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Preliminary Ecological Appraisal

Survey site:

Land Adjacent to Welton Lodge, Newbold Verdon, Leicester, Leicestershire, LE9 9LN

Client:

Mr R Walker

Survey date:

24th February 2025

Project:

This report is prepared to inform a planning application with Hinckley and Bosworth Borough Council. The proposal is described as: Outline Application for a single self-build dwelling with all matters reserved except for access.

PEA survey methodology and legislation can be found in the Arbtech Supplement: **PEA Methodology and Legislation - 2024.**

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion

Site Location and Context

The survey site is centred on National Grid Reference SK 4503 9078 and has an area of approximately 0.2ha. The site is underlain by Mudstone bedrock (Edwalton Member) and overlain by glaciofluvial sand and gravel. The soil is described as seasonally wet, slightly acid but base-rich loamy and clayey soils.
The site comprises an area of grassland, bordered by hedgerows which extend into the wider landscape and connect to a nearby area of woodland. It is situated on the eastern outskirts of Newbold Verdon Village, in Leicestershire.
Aerial imagery shows the landscape to have a rural character with both arable and pastureland, connected by a network of hedgerows. There is an area is woodland 130m north of the site, with further parcels of woodland present 600m northeast and 900m northeast.

Survey Details

The site survey was undertaken by Victoria Walters BSc (Hons) MSc Graduate Ecologist (Natural England Protected Species Licence Numbers: [Bats] (Accredited Agent on Natural England Bat Licence Number: 2018-33540-CLS-CLS).

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
24/02/2025	11	88	100	19	None

Executive Summary

- Environmental DNA (eDNA) surveys will be required of all five ponds within 500m (where accessible) to determine the presence or absence of great crested newts.

Survey limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

The survey was completed outside of the optimal survey period (April to October) for ground flora, and as such the accuracy of botanical assessment and condition assessment data may be limited in terms of species visible and ground conditions at the time of survey.

Ecological Survey Factor **Conclusion, Impact or Recommendations**	**Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.**
Habitats and plants (see habitat map in appendix 1, pond map in appendix 2, location plan in appendix 3, proposal plan in appendix 4 and photos in appendix 5). **Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).**	
Summary of Survey Findings **(***UKHab codes used)*	**On-site habitat descriptions and condition assessments** **h2a** – Native Hedgerow The site boundary on all sides comprises 4 distinct lengths of hedgerow connected at ~90° angles, as detailed below: Hedgerow 1: Hedgerow 1 lines the north boundary and comprises hawthorn (D), oak (O) and holly (O). The hedgerow is approximately 1.8m high and 1.5m wide. Ground flora is indicative of nutrient enrichment; broadleaved dock (A), nettle (A), cleavers (A) and golden chervil (F). The hedgerow is trimmed to maintain its shape. Habitat condition assessment: A1. Height >1.5m average along length **PASS** A2. Width >1.5m average along length **PASS** B1. Gap between ground and base of canopy <0.5m for >90% of length **FAIL** B2. Gaps make up <10% of the total length and no canopy gaps >5m **PASS** C1. >1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length **PASS** C2. Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground **FAIL** D1. >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species and recently introduced species **PASS** D2. Current damage >90% of the hedgerow is free of damage caused by human activities **PASS** **Habitat condition score: Good**. Hedgerow 2: (Native hedgerow with trees) Hedgerow 2 lines the eastern boundary and comprises holly (A), hawthorn (F), ivy (F), ash (F), hazel (O), bramble (O), garden privet (R) and oak (R). The hedgerow is approximately 6m high and 2m wide. Ground flora is indicative of nutrient enrichment; broadleaved dock (A), nettle (A), cleavers (A) and golden chervil (F). There is a mature oak tree within the hedgerow, described further under the heading 'Bats'. The hedgerow is unmanaged. Habitat condition assessment: Hedgerow 3: A1. Height >1.5m average along length **PASS** A2. Width >1.5m average along length **PASS**

