

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

1A West St, Worsbrough, Barnsley, South Yorkshire, S70 5PG

Client:

Tom Agus

Survey date:

24th October 2025

Project:

This report is prepared to inform a planning application with Barnsley Metropolitan Borough Council. The proposal is described as:
Demolition of dwelling and construction of replacement dwelling.

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024](#).

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA 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					
<p>The survey site is centred on National Grid Reference SE 36141 03804 and has an area of approximately 0.11ha.</p> <p>The site comprises a garage and garden area, located within the grounds of a dwelling to the north of the site. The site is located within the village of Worsbrough, 3km south of the town of Barnsley. The site is bound by dwellings to the north-west, Station Road to the north-east, Edmunds Road to the south-east and an area of grassland to the south-west. The wider landscape comprises a mosaic, with significant areas of urban development to the north, and the Dearne Valley Wetlands SSSI and Worsborough Country Park LNR to the south, details of which are provided further in this report.</p> <p>The underlying geology for the site comprises mudstone, siltstone and sandstone (Pennine Middle Coal Measures Formation) which is overlaid by slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils, typical habitats of which include seasonally wet pastures and woodlands.</p>					
Survey Details					
<p>The site survey was undertaken by Gareth Hey BSc (Hons), MSc, ACIEEM (Natural England Protected Species Licence Numbers: [Bats] (2021-51195-CLS-CLS) [Great Crested Newts] (2017-30374-CLS-CLS) [Barn Owl] (CL29/00097) (Natural Resource Wales Protected Species Licence Number: [Bats] (S094455/1)</p>					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
24/10/2025	18	69	20	2	None
Survey limitations					
<p>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.</p> <p>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.</p>					

<p>Ecological Survey Factor</p> <p>Conclusion, Impact or Recommendations</p>	<p>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.</p>
<p>Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, proposal plan in appendix 3 and photos in appendix 4). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).</p>	
<p>Summary of Survey Findings</p> <p>(UKHab codes used)</p>	<p>The site does not contain any habitats listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Overall, the habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km.</p> <p>On-site habitat descriptions</p> <p>u1 - Built-up areas and gardens [vegetated garden 828]</p> <p>Located in the eastern section of the site is a garden area, comprising an amenity lawn. The lawn area comprises a rye-grass mix (<i>Lolium perenne</i>) that is extremely species poor, with only rare occurrences of white clover (<i>Trifolium repens</i>), dandelion (<i>Taraxacum officinale</i>) and creeping buttercup (<i>Ranunculus repens</i>) present. The lawn area is regularly mown to maintain its amenity value for the dwelling at the site.</p> <p>BNG Condition Assessment – N/A (Pre-determined by the metric)</p> <p>u1b5 – Buildings</p> <p>There is one building present within the site that comprises a garage structure, associated with the dwelling to the north of the site. The buildings suitability for roosting bats is detailed further in this report.</p> <p>BNG Condition Assessment – N/A (pre-determined by the metric)</p>

	<p>u1b6 – Other developed land</p> <p>Located in the western and central areas of the site are sections of hardstanding, utilised for access into the site and car parking. There is no associated vegetation and the areas of minimal ecological value.</p> <p>BNG Condition Assessment – N/A (pre-determined by the metric)</p> <p>Local notable habitats</p> <p>An area of deciduous woodland is located 190m south of the site. Deciduous woodland is designated as a priority habitat under Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006. It is unlikely that the habitats present within the site are functionally connected to these areas, given their largely ornamental nature and the location of the site within a largely urban setting.</p>
<i>Foreseen Impacts</i>	<p>On-site habitats</p> <p>The proposed development will result in the loss of a small area of vegetated garden. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats, however, given that some areas of garden are to be replaced by areas of built form, this could still result in an overall loss to biodiversity.</p> <p>Notable habitats</p> <p>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 areas of deciduous woodland, indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.</p>
<i>Recommendations</i>	<p>On-site habitats</p> <p>To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated:</p> <ul style="list-style-type: none"> • Creation of species rich grassland; and • Planting of native trees and shrubs throughout the site.

