

18 Burton Road, Twycross

Ecological Assessment

Prepared for Luke Elphick

June 2026

Revision 02

TURNSTONE ECOLOGY LIMITED

Project Number:	TT4032
Project Title:	18 Burton Road, Twycross
Document Reference:	R01-Preliminary Ecological Appraisal-Rev02

Document Issued To:	Luke Elphick
Document Issued By:	Turnstone Ecology Limited

Revision Number	Author(s)	Reviewer(s)	Issuer	Issue Date
REV00	MF Senior Ecologist	AR Senior Ecologist MG Director	MF Senior Ecologist	11/07/2025
REV01 – BNG Updates	YE Ecologist	AR Senior Ecologist	YE Ecologist	16/01/2026
REV02 – BNG Updates	YE Ecologist	AR Senior Ecologist	YE Ecologist	04/06/2026

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SURVEY AND REPORT VALIDITY

It is important that planning decisions are based on up-to-date ecological reports and survey data. However, it is difficult to set a specific timeframe over which reports or survey data should be considered valid, as this will vary in different circumstances. In some cases there will be specific guidance on this (such as for the age of data which may be used to support an Protected Species Mitigation Licence Applications) but in circumstances where such advice does not already exist, the Chartered Institute of Ecology and Environmental Management (CIEEM) has provided the general advice set out below.

<i>Age of Data / Survey / Report</i>	<i>Validity</i>
Less than 12 months	Likely to be valid in most cases.
12-18 months	Likely to be valid in most cases with the following exceptions: • Where a site may offer existing or new features which could be utilised by a mobile species within a short timeframe; • Where a mobile species is present on site or in the wider area, and can create new features of relevance to the assessment; • Where country-specific or species-specific guidance dictates otherwise.
18 months to 3 years	A professional ecologist will need to undertake a site visit and then review the validity of the report. Some or all of the other ecological surveys updated.
Protected Species Licensing	Licence applications usually only possible using data less than 2 years old

The likelihood of surveys needing to be updated increases with time and is greater for mobile species or in circumstances where the habitat or its management has changed significantly since the surveys were undertaken. Factors to be considered include (but are not limited to):

- Whether the site supports, or may support, a mobile species which could have moved on to site, or changed its distribution within a site;
- Whether there have been significant changes to the habitats present (and/or the ecological conditions/functions/ecosystem functioning upon which they are dependent) since the surveys were undertaken, including through changes to site management;
- Whether the local distribution of a species in the wider area around a site has changed (or knowledge of it increased), increasing the likelihood of its presence.

1 INTRODUCTION

1.1 Purpose of Report

This report has been completed in connection with the proposed development at 18 Burton Road, Twycross, CV9 3PR (National Grid Reference: SK 33495 05221). The location of the proposed development site (the 'site') is shown in *Figure 1*. Proposals for the site include the demolition of an existing outbuilding and the construction of a single residential property and associated access and landscaping.

A survey was carried out on the 9th October 2024 by Turnstone Ecology Ltd and consisted of a Preliminary Ecological Appraisal using the UK Habitat Classification Approach in order to inform a Biodiversity Net Gain Assessment as well as an assessment of suitability of the site's habitats to support protected species. A separate Preliminary Roost Assessment has been undertaken by Christopher Smith (Bat and Bird Report, 2025).

This report details survey and assessment methodology along with the results of a desk-based study and on-site survey. It also provides a quantitative assessment of potential impacts from retention, loss, enhancement and creation of habitats on-site and appropriate mitigation to offset any impacts associated with the proposal and to satisfy national and local planning policies in relation to Biodiversity Net Gain (BNG).

Figure 1. Location of proposed development (black circle)



1.2 Ecological Context

The proposed development site, a residential property, is located on Burton Road in the village of Twycross. The development proposals include the demolition of an existing outbuilding, and subsequent construction of a single residential dwelling within the current garden of the property, with associated parking, garden and driveway.

The site consists of a residential property, an outbuilding, vegetated garden, a driveway and hedgerows. The site is adjacent to Burton Road along its western boundary, with agricultural land around the northern and eastern boundaries (*Figure 2*). A small woodland area, containing two ponds, lies south of the proposed development, between the site and Ashby Road.

Figure 2. Site bordering Burton Road, with surrounding habitat



The wider landscape primarily consists of agricultural land, interspersed with woodland parcels, residential and commercial areas (*Figure 3*).

Figure 3. Site boundary and wider landscape



2 METHODS

2.1 Desk-based Study

A data request through the local environmental records centre was not undertaken as the site is small, the habitats that will be impacted are limited and it is very unlikely that the records obtained would impact the site assessment and mitigation proposed.

Information relating to designated sites, and historic records of protected species within 2 km of the proposed development site were obtained from Magic (www.magic.gov.uk) and other freely available information on the internet, such as planning portals.

Any relevant historic records within 2 km of the proposed development have been obtained from freely available information on the internet, such as planning portals and NBN Atlas (<https://nbnatlas.org/>) where unless stated otherwise, all records are provided to the NBN Atlas under licences CC-BY or OGL.

