



## Preliminary Ecological Appraisal

Survey site: Little Mulberry Farm Stoke Golding Leicestershire CV13 6EU

Client: Sarah Hurley

Survey date: 31/03/ 2025

Project: This report is prepared to inform a planning application with the Hinckley and Bosworth Borough Council. The proposal is described as: the building of barns.

Date of survey Temperature (°C) Humidity (%) Cloud Cover (%) Wind (mph) Rain

31/03/2025 12 80 80 11 Drizzle

#### Executive summary

The survey results and recommendations contained within this report are valid for 12 months. An updated site visit may be required if the report is to be

used any longer than 12 months after completion.

#### Survey Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this

report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being

present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and

the known distribution of species as recovered during the searches of historical biological records.

The survey was completed outside of the optimal survey period (April to October) limiting the identification of ground flora species.

Ecological Survey Factor

Conclusion, Impact or

Recommendations

Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.

Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, photos in appendix 3 and proposal plan in appendix 4).

Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

## Summary of Survey Findings – Site Description

### Preliminary Ecological Appraisal

*(UKHab classification codes applied)*

The survey area is centred on national grid reference **SP 3997 1512** and covers approximately **7 hectares**. The description below refers to the **entire survey site**, which comprises a mosaic of agricultural buildings—some operational and some disused—alongside hedgerows and modified grassland. The site is bordered by further agricultural land, scattered residential dwellings and the **Ashby-de-la-Zouch Canal**, which defines the eastern boundary. Beyond this, the wider landscape includes a residential village to the east and extensive agricultural land to the north, south, and west.

It is important to note that this appraisal describes the broader site context. **The proposed development footprint (red-line boundary) represents only a very small proportion of the overall landholding**, measuring approximately **12.2 m × 10.48 m**, and is situated immediately adjacent to existing barns that already benefit from prior planning permission. The red-line area lies entirely on **developed land (sealed surface)** and forms an extension to the established farm building complex. As such, the ecological characteristics of the wider 7 ha site do not directly reflect the condition or habitat value of the small development parcel.

---

### Buildings (u1b5)

Three barn structures occur within the wider survey area.

- A **dilapidated barn** is located to the north, currently subject to planning approval for conversion to a dwelling.
- Two **active agricultural barns** lie along the western boundary.

Historic aerial imagery indicates that these buildings were constructed on agricultural grassland comparable in structure and botanical composition to the remaining grassland across the site.

### Developed Land – Sealed Surface (u1b)

A concrete access track connects the public highway on the northern boundary to the first barn. The **proposed development area** falls wholly within this habitat type, forming part of the existing sealed-surface infrastructure associated with the barn complex.

---

### Modified Grassland (g4) with Scattered Trees (t3)

Across the wider site, continuous grazing has resulted in **reduced species diversity** and a structurally uniform sward. Species recorded include:

- **Dominant (D):** perennial rye-grass
- **Frequent (F):** orchard grass, winter grass
- **Occasional (O):** dock, moss, nettle, cleavers
- **Rare (R):** sow-thistle, ground ivy, bramble, cow parsley, meadow buttercup, English ivy, white clover

Scattered trees are present at low density and do not constitute a continuous canopy.

---

### Modified Grassland – Condition Assessment

Using UKHab condition assessment criteria, the grassland within the wider landholding is categorised as **poor condition**, based on:

- Fewer than **six plant species per m<sup>2</sup>**
- **Uniform sward height**, characteristic of intensively grazed pasture
- Scrub cover < **20%**
- Physical damage present across > **5%** of the area

- Bare ground > **10%**
- Bracken cover < **20%**
- No invasive non-native species recorded

These factors indicate that the grassland does not meet the thresholds for moderate or good condition.

## Foreseen Impacts

### On-site Habitats

The proposed development is confined to an area of **existing developed land (sealed surface)** and will therefore **not result in the loss or alteration of any semi-natural habitats** within the site. As the red-line boundary encompasses only hardstanding associated with the existing barns, **no direct habitat removal** will occur.

