment criteria must be achieved. It is advised to target criteria A, C, D & E.

- Criteria A: The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). At least 80% of scrub is native, there are at least three native woody species and no single species comprises more than 75% of the cover (except hazel *Corylus avellana*, common juniper *Juniperus communis*, sea buckthorn *Hippophae rhamnoides* or box *Buxus sempervirens*, which can be up to 100% cover).
- Criteria B: Seedlings, saplings, young shrubs and mature (or ancient or veteran) shrubs are all present.
- Criteria C: There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA) and species indicative of suboptimal condition make up less than 5% of ground cover.
- Criteria D: The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.
- Criteria E: There are clearings, glades or rides present within the scrub, providing sheltered edges.

5.6.3 The habitats to be created on site (Ref: 2, 3 & 5) are included within the Local Wildlife Habitat Network and are therefore listed as 'Formally identified in local strategy' within the strategic significance section.

5.6.4 The other habitat to be created on site (Ref: 1 & 4) are not included within the Local Wildlife Habitat Network and are therefore listed as 'Area/compensation not in local strategy/ no local strategy' within the strategic significance section.

5.7 Proposed Development Summary of Net Impacts



5.7.1 Table 14 below summarises the BU value of the Proposed Development together with the unit value of any biodiversity impacts or on-site habitat creation/enhancement proposals.

5.7.2 This shows that on balance, the Proposed Development would result in a net gain of +0.02 habitat BU, equivalent to a net gain of +10.74% and a net gain of +0.01 hedgerow BU, equivalent to a net gain of 10.56%.

5.7.3 The Proposed Development does satisfy the Trading Rules.

Table 15: Summary of Biodiversity Metric results for habitats

Biodiversity Units (BU)	
Existing Site habitat biodiversity value	0.17
Value of gross habitat biodiversity loss	0.13
Value of retained and proposed on site habitat creation and enhancement	0.19
Net habitat biodiversity balance	+0.02

Table 16: Summary of Biodiversity Metric results for hedgerows

Biodiversity Units (BU)	
Existing Site hedgerows biodiversity value	0.08
Value of gross hedgerows biodiversity loss	0.08
Value of retained and proposed on site hedgerows creation and enhancement	0.09
Net hedgerows biodiversity balance	+0.01



6. Assessment of Affects

6.1 Statutory Designated Sites

- 6.1.1. The MAGIC website revealed no internationally designated sites within 2km of the site.
- 6.1.2. The MAGIC website revealed one nationally designated site within 2km of the site. Castle Hill is designated as a Local Nature Reserve (LNR) and is located 1990m south of the site. Due to the distance from the site adverse affects to the LNR are not anticipated.
- 6.1.3. The site does fall into the Site of Special Scientific Interest (SSSI) Impact Risk Zone. However, due to the nature of the development no adverse affects to the SSSI are anticipated. Consultation with Natural England is not required.

6.2 Non-statutory Designated Sites

- 6.2.1. Records received from WYES revealed five Local Wildlife Sites (LWS) within 2km of the site. The closest is St John Ramsden Canal, which is located 560m west of the site. Due to the nature of the development, the lack of habitat connectivity and the distance from the LWS and the other non-statutory sites, no adverse affects to the LWS are anticipated.

6.2.2. Local Wildlife Habitat Network

The Local Wildlife Habitat Network is located on the north of the site. Without mitigation and precautionary measures, adverse affects to the Local Wildlife Habitat Network are anticipated. Further recommendations are supplied in **Section 7.1.2**.

6.3 Habitats

- 6.3.1. h3d – Bramble scrub: 32 Scattered trees, 33 – Line of trees, 81 – Ruderal or ephemeral, 202 – Young trees – self-set, 532 – Scattered grass.

The site contains bramble scrub which is located on the north of the site. Under current development plans the scrub is to be lost to facilitate the development.

- 6.3.2. u1b – Developed land; sealed surface



The existing hardstanding on the site will be removed and replaced in areas to facilitate the development.

6.3.3. u1b5 – Buildings

There is a single building on the east of the site. The building it is to be demolished.

6.4 Protected and Notable Species

6.4.1. Flora

The deciduous woodland adjacent to the north of the site is potentially suitable habitat for bluebells. Without mitigation and precautionary measures, adverse affects to the Local Wildlife Habitat Network are anticipated. Further recommendations are supplied in **Section 7.1.2**.

6.4.2. Invertebrates

The bramble scrub on site has the potential to support common and widespread invertebrates. Without mitigation and precautionary measures, adverse affects to invertebrates and the species that feed upon them such as birds and bats are anticipated. Further recommendations are supplied in **Section 7.1.3**.

6.4.3. Birds

The bramble scrub, trees and building on the site have the potential to support a wide range of nesting birds. Without mitigation and precautionary measures, adverse affects to nesting birds are anticipated. Further recommendations are supplied in **Section 7.1.4**.

6.4.4. Bats

The building on the site contains potential roosting features and was judged to have 'low' potential to support roosting bats. The habitats on the site have the potential to support commuting and foraging bats and were judged to be of 'low' potential. Without mitigation and precautionary measures, adverse affects to bats are anticipated. Further recommendations are supplied in **Section 7.1.5**.



6.4.5. Badgers

The bramble scrub habitat on site has the potential to support foraging badgers and the woodland to the north could potentially contain badger setts. Badgers are also a highly mobile species and may be utilising the site for dispersal. Without mitigation and precautionary measures, adverse affects to badgers are anticipated. Further recommendations are supplied in **Section 7.1.6**.