2.2 Baseline Habitat Assessment

The survey methods were based on the UK Habitat Classification approach (<https://ukhab.org>, updated January 2021), which is a standardised method to survey main habitat types in the UK. Plant nomenclature in this report follows Rose (Revised Edition 2006) for native, naturalised and garden varieties of vascular plant. Introduced species and garden varieties are not always identified. UK Habitat Classification is the industry standard survey method used when determining baseline conditions for Biodiversity Net Gain Assessments using the Statutory Biodiversity Metric (<https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>).

The Statutory Biodiversity Metric calculation tool has been used to determine the baseline biodiversity units for this site and how the proposed development will impact biodiversity by calculating the lost, retained, enhanced and created habitats using a quantitative approach.

2.3 Protected Fauna Survey and Assessment

The habitats on site were assessed for suitability for protected fauna that occur in the region and obvious signs and incidental sightings of protected species were noted where present. Taking into consideration the geographical region and habitat types on and adjacent to site, the protected species and species groups that could be encountered are listed below.

- Badger
- Bats
- Nesting birds
- Great Crested Newt
- Reptiles

Details of initial survey methods for each relevant species are given below.

2.3.1 Badger

Where access allowed, a comprehensive assessment was carried out to identify areas that are used by Badgers (*Meles meles*) for foraging and sett digging. Signs of Badgers including setts, foraging signs, paths and latrines were recorded where present.

2.3.2 Bats

Any buildings and trees on or adjacent to the site were visually surveyed to assess them for their potential to support roosting bats, although a thorough inspection of all potential roosting features would not be undertaken as part of the baseline survey.

Habitats were assessed for their suitability for use by foraging or commuting bats. Areas of particular interest vary between species, but generally include sheltered areas and those habitats with good numbers of insects, such as woodland, scrub, hedges, watercourses, ponds, lakes and more species-rich or rough grassland.

2.3.3 Breeding birds

Habitat that might be used by nesting birds was identified and actively nesting birds or evidence of nesting birds noted where present.

2.3.4 Great Crested Newt

The suitability of any aquatic and terrestrial habitat on the site, and in the immediate vicinity, was assessed for suitability for use by Great Crested Newts (*Triturus cristatus*). Great Crested Newts are known to travel up to 500 m between breeding ponds and suitable terrestrial habitat, so a desk-based search was undertaken for any ponds up to 500 m from the site using OS maps and aerial imagery. The terrestrial habitat between the site and these ponds, and therefore connectivity to the site, was also considered.

There were three ponds within 500m of the site (P1, P2 and P3), of which P1 and P2 were accessible. These ponds were assessed using the Habitat Suitability Index (HSI) developed by Oldham et al. (2000), which is derived from systems developed by the US Fish and Wildlife Service. It is a numerical index, between 0 and 1, where 0 indicates unsuitable habitat and 1 represents optimal habitat. The HSI for the Great Crested Newt uses ten factors (suitability indices (SI) 1 to 10), which are thought to affect Great Crested Newts as follows:

- geographic location (SI 1);
- surface area (SI 2);
- hydrology (drying) (SI 3);
- water quality (SI 4);
- shade (SI 5);
- presence of water fowl (SI 6);
- presence of fish (SI 7);

- number of adjacent water features (SI 8);
- terrestrial habitat (SI 9); and
- macrophyte cover (SI 10).

Each factor is scored using field and desk-based survey. These ten scores are then converted to SI scores using a scale from 0.01 to 1 from graphs given in Oldham et al. (2000) and a HSI result is calculated using the following formula:

$$HSI = (SI1 \times SI2 \times SI3 \times SI4 \times SI5 \times SI6 \times SI7 \times SI8 \times SI9 \times SI10)^{1/10}$$

Further research by Brady (unpublished) has developed a system for using HSI scores to define pond suitability for Great Crested Newts according to the following categories:

- HSI < 0.5 = poor
- HSI 0.5 – 0.59 = below average
- HSI 0.6 – 0.69 = average
- HSI 0.7 – 0.79 = good
- HSI > 0.8 = excellent

HSI cannot guarantee the presence or absence of Great Crested Newts however, there is a positive correlation between HSI scores and presence and abundance. Generally, ponds with high HSI scores are likely to support larger populations. The relationship is however not sufficiently precise to conclude that any pond with a high HSI will support newts in high populations, or that any pond with a low score will support low numbers of newts or no newts at all.

The pond present on site was subject to eDNA surveys completed in June 2025. The surveys were undertaken by Molly Foukds of Turnstone Ecology who holds a licence to survey for Great Crested Newts in all counties in England (Licence number 2019-43610-CLS-CLS).

The survey samples were analysed by Surescreen Scientifics for the presence of GCN eDNA following the protocol stated in DEFRA WC1067 ‘Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5’ (Biggs et al. 2014).

2.3.5 Reptiles

The site was assessed for suitability for use by widespread species of reptiles, with particular attention paid to those features that could be used as basking areas (*e.g.* south-facing slopes), hibernation sites (*e.g.* banks, walls, piles of hardcore) and opportunities for foraging (*e.g.* rough grassland and scrub). The site was assessed for its suitability for the commoner reptile species which have broadly similar habitat requirements, but more specific requirements include those shown below (Beebee & Griffiths 2000).