	B1. Gap between ground and base of canopy <0.5m for >90% of length **PASS** B2. Gaps make up <10% of the total length and No canopy gaps >5m **PASS** C1. >1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length **PASS** C2. Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground **FAIL** D1. >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species and recently introduced species **PASS** D2. Current damage >90% of the hedgerow is free of damage caused by human activities **PASS** **Habitat condition score: Good.** Hedgerow 3: Hedgerow 3 lines the west boundary and comprises hawthorn (D), holly (A) and ivy (F). Ground flora is indicative of nutrient enrichment; broadleaved dock (A), nettle (A), cleavers (A) and golden chervil (F). The hedgerow is approximately 2m high and 1.5m wide and is trimmed to maintain a loose shape. Habitat condition assessment: Hedgerow 3: A1. Height >1.5m average along length **PASS** A2. Width >1.5m average along length **PASS** B1. Gap between ground and base of canopy <0.5m for >90% of length **PASS** B2. Gaps make up <10% of the total length and No canopy gaps >5m **PASS** C1. >1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length **PASS** C2. Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground **FAIL** D1. >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species and recently introduced species **PASS** D2. Current damage >90% of the hedgerow is free of damage caused by human activities **PASS** **Habitat condition score: Good.** Hedgerow 4: (Native hedgerow with trees) Hedgerow 4 lines the south boundary and comprises hawthorn (D), bramble (F) and oak (R). Ground flora is indicative of nutrient enrichment; broadleaved dock (A), nettle (A), cleavers (A) and golden chervil (F). Snow drops are also present within the ground flora (O). A mature oak tree (T2) lies within the hedgerow, described further under the heading 'Bats'. The hedgerow is trimmed to maintain its shape. Habitat condition assessment: Hedgerow 3: A1. Height >1.5m average along length **PASS** A2. Width >1.5m average along length **PASS** B1. Gap between ground and base of canopy <0.5m for >90% of length **PASS** B2. Gaps make up <10% of the total length and No canopy gaps >5m **PASS** C1. >1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length **PASS** C2. Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground **FAIL** D1. >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species and recently introduced species **PASS** D2. Current damage >90% of the hedgerow is free of damage caused by human activities **PASS**

	Habitat condition score: Good. **g3c**- Other Neutral Grassland The site is dominated by other neutral grassland, which is currently unmanaged, as evidenced by the long sward (15-20cm) and the presence of both ant hills and supporting thatch within the sward. It appears to have been previously managed through livestock grazing. Species comprise cocks' foot (D), Yorkshire fog (F), common bent (O), nettle (O), foxglove (O), broadleaved dock (O), cleavers (O), common sorrel (O), dandelion (O), creeping thistle (O), golden chervil (O) and springy turf moss (O). Habitat condition assessment: A. The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type **FAIL** B. Sward height is varied (at least 20% is less than 7cm, and 20% more than 7cm) **FAIL** C. Cover of bare ground is between 1% and 5% **PASS** D. Cover of bracken is less than 20% and cover of scrub is less than 5% **PASS** E. Combined cover of species indicative of suboptimal condition and physical damage accounts of less than 5% of total area. **FAIL** F. There are 10 or more vascular plan species per m^2 **FAIL** **Habitat condition Score: POOR.** **Local notable habitats** The site contains Native hedgerow which is listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Habitats within the site are widespread and common. Notable habitats are present within 2km: • Deciduous woodland; 130m north and 460m southwest • Ancient and semi-natural woodland; 1.3km northeast. • Traditional Orchard, 1.5km northeast
Foreseen Impacts	**On-site habitats** The proposed development will result in the loss of 0.2ha of grassland. This could result in a net loss in biodiversity at the site. **Notable habitats** No direct impacts to any notable habitats will occur as a result of the proposed development. However, due to the proximity of the site to deciduous woodland (130m north), indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.
Recommendations	**On-site habitats** Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). **Notable habitats**