6.4.6. Other Notable Species

The bramble scrub on site and the woodland adjacent to the site has the potential to support foraging, resting, breeding and hibernating hedgehogs. Without mitigation and precautionary measures, adverse affects to hedgehogs are anticipated. Further recommendations are supplied in **Section 7.1.7**.

6.4.7. Invasive Species

No invasive species were found on site; however, the timing of the survey is considered to be a major constraint for identifying invasive plant species as most species have died back during the winter. Further recommendations are supplied in **Section 7.1.8**.

6.4.8. Summary of Impacts

Table 16 below summarises the assessment of affects, including any mitigation and subsequent residual affects.

Table 17: Summary of important ecological features and their geographic/legal context

Receptor	Likely Significant Affect and/or Legal Implication	Avoidance and Mitigation Measures	Residual Impacts After Mitigation
Statutory designated site: LNR	No significant affects	N/A	No significant affects
Non-statutory designated site: LWS	No significant affects	N/A	No significant affects
Local Wildlife Habitat Network	Adverse affects to Local Wildlife Habitat Network adjacent to site from inconsiderate building practises	A Construction and Environment Management Plan (CEMP) is recommended. This is to ensure that Local Wildlife habitat Network, deciduous woodland and flora adjacent to site is not adversely impacted during the works	No significant affects
Priority Habitats	Adverse affects to the deciduous woodland adjacent to site from inconsiderate building practises		No significant affects



Flora	Adverse affects to flora adjacent to site from inconsiderate building practises.		No significant affects
Invertebrates	Degradation of potentially suitable habitat, leading to a loss of suitable foraging habitat.	Native species planting and the addition of insect refuges.	No significant affects
Fish	No significant affects	N/A	No significant affects
Amphibians	No significant affects	N/A	No significant affects
Reptiles	No significant affects	N/A	No significant affects
Birds	Potential breach of legislation from destruction of nests or disturbance of nesting birds.	Precautionary Working methods under ecological supervision.	No significant affect
Bats	Low adverse impact at the local level.	One bat emergence survey is required. Works to be carried out via appropriate lighting schemes as per Institute of Lighting Professionals' guidance (ILP, 08/23).	Dependent on results of survey
Badgers	Potential breach of legislation from killing and injury of individual badgers.	Precautionary Working methods	No significant affect
Otters	No significant affects.	N/A	No significant affects
Water voles	No significant affects.	N/A	No significant affects
Other notable species	Potential breach of legislation from killing and injury of individual hedgehogs.	Precautionary Working methods	No significant affect
Invasive species	Potential breach of legislation from spread of invasive species.	Invasive species survey April – September	Dependent on results of survey



7. Recommendations

7.1.1 Biodiversity Loss Offsetting

It was identified that the Proposed Development would have a net gain of +0.02 habitat BU, equivalent to a net gain of +10.74% and a net gain of +0.01 hedgerow BU, equivalent to a net gain of 10.56%. The Proposed Development does satisfy Trading Rules,

The Proposed Development has achieved a biodiversity net gain in habitat BU and hedgerow BU. Therefore, no off site compensatory habitat creation and/or enhancement measures are required.

Further details of the Statutory Biodiversity Metric calculations and associated condition assessments can be found within the Statutory Biodiversity Metric Calculator Tool excel spreadsheet and the Statutory Biodiversity Metric Habitat Condition Assessment Sheets accompanying this report.

Should the Proposed Development be subject to future change, the conclusions and recommendations in this report will need to be revised. This is to be undertaken via the recalculation of the impact assessment element through the most up-to-date biodiversity metric

7.1.2 Wildlife Habitat Network, Deciduous Woodland & Flora

A Construction and Environment Management Plan (CEMP) is recommended relating to the Wildlife Habitat Network, Deciduous Woodland & Flora adjacent to the north of the site. This is to ensure that these habitats or the species potentially utilising these habitats are not adversely impacted during the works.

7.1.3 Invertebrates

The proposed works provide an opportunity to institute enhancement for invertebrate diversity through planting of native species of wildflowers (such as ragwort), shrubs and trees and the addition of faunal boxes, such as insect refuges bird boxes, bat boxes and hedgehog hotels.

7.1.4 Birds

Any site clearance must take place between September and January (inclusive) to avoid destruction of bird nests or disturbing active bird nests. If site clearance cannot take place in this period, a nesting bird survey must take place no more than 24 hours before clearance works. Any active nests must remain in situ, surrounded by a buffer of undisturbed vegetation, until any young have fledged.

7.1.5 Bats

The building on the site contains potential roosting features and was judged to have 'low' potential to support roosting bats. The following must be undertaken:

One bat emergence surveys is required on the building on site which has been judged to be of 'low' potential for roosting bats. The bat survey must be carried out between May and August in suitable weather conditions.

All lighting must consider wildlife and be in accordance with the ILP Guidance GN01 and GN09 (2023). A key point is the avoidance of internal and external light spill. Where possible, lighting should be timed, or on sensors and avoid the hours between sunset and sunrise, when bats are out foraging.

It is important to avoid:

- Uniform levels of luminance across the site.
- Metal halide and florescent lighting.
- Upward tilting lighting that increases skyline luminance.

Instead, the following should be installed:

- Dark buffer zones.
- Screening in the form of vegetation, fences and structures.
- Appropriately designated darkened areas.
- Luminaries absent of UV elements.
- LED luminaries with a sharp cut-off, low intensity and good rendition.
- A warm white spectrum (<2700 kelvin) to reduce blue light.
- Peak luminaire wavelength at a minimum of 550nm.
- Downward directional luminaires with upward light ratios of 0%.
- Lower light columns to limit light spill.
- Recessed internal light fixtures.
- Window glazing treatments or automated blind systems.