- Common Lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to walls and pastures, although one habitat they use is brownfield sites

- Slow-worms (*Anguis fragilis*) use similar habitats to Common Lizards, and are often found in rank grassland, gardens and derelict land
- Grass Snakes (*Natrix natrix*) have broadly similar requirements to Common Lizards but with a greater reliance on ponds and wetlands, where they prey on amphibians
- Adder (*Vipera berus*) use a range of fairly open habitats with some cover, but are most often found in dry heath.

2.4 Constraints

The survey was completed in October which is not the optimal time of year to complete botanical surveys. However, as the site was primarily vegetated garden and hardstanding / buildings, the timing of the survey is not a constraint to result and assessment of the survey.

2.5 Criteria for Assessment

The scientific value of habitats for nature conservation is assessed according to widely accepted criteria of which the most important are naturalness, extent, rarity, and diversity.

The assessment of impacts is based on the principles within Chartered Institute of Ecology and Environmental Management (CIEEM) Ecological Impact Assessment (EcIA) Guidance (2024) which assesses the impacts of the proposal on ecological receptors taking into consideration extent, duration, reversibility, timing, frequency and certainty.

Mitigation and enhancement is designed to reduce the level of impact upon receptors and provide ecological enhancement in order to meet current legislation and planning policy. The information below has therefore been considered during assessment.

- Criteria that have been developed to assist in the identification of statutory Sites of Special Scientific Interest (SSSIs) (JNCC 2013)
- Habitats and species of Principal Importance included under Section 41 (England) and Section 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act 2006
- The legal status of habitats and species according to The Conservation of Habitats and Species Regulations 2017 (as amended)
- CIEEM Guidelines (2024) for assessing the value of ecological receptors within a defined geographical context using the following categories: international (*i.e.* Europe); UK and national (England); regional; county; Unitary Authority; local or parish; and zone of influence. Receptors are identified as ‘important’ at these levels, or as ‘not important’
- Species protected by European directives
- Species protected by the *Wildlife and Countryside Act 1981* (as amended)
- Other species listed as scarce or notable in literature issued by conservation organisations or learned societies *e.g.* vascular plant species listed in Stewart *et al.* (1994) and Red and Amber List Birds of Conservation Concern (Stanbury *et al.* 2021)

- Local Wildlife Site selection criteria
- National Policy Planning Framework (NPPF), 2024
- BS42020:2013 – Biodiversity Code of practice for planning and development
- Protected species handbooks and best practice guidelines
- The Leicestershire and Rutland Biodiversity Action Plan (BAP), which identifies and prioritises national biodiversity targets in the local context.
 - Habitats: Habitat targets have been set for the following habitats: Broadleaved Woodland, Wet Woodland, Lowland Wood-Pasture and Parkland, Hedgerows, Mature Trees, Eutrophic Standing Water, Mesotrophic Lakes, Floodplain Wetland, Reedbed, Fast-Flowing Streams, *Sphagnum* Ponds, Springs and Flushes, Neutral Grassland, Heath Grassland, Calcareous Grassland, Roadside Verges, Field Margins, Rocks and Built Structures, Urban Habitat..
 - Species: Specific targets have been set for the following UK BAP Species: Barn Owl (*Tyto alba*), Bats, Black Hairstreak Butterfly (*Satyrrium pruni*), Black Poplar (*Populus nigra*), Dingy Skipper (*Erynnis tages*), Dormouse (*Muscardinus avellanarius*), Nightingale (*Luscinia megarhynchos*), Otter (*Lutra lutra*), Purple Small-Reed (*Calamagrostis canescens*), Redstart (*Phoenicurus phoenicurus*), Sand Martin (*Riparia riparia*), Violet Helleborine (*Epipactis purpurata*), Water Vole (*Arvicola amphibius*), White-Clawed Crayfish (*Austropotamobius pallipes*), Wood Vetch (*Vicia sylvatica*), Swift (*Apus apus*), Barn Swallow (*Hirundo rustica*) and House Martin (*Delichon urbicum*).

2.5.1 Biodiversity Net Gain

Biodiversity Net Gain is required in England under a statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). This statutory framework is referred to as *biodiversity net gain* in Planning Practice Guidance. Under the statutory framework for biodiversity net gain, subject to some exceptions, every grant of planning permission is deemed to have been granted subject to the condition that the biodiversity gain objective is met. This objective is for development to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of the onsite habitat. This increase can be achieved through onsite biodiversity gains, registered offsite biodiversity gains or statutory biodiversity credits.

The biodiversity gain condition is a pre-commencement condition: once planning permission has been granted, a Biodiversity Gain Plan must be submitted and approved by the planning authority before commencement of the development. There are exemptions and transitional arrangements which disapply the condition from certain planning permissions, as well as special modifications for planning permissions for phased development and the treatment of irreplaceable habitats.

The statutory framework for biodiversity net gain also includes provisions about information requirements for planning applications and the treatment of the condition on decision notices on the grant of planning permission.

3 RESULTS

3.1 Desk Study

3.1.1 Designated Sites

There are no statutory designated sites within 2 km of the site.

3.1.2 Protected Species Licence Sites

There are no protected species licenses within 2 km of the site.