Due to the limited ecological value of the footprint area, the development is considered to result in a **negligible change** to on-site biodiversity. While this technically constitutes a **very small net loss** at the wider site scale (due to the conversion of developed land to built form), the impact is minimal and ecological significance is low.

---

### Notable Habitats

No **direct impacts** to any notable or priority habitats are anticipated as a result of the proposed development.

Given the site's proximity to **lowland meadow** habitat, there is potential for **temporary indirect effects** during construction—such as dust deposition, accidental pollution, litter, or increased surface water runoff. These effects would have been short-term and readily mitigated through standard construction good practice. No long-term adverse effects to the adjacent lowland meadow are expected.

## Recommendations

### On-site Habitat – Hedgerow Protection and Management

The **Management of Hedgerows (England) Regulations 2024**, enforced by the Rural Payments Agency, establish the legal framework for the protection and appropriate management of hedgerows across England. These regulations apply to any “important” hedgerow older than five years, defined as a **native hedgerow** growing on or adjacent to agricultural land and extending for **20 m or more**, or shorter lengths that connect to other hedgerows at both ends. Hedgerows forming the curtilage or boundary of residential dwellings are exempt.

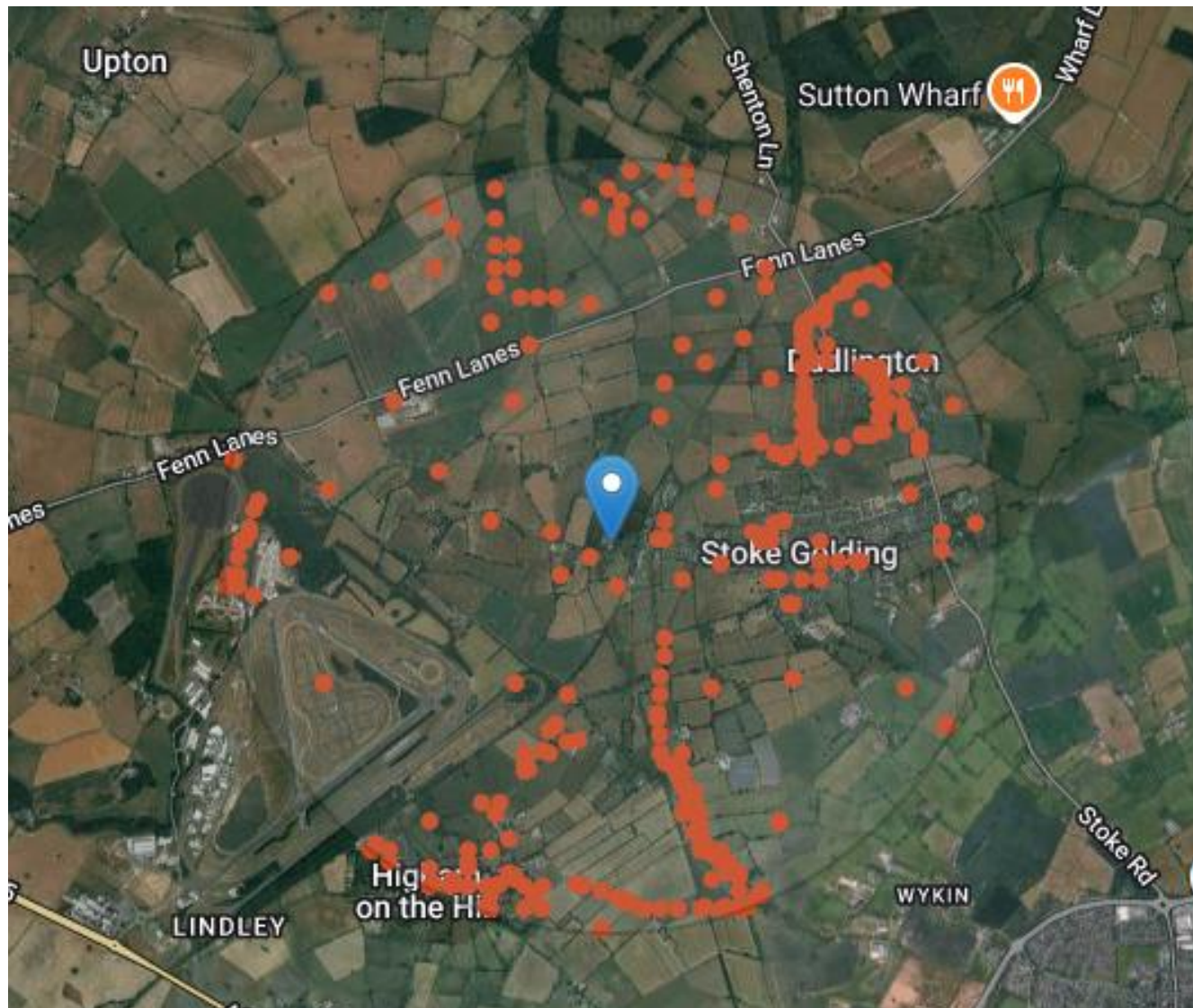
Key provisions include:

- A prohibition on cutting important hedgerows **between 1 March and 31 August** (inclusive).
- Restrictions on pesticide use, which is permitted only for the control of invasive non-native species.
- A requirement to maintain **green cover** within **2 m of the hedgerow centreline**.

Within the wider site, it is acknowledged that **valued hedgerows run parallel to the existing constructed barn**, contributing to local landscape structure and ecological connectivity. Although the proposed development lies entirely on **existing developed land (sealed surface)** and will not result in **any direct or indirect hedgerow loss**, it is recommended that these hedgerows be **appropriately protected during construction** to avoid accidental damage (e.g., root compaction, pruning, vehicle impacts).

The landowner has also indicated that, as a **voluntary enhancement measure**, they have engaged with **Hinckley and Bosworth Borough Council’s hedgerow planting scheme** and intend to plant additional hedgerows on the site as part of this initiative. This voluntary planting will provide a **net biodiversity gain**, adding ecological value beyond what is required for the proposed development.

**Summary of Survey Findings** Displays a 2km radius development site



## On-site Designations

No statutory or non-statutory ecological designations are present **within the red-line development boundary** or directly within the site.

It should be noted that the designations described below relate to the **wider survey area**, assessed as part of a thorough Preliminary Ecological Appraisal following **CIEEM (Chartered Institute of Ecology and Environmental Management) guidelines**. These wider findings provide contextual understanding but do **not** reflect the specific characteristics of the small red-line development area.

---

## Surrounding Designations (within 2 km)

Within 2 km of the site lies **Kendall's Meadow Site of Special Scientific Interest (SSSI)**, located approximately **830 m north** of the survey area. This SSSI comprises a traditionally managed hay meadow renowned for its exceptional floristic diversity and species richness—considered the finest example of this grassland community type in the central English Midlands, particularly within a region otherwise poor in species-rich grassland.

---

## Foreseen Impacts – Designated Sites

The overall site falls within the **Impact Risk Zone (IRZ)** for Kendall's Meadow SSSI. However, the proposed development affects only **0.1 ha**, wholly within **existing developed land (sealed surface)** adjacent to pre-existing barns. The development type and scale are **not classed as high risk** for the SSSI according to Natural England's IRZ criteria.

No significant direct or indirect impacts on Kendall's Meadow SSSI are anticipated.

---

## Recommendations – Designated Sites

No further surveys or mitigation are required in relation to designated sites.

---

## Invasive / Non-native Species

### Summary of Survey Findings

No invasive or non-native species were recorded **within the wider survey area**. This information forms part of the comprehensive site appraisal required under CIEEM guidelines but does not specifically relate to the red-line development boundary, which contains only hardstanding and buildings.

### Foreseen Impacts

N/A — no invasive species present.

### Recommendations

No further surveys or action required.

---

## Invertebrates

### Summary of Survey Findings

Habitats within the **wider site**, including hedgerows, ditches, scattered trees, and modified grassland, offer foraging and shelter opportunities for **common invertebrate assemblages**. These linear and structural features may also support more specialised or locally important invertebrate species.