7.1.6 Badgers

Any excavations made during construction must be covered at night to prevent badgers becoming trapped within. If covering excavations is not feasible, a means of escape for badgers is to be provided. This could be ensuring one of the sides of the excavation is angled at around 45 degrees so that badgers can climb out or providing a plank to serve as a ramp for badgers to climb. Any open pipes must be capped. A pre-construction walkover to check the bramble scrub and woodland adjacent to the site for badger setts is required prior to clearance.



7.1.7 Other notable species

Any excavations made during construction must be covered at night to prevent hedgehogs or any other species becoming trapped within. If covering excavations is not feasible, a means of escape for hedgehogs, hares and other species is to be provided. This could be ensuring one of the sides of the excavation is angled at around 45 degrees so that hedgehogs can climb out or providing a plank to serve as a ramp. Any open pipes must be capped.

In the absence of any mitigation measures, the proposed development would be anticipated to have adverse significant impacts at the Local level. However, with the implementation of the mitigation and precautionary measures as specified above, the proposed development is not anticipated to result in any significant adverse residual effects to important ecological features.

7.1.8 Invasive species

As absence of invasive species could not be determined during the survey a, invasive species survey during April - September is recommended.



8. References

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Within this detailed guidance on surveys and mitigation information is available on the following protected species:

- Bats
- Natterjack toads
- Otters
- Reptiles
- Water voles
- White-clawed crayfish
- Wild birds
- Hazel dormice
- Great crested newts
- Badgers

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Within this detailed guidance on licensing information is available on licences for the following protected species:

- Bats
- Natterjack toads
- Otters
- Reptiles
- Water voles
- White-clawed crayfish
- Wild birds
- Hazel dormice
- Great crested newts
- Badgers

As well as:

- Non-native Bumblebee species
- Deer
- Freshwater fish
- Invertebrates
- Mink, coypu, muskrat and grey squirrel
- Plants

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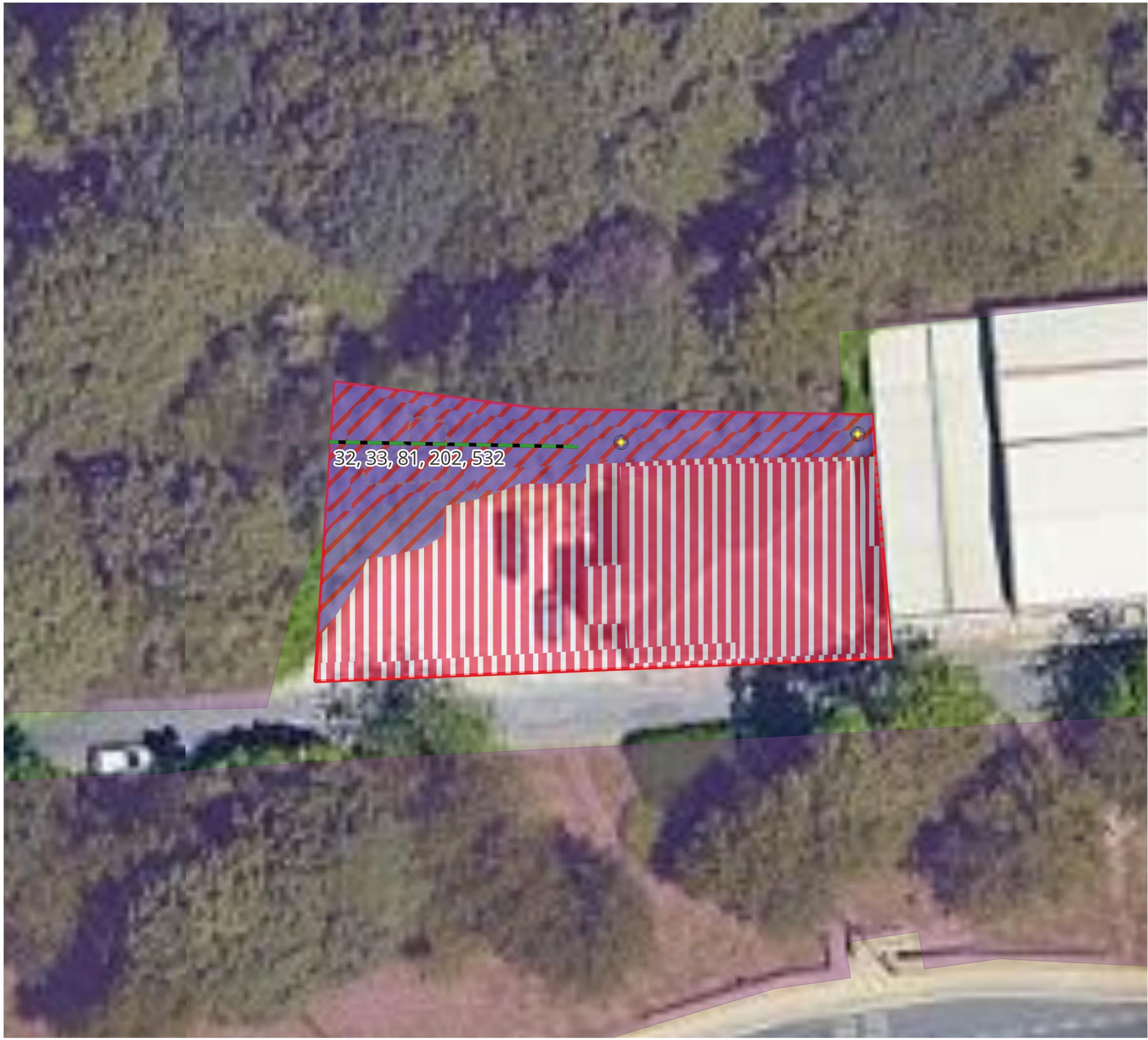
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Appendices