3.1.3 Great Crested Newt Survey Class Licence Returns

There are no Great Crest Newt survey class licence returns within 2 km of the Site. There were two ponds that were surveyed as part of a Natural England scheme in 2019, one 1.3 km north east and one 1.4 km east of the site; both returned negative results for Great Crested Newt.

3.1.4 Ecological Surveys

UK Habitats Classification was used to record habitat types within and immediately adjacent to the proposed development site. These habitats are listed below and shown in *Figure 4*:

Habitats present onsite include:

- Developed Land; Sealed Surface
- Unsealed, Unvegetated, Artificial Surface
- Urban: Vegetated Garden
- Hedgerows

Figure 4. Baseline Habitats Map



The site or immediately adjacent areas contain habitat suitable for the protected species listed below.

- Badger
- Bats
- Nesting birds
- Great Crested Newt
- Reptiles

3.2 Baseline Habitat Survey

3.2.1 Built Environment; Sealed Surface

There are two buildings within the site boundary, a residential property (*Plate 1*) and an outbuilding. There are to be no works to the residential property under this planning application.

Plate 1. Residential property not to be impacted by works



The outbuilding has three unconnected rooms, which can be accessed through their own doors. The building is a single storey, brick-built building. The roof is pitched with slate tiles and clay ridge tiles. Wooden fascia boards are present around the building. The roof and brickwork are in a state of disrepair with several bricks missing and slipped/missing tiles. The outbuilding is further discussed in *Section 3.4.2* of this report.

Internally, the building had evidence of old House Sparrow (*Passer domesticus*) nests, but was generally disused and in a state of disrepair.

Plate 2. Outbuilding to be demolished



3.2.2 Artificial unvegetated, unsealed surface

There was an area of unused, previously developed, land between the outbuilding and the residential house (*Plate 3*), leading out onto Burton Road (*Plate 4*). This had previously been hardstanding (in the form of brick or flagstone paths) which have been partially removed or grown over.

Plate 3. Previous area of flagstones which have been partially removed and vegetation grown over



Plate 4. Previous area of brick pathway which have been partially removed and vegetation grown over



3.2.3 Vegetated Garden

To the south of buildings, a vegetated garden makes up the rest of the on-site habitats. The garden is primarily unmanaged grassland, with limited forb species (*Plate 5*). Hedgerows surround the garden on its western, eastern and southern aspects. Areas of ornamental planting are present throughout the garden.

Plate 5. Vegetated garden in the south of the site



3.2.4 Native Hedgerow

There are two native hedgerows present around the boundaries of the site, H1 down the western and southern boundary and H2 down the east.

H1 (*Plate 6*) appears to be regularly managed and is more than 1.5m in height and width at the time of survey. The hedgerow contains Holly (*Ilex aquifolium*), Ash (*Fraxinus excelsior*) and Elder (*Sambucus nigra*). There are occasional occurrences of Dogrose (*Rosa canina*), and Bramble (*Rubus fruticosus*).

H2 (*Plate 7*) appears to be regularly managed and is more than 1.5m in height and width at the time of survey. The hedgerow contains the same species as H1

Plate 6. Native Hedgerow (H1)



Plate 7. Native Hedgerow (H2)



3.3 Biodiversity Net Gain Metric: Baseline Data

The red line development area totals 0.09 ha with 100 m of hedgerows. Individual area sizes per habitat were measured during the 2024 survey when habitat borders were defined and mapped. Where condition scores differed across the site for the same habitats these have been separated out to ensure proposed management prescriptions can be targeted per habitat and are based upon the current baseline habitat conditions.

A summary of the habitats present on site, current habitat condition scores and their total area size (per habitat) in hectares can be seen in *Table 1* with the same for hedgerows shown in *Table 2*. Habitat/hedgerow unit values, as calculated using the Statutory Biodiversity Metric Tool have also been included within the tables below.

Table 1. Area sizes and condition scores for all baseline habitats present on site

Habitat Type	Condition	Area Size (Ha)	Habitat Units
Artificial unvegetated, unsealed surface	Condition Assessment N/A	0.0203	0.00
Developed land, sealed surface	Condition Assessment N/A	0.0095	0.00
Vegetated garden	Condition Assessment N/A	0.0581	0.12
Total:		0.09	0.12

Table 2. Length and condition scores for all baseline hedgerows present on site

Hedgerow Ref	Hedgerow Type	Condition	Length (km)	Hedgerow Units
H1	Native Hedgerow	Moderate	0.033	0.13
H2	Native hedgerow	Moderate	0.072	0.29
Total:			0.10	0.42

3.4 Protected Fauna

3.4.1 Badger (CONFIDENTIAL)

Four records of Badger were returned from the desk study within 2 km of the site¹.

There was no evidence of Badger within the site boundary, however the hedgerows and vegetated garden offer some, albeit limited, foraging and commuting habitat for Badgers across the site.

¹ <https://records.nbnatlas.org/occurrences/c0171b3b-3386-4574-8d73-2d2078dfe82b>

3.4.2 Bats

There was one freely available bat record within 2 km of the site, a Soprano Pipistrelle (*Pipistrellus pygmaeus*) sighted at Twycross Zoo approximately 1.6 km north west of the site².