However, it must be emphasised that these observations apply to the **broader landholding** and **do not fall within the red-line development boundary**, which comprises entirely hardstanding. This additional assessment is included to demonstrate the application of **CIEEM-compliant survey effort**.

### Foreseen Impacts

Preliminary Ecological Appraisal

During construction, a small area of modified grassland was removed. Given the low ecological value of this habitat and the availability of extensive similar habitat locally, any impacts on invertebrate populations would have been **negligible**.

## Recommendations

No further surveys are required. The **adjacent hedgerow and trees are being fully retained**, ensuring continued habitat availability for invertebrates.

## Bats

### Summary of Survey Findings

### European Protected Species Licence (EPSL) Records

A desk study identified **three EPSL applications within 2 km** of the site. These include:

- **1.5 km east** – Licence for the destruction of a *common pipistrelle* and *brown long-eared bat* resting place (active **23/12/2011 – 31/10/2014**).
- **1.7 km southeast** – Licence for the destruction of *common pipistrelle*, *brown long-eared*, and *Natterer's* breeding and resting sites (active **04/01/2012 – 31/08/2014**).
- **1.8 km southeast** – Two licences:
  - First for the destruction of *common pipistrelle* and *brown long-eared* breeding and resting sites (**granted 12/12/2016**).
  - Second for the destruction of *common pipistrelle* and *brown long-eared* breeding and resting sites (active **16/11/2017 – 21/10/2026**).

These records indicate the wider landscape supports a range of bat species, including crevice- and cavity-roosting taxa.

## Foraging and Commuting Habitat

The **wider site** contains habitats of value to foraging and commuting bats, including modified grassland, mature species-rich hedgerows, scattered trees, and linear landscape features. These habitats provide favourable microclimatic conditions that support invertebrate prey, while the hedgerows act as **important navigation routes** for bats moving between roosts and foraging areas.

The site also benefits from connectivity to higher-value habitats:

- the **Ashby-de-la-Zouch Canal** immediately east, and
- **lowland meadow habitat** immediately west.

These features strengthen the functional connectivity of the wider landscape for multiple bat species.

It should be noted that this assessment refers to the **broader survey area**; the **red-line development boundary** comprises only existing hardstanding and does not include any of these habitats.

---

## Roosting Bats – Buildings

Three buildings occur within the site (B1–B3):

- **B1 (Neglected barn)** – Subject to a PRA by Arbtech Consultancy (Nov 2023). Assessed as **negligible roost suitability** due to a well-sealed exterior and unstable internal temperatures.
- **B2 (Open-sided metal-framed barn)** – No walls; metal roof only. No external crevices or stable internal conditions.
- **B3 (Metal-framed barn with brick base and upper timber cladding)** – Fluctuating internal temperatures and absence of suitable roosting features.

All buildings (**B1–B3**) are therefore assessed as **negligible suitability** for roosting bats.

## Roosting Bats – Trees

Within the southern hedgerow is a large, mature **ash tree** (~12–15 m tall) exhibiting multiple **Potential Roost Features (PRFs)**. Although access was partially limited by height and surrounding vegetation, an over-estimation approach was adopted in line with best practice.

Identified PRFs include:

- **North elevation** – A woodpecker hole ~7 m high, considered capable of supporting multiple bats.
- **West elevation** – Two tear holes at ~5–6 m, each ~0.2 m long; likely interconnected through internal decay.
- **South elevation** – A vertical split (~1 m long) at ~10 m height; narrower sections provide suitable crevice habitat for bats.

All PRFs could support **multiple individuals**, and the high-quality surrounding habitat further increases the likelihood of use. Importantly, **the proposed development does not affect this tree**, and it will be fully retained.

---

## Foreseen Impacts

### Foraging and Commuting Bats

The proposed development does **not result in the loss of any habitats** suitable for commuting or foraging bats, as the works occur entirely within an area of pre-existing hardstanding.

However, **post-development lighting** has the potential to cause disturbance through light spill onto hedgerows, trees, or commuting corridors, which may deter bats from using these features.

