



11 Newbold Road, Kirkby Mallory, Leicester, LE9 7QG
Preliminary Ecological Appraisal Report

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1. Summary

Table 1: Summary

Report Purpose	<p>With reference to the development proposals and the applicable planning policy & legislation, the scope of the present report is to:</p> <ul style="list-style-type: none"> Identify key ecological constraints associated with the project. Identify avoidance, mitigation or compensation measures likely to be required in accordance with the mitigation hierarchy. Identify any additional surveys that may be required to inform the above. Identify likely opportunities to deliver ecological enhancement.
Methodology	<p>A desk study was carried out including a study of the UK Government MAGIC¹ website for designated sites of nature conservation, Natural England licensing, and the site in the context of habitat connectivity to the surrounding landscape.</p> <p>The field survey included a UKHab Habitat survey of the site, extended to consider protected species.</p>
Key Notes	<p>Mammal paths, latrines and a mammal squeeze present considered likely attributable to Eurasian badger <i>Meles meles</i> were recorded on site. The site offered suitable habitat for a range of nesting birds, amphibians, including great crested newt <i>Triturus cristatus</i>, and reptiles.</p> <p>Buildings B1 was assessed as having moderate suitability for roosting bats.</p> <p>Droppings potentially attributable to bat were observed within the building B1.</p> <p>Barberry cotoneaster <i>Cotoneaster dammeri</i>, a Schedule 9 listed invasive species, was present on site.</p> <p>The site offered suitable habitat for commuting and foraging badger, European hedgehog <i>Erinaceus europaeus</i>, reptiles, amphibians (including great crested newt <i>Triturus cristatus</i> (GCN)), bats, and nesting birds.</p>
Conclusions	<ul style="list-style-type: none"> Recommendation 1 – Pre-commencement Badger Survey: It is recommended that a pre-works badger walkover survey is carried out to ensure that no setts have been created within a 30m radius of the works area. Recommendation 2 – The PRA survey assessed the building B1 as having moderate bat roosting suitability. With reference to best practice survey guidelines (Collins, 2023), two emergence surveys should be carried out on the building, to establish the presence/ likely absence of roosting bats. With reference to the guidelines, at least one emergence survey should be carried

¹ Multi-agency Geographic Information for the Countryside: www.magic.gov.uk.

	<p>out during the May-August bat activity season. One survey may be within September.</p> <ul style="list-style-type: none"> Recommendation 3 – DNA analysis of bat droppings: Droppings potentially attributable to bat were observed within the loft void of building B1 during the survey and a sample was collected. It is recommended that the dropping samples are sent to a laboratory to confirm bat origin and be analysed down to species level. Recommendation 4 – eDNA analysis: To further inform the impacts of the development on GCN due to the close proximity of ponds P1-P4, and the suitability of habitats on site, it is recommended that an assessment of eDNA of P1-P4 be carried out to establish the presence/likely absence of GCN. Recommendation 5 – Precautionary Methods During Works: Precautionary methods should be implemented during works to protect foraging and commuting badger, birds, amphibians, fish, white-clawed crayfish, reptiles, and other small mammals. Recommendation 6 – Construction Environmental Management Plan (CEMP): To mitigate potential significant effects to Important Ecological Features (IEFs) during the construction phase of the proposed development and with reference to Clause 10.2 of the British Standard 'BS 42020:2013 Biodiversity — Code of practice for planning and development', the works should be carried out under a Construction Environmental Management Plan (CEMP). Recommendation 7 – Artificial Lighting Mitigation: Bats are present in the wider area. Where lighting is required, this should be sympathetic to wildlife through the design of lighting observing the principles set out in guidelines from the Bat Conservation Trust (BCT) & Institution of Lighting Professionals (BCT & ILP, 2023). Recommendation 8 - Removal of Invasive Species: Due to the presence of Schedule 9 INNS on site, it is recommended that the removal of vegetation at these areas, should it be required, is carried out under the supervision of an Ecological Clerk of Works (ECoW) via inclusion in a Precautionary Working Method Statement for the site. Soils containing the plant are classified as controlled waste and should be disposed of at licensed landfill
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2. Introduction

Background

- 2.1. Elton Ecology Ltd was commissioned by Jamie Anderson Property Services Ltd to conduct a Preliminary Ecological Appraisal (PEA) of the site known as 11 Newbold Road, Kirkby Mallory, Leicester, LE9 7QG.
- 2.2. The resulting Preliminary Ecological Appraisal Report (PEAR) has been prepared by Assistant Ecologist HIT BA (Hons), MSc. HIT is trained and competent in assisting with ecology surveys, report writing and QGIS.

Site Description

- 2.3. The site comprises a two-storey residential dwelling with associated hard landscaping, a garden of modified grassland with areas of tall forbs and vegetated garden, bordered by hedgerows, stone walls and wooden fencing. The site is located at 11 Newbold Road, Kirkby Mallory, Leicester, LE9 7QG. (Figure 1: Site Location Plan) (central OS grid reference: SK 45282 01511).

Development Proposals

- 2.4. The development proposals include the erection of a replace self-build dwelling and detached garage.
- 2.5. Relevant documents used to inform the assessment include:
 - Location Plan (Drawing No. 209-04) (Design Three Sixty, 07/04/2025).
 - Block Plan (Drawing No. 209-03) (Design Three Sixty, 07/04/2025).

Report Purpose and Scope

- 2.6. With reference to the Development Proposals, the purpose and scope of the present report is to:
 - Identify key ecological constraints associated with the project.
 - Identify avoidance, mitigation or compensation measures likely to be required in accordance with the mitigation hierarchy.
 - Identify any additional surveys that may be required to inform the above.
 - Identify likely opportunities to deliver ecological enhancement.

Planning Policy and Legislation

- 2.7. A summary of biodiversity planning policies and wildlife legislation relevant to the site is provided in Appendix 1: Planning Policy and Legislation Summary. The relevant planning policy and legislation includes:
 - National Planning Policy Framework (NPPF) 2024.
 - Government Circular ODPM 06/05 Biodiversity and Geological Conservation.
 - The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
 - The Wildlife and Countryside Act 1981 (as amended).

- Natural Environment and Rural Communities (NERC) Act 2006 – Habitats and species of principal importance.
- The Hedgerow Regulations 1997;
- Protection of Badgers Act 1992; and
- The Wild Mammals (Protection) Act 1996 (as amended).

2.8. The site is covered by the Leicester, Leicestershire and Rutland Biodiversity Action Plan (BAP), which includes:

- Bats
- Redstart
- Sand Martin
- Swifts, swallow and house martin

3. Methodology

Assessment

- 3.1. The present assessment has been carried out with reference to best practice guidelines for Preliminary Ecological Appraisal provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017).

Personnel

- 3.2. The Extended UKHab Survey and Preliminary Roost Assessment (PRA) was carried out by Ecologist EKJ BSc (Hons), accredited agent on Natural England Bat Licence Reference Number: 2018-33647-CLS-CLS. EKJ is a Qualifying member of CIEEM and is experienced in undertaking ecology surveys, GIS mapping, and report writing. EKJ has received a provisional result of a Level 3 Field Identification Skills Certificate (FISC).
- 3.3. The Extended UKHab Survey and Preliminary Roost Assessment (PRA) was assisted by Assistant Ecologist HIT BA (Hons), MSc. See introduction section for relevant training and competencies.
- 3.4. The quality assurance of the present report was undertaken by Consultant Ecologist EAM BSc (Hons), MSc. EAM is a Qualifying member of CIEEM, has attended formal training in UKHab survey and Biodiversity Net Gain, and is experienced in assisting and undertaking ecology surveys, GIS mapping, and report writing. EAM holds a preliminary Level 3 Botanical Society of Britain and Ireland (BSBI) Field Identification Skills Certificate.
- 3.5. The final review of the present report was undertaken by Senior Ecologist PMH BSc (Hons), MSc ACIEEM. PMH holds a Natural England Level 1 Bat Licence (CL17) (reference number: 2021-54491-CLS-CLS) and a Natural England Level 1 Great Crested Newt Licence (CL08) (reference number: 2022-10461-CL08-GCN) and a preliminary botanical Field Identification Skills Certificate (FISC) Level 4. PMH has attended formal training in UKHab survey, Biodiversity Net Gain, and botanical species identification. PMH is an Associate member of CIEEM and is experienced in assisting and undertaking ecology surveys, GIS mapping, and report writing.

Desk Study

- 3.6. The sources of information and study areas of the desk study data are provided in Table 2.

Table 2: Desk study sources and areas

Feature		Study Area	Data Source	Date of Search
Designated sites of nature conservation	International (e.g. Special Area of Conservation, Special Protection Area, and Ramsar)	10 km radius of the site boundary	UK Government MAGIC ² website	07/10/2025
	National (e.g. Site of Special Scientific Interest (SSSI), SSSI Impact Risk Zones (SSSI IRZ)), Local Nature Reserves,	5 km radius of the site boundary		

² Multi-agency Geographic Information for the Countryside: www.magic.gov.uk.

Feature		Study Area	Data Source	Date of Search
	National Nature Reserves			
Non-Statutory Designated Sites, Protected/ Notable Species & Invasive Non-Native Species		1km radius of the centre of the site	Leicestershire and Rutland Environmental Records Centre	
Granted Natural England Mitigation Licences		2 km radius of the site boundary	UK Government MAGIC website	
Natural England Ancient Woodland Inventory		Site & 1 km radius of the site boundary		
Natural England Priority Habitat Inventory		Site & 1 km radius of the site boundary		
The site in the context of habitat connectivity to the surrounding landscape		2 km radius of the site boundary	Satellite and OS map data	
Relevant ecological information used to inform other planning applications		Site & surrounding area	LPA planning portal – Hinckley and Bosworth Borough Council	

Field Survey

UKHab Habitat Survey

- 3.7. The Extended UKHab Habitat survey was carried out on the 8th October 2025 and was extended to include an assessment for Natural Environment and Rural Communities Act (2006) Section 41 Habitats of Principal Importance (HPI) and of the sites potential to be used by protected or notable species as described below. The study area included the site boundary and a 30m radius for evidence of mobile protected species such as badger, access permitting. Weather conditions were appropriate for field survey with temperatures of 14°C, no rain, and good visibility.
- 3.8. The site was walked over, and botanical species lists of representative and notable plant species for each habitat type were recorded. Habitats were classified and mapped with reference to best practice guidelines from UKHab Ltd (2023). The nomenclature used for botanical species lists broadly follows that of Stace (2019). Protected or notable plant species were recorded where observed.