Appendix 1: Baseline UKHab Habitat Map





Site name & address

**Land at Chapel Lane,
Moldgreen, Huddersfield,
HD5 9BG**

Key

 Red Line Boundary

Individual tree Baseline

 Existing Small Urban Tree

Hedgerow Baseline

 Line of trees

Habitats Baseline

 h3d – Bramble scrub

32 – Scattered trees

33 – Line of trees

81 – Ruderal or ephemeral

202 – Young trees – self-set

532 – Scattered grass

 u1b – Developed land; sealed surface

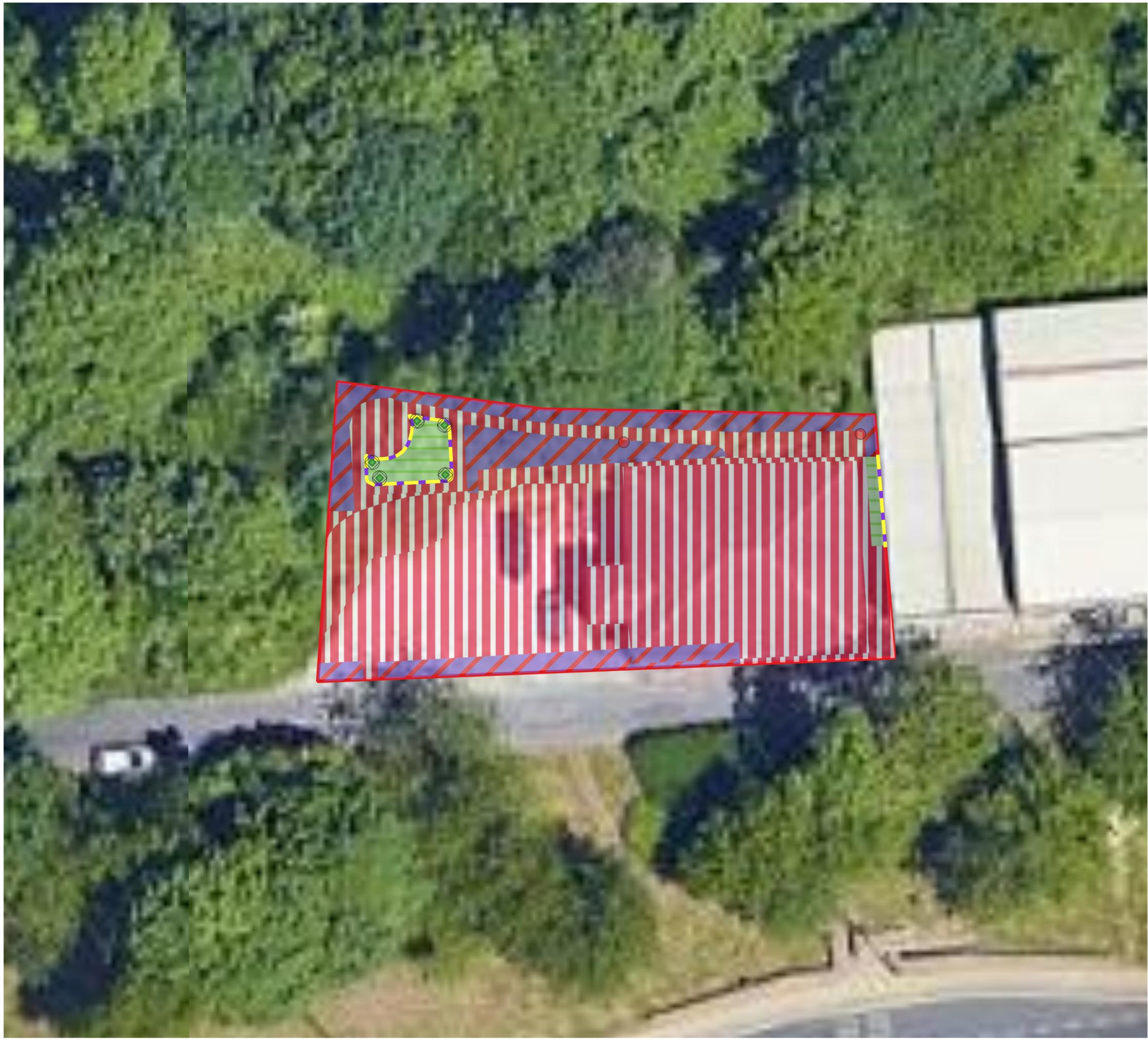


Site Land at Chapel Lane	Client Skyline Funding (UK) Ltd.
Project Ecological Impact Assessment Scoping Report	Author JF
Plan ref 22721/JF	Revision 0

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Appendix 2: Proposed UKHab Habitat Map





Site name & address

**Land at Chapel Lane,
Moldgreen, Huddersfield,
HD5 9BG**

Key

- Red Line Boundary
- Individual tree Proposed
- ◆ Proposed Small Urban Tree
- Lost Urban Tree
- Hedgerows Proposed
- Native hedgerow
- Habitats Proposed
- Developed land; sealed surface
- Mixed scrub
- Other neutral grassland