### Roosting Bats

No roosting features (trees or buildings) will be removed or altered as part of the development.

The large ash tree with multiple PRFs will be retained, meaning that **no impacts on roosting bats** are anticipated.

---

## Recommendations

### Foraging and Commuting Bats

A **low-impact lighting strategy** should be implemented to avoid light spill onto hedgerows, trees, and other linear features used by bats. Guidance and parameters should follow the **Bat Conservation Trust (BCT)** recommendations:

<https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting>

Key considerations include:

- Using **warm-spectrum LEDs** (<2700 K)
- Keeping lux levels **as low as possible**
- Utilising **motion sensors**, hoods, baffles, and directional fittings
- Maintaining **dark corridors** along hedgerows and the canal corridor

### Roosting Bats

No further survey or mitigation is required, provided the ash tree and adjacent hedgerow are protected during construction.

## Birds

### Summary of Survey Findings

A previous survey undertaken by **Arbtech Consultancy (2023)** recorded evidence of nesting birds within **Building B1**. The internal structure provides suitable nesting niches, while the surrounding **trees and hedgerows** offer additional nesting opportunities and materials.

Buildings **B2** and **B3** showed **no direct evidence** of bird nesting during the site visit. However, both contain areas that could feasibly be used by birds for nesting in the future.

It should be noted that this information relates to the **wider survey area** and not specifically the **red-line development boundary**, which contains only existing hardstanding. The findings are included to demonstrate adherence to **CIEEM best practice** and to ensure a thorough assessment of site-wide ecological receptors.

---

### Foreseen Impacts

The proposed development did **not require the removal of any vegetation or buildings** that could support nesting birds. All trees and hedgerows, including the western hedgerow, are to be retained.

However, construction activity in proximity to the western hedgerow could potentially cause **disturbance to nesting birds** if works occur during the breeding season (March–August inclusive).

---

## Recommendations

### Nesting Birds – Protection During Construction

- Any vegetation clearance or works in proximity to nest-supporting habitats should occur **outside the nesting bird season (March–August)** where possible.
  - If works must proceed during this period, a **pre-works nesting bird check** should be undertaken by a suitably qualified ecologist.
  - Where active nests are identified, at least a **3–5 m exclusion buffer** should be established around the nest, and works should not resume in the area until the young have **successfully fledged**.
  - Machinery use and noise-generating activities near retained nesting habitat should be **minimised** where practicable.
- 

### Suggested Biodiversity Enhancements

To enhance breeding opportunities for local bird populations, it is recommended that **a minimum of two nest boxes** be installed on mature trees around the site boundaries or on retained buildings. Suitable options include (or equivalent alternatives):

- **Schwegler No.17 Swift Nest Box** – buildings
- **Schwegler 1SP Sparrow Terrace** – buildings
- **Schwegler 1B Nest Box** – trees
- **Schwegler 2H Robin Box** – trees
- **Woodstone Nest Box** – buildings or trees

**Tree-mounted boxes** should be installed at approximately **3 m above ground level**, positioned away from prevailing wind and strong sunlight.

**Small-hole nest boxes** should be installed between **1–3 m high** in locations where foliage will not obscure the entrance.

These enhancements will provide long-term nesting opportunities and contribute positively to site biodiversity.

## Reptiles

### Summary of Survey Findings

#### EPSL Applications

A data search confirms that **no European Protected Species Licence (EPSL)** applications relating to rare or protected reptiles occur within **2 km** of the site. This indicates a **low level of recorded reptile activity** within the wider landscape.

---

#### On-site Habitat Assessment

Habitats within the wider survey area offer **limited foraging, commuting, basking, and refuge opportunities** for widespread reptile species. The hedgerows provide some elevated value, offering structural complexity that can support refuge and movement.

However, the majority of the site comprises:

- **frequently managed modified grassland,**
- **agricultural buildings,** and
- **areas of hardstanding,**

all of which are assessed as **suboptimal** reptile habitat. These areas lack the structural diversity and vegetative cover required to support viable reptile populations. While small basking opportunities may be present in isolated sun-exposed spots near potential refugia, habitat suitability overall remains **very low**.