Hedgerow Survey

- 3.9. During the Extended UKHab Habitat Survey, notes were made on features of the hedgerow such as height and width, ground flora, standard trees, percentage gaps, structure, and connectivity.
- 3.10. A hedgerow is defined as a boundary line of shrubs, provided that at one time the shrubs were stock proof and more or less continuous. Any bank, wall, ditch, or tree within 2m of the centre of the hedgerow is considered to be part of this habitat, as is the herbaceous vegetation within 2m of the centre.

Amphibians (Including Great Crested Newt)

- 3.11. The habitats at the site were assessed for their suitability to support amphibians, including a search of the site for ponds and suitable terrestrial habitat. The desk study included a search of ponds within a 250m radius of the site.
- 3.12. The HSI was carried out with reference to Oldham *et al.* (2000), and as refined by ARG UK, (2010). The HSI provides a numerical index between 0 and 1, whereby 0 indicates unsuitable habitat and 1 indicates optimal habitat. Ten habitat variables 'Suitability Indices (SI)' are assessed, which are known to affect the suitability of a pond for the species, as follows:
- Geographic Location (SI₁)
 - Pond area (SI₂)
 - Permanence (SI₃)
 - Water Quality (SI₄)
 - Shade (SI₅)
 - Waterfowl (SI₆)
 - Fish (SI₇)
 - Pond Count (SI₈)
 - Terrestrial habitat (SI₉)
 - Macrophytes (SI₁₀)
- 3.13. The habitat variables are each assigned a numerical score. The HSI score is then a geometric mean of the ten suitability indices: $HSI = (SI_1 \times SI_2 \times SI_3 \times SI_4 \times SI_5 \times SI_6 \times SI_7 \times SI_8 \times SI_9 \times SI_{10})^{1/10}$
- 3.14. The HSI score result (i.e. the numerical index between 0 and 1) is categorised according to the pond suitability scale presented in Table 3.

Table 3: Pond Suitability Scale for Habitat Suitability Index (HSI)

HSI Score	Pond Suitability
<0.5	Poor
0.5-0.59	Below Average
0.6-0.69	Average
0.7-0.79	Good
>0.8	Excellent

- 3.15. There is a general positive correlation between HSI scores and GCN presence. HSI scores are useful as a guide, however this relationship is not sufficiently strong to determine GCN presence/ likely absence.

Badger

- 3.16. The badger walkover survey included a search for evidence of badger at the site, such as sett entrances (normally 25 to 35cm wide and shaped like a 'D' on its flat edge), large spoil heaps outside sett entrances, bedding, footprints, mammal paths, latrines, hairs, scratching posts, and signs of digging for food or 'snuffle holes'. The survey included a search of the site and 30m radius (access permitting) for badger setts.

Bats – Ground Level Tree Assessment

- 3.17. The preliminary Ground Level Tree Assessment (GLTA) was carried out with reference to best practice industry guidelines (Collins, 2023). The study area included all trees within the survey area.

- 3.18. The survey included a surveyor assessing the tree(s) from ground level aided by binoculars, noting potential bat entry/exit points, potential roosting features (PRFs), and any evidence of bats. The trees were graded for their suitability to support roosting bats, which will inform the need for further survey effort, if required, such as a potential roost feature (PRF) inspection via rope and harness access and/or nocturnal survey.
- 3.19. The suitability of the trees for roosting bats was then categorised with reference to best practice industry guidelines (Collins, 2023) (Table 4) as either none, further assessment required (FAR), potential roosting features present for individual bats (PRF-I), or potential roosting features present for multiple bats (PRF-M), which informs the need for further survey effort to establish the presence/ likely absence of roosting bats.

Table 4: Guidelines for Assessing the Potential Bat Roosting Suitability of Trees (Adapted from Collins, (2023))

Suitability	Description of Trees
None	No features likely to be used by roosting bats or highly unlikely features are present. An absence of accessible voids, cracks and crevices.
FAR	Further assessment is required to determine if features likely to be used by roosting bats are present.
PRF-I	The PRF is suitable for individual or small numbers of bats due to lack of size or suitable surrounding landscape.
PRF-M	The PRF is suitable for multiple bats and may be used by a maternity colony.

Bats - Preliminary Roost Assessment

- 3.20. The Preliminary Roost Assessment (PRA) was carried out on the 8th October 2025 with reference to best practice guidelines (Collins, 2023).
- 3.21. The survey involved a Natural England bat licenced surveyor making a detailed external and internal inspection of the building(s) on-site, compiling information on potential bat entry/exit points, roosting features, and any evidence of bats found (such as actual bat sightings, droppings, urine staining and fur-oil staining). The nomenclature used for bat species lists broadly follows that of Dietz and Kiefer (2018).
- 3.22. The PRA was aided as required by binoculars, a high-powered torch, and an endoscope to view features on the building and/ or search accessible cracks and crevices for the presence of bats where required.
- 3.23. The suitability of the building(s) for roosting bats was categorised with reference to best practice industry guidelines (Collins, 2023) (Table 5: Guidelines for Assessing the Potential Bat Roosting Suitability of Structures and Trees) as either negligible, low, moderate, or high. Suitability grading of buildings requires consideration of the potential roosting features on the building within the context of the suitability of the surrounding landscape to support commuting and foraging bats.

Table 5: Guidelines for Assessing the Potential Bat Suitability of Structures and Habitats (Adapted from Collins, (2023))

Suitability	Description of Roosting Habitats	Commuting and Foraging Habitats
Negligible	Negligible features likely to be used by roosting bats. An absence of accessible voids, cracks and crevices.	Negligible features likely to be used by commuting or foraging bats. A lack of landscape habitat features.
Low	A structure or tree with a potential roost site which could be used by individual bats, which does not provide enough space, shelter, protection, or appropriate conditions (i.e. temperature, humidity, height above ground level, light levels, disturbance) or suitable surrounding habitat to be used on a regular basis by larger numbers of bats.	Habitat that could be used by small numbers of commuting bats such as a hedgerow with gaps or unvegetated stream, but isolated (i.e. not very well connected to the surrounding landscape by habitat). Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with a potential roost site that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but is unlikely to support a roost of high conservation status (such as a maternity colony).	Continuous habitat connected to the wider landscape that could be used by commuting bats such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are 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.	Continuous high-quality habitat that is well connected to the wider landscape likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees, and woodland edge. Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Sites which are close to and connected to known roosts.

Bats – Commuting and Foraging

- 3.24. With reference to Table 5, an assessment of the habitats at the site to support commuting and foraging bats was made, within the context of habitat connectivity to features in the wider landscape. The site was assessed as either negligible, low, moderate, or high suitability for commuting and foraging bats.

Nesting Birds

- 3.25. An assessment of the habitats on site to support nesting birds was made, and the site was searched where accessible for active or historical bird nests. Any sightings of bird nesting behaviour associated with the site was also noted.

Hazel Dormouse

- 3.26. An assessment of the suitability of the habitats at the site to support hazel dormouse was made with reference to *Bullion et al. (2025)*

Terrestrial Invertebrates

- 3.27. An assessment was made of the suitability of the habitats at the site to support notable assemblages of invertebrates, such as vegetation structure, vegetation species diversity, deadwood, and host plants/ animals.

Reptiles

- 3.28. An assessment was made of the suitability of the habitats at the site for reptiles. Optimal habitat for reptiles includes rough grassland, moorland, heathland, woodland and scrub, sub-urban areas such as railway embankments, golf courses and allotments, and sympathetically managed farmland. Favourable features for reptiles include sunny south facing banks for basking, ecotones such as the transition between grassland and scrub, and hibernacula such as stone, log, and brash piles.

Otter

- 3.29. An assessment of the habitats at the site to support otter *Lutra lutra* was made, and a search for evidence of otter carried out with reference to Chanin (2003a), Chanin (2003b) and Chanin (2005). Water Vole
- 3.30. With reference to Dean *et al.* (2016), Strachan *et al.* (2011), and Natural England (2008) an initial assessment of the habitats at site was carried out for the suitability to support water vole *Arvicola amphibius* during the Extended UKHab Habitat Survey.

Fish

- 3.31. An initial assessment of the habitats at site was carried out for the suitability to support notable fish species during the Extended UKHab Habitat Survey, such as presence of suitable watercourses and waterbodies.
- 3.32. An assessment of the suitability of the pond habitat for fish was made, including:
- Flow type
 - Water depth and permanence
 - Substrate diversity and the presence of substrate for spawning
 - Cover and refuge (in-stream and marginal vegetation)
 - Evidence of pollution or other degradation
 - Barriers to migration

Aquatic Invertebrates (including White-clawed Crayfish)

- 3.33. With reference to Peay (2002), Peay (2003), and Holdich (2003) an initial assessment of the suitability of habitats present at the site to support white clawed crayfish *Austropotamobius pallipes* was undertaken during the Extended UKHab Habitat Survey and Desk Study, including making observations on favourable and unfavourable habitat conditions for white clawed crayfish (see Table 6).

Table 6: Favourable and Unfavourable Habitat Features for White-Clawed Crayfish (adapted from Peay (2002))

Favourable	Unfavourable
Water quality <ul style="list-style-type: none"> • High pH (preferably 6.8-8.6). • Base-rich/alkaline (usually >5ppm Ca). • Well aerated, dissolved oxygen >60% saturated (90 percentile), usually higher. • Unpolluted or largely so; may be slight nutrient enrichment from organic pollution (Grade A to C only). 	Water quality <ul style="list-style-type: none"> • low pH <pH6.0, base-poor, low alkalinity. • subject to acid pulses from moorland runoff. • Dissolved oxygen <60% saturated (90 percentile). • Ochreous drainage from peatland drainage or mine water. • Brackish or saline conditions. • Pollution from sheep dips or other polluting discharges.
Flow <ul style="list-style-type: none"> • Slow-flowing glides (including canals). • Sheltered parts of riffles, 	Flow <ul style="list-style-type: none"> • Falls and cascades. • Fast riffles.