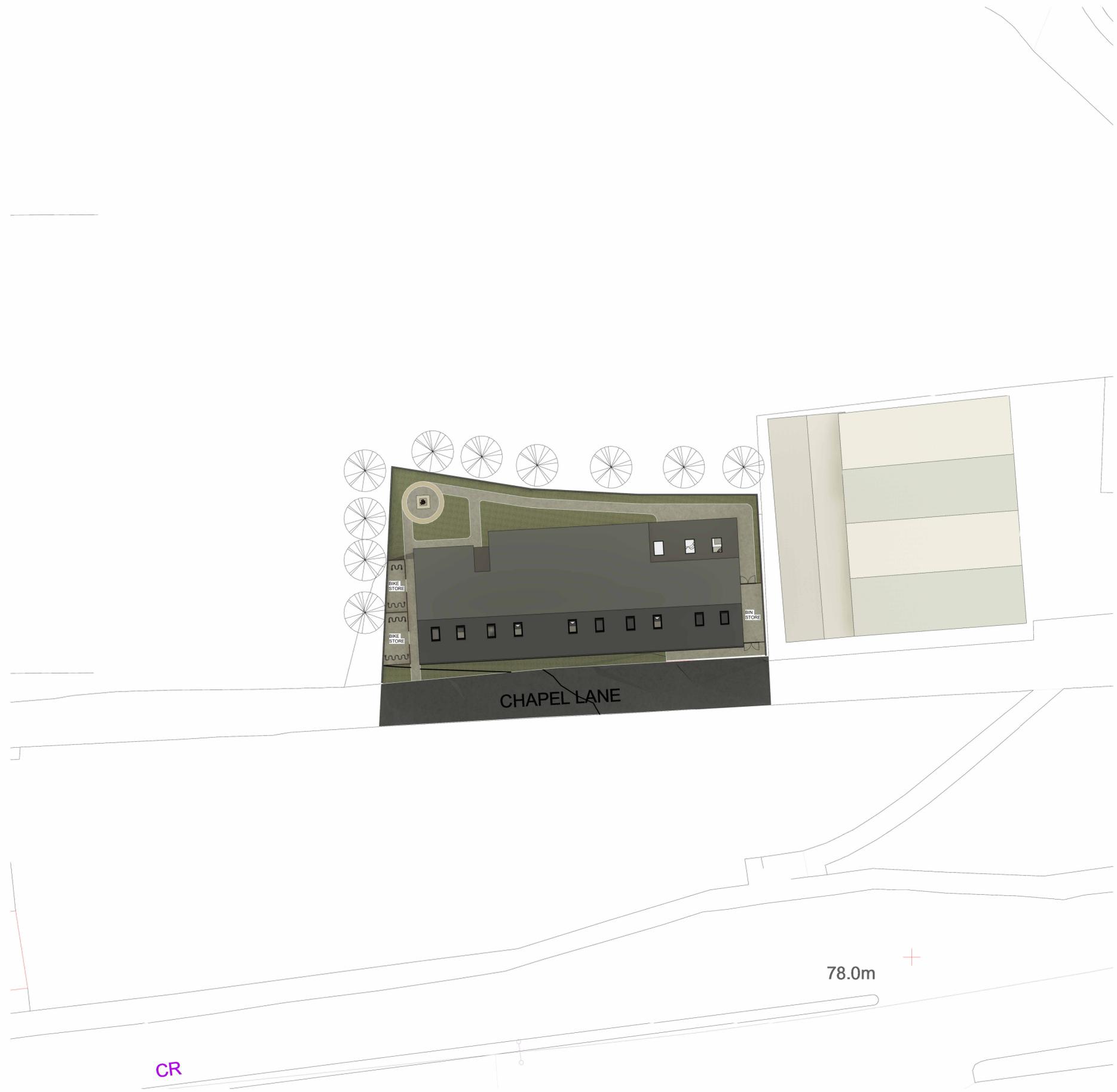
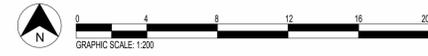
Site Land at Chapel Lane	Client Skyline Funding (UK) Ltd.
Project Ecological Impact Assessment Scoping Report	Author JF
Plan ref 22721/JF	Revision 0

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Appendix 3: Proposed Development Plan



Only figured dimensions should be used.
 Scaled dimensions should be checked with the Architect.
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 of the Architect and must not be reproduced without written
 permission



DISCUSSION

1 PROP. SITE PLAN
1 : 200

rev	description	drawn	auth	date
DO NOT SCALE OFF THIS DRAWING				
 ACUMEN Designers & Architects <small>acumenarchitects.co.uk 01484 546 000</small> <small>Headrow House, Old Leeds Road, Huddersfield, Huddersfield HD1 1SG</small>				
Client				
SKYLINE LTD				
Project				
LAND AT CHAPEL LANE, MOLDGREEN, HUDDERSFIELD				
Project No	Drawing No	Rev		
2917	(SK)01			
Description				
PROPOSED SITE PLAN				
Scale	Date Drawn	Drawn By	Authorised By	
1 : 200 @ A1	DEC 24	HB	JC	
Purpose of Issue				
Planning	Building Regs	Tender	Construction	Comment

Appendix 4: Bat Roost Potential Map

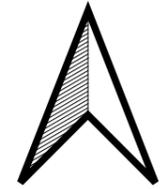


Site name & address

**Land at Chapel Lane,
Moldgreen, Huddersfield,
HD5 9BG**

Key

-  West Yorkshire Wildlife Habitat Network
 -  Red Line Boundary
 -  Building 1: Low Bat Roost Potential
- Potential Roosting Feature
- 1 - Missing mortar
 - 2 - Gap in soffit box
 - 3 - Air vent
 - 4 - Missing brick
 - 5 - Lifted tile
 - 6 - Gap in ridge tile



Site Land at Chapel Lane	Client Skyline Funding (UK) Ltd.
Project Ecological Impact Assessment Scoping Report	Author JF
Plan ref 22721/JF	Revision 0

Appendix 5: Photographic Evidence



Photo 1: Bramble scrub and trees on the north of the site, viewed from the south.