	Best practice measures to minimise the possibility of pollution affecting the nearby deciduous woodland must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this. **Biodiversity net gain** The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. The site comes under a self-build category and therefore is exempt from requiring a Biodiversity Net Gain Assessment.
Locality and Designated Sites	
Summary of Survey Findings	**On-site designations** The site is not subject to any designation. **Statutory designated sites (within 2km)** There are no known statutory sites within 2km of the site. The site lies within the impact risk zone for Botcheston Bog Site of Special Scientific Interest (SSSI), 2.6km northeast, designated for wetland habitats. **Statutory designated sites (within 10km)** No national network sites (SAC, SPA, Ramsar) are located within 10km. **Non-statutory designated sites** The presence of non-statutory designated sites within 2km of the site cannot be established without data from Leicestershire and Rutland Environmental Records Centre.
Foreseen Impacts	**On-site designations** No impacts foreseen. **Statutory and non-statutory designated sites** No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers. The site lies within the impact risk zone for Botcheston Bog SSSI The proposed development type is not listed as a possible high risk for this designation.
Recommendations	**On-site designations** None required. **Statutory and non-statutory designated sites** None required.
Invasive / Non-native species	

Summary of Survey Findings	No problematic invasive and non-native species recorded on site.
Foreseen Impacts	N/A
Recommendations	No further surveys but remain vigilant.
Invertebrates	
Summary of Survey Findings	The habitats present on-site, including grassland and hedgerows likely provide common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.
Foreseen Impacts	Grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to the presence of more extensive habitat locally.
Recommendations	No further surveys. **Suggested biodiversity enhancements** The incorporation of bee bricks (e.g. Ibstock BeeHabitat or similar alternative brand) into the fabric of the new buildings would provide sheltering opportunities for pollinators. These should be installed 0.5m above ground level on a south-facing elevation with no obscuring vegetation. The site could be further enhanced via the provision of native wildflowers or wildflower turf, which would provide foraging opportunities for invertebrates.
Bats	
Summary of Survey Findings	**EPSL data** A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. No EPSLs are present within a 2km radius of the site. There are no Special Areas of Conservation designated for bats within 10km of the site. **Foraging and commuting habitat** Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of grassland and hedgerow with trees. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. Most notably, the hedgerows on site are mature and extend beyond the site adding to the continuity of vegetated linear features present in the wider landscape. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites. **Roosting habitat** Trees to be impacted by the proposed development are assessed for their suitability to support roosting bats below.

	There are no buildings on site. There are two mature oak trees on site within the hedgerow which have a cover of ivy. No evidence of roosting bats was identified on either of the two trees.

T1 description	***Photographs***
Summary T1 is a mature oak tree located within the east hedgerow (SK 4503 9276). The tree has a DBH of 500mm and a height of 8m. The tree has a dense cover of ivy which may be hiding features. No features were identified outside of the ivy cover.	

T2 description	***Photographs***
Summary T2 is a mature oak tree located within the south hedgerow (SK 4503 9075). The tree has a DBH of 700mm and a height of 9m. The tree has a dense cover of ivy which may be hiding features. No features were identified outside of the ivy cover.	

Foreseen Impacts	**Roosting habitat [Buildings]** No buildings on site. **Roosting habitat [Trees]** Both T1 and T2 will be retained and therefore no impacts to roosting bats are anticipated. **Foraging and commuting habitat** The proposed development will result in the loss of 0.2ha of grassland but given their low value and the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats. **Artificial lighting** The proposed development may lead to an increase in the amount of current lighting of surrounding habitats or the retained building without mitigation. This may disturb commuting bats.
Recommendations	**Roosting habitat [Buildings]** No buildings on site. **Roosting habitat [Trees]** In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. If plans change and the trees become subject to felling, they will require further inspection due to the ivy cover, in the form of a Ground Level Roost Assessment (GLTA). **Foraging and commuting habitat** No further surveys are required. **Artificial lighting** A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2 **Suggested biodiversity enhancements** The installation of one bat box at the site will provide additional roosting habitat for bats. The bat boxes will be incorporated into the fabric of the new dwelling. They will be suitable for pipistrelles (which have been identified locally through EPSL data). Suitable bat boxes include Habibat Bat Box, Ibstock Enclosed Bat Box or similar alternative brand. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light.