	<p>Notable habitats</p> <p>Best practice measures to minimise the possibility of pollution affecting the nearby areas of deciduous woodland must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this.</p> <p>Biodiversity net gain</p> <p>The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain.</p>
Locality and Designated Sites	
<p><i>Summary of Survey Findings</i></p>	<p>On-site designations</p> <p>The site is not subject to any designation.</p> <p>Statutory designated sites (within 2km)</p> <p>There are two statutory sites within 2km of the site, as detailed below:</p> <ul style="list-style-type: none"> • Worsborough Country Park Local Nature Reserve (LNR) – 210m south. The site is good for water fowl. Habitats include a reservoir, willow carr, managed grassland/meadowland, reed bed and woodland. • Dearne Valley Wetlands Site of Special Scientific Interest (SSSI) – 280m south. Dearne Valley Wetlands SSSI is of special interest for the following nationally important features: <ul style="list-style-type: none"> ○ Breeding gadwall <i>Mareca strepera</i>, shoveler <i>Spatula clypeata</i>, garganey <i>Spatula querquedula</i>, pochard <i>Aythya ferina</i>, bittern <i>Botaurus stellaris</i>, black-headed gull <i>Chroicocephalus ridibundus</i> and willow tit <i>Poecile montanus klieenschmidtii</i>. ○ Non-breeding gadwall <i>Mareca strepera</i> and shoveler <i>Spatula clypeata</i>. ○ Diverse assemblages of breeding birds of Lowland damp grasslands, Lowland scrub and a mixed assemblage of Lowland open waters and their margins and Lowland fen.

	<p>The site lies within the impact risk zone for Dearne Valley Wetlands SSSI.</p> <p>Statutory designated sites (within 10km)</p> <p>No national network sites (SAC, SPA, Ramsar) are located within 10km.</p> <p>Non-statutory designated sites</p> <p>The presence of non-statutory designated sites within 2km of the site cannot be established without data from the local records centre.</p>
<i>Foreseen Impacts</i>	<p>On-site designations</p> <p>No impacts foreseen.</p> <p>Statutory and non-statutory designated sites</p> <p>No direct impacts to any designated sites will occur as a result of the proposed development. However, due to the proximity of the site to Worsborough Country Park LNR and Dearne Valley Wetlands SSSI, indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.</p> <p>The site lies within the impact risk zone for Dearne Valley Wetlands SSSI The proposed development type is not listed as a possible high risk for this designation.</p>
<i>Recommendations</i>	<p>On-site designations</p> <p>None required.</p> <p>Statutory and non-statutory designated sites</p> <p>Best practice measures to minimise the possibility of pollution affecting the nearby Worsborough Country Park LNR and Dearne Valley Wetlands SSSI must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this.</p>

Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species recorded on site.
<i>Foreseen Impacts</i>	N/A
<i>Recommendations</i>	No further surveys but remain vigilant.
Invertebrates	
<i>Summary of Survey Findings</i>	The vegetated garden on site likely provides common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.
<i>Foreseen Impacts</i>	None foreseen.
<i>Recommendations</i>	No further surveys.
Bats	
<i>Summary of Survey Findings</i>	<p>EPSL data</p> <p>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. One EPSL is present within a 2km radius of the site. The record (2017-32557-EPS-BDX) is located 530m south-east of the site and relates to the damaged and destruction of a breeding site and resting place for soprano pipistrelle.</p> <p>Foraging and commuting habitat</p> <p>The habitats present within the site are considered to be of low ecological value for foraging and commuting bats, primarily due to their predominantly ornamental nature and the absence of suitable linear features that could facilitate bat movement. In contrast, the habitats within the wider landscape to the south comprise a more connected network of features, including vegetated corridors and semi-natural habitats, which are likely to offer greater suitability for foraging and commuting bats.</p>

	<p>Roosting habitat</p> <p>Buildings to be impacted by the proposed development are assessed for their suitability to support roosting bats below. No evidence of roosting bats was identified on or within B1.</p>
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B1 Building description	Photographs
<p><i>Summary</i></p> <p>Building B1 comprises a single-storey, brick-built garage structure, with a pitched roof, covered in concrete roof tiles. Throughout the building, there are timber soffit boxes present, which are all in good condition, and well-sealed against the brickwork. Overall, the building is in excellent condition, with no gaps or holes present within any of the external features that could be utilised by roosting bats.</p> <p>Internally, there is one roof void present within the building that covers the entire footprint of the building. The roof structure was composed of a timber frame, which is covered in a bitumen felt lining. The loft space is currently utilised by storage of various items by the occupiers of the site and as such, is subject to routine levels of disturbance. No light was observed to be entering the roof space and the bitumen lining was determined to be in excellent condition.</p> <p>Given the well sealed nature of the building resulting in an absence of suitable roosting features, B1 is determined to be of negligible value to roosting bats.</p>	 <p>Eastern elevation of B1</p>  <p>Northern elevation of B1</p>