Photo 2: Bramble scrub and trees on the north of the site, viewed from the southwest.



Photo 3: Bramble scrub and trees on the north of the site, viewed from the east.



Photo 4: Individual tree and building on the northeast of the site, viewed from the north.



Photo 5: Building on site, viewed from the west.



Photo 6: Building on site, viewed from the southwest.





Photo 7: Air vent and missing brick on the northern aspect.



Photo 8: Gap in soffit box on the northern aspect.



Photo 9: Gap in soffit box on the eastern aspect.



Photo 10: Gap in Soffit on the southern aspect.



Photo 11: Gap in soffit box on the western aspect.

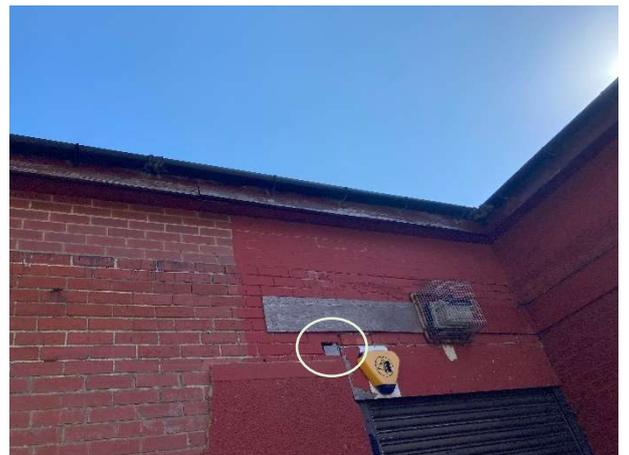


Photo 12: Missing mortar on the western aspect.



Appendix 6: Bat Survey Guidelines

Figure 1: Guidelines used for assessing the bat roosting suitability of a site (taken from Collins, 2023, Tables 4.1, 4.2, 6.2)

Roosting Suitability	Potential Roosting Features (PRFs) Present
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e., a complete absence of crevices/suitable shelter at all ground/underground levels). Trees: Either no PRFs in the tree or highly unlikely to be any.
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roosting opportunities that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitats, to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats). Trees: PRF-I (Individual) – PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
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 unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
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. These structures have the potential to support high conservation status roosts, e.g., maternity or classic cool/stable hibernation site. Trees: PRF-M (Multiple) – PRF is suitable for multiple bats may therefore be used by a maternity colony.

Figure 2: Recommended minimum number of survey visits for presence/likely absence surveys (taken from Collins, 2023, Tables 7.1 and 7.2).

Negligible roost suitability	Low roost suitability or PRF-I	Moderate roost suitability	High roost suitability or PRF-M
No further survey required	One survey visit. One dusk emergence survey, May to August (structures). No further surveys required (trees).	Two separate dusk emergence survey visits. May to September, with at least one survey between May and August.	Three separate dusk emergence survey visits. May to September, with at least two surveys between May and August
September surveys are both weather- and location-dependent. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season.			



September surveys are likely to miss maternity roosts due to dispersal before this time but may pick up mating roosts.

Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced out at **least three weeks apart**, preferably more. Survey timings **should consider the prevailing conditions in the year of survey, which will vary geographically**. In years with a cold spring, the surveys should not be started in early May, or all completed in May. The surveys should maximise the possibility of detecting maternity roosts, which can switch roosts between pregnancy and lactation, and the **optimum coverage includes the pre-parturition, post-parturition, and mating periods**.

Structures that have been categorised as low potential can be problematic, and the number of surveys required should be judged on a case-by-case basis. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

Figure 4: Survey timings calendar (taken from BCT: Bat Surveys for Professional Ecologists: Good Practice Guidelines; 4th Edition).

Survey type	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
Daytime Bat Walkover (DBW)												
PRA – structures ^a												
Emergence survey for maternity or summer roosts ^b												
Emergence survey for transitional/occasional roosts ^b												
Re-entry surveys ^c												
Emergence survey for mating roosts ^b												
Hibernation survey – structures ^a												
GLTA ^d												
PRF inspection survey – trees												
Ground-level bat activity survey – night-time walkover surveys and automated/static												
Pre-, during and post-hibernation – automated/static bat activity survey												
Swarming survey ^e												
Back-tracking survey												
Trapping and radio-tagging survey ^f												

 = optimal period  = sub-optimal period

 = weather or location dependent (i.e. may not be suitable due to spring and autumn conditions in any one year or in more northerly latitudes). Note that October emergence surveys are not acceptable in Scotland.

 = it is not acceptable to trap bats when they are heavily pregnant and have dependent pups. Mothers need to optimise foraging due to the physiological demands of pregnancy and lactation, and pups need to be regularly fed. Interrupting these activities could potentially have an impact on breeding success in the year in question. The timing of birth can vary between years – it may be as early as the end of May or as late as the start of August, therefore caution should be exercised and local information gained on birth dates before trapping activities are carried out during the summer months. Any information gained and decisions made should be kept as a record.



Appendix 7: Glossary

Activity surveys - are used to assess the level of bat activity at a site. This can be done either by using equipment such as an AnaBat device, or manually walking around a site with a heterodyne detector, documenting the number of bat passes and interceptions.

Dawn surveys - begin around 2 hours before and up to sunrise when bats are returning to their roosts from foraging, and swarming behaviour can be seen close to roost entrances.