The wider landscape provides **little to no connectivity** to high-quality reptile habitat. Hedgerows terminate into extensive arable fields, which are **unsuitable for reptile habitation**, further reducing the likelihood of reptiles being present on site or in the immediate surroundings.

It should also be noted that the **red-line development area** only includes hardstanding and does not contain any of these wider habitats. The broader site assessment is provided to demonstrate CIEEM-compliant survey thoroughness.

---

### Foreseen Impacts

The proposed development resulted in the removal of a small area of **modified grassland** that had been heavily grazed and maintained. Due to the **low sward height, lack of structural diversity, and limited refuge opportunities**, this grassland was considered **unsuitable for reptiles**.

As such, the risk of impacting reptiles during development was **very low**, and no negative effects are anticipated.

---

### Recommendations

- No further survey work or mitigation is required for reptiles.
- In the **unlikely event** that a reptile is encountered during any remaining or future site works, all works in the immediate area must **cease immediately**, and advice should be sought from a **suitably qualified ecologist** to ensure compliance with wildlife legislation.

### Foreseen Impacts – Amphibians

When georeferencing the proposed development plans against scaled site mapping, it is confirmed that the **red-line development boundary lies fully within an area of existing developed, sealed surface**. As such, **no grassland or semi-natural habitat has been lost or disturbed** as part of the proposed works.

If Great Crested Newts (GCN) were present within **Pond 1**, located ~10 m west of the site, a Rapid Risk Assessment (Natural England, 2015) indicates an **Amber risk outcome**, which states: *Offence Likely*. This result is driven primarily by the **proximity of the pond**, rather than by habitat suitability within the development footprint.

However, as the proposed development affects **only sealed hardstanding** with **no refuge features, vegetation, or suitable terrestrial habitat**, the **actual risk to GCN is very low**. The hardstanding does not provide resting, sheltering, or foraging opportunities and is highly unlikely to be used by amphibians, except potentially by **individual newts moving through the wider landscape** on a transient basis.

Therefore, any residual risk is limited to the **unlikely possibility of a GCN crossing the hardstanding** during construction. No significant or lasting impacts are anticipated.

---

### Recommendations – Amphibians

Although the risk to amphibians is **very low**, precautionary working methods should be implemented for any remaining or future construction activities. These measures include:

- **Hand dismantling of any rubble or brash piles** on site. Materials should be removed from the site or stored on raised pallets to prevent amphibians from using these as refugia.
- **Implementation of best-practice pollution prevention measures** to ensure that nearby aquatic habitats (including Pond 1) are not impacted by run-off, contaminated water, or sediment.
- **Safe storage and disposal of chemicals or pollutants** in accordance with COSHH regulations to avoid accidental contamination of water or terrestrial habitats.
- If **common amphibians** (e.g., smooth newt, toad, or frog) are encountered, they should be allowed to move away of their own accord; if at immediate risk, they may be carefully **relocated by hand** to a sheltered, vegetated area nearby.

In the **unlikely event** that a **Great Crested Newt** is identified during works, all activity must **cease immediately**, and a **suitably qualified ecologist** should be contacted for further advice, in accordance with legislation.

## Badger

### Summary of Survey Findings

No badger setts were identified **on site or within 30 m** of the survey area. The site itself is considered **unsuitable for sett excavation**, owing to the lack of friable soils, banks, or sloping ground that typically support badger sett construction.

However, the **apple and cherry trees** within the southern field offer **optimal foraging resources**, and the surrounding habitats to the **west and south** provide high-quality foraging and potential sett-building environments. As such, it is possible that **badgers may forage across the site on a transient basis**, even though no evidence of residency was recorded.

---

### Foreseen Impacts

Given the absence of setts, **no direct impacts** on badgers are anticipated.  
However, the presence of **occasional foraging individuals** cannot be ruled out.

---

### Recommendations

Basic precautionary measures should be implemented to safeguard any badgers that may occasionally traverse the site:

- **Cover all excavations overnight**, or install a sturdy **escape ramp** (e.g., a timber plank at a 45° angle) to prevent animals from becoming trapped.