Birds	
Summary of Survey Findings	**Buildings** No buildings on site **Trees and vegetation** No bird nests were identified within the hedgerows or trees on-site, however they all offer nesting opportunities and nest-building resources for birds. The survey was carried out outside of the bird nesting season so the presence of nests on site cannot be discounted. **Barn owls** The site does not appear to provide any suitable nesting sites for barn owls. **Overwintering birds** Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.
Foreseen Impacts	**Buildings/trees** The proposed development could result in the disturbance and subsequent abandonment of active bird nests if construction occurs within 5m of any nests within the hedgerow. **Barn owls** None foreseen. **Overwintering birds** None foreseen.
Recommendations	**Buildings/trees** Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. **Barn owls** None required. **Overwintering birds** None required. **Suggested biodiversity enhancements**

	The installation of a minimum of one bird box on mature trees around the site boundaries or on new buildings will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box (buildings) Schwegler 1SP Sparrow Terrace (buildings) Schwegler 1B Nest Boxes (trees) Schwegler 2H Robin Boxes (trees) Woodstone Nest Box (buildings or trees) Or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.
Reptiles	
Summary of Survey Findings	**EPSL data** A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. **Habitat suitability** Habitats recorded on site are assessed to provide foraging, commuting, basking and refuge opportunities for reptiles. The hedgerow provides elevated value for reptiles as these habitats provide a suitable structure for refuge, whilst also providing foraging and commuting opportunities. At the time of survey, the grassland had a tall sward (15-20cm) which could provide enough shelter for commuting reptiles. The site has good connectivity to further suitable reptile habitat in the wider landscape via hedgerows. The presence of reptiles on site cannot be discounted, albeit likely limited to low numbers within hedgerows. **Wider landscape** The hedgerows on site extend into the wider landscape and connect to wider suitable habitat for reptiles, most notably the area of deciduous woodland 130m north of the site. The presence of reptiles utilising these adjacent habitats cannot be discounted.
Foreseen Impacts	Grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present. Furthermore, the site does not form a connective pathway or stepping stone between areas of suitable reptile habitat in the wider landscape and the development is unlikely to lead to reptile habitat fragmentation.
Recommendations	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures: • Vegetation will be subject to phased cutting, with the first cut to at least 15cm high to allow any reptiles present to escape. Alterntatively the site could be temporarily grazed by livestock to reduce the sward height. Sward height will then be maintained at a short sward (5cm) to discourage reptiles. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats.

	• Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a reptile is identified, works must cease and advise must be sought from a suitably qualified ecologist. **Suggested biodiversity enhancements** The site could be enhanced for reptiles post-development with the inclusion of log piles and planting of areas of native shrubs, to provide sheltering opportunities.
Amphibians	
Summary of Survey Findings	**EPSL and survey data** A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. Further, no positive class survey licence return or DLL historic survey data (2017 – 2019) were present within 2km of the site. **Aquatic habitat suitability (including ponds within 500m)** Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). There are no ponds on the site, but a review of aerial imagery (MAGIC and OS Maps) indicates the presence of two ponds within 500m; the pond (P1) is located 60m east of the site and is situated on the far side of an access road. This landscape is not likely to represent a significant barrier to dispersal due to the lack of curbs and the low traffic low. Pond 2 (P2) is 380m north, and is connected to the site through hedgerows, woodland and grassland. A pond map showing approximate pond locations is provided in Appendix 2. **Terrestrial habitat suitability** Areas of tall grassland and hedgerows may provide foraging and sheltering opportunities for amphibians. No hibernation opportunities were identified on-site.
Foreseen Impacts	When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss or significant disturbance of 0.2ha of grassland. If great crested newts are present within the pond 60m to the east of the site, when completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces an **Amber risk score**, which states: **Offence Likely** (see F**igure 1** below).