Dusk surveys - begin around 30 minutes before sunset and up to 2 hours afterwards. These are done in order to see bats emerging from their roost sites at night.

Echolocation – is a system similar to sonar that allows bats to travel and forage even in total darkness. Bats make a call and then listen to the returning echoes in order to build up a map of their surrounding area. This allows bats to gauge the identity and distance of an object by how long the echo takes to return to them.

Habitat - the ecological or environmental area that is inhabited by a particular species of animal, plant or other type of organism.

Hibernation - is a state of inactivity and metabolic depression characterized by lower body temperature, slower breathing, and lower metabolic rate. Hibernating animals conserve energy, especially during winter when food is short, tapping energy reserves, i.e. body fat, at a slow rate.

Hibernacula - typically consist of underground sites, such as caves and cellars, which remain relatively cold and humid. Bats will hibernate to conserve energy over the winter months when falling temperatures cause a drop in the abundance of insects. These will typically be colonised around November to around March.

Insectivorous – is when an organism feeds exclusively on insects.

Nocturnal - a behaviour characterized by being active during the night and sleeping during the day.

Maternity roosts – colonised around late May early June and consist of mature females and their young. These roosts need to be warm and quiet, and are used up until around August, with females typically leaving first and then the young.

Mating roosts – mating begins around late October to November. Males of most species use special mating calls to attract females. These can include purrs, clicks and buzzing.

Roost – a site where bats live during the day, rear young and hibernate. These can be in man made structures, such as buildings, bridges, tunnels, cellars and mines, or natural features such as mature trees and caves.

Roosts in buildings – many types of buildings will be used by bats. The most likely sites are agricultural buildings (e.g. farmhouses and barns), buildings with exposed wooden beams (greater than 20cm thick), buildings with weather boarding and/or hanging tiles, and buildings close to woodland and/or water.

Roosts in trees – these are typically in mature trees with deep sheltered cracks, under loose sections of bark, or in woodpecker holes.

Species – a group of organisms in which all members can interbreed and produce viable offspring.

Summer roosts (non-breeding) - these are generally occupied by groups of males and immature females during the summer, and are usually only occupied for a short period before the group moves to another location.

Swarming – a behaviour exhibited by bats returning to their roost sites at dawn. Bats can be seen repeatedly flying to and from the roost entrance, making it much easier for consultants to identify where roosts are on a building or structure.



Temporary/Transitory roosts – These are used after hibernation (March – April) before mature females disperse to maternity roosts and male/immature females colonise summer (non-breeding) roosts. Similarly, temporary roosts form before hibernation (August -October).

Underground Roosts – these are typically used during the winter and can be mines, caves, tunnels or cellars.



Appendix 8: Protected Species Information

The following species are fully protected in UK law, under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019:

- All UK bat species
- Dormouse
- Great Crested Newt and Natterjack Toad
- Large Blue Butterfly
- Otter
- Pine Marten
- Polecat
- Scottish Wild Cat
- Smooth Snake and Sand Lizard
- Various aquatic and plant species

These species are afforded the highest protection in the UK. Under this protection it is an offence to; deliberately capture, injure or kill any wild animal of a European protected species; deliberately disturb wild animal of any such species; deliberately take or destroy the eggs of such an animal, or damage or destroy a breeding site or resting place of such an animal.

In addition to this it is an offence to be in possession of, or to control, transport, sell or exchange, or to offer for sale or exchange, a European Protected species.

The following species are protected under UK law, such as the Wildlife and Countryside Act 1981 (as amended):

- Badger
- Nesting birds
- Red Squirrel
- Reptiles (Adder, Common lizard, Grass snake, Slow worm)
- Water Vole
- White Clawed Crayfish
- Various bird species i.e. Barn Owl
- Various plant species

Therefore under this protection it is an offence to; kill, injure or take any of the above species.

Nesting birds are only protected during the breeding season whilst on their nest. In addition to the adults being protected, the eggs, young and nest itself whilst in use are protected.

The Wildlife and Countryside Act 1981 also contains measures to prevent the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of



animals and planting of plants listed in Schedule 9 in England and Wales (e.g. Japanese Knotweed and Himalayan Balsam).

Badgers are protected under The Protection of Badgers Act 1992. Under this legislation it is an offence to; take, injure, kill, or cruelly ill-treat a badger; interfere with a badger sett; sell or possess a live badger; or mark or ring a badger.