- Avoid the use of **night-time lighting** where possible. If lighting is required, utilise a **sensitive lighting design** to minimise light spill onto habitats along the southern and western boundaries that badgers may use for foraging or movement.
  - Any **chemicals or pollutants** should be stored and disposed of appropriately in accordance with **COSHH regulations** to avoid contamination of habitats.
  - In the **unlikely event** that a badger sett is discovered **within 30 m** of the works, all activity must **stop immediately**, and advice should be sought from a **suitably qualified ecologist**.
- 

## Riparian Animals

### Summary of Survey Findings

#### EPSL Applications

No EPSL applications for riparian species (e.g., otter, water vole) were identified within **2 km** of the site.

#### On-site Habitat

Two small field ditches occur within the wider survey area; however, neither provides suitable habitat for **otters** or **water voles**. This is due to:

- a lack of connectivity to high-quality riparian corridors,
- insufficient marginal or bankside vegetation, and
- unsuitable bank structure for burrow creation.

The **canal** located east of the site is also **not suitable** for riparian mammals, given the absence of appropriate burrowing habitat, limited food availability, and regular boat traffic.

---

## Foreseen Impacts

The proposed development is **not anticipated to have had any adverse effects** on riparian species, as no suitable habitat occurs within or adjacent to the red-line boundary.

---

## Recommendations

No further survey work or mitigation is required.

## Hazel Dormouse

### Summary of Survey Findings

### EPSL Applications

No European Protected Species Licence (EPSL) applications for **Hazel Dormouse** were identified within **2 km** of the site.

### On-site Habitat

Hazel dormice require **complex, three-dimensional woody vegetation** to safely commute, forage, and nest above ground. The habitats present within the wider survey area—namely hedgerows and modified grassland—lack the structural diversity and continuous canopy connectivity required to support dormice.

As such, the likelihood of Hazel Dormouse being present on or near the site is assessed as **acceptably low**.

---

## Foreseen Impacts

As Hazel Dormouse is considered **absent**, the proposed development is **not anticipated to have resulted in any impacts** on this species.

---

### Recommendations

No further survey effort or mitigation is required for Hazel Dormouse.

---

### Other Species (e.g., Hedgehog)

#### Summary of Survey Findings

The hedgerows and modified grassland within the wider survey area provide **foraging and commuting opportunities** for **hedgehogs**, particularly given their preference for edge habitat and structurally diverse vegetation.

#### Foreseen Impacts

While a small area of grassland within the **wider landholding** was historically affected, this is unlikely to have had any adverse impact on hedgehogs due to the **extensive availability of suitable habitat** in the surrounding landscape.

It is important to note that the **red-line development boundary contains only existing hardstanding**, so no hedgehog habitat was lost within the footprint of the development itself.

---

### Recommendations

Precautionary working methods should be implemented during any remaining or future construction to safeguard any hedgehogs that may pass through the site:

- **Cover all excavations overnight**, or provide a **gentle escape ramp** to prevent animals becoming trapped.

- Avoid **night-time lighting**, or adopt a sensitive lighting design to minimise light spill onto retained habitats used by hedgehogs.
  - Store and dispose of all **chemicals and pollutants** safely in accordance with **COSHH regulations**.
  - If hedgehogs are encountered, allow them to **move away naturally**; if at immediate risk, gently relocate them by hand to nearby shelter within vegetated habitat.
- 

### Suggested Biodiversity Enhancements

To support local hedgehog populations and enhance ecological value, the following measures could be incorporated into the site:

- **Planting fruit-bearing trees** and establishing **species-rich grassland** to increase foraging resources.
- Creating **brash piles** or installing **hedgehog houses** in shaded or undisturbed areas.
- Installing **hedgehog highways**—small gaps (13 × 13 cm) beneath boundary fencing—to allow free movement across the site.

Map 1 shows the total site covered by the PEA, however, the red line development is in the upper left corner



Map 2 shows the actual development site