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**	

Furthermore, discounting this pond, a repeated risk assessment based on the pond 380m north of the site produces a **Green risk score**, which states **Offence Highly Unlikely** (See Figure 2 below). Indicating that it is only pond 1 which produces a risk.

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)	No effect	0
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.005
Individual great crested newts	No effect	0
	Maximum:	0.005
Rapid risk assessment result:	**GREEN: OFFENCE HIGHLY UNLIKELY**	

Recommendations

Environmental DNA (eDNA) surveys will be required of Pond 1; where accessible, to determine the presence or absence of great crested newts. This will comprise collecting water samples and sending them off for laboratory analysis and such surveys must be undertaken between mid-April and June, in accordance with current survey guidelines (Biggs et al, 2014).
The surveys are likely to be required before planning permission can be granted.

Precautionary working measures are required to mitigate against the unlikely risk that Pond 2 contributes to the presence of GCN on site;

	• A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any amphibians to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area. • Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any common amphibians are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a great crested newt is identified, works must cease and advise must be sought from a suitably qualified ecologist. **Suggested biodiversity enhancements** The site could be enhanced for amphibians post-development through creation of amphibian hibernacula using rubble and logs from site clearance. Information on how to construct a hibernaculum can be found here: https://www.wiltshirewildlife.org/hibernaculum
Badger	
Summary of Survey Findings	No badger setts were noted on site or within a 30m radius of the site. Further, no evidence of foraging badgers was noted within the development area. However, the site was considered suitable for badger sett excavation and foraging habitat.
Foreseen Impacts	No works will be undertaken within 30m of a badger sett. Grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present.

Recommendations	Owing to the nature of the proposed development and the low potential for impacts to bat roosts, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: • A toolbox talk will be given to contractors regarding the possible presence of badgers at the site. • A pre-commencement inspection of the site will be undertaken for any new badger activity if works do not commence within three months. • Heras fencing will be erected around the working area to prevent encroachment into retained habitats where badger setts could be present. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. In the unlikely event that a badger sett is identified, works must cease and advise must be sought from a suitably qualified ecologist.
Riparian animals	
Summary of Survey Findings	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
Foreseen Impacts	No impacts are anticipated on riparian animals as a result of the proposed development.
Recommendations	None required.
Hazel dormouse	
Summary of Survey Findings	**EPSL data** A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. **Habitat suitability** The site lies outside of the know current range for hazel dormice and there are no suitable habitats within the development area. Furthermore, Dormice typically utilise a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation. As such habitats on site are considered unsuitable for hazel dormice and therefore the likelihood of this species being present on site is considered acceptably low.
Foreseen Impacts	No impacts are anticipated on hazel dormice as a result of the proposed development.
Recommendations	None foreseen.
Other e.g. hedgehog	
Summary of Survey Findings	The hedgerow and tall grassland provides foraging and commuting opportunities for hedgehogs, with woodland habitat nearby.