Internal area of B1

<i>Foreseen Impacts</i>	<p>Roosting habitat [Buildings]</p> <p>Bats are very unlikely to be roosting within this building and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development.</p> <p>Foraging and commuting habitat</p> <p>The proposed development will result in the loss of small areas of vegetated garden, 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.</p> <p>Artificial lighting</p> <p>The proposed development may lead to a small increase in the amount of current lighting of surrounding habitats or the retained buildings adjacent to the site, however, given the sites location within the curtilage of a dwelling and adjacent to a series of roads and dwellings, this is likely to be inconsequential for bats.</p>
<i>Recommendations</i>	<p>Roosting habitat [Buildings]</p> <p>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.</p> <p>Artificial lighting</p> <p>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.</p> <p>Suggested biodiversity enhancements</p> <p>The installation of two bat boxes at the site will provide additional roosting habitat for bats.</p> <p>The bat boxes will be incorporated into the fabric of the new dwellings. 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</p>

	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	
<i>Summary of Survey Findings</i>	<p>Buildings</p> <p>No evidence of nesting birds was identified on or within B1. B1 is deemed to provide negligible habitat value for nesting birds due to a lack of suitable nesting sites or access points.</p> <p>Vegetation</p> <p>No suitable habitat present on site for nesting birds.</p> <p>Barn owls</p> <p>The site does not appear to provide any suitable nesting sites for barn owls.</p> <p>Overwintering birds</p> <p>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.</p>
<i>Foreseen Impacts</i>	<p>Buildings/vegetation</p> <p>No impacts are anticipated on nesting birds as a result of the proposed development.</p> <p>Barn owls</p> <p>None foreseen.</p> <p>Overwintering birds</p> <p>None foreseen.</p>

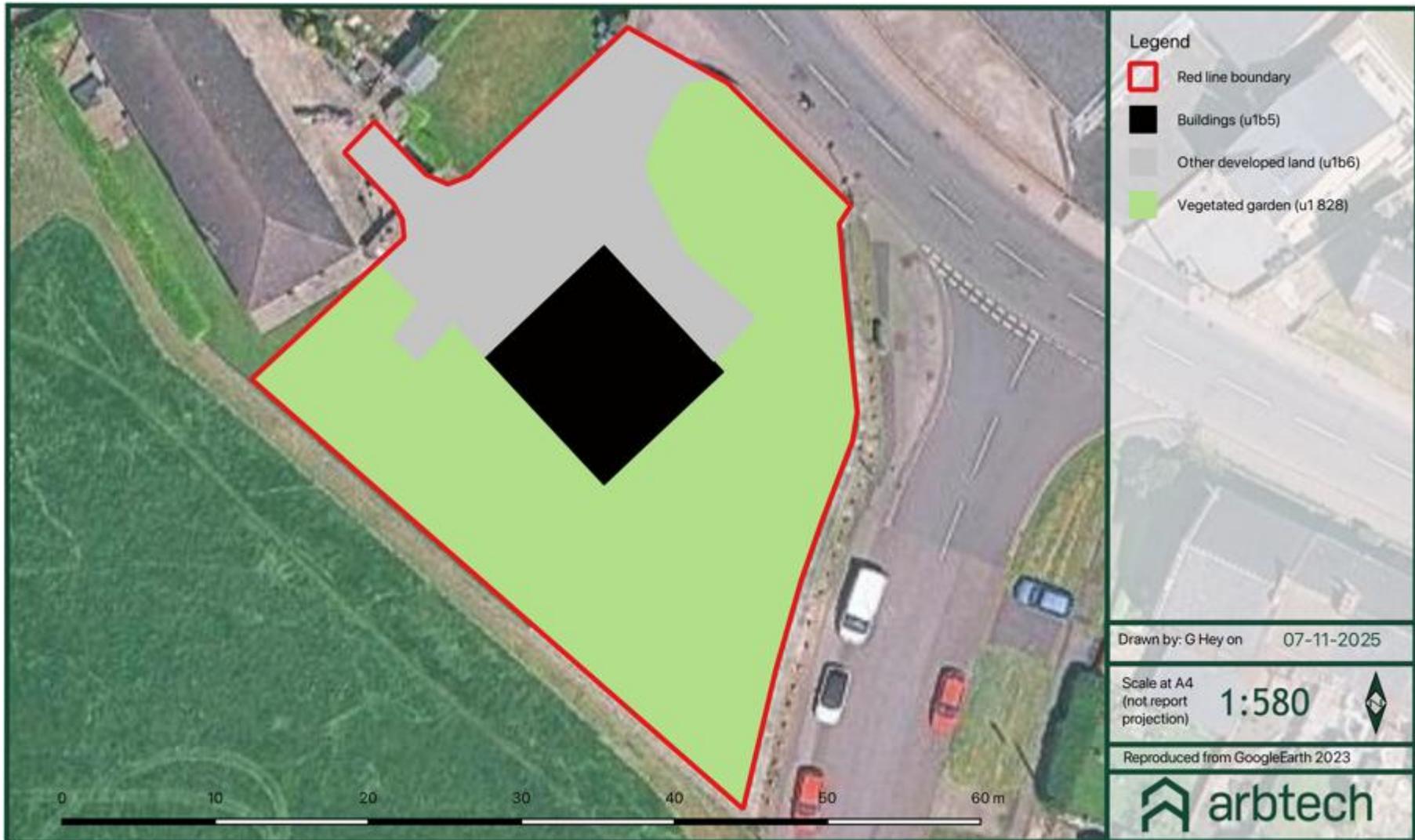
<i>Recommendations</i>	<p>Buildings/vegetation</p> <p>None required.</p> <p>Barn owls</p> <p>None required.</p> <p>Overwintering birds</p> <p>None required.</p>
Reptiles	
<i>Summary of Survey Findings</i>	<p>EPSL data</p> <p>A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site.</p> <p>Habitat suitability</p> <p>There is no suitable habitat present on site for reptiles due to a lack of habitats such as scrub and rank grassland which would offer refuge for these species. Further, the site is surrounded by urban development (i.e. roads and buildings) which is considered sub-optimal for reptile migration and therefore reptiles are considered unlikely to migrate from any nearby suitable habitats to the development site. As such it is likely that reptiles are absent from the development site.</p>
<i>Foreseen Impacts</i>	No impacts are anticipated on reptiles as a result of the proposed development.
<i>Recommendations</i>	None required.
Amphibians	
<i>Summary of Survey Findings</i>	<p>EPSL and survey data</p> <p>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.</p>