<ul style="list-style-type: none"> Slack margins, pools, on-stream ponds. Still waterbodies (lakes, old mineral workings). 	<ul style="list-style-type: none"> Flumes (e.g. in culverts). Other strong currents.
Habitat – substrate <ul style="list-style-type: none"> suitable habitat for refuges, i.e; Submerged Stones, tree roots, wood debris, undercut banks big enough for the size of crayfish (strongly prefer boulders >25cm, usually over 15 cm in size, rarely <64mm); stable (i.e. less likely to be moved in floods); free of siltation, aerated and in suitable condition Boulders and large cobble, especially if relatively flat, with cavities beneath. Cobble and boulder riffles in chalk or gravel streams. Brick and other rubble in streams and still waterbodies. Submerged, un-mortared stone which protects banks from erosion; facing walls or rip-rap stone reinforcement. Small stone weirs/flow deflectors. Crevices in old or damaged, submerged brickwork, stonework, cracked concrete, or old wooden structures. Undercut earth banks or steep to vertical submerged banks. 	Habitat – substrate <ul style="list-style-type: none"> Bare sand, gravel, pebble or un-fissured bedrock (unfavourable for refuges) Uniform clay channels. Pebble or cobble shingle regularly exposed by changing river levels. Gabion baskets filled with pebble-sized stone (<6cm), for bank reinforcement. Areas of armoured bed where the substrate is compacted by the flow. Soft silt, especially loosely settled organic fines. Steel sheet-piling or concrete walls for bank reinforcement. Sloping banks without any vertical or undercut areas below water level. a lot of small stone (small cobble and pebble). Isolated refuges
Habitat – plant material <ul style="list-style-type: none"> Submerged tree roots. Overhanging trees or branches. Debris dams. Leaf packs. Stands of submerged aquatic plants (if not too dense), e.g. aquatic mosses, water crowfoot. Bank reinforcement by faggots (bundles of small woody material), or woven willow (like basket-weave, but may be growing). 	Habitat – plant material <ul style="list-style-type: none"> Dense, filamentous algae. Regularly exposed marginal vegetation. Dense, silted up stands of emergent vegetation leading to loss of open water.
Food supply <ul style="list-style-type: none"> leaf litter from trees and other plants, after it has soaked for several days; aquatic macrophytes, including filamentous algae; any aquatic invertebrates slow enough to be caught; other crayfish; dead fish or other animal remains, and small live fish (occasionally). 	Barriers to dispersal such as: <ul style="list-style-type: none"> a major weir, dam or waterfall; a length of highly modified channel lacking in suitable habitat; a fast-flowing flume or culvert; a dried-up section of channel, or poor water quality in a reach.
	Alien Crayfish <ul style="list-style-type: none"> competition from alien crayfish. disease carried by alien crayfish.

Other Mammals

- 3.34. An assessment of the site to support other mammals including brown hare *Lepus europaeus*, harvest mouse *Micromys minutus*, and hedgehog was also made.

Invasive Species

- 3.35. Invasive plant species such as those listed on Schedule 9 of the Wildlife and Countryside Act 1981 (As Amended) were recorded where encountered during the UKHab Habitat survey.

Limitations

- 3.36. It must be noted that survey effort has been made to provide detailed descriptions of the site within the context of potential usage by protected species, however a fully comprehensive assessment and prediction of natural factors cannot be made. The protected species assessment provides a professional view of the likelihood of such species being present and cannot be taken as a definitive presence or absence of the same. Systematic presence/ likely absence surveys for such species, which typically require multiple survey visits, have not been undertaken and are outside of the scope of Preliminary Ecological Appraisal. Such surveys are recommended in the present report if considered proportionate to the potential ecological impacts of the development proposals.
- 3.37. A full search of crevices and cavities on buildings typically cannot be made without specialist access equipment and in most cases intrusive works, and therefore accessible areas only have been searched for evidence of protected species and a negative result of evidence does not conclusively equate to absence of such species which may occupy inaccessible crevices on the building. However, provided any recommended nocturnal emergence/ re-entry bat survey(s) are undertaken, this is not considered a significant limitation to assessing the presence/ likely absence of roosting bats at the site.
- 3.38. Third party desk study data is not exhaustive, and an absence or a negative result of a species does not indicate the absence of protected species from the site/ search area.
- 3.39. The UKHab Habitat survey was undertaken outside of the optimal survey period of April to October. However, species identification of plants present outside of the optimal period is typically still possible based on the vegetative characteristics. Where additional surveys during the optimal period are required to assess the habitat type present, these are recommended.
- 3.40. Access to the loft void was limited due to health and safety concerns. Survey of the loft was, therefore, limited to being conducted using a high-powered torch from the loft hatch. Time accessing the loft hatch was also limited due to the presence of a wasp nest. Due to the recommendation for further surveys, this limitation is not considered significant.
- 3.41. All dimensions, locations and distances provided are approximate.

4. Results

Desk Study

Surrounding Landscape

- 4.1. The surrounding landscape is primarily rural (Figure 2: Surrounding Landscape Plan).
- 4.2. Habitat features favourable to ecology in the wider landscape include nearby tree lined watercourses, woodland blocks, arable and pasture grazed fields linked to further favourable habitat in the surrounding landscape via hedgerows and treelines.
- 4.3. Landscape features which may limit habitat quality and connectivity included areas of hardstanding and artificial lighting associated with the residential setting of Kirkby Mallory to the south of the site..

Statutory Designated Sites

- 4.4. The site does not form part of an international or national designated site for nature conservation.
- 4.5. A summary of designated sites identified via the desk study are presented in Table 7 below.

Table 7: Summary of Statutory Designated Sites

Site Name	Designation	Description/ Reasons Designation	Main for	Distance & Direction from Site
Botcheston Bog	SSSI	Area of marshy grassland representative of grazed marsh communities on peaty soils.		4.5km northeast.

- 4.6. The site lies within a Site of Special Scientific Interest Impact Risk Zone (SSSI IRZ), requiring the Local Planning Authority to consult with Natural England on any risks which may affect the SSSI sites as a result of certain development types. However, the current development type is not listed in the SSSI IRZ citation as requiring consultation.

Non-Statutory Designated Sites

- 4.7. The site does not form part of a non-statutory designated site for nature conservation.
- 4.8. A summary of non-statutory designated sites identified via the desk study are presented in Table 8 below.

Table 8: Summary of Non-Statutory Designated Sites

Site Name	Designation	Description/ Reasons Designation	Main for	Distance & Direction from Site
Kirkby Mallory, Green Spinney, Ashpole Spinney and fishpond.	Historic Local Wildlife Site (LWS)	Woodland and standing open water..		0.08km north.
Kirkby Mallory, Little Moats Grassland and Hedgerow	LWS	Mesotrophic grassland and hedgerows.		0.1km northeast.
Kirkby Mallory, Little Moats Hedgerow	LWS	Hedgerow		0.25km northeast.
Fox Covert/Jubilee Plantation, Kirkby Mallory	LWS	Broadleaved woodland.		0.3km northwest.
Newbold Road hedgerow	LWS	Hedgerow		0.4km north.
Bosworth Road hedgerows, Kirkby Mallory	LWS	Hedgerows		0.5km southwest.
Desford Lane hedgerow, Kirkby Mallory	LWS	Hedgerow		0.6km southeast.
Marsh off Desford Lane, Kirkby Mallory	LWS	Wet grassland and scattered scrub		0.7km southeast.
Beech Spinney	Historic LWS	Woodland		0.7km north.
Desford Lane Ash, Kirkby Mallory	LWS	Mature ash tree		0.7km southeast.
Stapleton Lane hedgerows, tree & grassland	LWS	Hedgerows, mature ash tree and mesotrophic grassland		0.7km southwest.
Kirkby Mallory Race Circuit Pond (N)	LWS	Pond habitat		0.8km southwest.
Kirkby Mallory, Brook west of Kirkby Moats	Historic LWS	Small river or stream		0.8km northeast.
Peckleton Rd/Kirkby Lane hedgerows	LWS	Hedgerows		0.9km southeast.

Site Name	Designation	Description/ Reasons Designation	Main for	Distance & Direction from Site
Brascote and Fox Coverts and associated grassland	LWS	Woodland		0.9km northwest.

Priority Habitats and Ancient Woodland

- 4.9. No priority habitats were noted on site via the desk study.
- 4.10. Areas of ancient woodland were identified within the search radius via the desk study. The closest record related to an ancient & semi-improved woodland 0.15km southwest of the site.
- 4.11. A summary of priority habitats identified via the desk study are presented in Table 9 below.

Table 9: Summary of Priority Habitats

Habitat type	Distance & Direction of Closest Priority Habitat Type from Site
Ancient & semi- improved woodland	0.15km southwest
Deciduous Woodland	0.25km southwest.

Relevant Ecological Information Used to Inform Other Planning Applications

- 4.12. A summary of relevant ecological information identified via the desk study is presented in Table 10 below.

Table 10: Summary of Relevant Ecological Information

Ecological Information	Summary
Planning Reference Number: 23/00240/FUL Preliminary Ecological Appraisal Report (C.B.E Consulting, March 2023).	A Preliminary Ecological Appraisal Report highlighted the potential effect of a development on nesting birds, amphibians, reptiles and hedgehogs at a site approximately 0.3km north of the survey site relating to the present report.
Planning Reference Number: 22/00952/FUL Ecology Comments (sent via email, August, 2023).	Evidence of a bat roost was recorded in the form of 20 droppings of an unknown species at a location approximately 0.3km north of the survey site relating to the present report.

<p>Planning Reference Number: 22/00932/DISCON</p> <p>Bat Mitigation Strategy (Rothen Ecology, July 2021).</p>	<p>Report details bat mitigation strategy for the presence of a day roost for common pipistrelle recorded via emergence in the 2018 bat survey season at a location approximately 0.2 km northeast of the survey site relating to the present report.</p>
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Field Survey

UKHab Habitat Survey

- 4.13. The habitats recorded at the survey site during the UKHab Habitat survey are presented in Table 11 and mapped on Figure 3: UKHab Habitat Plan.