There were two buildings on site that provided suitable roosting opportunities for bats, the main house which is to undergo some attic renovations and the outbuilding, which is to be demolished. There were no mature trees on Site and no younger trees were identified as offering suitability for roosting bats. A full Preliminary Roost Assessment was not within the scope of this report and has been completed by Christopher Smith.

The hedgerows and vegetated garden on Site offer some foraging and commuting habitat for bat species and provide commuting routes to the wider environment, particularly the woodland to the south of the site.

3.4.3 Birds

The site provided some suitable nesting habitat in the form of hedgerows and small trees. The outbuilding contained evidence of old House Sparrow (*Passer domestics*) nesting.

3.4.4 Great Crested Newt

There were no records of Great Crested Newt or any license returns within of the site. There were two ponds that were surveyed as part of a Natural England scheme in 2019; one 1.3km north east and one 1.4km east and both returned negative results for Great Crested Newt.

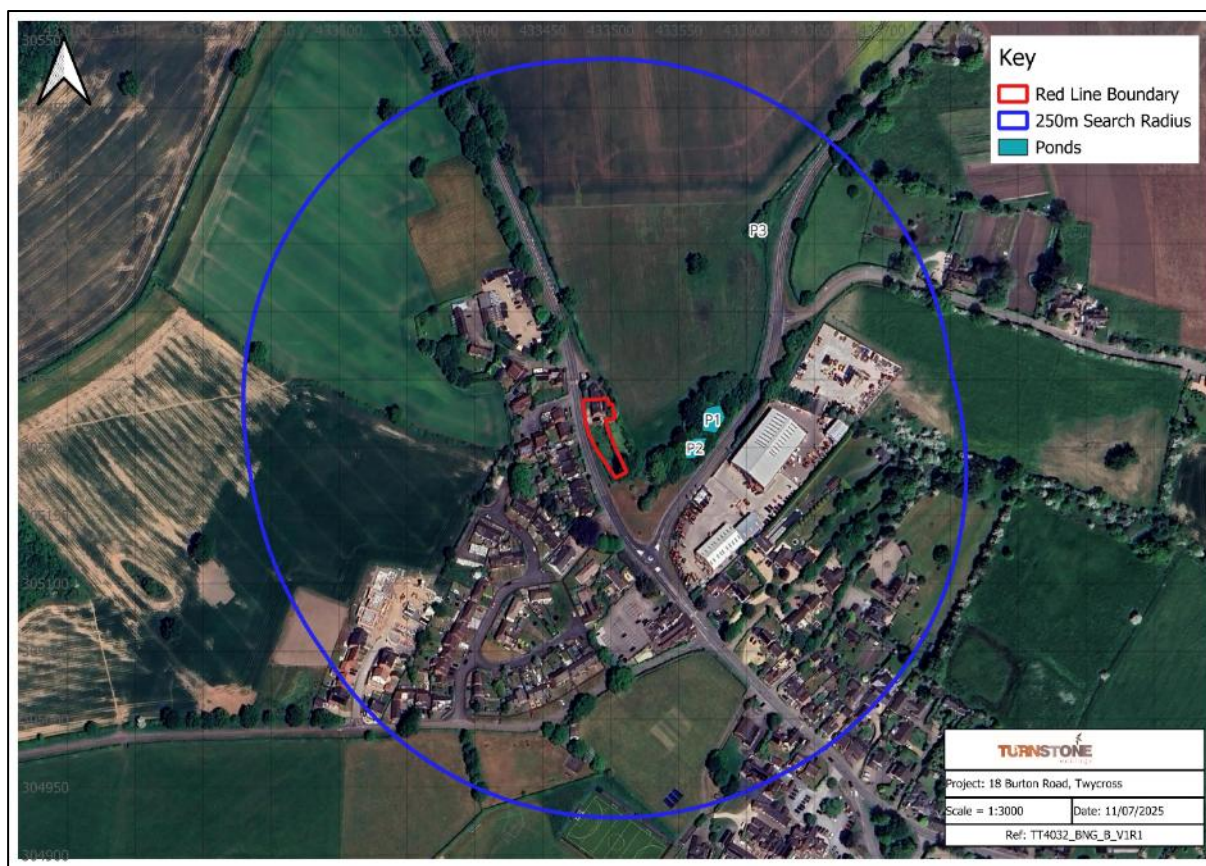
There are no waterbodies within the site and three ponds within 250m of the site boundary, which are described below and shown in *Figure 5*.

Waterbody Description

- **Pond 1** is located 39 m east of the site, and is a shaded pond with marginal vegetation. The water is turbid.
- **Pond 2** is located 64 m east of the site, and is a shaded pond with marginal vegetation. The pond was dry at the time of survey.
- **Pond 3** is located within an arable field 114 m north east of the site. Access was not possible for this pond. From aerial imagery it is surrounded by scrub and scattered trees.

² <https://records.nbnatlas.org/occurrences/762aac8-7a7f-4854-a186-8d51a2c08d12>

Figure 5. Pond Locations within 250m of the site



The site itself provides some suitable habitat for terrestrial phase Great Crested Newt within the vegetated garden, hedgerow bases and within the outbuilding and associated hardstanding.

eDNA Results

Pond 3 was inaccessible at the time of survey, and Pond 2 was dry so only Pond 1 underwent an eDNA assessment. Results were returned as **Negative** for Great Crested Newt and the results can be viewed in *Appendix A*.