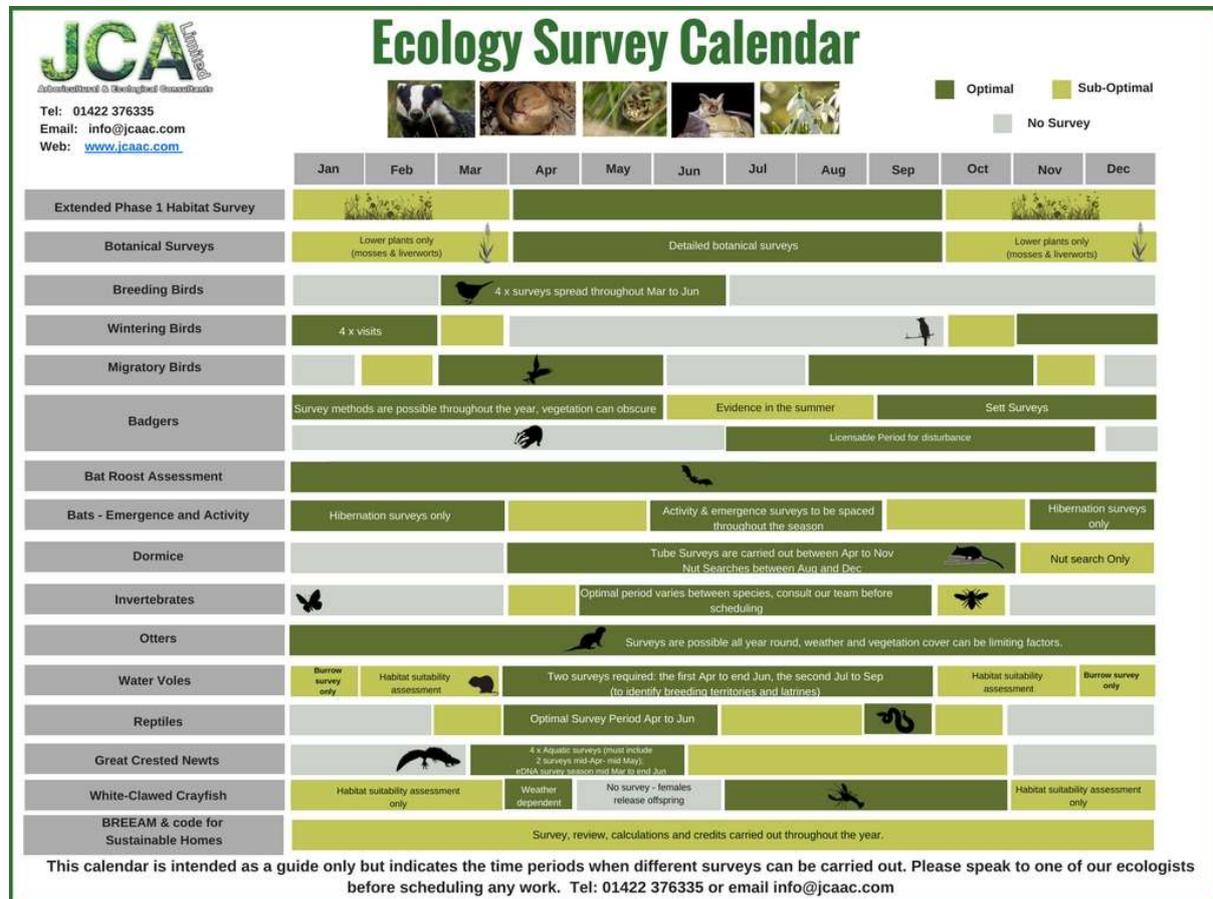
The following habitat types are protected under UK Law:

- Habitats that are used by protected species
- Habitats that fall within designated sites
- Hedgerows
- Individual trees/woods can be protected under Tree Preservation Orders



Appendix 9: Survey Calendar

Survey calendar for protected species and habitat surveys.



Appendix 10: Author Qualifications

Adam West, Principal Ecologist

BSc (Hons) Animal and Wildlife Management.

Adam joined JCA to lead the expanding ecology department. Having returned to education as a mature student, Adam studied Countryside Management for two years before undertaking a Bachelor's degree, for which he was awarded First Class Honours. Adam has many years' experience in ecological consultancy, working on projects ranging from individual planning applications to national infrastructure projects. Adam holds a Natural England Level 1 great crested newt survey class licence and a Natural England Level 2 bat survey class licence.

James Foster, Assistant Ecologist

BSc (Hons) Biology.

James gained his undergraduate degree in biology in 2012 from University of Leeds. James has plenty of experience in ecology, having worked countless projects of different scales all over the north and midlands. James has 9 years of experience surveying anything from reptiles to hedgerows and holds a Great crested newt licence level 1 and is working towards his bat licence and barn owl licence.

Alex Donovan, Assistant Ecologist

MBIOL, BSc Biology (Industrial).

Alex joined JCA in 2023 after graduating from the University of Leeds with a First Class Honours Integrated Master's degree in Biology. As part of his degree programme, Alex spent an industrial placement year working in the Uplands Research Department of the Game and Wildlife Conservation Trust, assisting on various ecological surveys and projects. Alex is a registered Trainee Bird Ringer, licensed through the BTO and is experienced in conducting preliminary ecological surveys, bat roost assessments and emergence surveys, Biodiversity Net Gain, and has knowledge of wildlife legislation. Alex is a CIEEM Qualifying Member and is currently working towards a Natural England level 1 bat licence, level 1 great crested newt licence, and a barn owl survey licence.

Richard Westwood, Graduate Ecologist

BA (Hons) History and Politics

Rick gained his undergraduate degree in History and Politics in 2001 from Leeds Metropolitan University before going on to complete a PGCE in History at the University of Leeds in 2003. After 18 years in secondary education and the NHS, Rick began assisting on bat emergence surveys in 2023, after which, he gained employment as a Graduate Ecologist at JCA Ltd.



The Information and advice which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and bona fide opinions.

Signed

REDACTED

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James Foster *BSc (Hons)*

03/04/2025

Reviewed by

REDACTED

.....
Richard Westwood *BA (Hons)*

07/04/2025

Approved by

REDACTED

.....
Alex Donovan *MBIOL BSc (Hons)*

08/04/2025



For and on behalf of **JCA Ltd**

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ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes
- Butterfly & Insect Surveys

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)
- Planting Schemes
- Monitoring of bird or bat boxes.

ARBORICULTURAL SERVICES

Guidance for Architects & Developers

- British Standard 5837 Surveys
- Arboricultural Implications Assessments (AIA)
- Arboricultural Method Statements (AMS)

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- Heave Assessment
- Tree Root Identification

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

Tree Advice for the Legal Profession

- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control



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