Table 11: UKHab Habitat Assessment Results

UKHab Primary Code	Habitat Type	UKHab Secondary Code	Description	(NERC) Act 2006 HPI*	Habitat of Local Importance	Photograph Ref No. (Appendix 2: Photographs)
g4	Modified Grassland	16 – tall forbs	The majority of the site comprised long sward modified grassland with areas of tall forbs comprising locally abundant bent <i>Agrostis sp.</i> and common nettle <i>Urtica dioica</i> , locally dominant perennial ryegrass <i>Lolium perenne</i> , frequent Yorkshire fog <i>Holcus lanatus</i> , yarrow <i>Achillea millefolium</i> , dandelion <i>Taraxacum officinale</i> , occasional annual meadow grass <i>Poa annua</i> , false oat grass <i>Arrhenatherum elatius</i> , rarely present self-heal <i>Prunella vulgaris</i> , fat hen <i>Chenopodium album</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , oxeye daisy <i>Leucanthemum vulgare</i> , spurge <i>Euphorbiaceae sp.</i> , wood avens <i>Geum urbanum</i> , forget me not <i>Myosotis sp.</i> , red dead nettle <i>Lamium purpureum</i> , a monocot species <i>Monocots sp.</i> , ribwort plantain <i>Plantago lanceolata</i> , ragwort <i>Jacobaea vulgaris</i> , red campion <i>Silene dioica</i> , mullein <i>Verbascum Thapsus</i> , apple tree <i>Malus sp.</i> and apple tree sapling.	No	No	1
g	Grassland	16 – tall forbs	Two areas of tall forbs were present on site. A large area was present in the west of the site comprising abundant garlic mustard <i>Alliaria petiolata</i> and common nettle, locally abundant spear thistle <i>Cirsium vulgare</i> , occasional mugwort <i>Artemisia vulgaris</i> , oxeye daisy, red campion, creeping cinquefoil <i>Potentilla reptans</i> , creeping thistle <i>Cirsium arvense</i> , weld <i>Reseda luteola</i> , and rarely present teasel <i>Dipsacus sp.</i> A further smaller area of tall forbs was present in the north of the survey site comprising abundant mugwort, occasional creeping thistle, sycamore saplings <i>Acer pseudoplatanus</i> , bramble <i>Rubus sp.</i> , snowberry <i>Symphoricarpos sp.</i> , common nettle, ragwort, and rarely present oxeye daisy.	No	No	2, 3
u1	Built-up areas and gardens	828 - Vegetated Garden	An area of vegetated garden was present in the northeast of the survey site comprising locally abundant common nettle, Winter barberry <i>Berberis julianae</i> , occasional orpine <i>Hylotelephium telephium</i> , bearberry cotoneaster, red campion, oxeye daisy, bramble, rarely present rose of Sharon <i>Hibiscus syriacus</i> , spear thistle and Adam's needle <i>Yucca filamentosa</i> .	No	No	4
u1b6	Other developed land		Hard standing in the form of a concrete driveway and concrete paving was present in the north of the survey site.	No	No	5, 6
h2a6	Other native hedgerow		One other native hedgerow was present on site. For full details, see Table 12: Hedgerow Survey Results.	Yes	Yes	7
h2b	Non-native and ornamental hedgerow		Two non-native and ornamental hedgerows were present on site. For full details, see Table 12: Hedgerow Survey Results.	No	No	8, 9
u1b5	Buildings		One building was present on site. For full details, see Table 14: Preliminary Roost Assessment.	No	No	10, 11
u1	Built-up areas and gardens	845 – ground level planters	A wooden fenced planter was present in the front garden north of the survey site, dominated by columbine <i>Aquilegia sp.</i>	No	No	12
g	Grassland	200 – tree	Eighteen rural trees were present on site. Five were identified as silver birch <i>Salix caprea</i> , Norway spruce <i>Picea abies</i> , monkey puzzle <i>Araucaria araucana</i> , and goat willow <i>Salix caprea</i> with the remaining thirteen unidentifiable as only short tree stumps remained.	No	No	13-18
u1e	Built linear features	853 – mortared wall	A concrete breeze block wall was present in the north of the survey site.	No	No	19
u1e	Built linear features	612 – fence	Post and wire fencing was present on site and formed the survey site's southern boundary.	No	No	20

*Natural Environment and Rural Communities Act (2006) Section 41 Habitat of Principal Importance (HPI). As defined with reference to habitat descriptions provided in Maddock, A. (ed) (2011).

Hedgerow Survey

4.14. The results of the hedgerow survey are provided in Table 12.

Table 12: Hedgerow Survey Results

Hedgerow number**	Description	UKHab Code	NERC Act HPI*	Photograph Ref No. (Appendix 2: Photographs)
H1	Hedgerow H1 related to the other native hedgerow at the east boundary of the survey site and was approximately 56m in length, 2m in height and 1.5m in width. Hedgerow species included dominant hawthorn <i>Crataegus sp.</i> , with rarely present cypress <i>Cupressus sp.</i> The ground flora included abundant common nettle, occasional cleavers <i>Galium aparine</i> , cow parsley <i>Anthriscus sylvestris</i> , ivy <i>Hedera sp.</i> and yarrow.	h2a6	Yes	7
H2	Hedgerow H2 related to the non-native and ornamental hedgerow at the west boundary of the survey site and was approximately 47m in length, 2m in height and 2m in width. Hedgerow species included dominant cypress with no ground flora present.	h2b	No	8
H3	Hedgerow H3 related to the non-native and ornamental hedgerow at the south boundary of the survey site and was approximately 18m in length, 3m in height and 2m in width. Hedgerow species included 2 adjoined rows of cypress trees with no ground flora present.	h2b	No	9

**See Figure 3: UKHab Habitat Plan for hedgerow reference numbers.

Protected/ Notable Species

4.15. The results of the protected/ notable species assessment undertaken during the Extended UKHab Habitat Survey are provided in Table 13 overleaf.

4.16. A summary of desk study results is also provided in Table 13. Additional species records were returned by the LERC within the search radius, which are considered unlikely to be impacted by the proposed development and are therefore not included. These include species for which there is no suitable habitat present on site or the surrounding area.

Table 13: Protected/ Notable Species Assessment

Species/ Species Group	Desk Study	Evidence Observed During Extended UKHab Habitat Survey	Suitability of Habitats Present
Amphibians (including great crested newt)	<p>No records of previous granted mitigation licences relating to GCN were noted within a 2km radius of the survey site via the desk study.</p> <p>No records of Great Crested Newt Class Survey Licence Returns or Great Crested Newt Pond Surveys 2017-2019 were noted within a 2km radius of the survey site via the desk study.</p> <p>No records of GCN were returned within a 1km radius of the survey site via the LERC data.</p> <p>4 records of other amphibian species were returned within a 1km radius of the survey site via the LERC data including common frog <i>Rana temporaria</i>, common toad <i>Bufo bufo</i> and smooth newt <i>Lissotriton vulgaris</i>. The closest record related to the presence of common frog and common toad at a location approximately 0.8km southeast of the survey site, dated 2023.</p>	No evidence observed.	<p>No ponds were identified as present within the boundary of the survey site during the site walkover.</p> <p>During the desk study four ponds were identified as present within a 250m radius of the survey site. With reference to Figure 4: Pond Plan, the closest pond, Pond P1 was located approximately 0.01km north of the survey site. The next closest pond, Pond P2, was located approximately 0.035km west of the survey site. The next closest pond, Pond P3, was located approximately 0.2km west of the survey site. The furthest pond, Pond P4, was located approximately 0.25km northwest of the survey site.</p> <p>Ponds P2-P4 were not accessed at the time of survey due to being located on private property and were therefore not subject to a HSI assessment.</p> <p>See Table 15 for a summary of Habitat Suitability Index Results relating to Pond P1.</p> <p>The unmanaged long sward height modified grassland, tall forbs, and hedgerow bases) offered suitable terrestrial habitat for amphibians (including great crested newt).</p> <p>The log piles located at target note TN1 (Figure 3: UKHab Habitat Plan, Appendix 2: Photographs, Photo 25) offered suitable hibernacula habitat for amphibians.</p>
Badger	5 records of badger <i>Meles meles</i> were returned within a 1km radius of the survey site via the LERC data. The closest record related to a badger sett at a location approximately 0.9km southwest of the survey site, dated 2009.	<p>Badger latrines were observed throughout the southeast corner of the survey site, located at target note TN2 (Figure 3: UKHab Habitat Plan) (Appendix 2: Photographs, Photo 21).</p> <p>A mammal squeeze potentially attributable to badger was observed under the post and wire fencing associated with Hedgerow H1 in the southeast corner of the survey site (Appendix 2: Photographs, Photo 22).</p> <p>Mammal paths potentially attributable to badger were observed under Hedgerow H1 in the southeast corner of the survey site (Appendix 2: Photographs, Photo 23).</p>	The unmanaged long sward height modified grassland, tall forbs and hedgerow bases offered suitable habitat for commuting and foraging badger.
Bats – GLTA	No records of previous granted mitigation licences relating to bats were noted within a 2km radius of the survey site via the desk study.	No evidence observed.	No trees with bat roosting features were recorded on site during the GLTA.
Bats - PRA		Approximately five droppings likely attributable to bats were found in the loft void of building B1.	One building was present on site. For full details of the Preliminary Roost Assessment, see Table 14.
Bats – commuting and foraging		No evidence observed.	The site was assessed as having high suitability for commuting and foraging bats with hedgerows on site, an immediately adjacent treelined watercourse, nearby woodland blocks with direct connectivity to further suitable habitat in the surrounding landscape through further hedgerows and treelines.
	26 records of bats were returned within a 1km radius of the survey site via the LERC data. The closest record related to a record of 20 droppings resembling a pipistrelle species and 3 records of individual common pipistrelles <i>Pipistrellus pipistrellus</i> at a location approximately 0.1km northeast of the survey site, dated 2018.		
	Other bat species recorded within a 1km radius of the survey site via the LERC data included an		