3.4.5 Reptiles

Records of Grass Snake (*Natrix helvetica*) were recorded at Twycross Zoo, approximately 1.6 km north-west of the site³. No other records of reptiles were returned within 2 km of the Site.

The hedgerow bases and vegetated garden are of limited suitability for foraging and dispersal due to the close proximity to Burton Road, and the regular management of the garden.

³ <https://records.nbnatlas.org/occurrences/ec73e03e-2d4a-4456-9379-47bcbaef354>

3.4.6 Other Species

Hedgehog (*Erinaceus europaeus*) have been recorded within 2 km of the site, with the closest available record 0.4 km south west of the site⁴. The site provides suitability for Hedgehog within the vegetated garden, hedgerow and within the outbuilding.

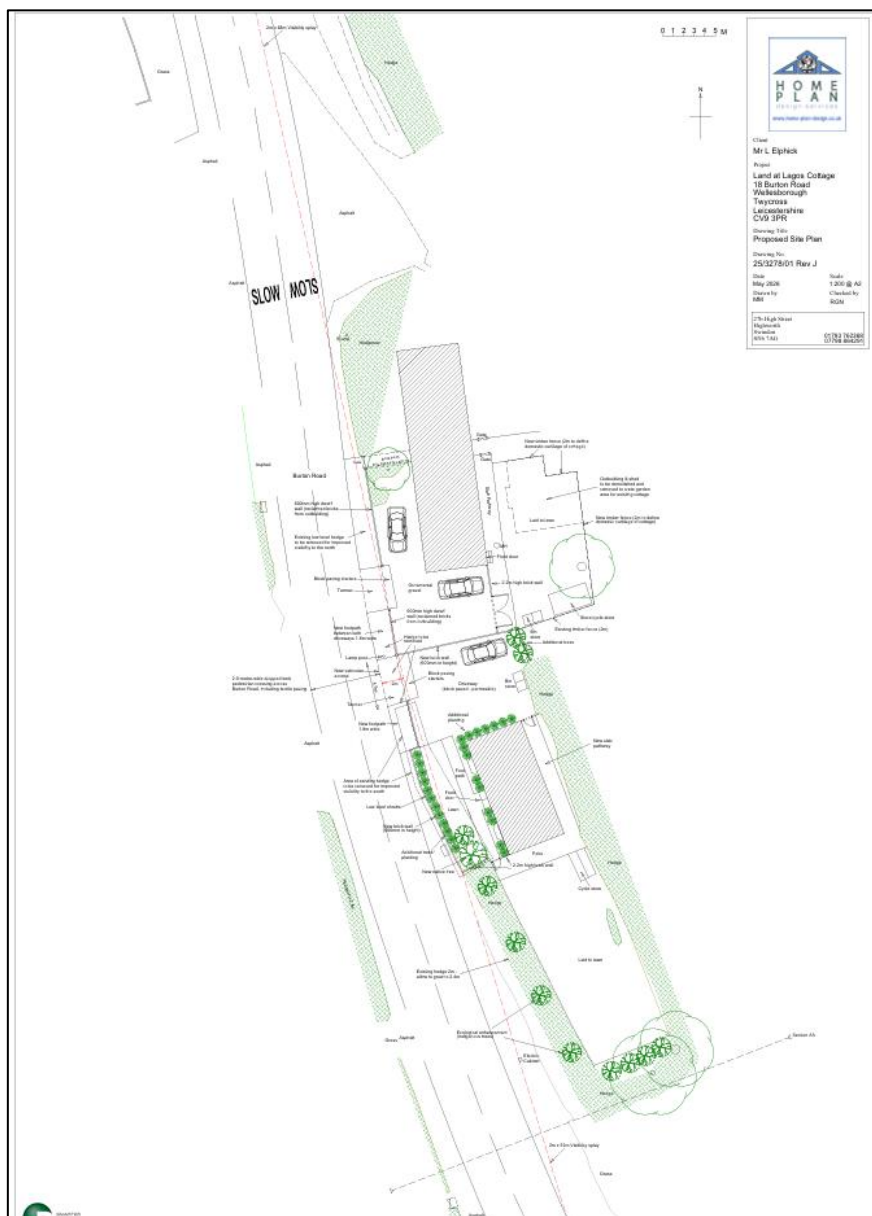
⁴ <https://records.nbnatlas.org/occurrences/762aaac8-7a7f-4854-a186-8d51a2c08d12>

4 EVALUATION

4.1 Summary of Proposals

The proposed development involves the demolition of an existing outbuilding within the site and the subsequent construction of a new residential dwelling, with associated access and landscaping (*Figure 6*). Additional tree planting is to occur around the perimeter of the site with trees planted within the existing hedge. Planting has not been included within the Biodiversity Net Gain Assessment due to the proposed habitat consisting of vegetated garden.

Figure 6. Proposed Layout of the Site



4.2 Designated Sites

The development will only result in local impact and as the site does not fall within the boundaries of a designated site. There are no statutory designated sites within 2 km of the Site, and it is therefore certain that the proposals will not impact statutory designated sites.