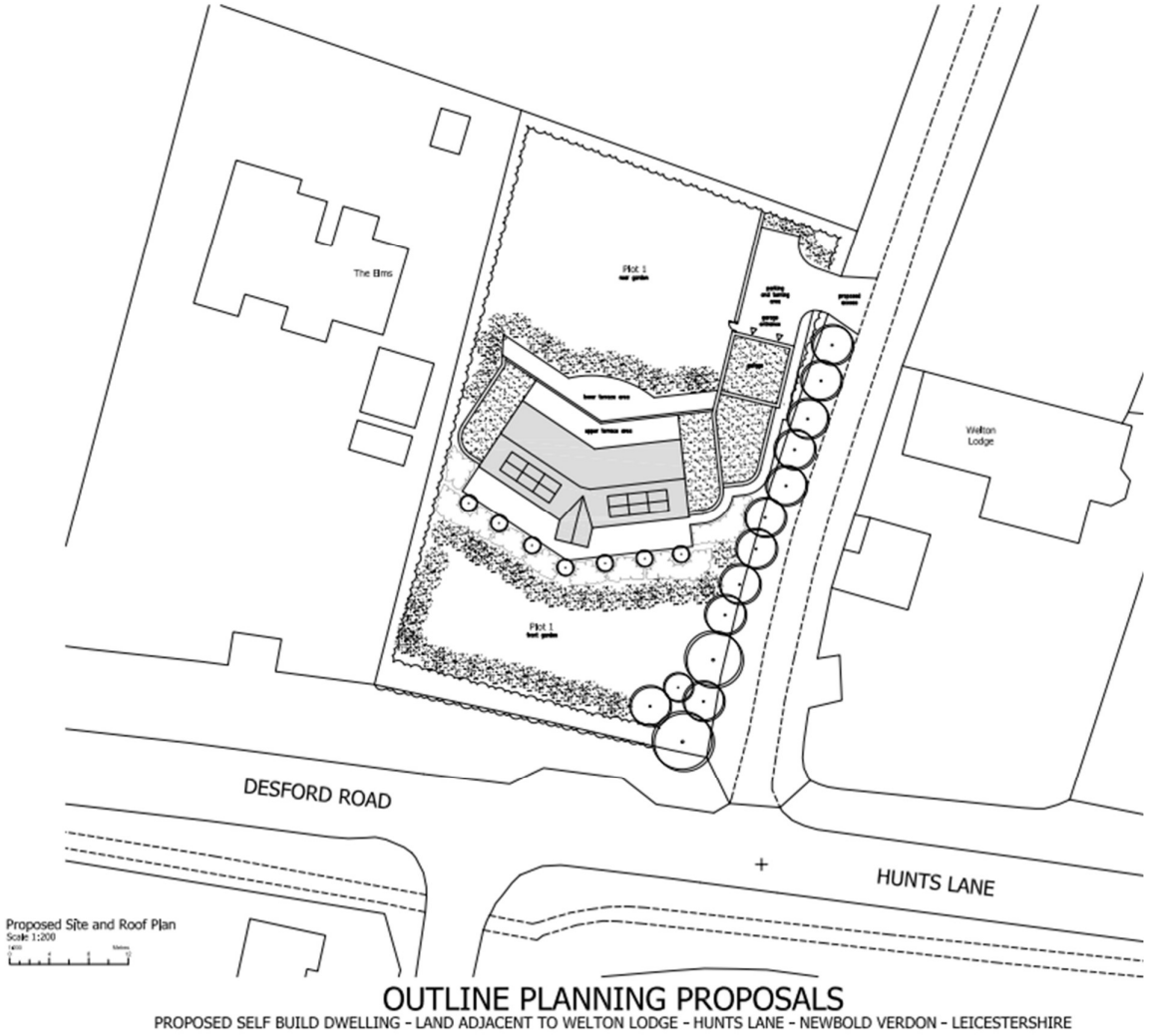
Foreseen Impacts	Grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.
Recommendations	A precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. **Suggested biodiversity enhancements** The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses in shady areas. • Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.

Appendix 1: Survey/Habitat map

Appendix 2: Pond map

Appendix 3: Location map

Appendix 4: Proposed plan



Appendix 5: Habitat Photos

Other neutral grassland	
Photograph	**Description**
	Figure 1: Looking south towards the grassland
Native hedgerow	
Photograph	**Description**
	Figure 2: Native hedgerow 1, bordering the north boundary.

Native hedgerow	
Photograph	**Description**
	Figure 3: Looking east towards hedgerow 2.
Native hedgerow	
Photograph	**Description**
	Figure 4: Looking west at hedgerow 3

Native hedgerow	
Photograph	**Description**
	Figure 5: Hedgerow 4, at the south boundary

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Status	**Issue**	**Name**	**Date**
Draft	0.1	Victoria Walters BSc (Hons) MSc Graduate Ecologist	25/02/2025
Proof	0.2	Elen Griffin BSc (Hons), MRSB, Consultant Ecologist	26/02/2025
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