	unidentified bat species, brown long-eared bat <i>Plecotus auritus</i> , Leisler's bat <i>Nyctalus leisleri</i> , a Myotis bat species <i>Myotis sp.</i> , noctule <i>Nyctalus noctula</i> , soprano pipistrelle <i>Pipistrellus pygmaeus</i> and whiskered bat <i>Myotis mystacinus</i> .		
Birds	<p>128 records of birds were returned within a 1km radius of the survey site via the LERC data. The closest record related to the presence of house sparrow <i>Passer domesticus</i>, dunnock <i>Prunella modularis</i> and song thrush <i>Turdus philomelos</i> at a location approximately 0.65km southwest of the survey site, dated 2014.</p> <p>Bird species present within a 1km radius of the survey site included included RSPB/BTO Birds of Conservation Concern Amber and Red listed and species listed as Wildlife & Countryside Act 1981 Schedule 1.1.</p> <p>Species present within a 1km radius of the survey site included barn owl <i>Tyto alba</i>, bullfinch <i>Pyrrhula pyrrhula</i>, Canada goose <i>Branta canadensis</i>, curlew <i>Numenius sp.</i>, dunnock <i>Prunella modularis</i>, fieldfare <i>Turdus pilaris</i>, green sandpiper <i>Tringa ochropus</i>, greylag goose <i>Anser anser</i>, herring gull <i>Larus argentatus</i>, hobby <i>Falco subbuteo</i>, house martin <i>Delichon urbicum</i>, house sparrow <i>Passer domesticus</i>, lapwing <i>Vanellus vanellus</i>, linnet <i>Linaria cannabina</i>, little ringed plover <i>Charadrius dubius</i>, osprey <i>Pandion haliaetus</i>, peregrine <i>Falco peregrinus</i>, red kite <i>Milvus milvus</i>, redwing <i>Turdus iliacus</i>, ring ouzel <i>Turdus torquatus</i>, sand martin <i>Riparia riparia</i>, skylark <i>Alauda arvensis</i>, song thrush <i>Turdus philomelos</i>, starling <i>Sturnus vulgaris</i>, swift <i>Apus apus</i> and yellow wagtail <i>Motacilla flava</i>.</p>	No evidence observed.	The building and the hedgerows on site offered suitable habitat for a range of nesting birds.
Hazel dormouse	This site is not located within the known distribution area for hazel dormouse. This species is therefore not considered further.		
Fish	No records of fish were returned within a 1km radius of the survey site via the LERC data.	No evidence observed.	Pond P1, immediately adjacent to the site's northern boundary, offered suitable habitat for fish .
Terrestrial invertebrates	<p>4 records of terrestrial invertebrates were returned within a 1km radius of the survey site via the LERC data. The closest record related to the presence of harlequin ladybird <i>Harmonia axyridis</i> at a location approximately 0.8km south of the survey site, dated 2023.</p> <p>Other terrestrial invertebrates recorded within a 1km radius of the survey site via the LERC desk study included shaded broad-bar <i>Scotopteryx chenopodiata</i>, small heath <i>Coenonympha pamphilus</i> and white-letter hairstreak <i>Satyrrium w-album</i>.</p>	No evidence observed.	The site offered common or widespread habitats that were considered unlikely to support notable invertebrate populations.

Reptiles	One record of reptiles was returned within a 1km radius of the survey site via the LERC data. The record related to the presence of grass snake <i>Natrix natrix</i> at a location approximately 0.9km northwest of the survey site, dated 2020.	No evidence observed.	The unmanaged long sward height modified grassland, tall forbs, and hedgerow bases offered suitable habitat for reptiles. The log piles located at target note TN1 (Figure 3: UKHab Habitat Plan, Appendix 2: Photographs, Photo 25) offered suitable hibernacula habitat for reptiles.
Otter	No records of otter were returned within a 1km radius of the survey site via the LERC data.	No evidence observed.	The site offered limited suitability for otter. The pond P1 adjacent to the north boundary of the site is likely to offer negligible suitability for otter, with limited connectivity to further watercourse. This species is not considered further.
Water vole	No records of water vole were returned within a 1km radius of the survey site via the LERC data.	No evidence observed.	The site offered limited suitability for water vole. The pond P1 adjacent to the north boundary of the site is likely to offer negligible suitability for water vole, with limited connectivity to further watercourses. This species is not considered further.
Aquatic Invertebrates (including white-clawed crayfish)	No records of aquatic invertebrates (including white-clawed crayfish) were returned within a 1km radius of the survey site via the LERC data.	No evidence observed.	Pond P1 adjacent to the north boundary of the site offered suitability for white-clawed crayfish.
Other Mammals (including brown hare, harvest mouse, and hedgehog)	One record of other Mammals (including brown hare, harvest mouse, and hedgehog) was returned within a 1km radius of the survey site via the LERC data. The record related to the presence of muntjac deer <i>Muntiacus reevesi</i> at a location approximately 1km northwest of the survey site, dated 2020.	A potential mammal hole, likely attributable to a small mammal species, was observed on the east elevation of hedgerow H1 near to the potential mammal path and squeeze (Appendix 2: Photographs, Photo 24).	The unmanaged long sward height modified grassland, tall forbs and hedgerow bases offered suitable habitat for other commuting and foraging mammals (including, brown hare, harvest mouse and hedgehog).
Invasive species	13 records of invasive species were returned within a 1km radius of the survey site via the LERC data. The closest record related to the presence of cherry laurel <i>Prunus laurocerasus</i> at a location approximately 0.15km north of the survey site, dated 2023. Other invasive species recorded within a 1km radius of the survey site included Canada goose, harlequin ladybird, muntjac deer and variegated yellow archangel <i>Lamium galeobdolon</i> .	Bearberry Cotoneaster was observed on site. This species is listed on Schedule 9 of the Wildlife and Countryside Act.	N/A

Table 14: Preliminary Roost Assessment Results

Building Reference Number***	Building Description	Potential Bat Access Points & Potential Roosting Locations	Evidence of Bats Recorded	Suitability Grading	Photograph Ref No. (Appendix 2: Photographs)
B1	Building B1 related to the two-storey residential dwelling present on site. The building was approximately in 17m length, in 12m width and 6m in height and comprised of brick-built walls with a pitched roof of composite tiles. A single storey extension was present at the north elevation of the building and comprised brick-built walls with a pitched roof of composite tiles. A conservatory was present at the southwest elevation and comprised breeze block walls with a flat roof of corrugated plastic. Internally the loft void was 2m in height and comprised timber ridge beams and rafters internally lined with bitumen felt.	Potential bat access points included through gaps under the lifted flashing at west and east elevations, under the lifted tiles at the northwest elevation, under the damaged tile at the east elevation of the single storey extension and through a gap present due to missing mortar at the east gable. Potential roosting locations included at the timber ridge beam and rafter convergence points.	Approximately five droppings likely attributable to bats were found in the loft void of building B1. A sample was collected.	Moderate	10, 11, 27, 28

***See Figure 3: UKHab Habitat Plan for building reference numbers.

4.17. The results of the HSI assessment of ponds on site and within a 250m radius of the site are presented Table 15 below. See Appendix 3 for the full breakdown of the HSI assessment.

Table 15: Summary of Habitat Suitability Index Results

Pond Number**	Distance From Site	HSI Score	HSI Result	Description	Photo Ref
P1	0.01km north	0.74	Good	Treelined large pond with an island of trees in its centre.	26

**See Figure 4: Pond Plan for pond reference numbers.

5. Ecological Constraints & Opportunities

- 5.1. The ecological constraints and opportunities, and recommendations for avoidance, mitigation, or further survey (where required) are provided in Table 16 overleaf.

Table 16: Ecological Constraints & Opportunities

Ecological Feature	Potential Ecological Impact & Level of Constraint	Potential Avoidance, Mitigation and/or Compensation Measures	Further Survey Required to Inform an Ecological Impact Assessment
Statutory Designated Sites	It is considered that the development will not adversely impact on the designated sites for nature conservation identified in the desk study, due to the distance between the designated sites and the development site, and the small scale of the works proposed.	N/A	No further surveys required.
Non-Statutory Designated Sites	It is considered that the development will not directly have an adverse impact on the designated sites for nature conservation identified in the desk study, due to the distance between the designated sites and the development site, and the small scale of the works proposed.	N/A	No further surveys required.
Priority habitats	<p>The National Planning Policy Framework 2024 sets out that:</p> <p><i>'192. To protect and enhance biodiversity and geodiversity, plans should:</i></p> <p><i>[...] b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species [...].</i></p> <p>The NPPF 2024 defines Priority Habitats and Habitats of Principal Importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006.</p> <p>The hedgerow H1 was identified as a priority habitat and will be retained under the current development proposals.</p>	<p>Retained trees and hedgerows should be protected via exclusion zones during works with reference to <i>British Standard (BS 5837:2012): Trees in Relation to Design, Demolition and Construction – Recommendations</i>.</p> <p>To mitigate potential significant effects to Important Ecological Features (IEFs) during the construction phase of the proposed development and with reference to Clause 10.2 of the British Standard <i>'BS 42020:2013 Biodiversity — Code of practice for planning and development'</i>, the works should be carried out under a Construction Environmental Management Plan (CEMP).</p>	No further surveys required.
Habitats (general)	<p>The habitats on site are considered to be common and widespread habitats of low conservation importance. However, cumulatively these habitats have local conservation value taken as the biodiversity value of the site.</p> <p>The development will result in the partial loss or degradation of the existing habitats.</p> <p>Elton Ecology has been informed that the site relates to a self-build application and therefore is exempt from mandatory biodiversity net gain³.</p> <p>The off-site pond P1 may be subjected to adverse impacts from the development, such as pollution, in the absence of mitigation.</p>	<p>Vegetation removal should be kept to a minimum, and biodiversity enhancement measures, such as the planting of native shrub species beneficial for wildlife, are recommended to minimise the loss in biodiversity on site.</p> <p>The off-site pond should be included within the CEMP for the site.</p>	No further surveys required.
Badgers	<p>Badgers are afforded legal protection under the Protection of Badgers Act 1992.</p> <p>Latrines, a mammal squeeze and mammal paths considered likely attributable to badger were observed on site.</p> <p>There may be some removal of suitable badger habitat at the site to facilitate the proposed works, including the removal of areas of</p>	<p>Precautionary methods should be implemented during works to protect foraging and commuting badger. Foundation ditches and other ditches, excavations, or trenches, which can be hazardous to badgers, should be closed overnight or fitted with roughened sloping boards or steps to allow animals to escape should they become trapped. Concrete should not be left unset overnight, or suitable barriers erected to prevent animals accessing the concrete. Pipework with a diameter greater than 120mm should have the ends closed off overnight to prevent entrapment.</p>	It is recommended that a pre-works badger walkover survey is carried out to ensure that no setts have been created within a 30m radius of the works area.