4.3 Habitats, Impacts and Mitigation

4.3.1 General

The proposed development will directly affect habitats with limited ecological value which offer some degree of suitability for protected species. These habitats are restricted to hedgerows, vegetated garden and the outbuilding.

4.3.2 Retention and Enhancement

The proposed development will result in the retention and enhancement of the following habitats (*Table 3*) and hedgerows (*Table 4*):

Table 3. Onsite Habitat Retention and Enhancement Areas.

Habitat Type	Area Size to be retained (Ha)	Area Size to be enhanced (Ha)
Developed land; sealed surface	0.0066	0

Table 4. Onsite Hedgerow Retention and Enhancement Areas.

Habitat Type	Area Size to be retained (Ha)	Area Size to be enhanced (Ha)
Native Hedgerow	0.07	0.000

4.3.3 Habitat Creation

The proposed development will result in the creation of a new residential dwelling and associated hardstanding, and a new lawn with ornamental planting near the driveway. The areas of proposed habitats are displayed in *Table 5*.

Table 5. Proposed on-site habitat creation (red line development area only)

Proposed development	Habitat Type	Condition Score	Area (Ha)	Habitat Units
Driveways and parking	Artificial unvegetated, unsealed surface	N/A - Other	0.0285	0.00
Residential dwelling and bike storage	Developed land; sealed surface	N/A - Other	0.0159	0.00

Proposed development	Habitat Type	Condition Score	Area (Ha)	Habitat Units
New shrub planting	Introduced shrub	Condition Assessment N/A	0.0015	0.00
Garden for new and existing properties	Vegetated garden	Condition Assessment N/A	0.0364	0.07
Total:			0.0823	0.07

4.4 Statutory Metric Summary

The proposed development will result in a net loss of 0.04 habitat units which equates to a **-37.59% net loss on habitats**. For hedgerows, there is a net loss of 0.14 hedgerow units which equates to a **-33.33% loss on hedgerows**. Approximately, 0.06 Habitat Area Units and 0.18 Hedgerow linear units will be sought from an offsite unit provider. A summary can be found in *Figure 7*.

Figure 7. Statutory Metric Summary

On-site baseline	Habitat units	0.12
	Hedgerow units	0.42
	Watercourse units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.07
	Hedgerow units	0.28
	Watercourse units	0.00
On-site net change (units & percentage)	Habitat units	-0.04
	Hedgerow units	-0.14
	Watercourse units	0.00
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.04
	Hedgerow units	-0.14
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-37.59%
	Hedgerow units	-33.33%
	Watercourse units	0.00%
Trading rules satisfied?		No - Check Trading Summaries ▲

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.12	0.13	0.06
Hedgerow units	10.00%	0.42	0.46	0.18
Watercourse units	10.00%	0.00	0.00	0.00

4.5 Protected Fauna

To protect species of note and maintain and increase biodiversity of the site, the following mitigation measures and safe working methods will need to be incorporated into the proposals.

4.5.1 Badger

No evidence of Badger was recorded on or adjacent to the proposed development site. The site offers no suitability for sett building however it does provide suitable, albeit limited, commuting and foraging habitat within the vegetated garden and hedgerows.

Due to the type and extent of habitats impacted by proposals, it is considered unlikely Badgers will be impacted. However, to ensure Badgers are not impacted by the works, best practice guidelines will be followed throughout construction. These measures are:

- Ensure excavations or trenches left overnight are covered or have an escape route such as a shallow gradient at one or both ends (or a mammal ramp placed at one end).
- Ensure excavations or trenches are inspected each morning and evening to ensure no mammals have become trapped.
- Open pipework with a diameter of more than 120mm will be properly covered or capped at the end of the working day to prevent small mammals from entering and becoming trapped.
- During the work, the storage of any chemicals will be contained appropriately so that they cannot be accessed or knocked over by any roaming mammals.
- Litter, tools and potentially dangerous materials on site will be cleared at the end of the working day. Care will be taken that there are no sharp metal objects or pointed protrusions on the ground.

4.5.2 Bats

There are two buildings on site that provide suitable roosting habitat for bats. A Preliminary Roost Assessment and activity surveys were undertaken by Christopher Smith and any specific mitigation for bats should be provided following this assessment.

No mature trees are to be impacted or lost by the development works and therefore no further mitigation is recommended.

Small sections of hedgerow are to be lost to create access, however, due to the scale of the development, this is unlikely to have an impact on foraging and commuting activities.

4.5.3 Nesting Birds

A single, old, House Sparrow nest was noted within the outbuilding which will be lost through this development. The vegetated garden and hedgerow provide suitable nesting habitat for common species of bird.

It is recommended that the building demolition and any vegetation clearance is undertaken outside of the main breeding bird season (March to August inclusive), or if this is not possible, a nesting bird check should be undertaken on the building by a suitably qualified ecologist prior to works.

Any habitat creation would only have a positive impact on nesting birds at the site. One integrated Swift box/brick (Manthorpe Swift Brick or equivalent) will be incorporated into the scheme on the north-eastern aspect of the new building or existing house. Additionally, one three-hole House Sparrow terraces (Schwegler 1SP Sparrow Terrace or equivalent) should be positioned on the northern aspect of the building which would provide nesting habitats across the Site.