³ <https://www.gov.uk/guidance/biodiversity-net-gain-exempt-developments>

Ecological Feature	Potential Ecological Impact & Level of Constraint	Potential Avoidance, Mitigation and/or Compensation Measures	Further Survey Required to Inform an Ecological Impact Assessment
	unmanaged long sward height modified grassland, tall forbs and hedgerow bases.		
Birds	<p>Nesting birds are afforded legal protection under the Wildlife and Countryside Act 1981 (as amended).</p> <p>The building and trees on site offered suitable nesting bird habitat. There will likely be some removal of suitable bird nesting habitat on site to facilitate the proposed works.</p>	Where works affecting nesting bird habitat on site cannot avoid the nesting bird season of March to August (inclusive) and September in mild years, the habitat to be subject to works should be surveyed for nesting birds immediately prior to removal by a suitably qualified ecologist. If nesting birds are recorded, a suitable buffer zone should be defined by the ecologist and implemented until the ecologist confirms the chicks have fledged. If species identification is possible, this can be used to inform the typical egg incubation and fledging period, giving an indication of an appropriate time for re-survey to confirm fledging.	No further surveys required.
Bats	<p>Bats are a fully protected European Protected Species (EPS) under The Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended).</p> <p>The development proposals include the demolition of building B1 which may result in harm or disturbance caused to any bats or bat roosts, should they be present.</p>	<p>The building B1 was assessed as having moderate suitability for roosting bats, with reference to best practice guidelines (Collins, 2023), further surveys are required to assess the presence/ likely absence of roosting bats. See adjacent column.</p> <p>Due to the suitability of the surrounding habitats for commuting and foraging bats, the impacts from external artificial lighting at the site on adjacent habitats should be avoided. Where lighting is required, this should be sympathetic to wildlife through the design of lighting observing the principles set out in guidelines from the Bat Conservation Trust (BCT) & Institution of Lighting Professionals (BCT & ILP, 2023).</p>	<p>The PRA survey assessed the building B1 as having moderate bat roosting suitability. With reference to best practice survey guidelines (Collins, 2023), two emergence surveys should be carried out on the building, to establish the presence/ likely absence of roosting bats. With reference to the guidelines, at least one emergence survey should be carried out during the May-August bat activity season. One survey may be within September.</p> <p>Droppings potentially attributable to bat were observed within the loft void of building B1 during the survey and a sample was collected. It is recommended that the dropping samples are sent to a laboratory to confirm bat origin and be analysed down to species level.</p>
Amphibians (including GCN) and Reptiles	<p>GCN are fully protected as a European Protected Species (EPS) under The Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended).</p> <p>Reptiles are partially protected under the Wildlife and Countryside Act 1981 (as amended), protecting them from killing or injury.</p> <p>There may be some removal of suitable amphibian and reptile habitat at the site to facilitate the proposed works, including the unmanaged long sward height modified grassland, tall forbs, hedgerow bases and log piles.</p> <p>Using the Risk Assessment Tool provided within the Natural England Method Statement Template (Table 17 overleaf), on a precautionary basis scenario that the pond P1 0.01km north of the site is a GCN breeding site and the basis that 0.2ha of land will be affected by the development, the calculator generated a risk of 'Amber: Offence Likely'.</p>	<p>Further surveys are required to provide suitable avoidance, mitigation, and/or compensation measures for GCN. See adjacent column.</p> <p>To prevent the killing and injury of terrestrial amphibians and reptiles during the works, it is recommended that vegetation clearance on site is carried out under precautionary working methods for amphibians and reptiles, to include a fingertip search of vegetation and suitable hibernacula prior to works, as well as staged and directional vegetation removal encouraging the safe displacement of amphibians and reptiles into adjacent habitats. The precautionary measures should be included in the CEMP: Biodiversity for the site. In the highly unlikely event that amphibians or reptiles are encountered during works, works should cease immediately, and the advice of an ecologist sought.</p>	To further inform the impacts of the development on GCN due to the close proximity of ponds P1-P4, and the suitability of habitats on site, it is recommended that an assessment of eDNA of P1-P4 be carried out to establish the presence/likely absence of GCN. A single visit to each pond by a suitably experienced ecologist should be made between mid-April and June to collect water samples for eDNA analysis within the laboratory.
Other Mammals	<p>Some mammals, such as hedgehog and brown hare, are listed as Species of Principal Importance in England under section 41 of the Natural Environment and Rural Communities Act 2006. These species are termed 'Priority' species and receive special considerations in the planning process.</p> <p>There may be some removal of suitable mammal commuting and foraging habitat at the site to facilitate the proposed works, including the removal of areas of unmanaged long sward height modified grassland, tall forbs, hedgerow bases and log piles.</p>	<p>The precautionary working methods implemented for badger and reptiles will also protect other mammals such as hedgehog.</p> <p>Any new fencing which may fragment the landscape for hedgehog should include a 13cm square hole at the base to allow for hedgehog migration through the site.</p>	No further surveys required.

Ecological Feature	Potential Ecological Impact & Level of Constraint	Potential Avoidance, Mitigation and/or Compensation Measures	Further Survey Required to Inform an Ecological Impact Assessment
Fish	<p>Some fish species are listed as Species of Principal Importance in England under section 41 of the Natural Environment and Rural Communities Act 2006. These species are termed 'Priority' species and receive special considerations in the planning process.</p> <p>The pond P1 adjacent to the north of site may be suitable for fish. The works could result in indirect impacts to fish via pollution events.</p>	Precautionary working methods should be implemented during the works to protect fish, including strict pollution control measures, the provision of pollution control and spill kits, and no storage of liquids or fuel materials within 10m of the pond.	No further surveys required.
Aquatic invertebrates (including white-clawed crayfish)	<p>White-clawed crayfish (WCC) receive partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), prohibiting the taking of any native crayfish for any purpose except under licence.</p> <p>WCC is listed under Annex II and V of the EC Habitats Directive, implemented in the UK by the Conservation (Natural Habitats &c) Regulations 1994. Annex II requires that Special Areas of Conservation (SAC) are established to conserve this and other listed species.</p> <p>The pond P1 adjacent to the north boundary of the site may support white-clawed crayfish. The works could result in indirect impacts to white-clawed crayfish via pollution events.</p>	The precautionary working methods implemented for fish will also protect white-clawed crayfish.	
Invasive Non-Native Species (INNS)	<p>Schedule 9 of The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) makes it an offence to cause any plant listed to grow in the wild unless all reasonable steps were taken to prevent an offence and due diligence was exercised.</p> <p>One schedule 9 INNS was noted on site, bearberry cotoneaster. There may be some removal of bearberry cotoneaster to facilitate the proposed works.</p>	Due to the presence of bearberry cotoneaster on site, it is recommended that the removal of vegetation in this area is carried out under the supervision of an Ecological Clerk of Works (ECoW) via inclusion in a Precautionary Working Method Statement for the site. Soils containing the plant are classified as controlled waste and should be disposed of at licensed landfill.	No further surveys required.

Table 17: GCN Rapid Risk Assessment

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.5
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
Maximum:		0.5
Rapid risk assessment result:		AMBER: OFFENCE LIKELY

6. Conclusions

Further Surveys

6.1. The following further ecological surveys are required to inform the impact of the proposed development:

- It is recommended that a pre-works badger walkover survey is carried out to ensure that no setts have been created within a 30m radius of the works area.
- The PRA survey assessed the building B1 as having moderate bat roosting suitability. With reference to best practice survey guidelines (Collins, 2023), two emergence surveys should be carried out on the building, to establish the presence/ likely absence of roosting bats. With reference to the guidelines, at least one emergence survey should be carried out during the May-August bat activity season. One survey may be within September.
- Droppings potentially attributable to bat were observed within the loft void of building B1 during the survey and a sample was collected. It is recommended that the dropping samples are sent to a laboratory to confirm bat origin and be analysed down to species level.
- To further inform the impacts of the development on GCN due to the close proximity of ponds P1-P4, and the suitability of habitats on site, it is recommended that an assessment of eDNA of P1-P4 be carried out to establish the presence/likely absence of GCN. A single visit to each pond by a suitably experienced ecologist should be made between mid-April and June to collect water samples for eDNA analysis within the laboratory.

Biodiversity Enhancement

6.2. Suitable methods of biodiversity enhancement for the site would include:

- The installation of two generic bird boxes. A suitable model is *the '1B Schwegler Nest Box'*, one with a 32mm hole, and one with a 26mm hole. The use of woodcrete nest boxes will ensure a longer box lifespan of 20-25 years. Boxes will be hung at a height of 1.5m or higher, and angled so they face away from prevailing wind, the chances of occupation are higher if there is a good tree or hedge cover nearby.
- Biodiversity enhancement opportunities for bats will be recommended following the further surveys.

7. References

- Bat Conservation Trust (BCT) & Institution of Lighting Professionals (ILP), (2018). Bats and artificial lighting in the UK. Bats and the Built Environment series. Guidance Note 08/18.
- Barn Owl Trust (2012). Barn Owl Conservation Handbook. Pelagic Publishing.
- British Standards Institute (BSI)SI (2013). BS 42020:2013 Biodiversity. Code of practice for planning and development. British Standards Institute, London.
- Bullion, S., Wolton, R. & White, I. (2025) *The Dormouse Conservation Handbook*. 3rd Edition. The Mammal Society
- Chanin P (2003a). Ecology of the European Otter. Conserving Natura 2000 Rivers Ecology Series No. 10. English Nature, Peterborough.
- Chanin P (2003b). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough.
- Chanin P (2005). Otter Surveillance in SACS: Testing the Protocol. English Nature Research Reports - Number 664, English Nature, Peterborough.
- CIEEM (2017) Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal, Second Edition*. Technical Guidance Series. Chartered Institute of Ecology and Environmental Management, Winchester.
- Collins, J (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.
- Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016). The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. The Mammal Society, London.
- Holdich D (2003). Ecology of the White-clawed Crayfish. Conserving Natura 2000 Rivers Ecology Series No. 1. English Nature, Peterborough.
- Maddock, A. (ed) (2011). UK Biodiversity Action Plan Priority Habitat Descriptions (updated Dec. 2011). Joint Nature Conservation Committee, Peterborough.
- Natural England (2008). Water voles – the law in practice. Guidance for planners and developers (NE 86). Natural England, Peterborough.
- Peay, S. (2003) Monitoring the White-clawed Crayfish *Austropotamobius pallipes*. Conserving Natura 2000 Rivers Monitoring Series No. 1. English Nature, Peterborough.
- Peay, S. (2002) Guidance on habitat for white-clawed crayfish and how to restore it. R&D Technical Report W1-067/TR. Environment Agency, Bristol.
- Stace, C A (2019). New Flora of the British Isles. 4th ed. Cambridge: C&M Floristics.
- Stanbury, A. *et al.* (2021) The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands, and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds.
- Strachan, R., Moorhouse, T. and Gedling, M. (2011). Water Vole Conservation Handbook. Third Edition. Wildlife Conservation Research Unit, Oxford.
- UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

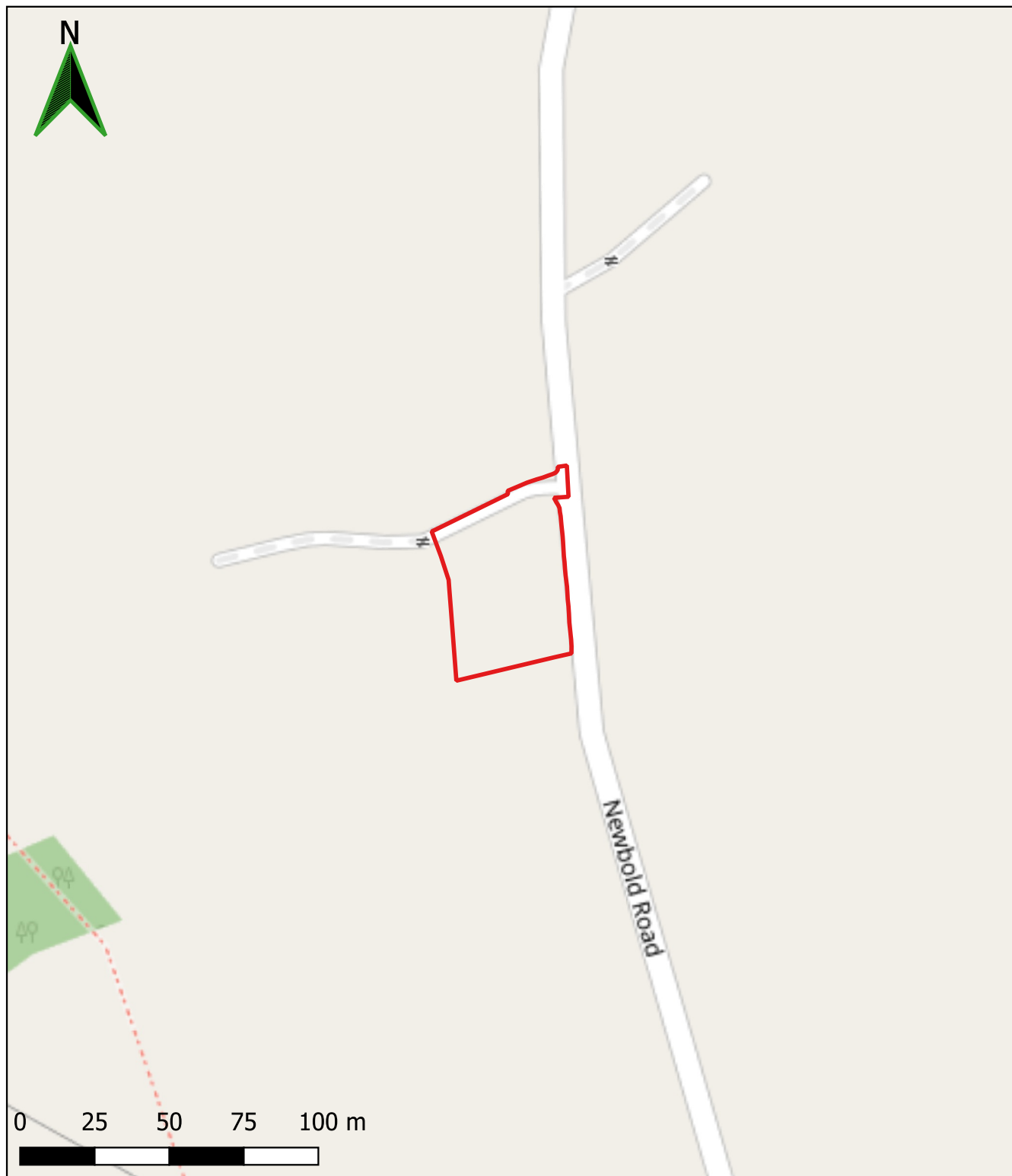
Figures

Figure 1: Site Location Plan (Overleaf)

Figure 2: Surrounding Landscape Plan (Overleaf)

Figure 3: UKHab Habitat Plan (Overleaf)

Figure 4: Pond Plan (Overleaf)



Legend

 Site Boundary

Project:
**Newbold Road, Kirkby Mallory, Leicester,
LE9 7QG**
Drawing:

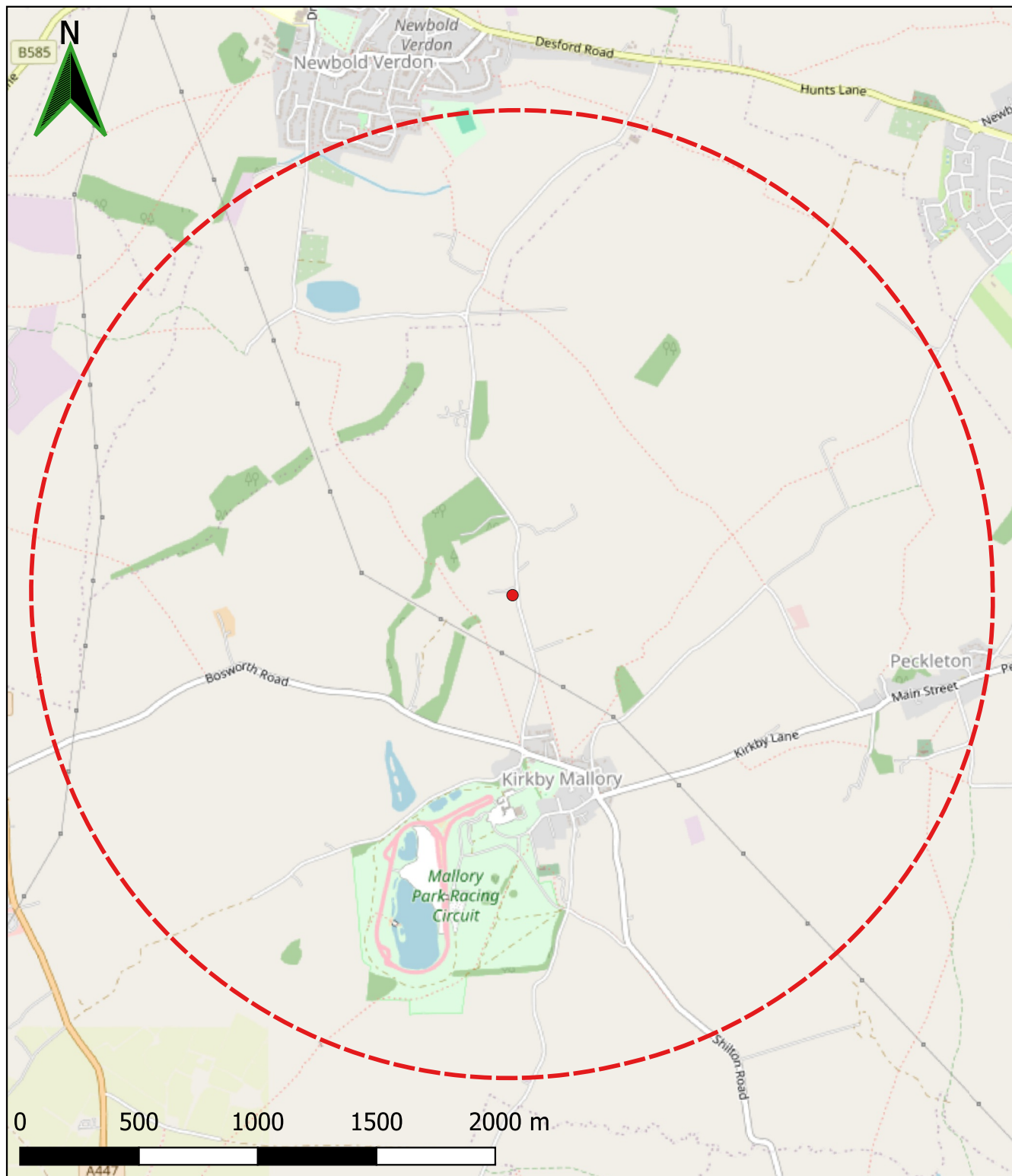
Figure 1: Site Location Plan

Date: 14-10-2025 Version: FINAL
Author: CBM Job No: P2911





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Legend

-  2km Buffer
-  Site Location

Project:
**Newbold Road, Kirkby Mallory, Leicester,
LE9 7QG**
Drawing:

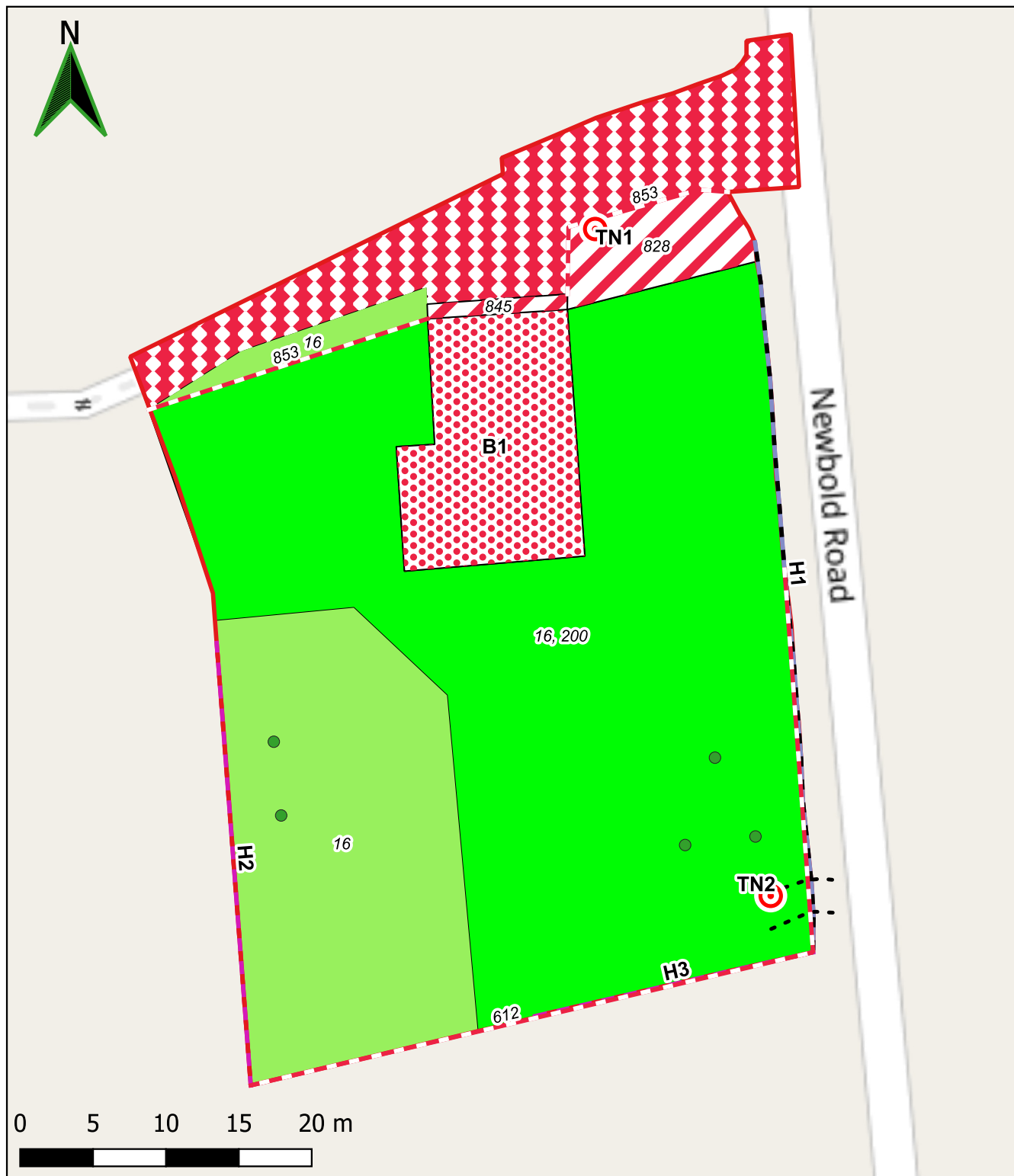
Figure 2: Surrounding Landscape Plan

Date: 14-10-2025 Version: FINAL
Author: CBM Job No: P2911















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Legend

-  Site Boundary
-  g - Grassland
-  g4 - Modified Grassland
-  u1 - Built-up Areas and Gardens
-  u1b5 - Buildings
-  u1b6 - Other Developed Land
-  h2a6 - Other Native Hedgerow
-  h2b - Non-native and Ornamental Hedgerow
-  u1e - Built Linear Features
-  - - - Mammal Path
-  Tree
-  Target Note with Reference Number

Secondary Codes:

16 - Tall forbs

200 - Tree

612 - Fence

828 - Vegetated garden

845 - Ground level planters

853 - Mortared wall

Project:

**Newbold Road, Kirkby Mallory, Leicester,
LE9 7QG**

Drawing:

Figure 3: UKHab Habitat Plan

Date: 15-10-2025

Version: FINAL

Author: CBM

Job No: P2911






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Legend

-  250m Pond Buffer
-  Site Boundary
-  Pond with Reference Number

Project:
**Newbold Road, Kirkby Mallory, Leicester,
LE9 7QG**
Drawing:

Figure 4: Pond Plan

Date: 14-10-2025 Version: FINAL
Author: CBM Job No: P2911



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Appendix 1: Planning Policy & Legislation Summary

This appendix serves as a summary of relevant policy and legislation. It is not intended to supersede the policy or legislation documents to which it refers, and the relevant full documents should always be consulted prior to decision making.

National Planning Policy Framework 2024

Biodiversity is a material consideration under the National Planning Policy Framework (2023). Relevant text to biodiversity from the NPPF is described below.

In Section 2 of the NPPF 'Achieving sustainable development', paragraph 8(c), the NPPF sets an environmental objective:

- "to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."

In Section 15 'Conserving and enhancing the natural environment', the NPPF states that:

"180. Planning policies and decisions should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; [...]
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. [...]"

The NPPF, in paragraph 185 sets out that to protect and enhance biodiversity, plans should:

- "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁶⁵; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."

In determining planning applications, the NPPF paragraph 186 sets guidance that local planning authorities should apply the following principles:

- "if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the

benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest [...];

- development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.”

Paragraph 187 states that the following sites should be given the same protection as habitats sites:

- “potential Special Protection Areas and possible Special Areas of Conservation;
- listed or proposed Ramsar sites; and
- sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.”

Paragraph 188 states that “The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or projects will not adversely affect the integrity of the habitats site.”

Paragraph 191 states that planning policies and decisions should ensure new development is appropriate to its location and take into account likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

- “Mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development [...]; [...] and
- limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.”

Government Circular ODPM 06/05 Biodiversity and Geological Conservation

The government circular provides administrative guidance on the application of statutory obligation and legislation relating to planning and nature conservation in England. It complements the National Planning Policy Framework. The document includes guidance on designated sites (international and national), habitats, and protected species.

Relating to protected species and the requirement for their consideration in planning applications, the government circular, in paragraph 98 details that:

“The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Local authorities should consult English Nature [now Natural England] before granting planning permission. They should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species. They should also advise

developers that they must comply with any statutory species' protection provisions affecting the site concerned."

Paragraph 99, relating to the requirement and timing of protected species survey and mitigation, the government circular states that:

"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted. However, bearing in mind the delay and cost that may be involved, developers should not be required to undertake surveys for protected species unless there is a reasonable likelihood of the species being present and affected by the development. Where this is the case, the survey should be completed and any necessary measures to protect the species should be in place, through conditions and/or planning obligations, before the permission is granted. In appropriate circumstances the permission may also impose a condition preventing the development from proceeding without the prior acquisition of a [Natural England] licence."

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The term 'European Protected Species' (EPS) is used to describe species listed on Schedule 2 of the The Conservation of Habitats and Species Regulations 2017 (as amended). Regarding these species, Regulation 43 of the Regulations make guilty of an offence a person who:

- "Deliberately captures, injures or kills any wild animal of a European protected species;
- Deliberately disturbs wild animals of any such species;
- Deliberately takes or destroys the eggs of such an animal, or;
- Damages or destroys a breeding site or resting place of such an animal [...]"

Regulation 43 defines that the disturbance of animals includes any disturbance which is likely to:

- Impair their ability:
 - to survive, to breed or reproduce, or to rear or nurture their young; or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
 - to affect significantly the local distribution or abundance of the species to which they belong.

A person guilty of an offence under Regulation 43 is liable on summary conviction to imprisonment for a term not exceeding six months or to a fine, or to both.

Wildlife and Countryside Act 1981 (As Amended)

The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) lists species on Schedule 5 for which the Act make it an offence to:

- Intentionally kill, injure or take;

- Recklessly or intentionally damage or destroy, or obstruct access to any structure or place which any wild animal included uses for shelter or protection;
- Recklessly or intentionally disturb any such animal while it is occupying a structure or place which it uses for shelter or protection.

Some species receive partial protection under the Act, which limits their protection under the Act to intentional killing or injury.

All wild nesting birds are protected under the Act, making it an offence to:

- Intentionally kill, injure or take any wild bird; and
- Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.

Some bird species are afforded special protection via their inclusion in Schedule 1 of the Act, which makes an offence to intentionally or recklessly disturb any schedule 1 bird building a nest or which is in, on or near a nest containing eggs or young; or to disturb dependent young of such a bird, or whilst such a bird 'leks' (i.e. congregates for community courtship behaviour).

Schedule 9 of the Act makes it an offence to cause any plant listed to grow in the wild, unless all reasonable steps were taken to prevent an offence and due diligence was exercised.

The Act sets out provisions to protect Sites of Special Scientific Interest (SSSI).

Natural Environment and Rural Communities Act 2006

Section 40 of the Act places a legal duty on public authorities (including planning authorities) to have regard to biodiversity conservation in their normal functions (including planning applications).

Under Section 41 of the Act, lists of Habitats of Principal Importance (HPI) and Species of Principal Importance (SPI), of principal importance for the purpose of conserving biodiversity, are produced which serve to guide public authorities in carrying out their functions with consideration for biodiversity conservation.

Wild Mammals (Protection) Act 1996 (as amended)

The Act protects wild mammals against certain cruel acts, including intentional crushing, downing or asphyxiation.

Appendix 2: Photographs



Photo 1: Modified grassland comprising the majority of the survey site.



Photo 2: Large area of tall forbs located in the west of the survey site.



Photo 3: Smaller area of tall forbs located in the north of the survey site.



Photo 4: Vegetated garden located in the north of the survey site.



Photo 5: Concrete driveway located in the north of the survey site.



Photo 6: Concrete paving surrounding the building on site.



Photo 7: Hedgerow H1.



Photo 8: Hedgerow H2.



Photo 9: Hedgerow H3.



Photo 10: Building B1.



Photo 11: Internal of building B1.



Photo 12: Wooden fenced planter located in the north of the survey site.



Photo 13: Silver birch present on site.



Photo 14: Norway spruce present on site



Photo 15: Monkey puzzle tree present on site

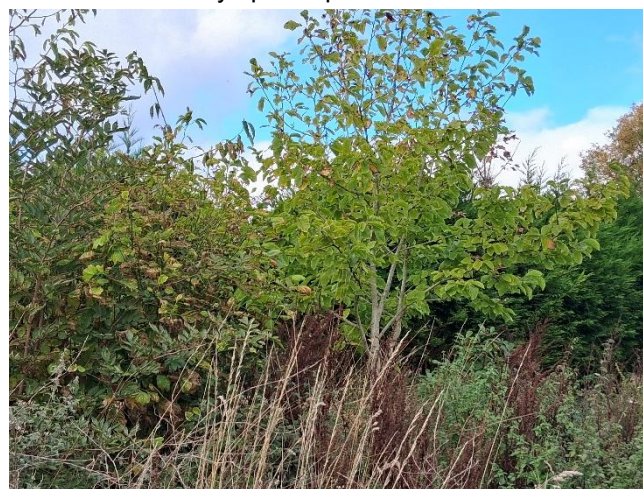


Photo 16: Goat willow tree present on site.



Photo 17: Examples of the thirteen unidentifiable tree stumps present on site.



Photo 18: *Malus sp.* present on site.



Photo 19: Concrete breeze block wall located in the north of the survey site.



Photo 20: Post and wire fencing which formed the southern boundary of the survey site.



Photo 21: Example of badger latrines observed throughout the southeast corner of the survey site.



Photo 22: A mammal squeeze potentially attributable to badger observed on site.



Photo 23: A mammal path potentially attributable to badger observed on site.



Photo 24: Potential mammal hole just off site in the southwest corner near hedgerow H1.



Photo 25: Log pile located in the northeast of the survey site.



Photo 26: Pond P1.



Photo 27: Gap present due to missing mortar at the east gable.



Photo 28: Gaps present beneath the flashing at the west elevation.

Appendix 3: Great Crested Newt Habitat Suitability Index

Pond	HSI Factor										HSI Score	HSI Result
	Geographic Location	Pond Area	Permanence	Water Quality	Shade	Waterfowl	Fish	Pond Count	Terrestrial Habitat	Macrophytes		
P1	Zone A	>2000	Never	Moderate	20	Minor	Possible	5	Moderate	20	0.74	Good