4.5.4 Great Crested Newt

There are three ponds within 250m of the site, with the closest, Pond 1, approximately 36 m east of the proposed development. The woodland between the pond and site is optimal terrestrial habitat for Great Crested Newt and there is some suitable habitat on site consisting of the vegetated garden, hedgerow bases and outbuilding.

An environmental DNA (eDNA) survey was undertaken on Pond 1 (the only pond accessible and retaining water) and was **Negative** for Great Crested Newt. As Pond 2 is directly adjacent, and Pond 3 is 180m north of the site, it is thought to be highly unlikely they would be using these ponds considering the negative result in Pond 1. Great Crested Newt are not a constraint to this development however best practise measures (as per 4.6.5 Reptiles) should be undertaken throughout development.

4.5.5 Reptiles

Proposed works will affect small areas of garden habitat that has some suitability for reptiles. Due to the extent and suitability of habitat affected by the proposals, it is considered unlikely that reptiles will be impacted.

Although reptiles are unlikely to be impacted, precautionary safe working methods / Reasonable Avoidance Measures will need to be adhered to pre and during works.

- Prior to construction, an experienced Ecologist to complete a walkover and hand search of any areas of vegetation impacted by the proposals. They will then complete a Toolbox Talk to highlight potential impacts on reptiles, discuss safe working methods and confirm what to do if an animal is found.
- Vegetation within and around the area of works should be cut and maintained short (ideally between March and October when reptiles are active).
- Site clearance works should start with habitat being removed from the centre of the site out towards the edges so that any animals would be able to move to areas of retained edge habitat.
- During construction, materials should be stored at least 5m away from retained edge habitats to discourage reptiles from using them as shelter.
- At any stage during the works if a reptile is found on site an Ecologist to be called and an appropriate course of action confirmed.

4.5.6 Other Species

Habitats onsite, such as hedgerows, are suitable for Hedgehogs. To ensure small mammals are not impacted by the works, best practice guidelines will be followed throughout construction. These measures are detailed in *Section 4.6.1*.

Where any permanent fencing is to be constructed, gaps of 120mm will be left beneath fences. This will help to maintain their permanency and so the connectivity for mammals, such as Hedgehogs, to the site and the surrounding landscape.

5 LEGAL PROTECTION

This section briefly describes the legal protection afforded to the protected species referred to in this report. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation but summarises the salient points.

5.1 Badger

Badger is protected in Britain under the *Protection of Badgers Act 1992* and *Schedule 6 of the Wildlife and Countryside Act 1981* (as amended). The legislation affords protection to Badgers and Badger setts, and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

5.2 Bats

All species of British bat are protected by *The Wildlife and Countryside Act 1981* (as amended) extended by the *Countryside and Rights of Way Act 2000*. This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst it occupies a bat roost.

Bats are also listed on *Schedule 2 of the Conservation of Habitats and Species Regulations 2017* (as amended). This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats in such a way as to be likely to (a) impair their ability to: (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or b), to affect significantly the local distribution or abundance of the species to which they belong; and
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present.

Where it is necessary to carry out an action that could result in an offence under the regulations protecting bats and their roosts it is possible to apply for Mitigation Licence from Natural England (NE) or Natural Resources Wales (NRW). Three tests must be satisfied before this licence (to permit otherwise prohibited acts) can be issued:

- Regulation 55(1)(a) states that licences may be granted to “preserve public health or public safety or 55(6)(a) other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.”
- Regulation 55(2) and 55(7)(a) states that a licence may not be granted unless “there is no satisfactory alternative”.
- Regulation 55(7)(b) states that a licence, in respect of imperative reasons of overruling public interest (IROPI), cannot be issued unless the action proposed “will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range”.

5.3 Nesting Birds

All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the CRow Act.

The legislation makes it an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

Certain species of bird are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4)* and *1(5)* of the Act. The protection was extended by the CRow Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.

5.4 Great Crested Newt

Great Crested Newt is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. These species are also listed on *Schedule 2* of the *Conservation of Habitats and Species Regulations 2017 (as amended)*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRow Act).

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;

- intentionally or recklessly disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

The Great Crested Newt is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and also as a species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRow Act.

5.5 Common Reptile Species

Common Lizard, Grass Snake, Slow-worm and Adder are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the CRow Act.

Under the above legislation it is an offence to:

- intentionally or deliberately kill or injure any individual of such a species; or
- sell or attempt to sell any part of the species alive or dead.

Folio No:
Purchase Order:
Contact:
Issue Date:
Received Date:

3520-2025
TT4032/P01/MF
Turnstone Ecology Ltd
10.07.2025
03.07.2025

SureScreen Scientifics

GCN eDNA Analysis

Summary

When great crested newts (GCN), *Triturus cristatus* , inhabit a pond, they continuously release small amounts of their DNA into the environment. By collecting and analyzing water samples, we can detect these small traces of environmental DNA (eDNA) to confirm GCN habitation or establish GCN absence.

Results

Lab ID	Site Name	OS Reference	Degradation Check	Inhibition Check	Result	Positive Replicates
GCN25 9770	18 Burton Road - P1	SK 33495 05221	Pass	Pass	Negative	0/12

Matters affecting result: none

Reported by: Amy Bermudez

Approved by: Consuela Sopronyi