	<p>Aquatic habitat suitability (including ponds within 500m)</p> <p>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).</p> <p>There are no ponds on the site, but a review of aerial imagery (MAGIC and OS Maps) indicates the presence of five ponds within a 500m radius of the site. All of the ponds are located over 250m from the site, 320m south, 330m south, 400m south-east, 480m south-east and 490m south-east. All of the ponds are separated from the site by significant areas of built form including main roads and buildings, all of which are likely to present a significant barrier to dispersal. Given the above, the ponds are considered to be disconnected from the site.</p> <p>Terrestrial habitat suitability</p> <p>The site provides limited suitable terrestrial habitat for amphibians given the lack of optimal habitat (i.e. scrub, rank grassland). The areas of hard standing and amenity grass offer sub-optimal habitat for terrestrial amphibians. Further, there is limited suitable terrestrial habitat across the wider landscape reducing the likelihood of amphibians being present on site and across the surrounding areas.</p>
<i>Foreseen Impacts</i>	Given the lack of suitably connected breeding ponds within 500m of the site, the presence of GCN on-site is considered unlikely and therefore impacts to amphibians as a result of the proposed development are deemed to be acceptably low.
<i>Recommendations</i>	None required.
Badger	
<i>Summary of Survey Findings</i>	No badger setts were noted on site or within a 30m radius of the site. The site is considered unsuitable for badgers given the lack of suitable sett excavation areas/ground. Further, there is limited suitable badger foraging habitat on site given the lack of fruiting trees/scrub. The site is also surrounded by urban development (i.e. roads and buildings), which is sub-optimal habitat therefore reducing the likelihood of badgers being present within the surrounding area of the site.

<i>Foreseen Impacts</i>	No impacts are anticipated on badgers as a result of the proposed development.
<i>Recommendations</i>	None required.
Riparian animals	
<i>Summary of Survey Findings</i>	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.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	<p>EPSL data</p> <p>A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site.</p> <p>Habitat suitability</p> <p>The site lies outside of the know current range for hazel dormice and there are no suitable habitats within the development area. As such it is considered likely that hazel dormice are absent from site.</p>
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None foreseen.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The vegetated garden on site provides suitability for foraging and commuting hedgehogs within the urban landscape.
<i>Foreseen Impacts</i>	Small areas of vegetated garden 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.
<i>Recommendations</i>	A precautionary working method will be implemented during construction, including the following measures:

	<ul style="list-style-type: none">• 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. <p>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.</p>
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Appendix 1: Survey/Habitat map



Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Habitat Photos

Buildings	
Photograph	Description
	<p>Figure 1: Garage building (B1) on site</p>
Vegetated garden	
Photograph	Description
	<p>Figure 2: Amenity grass lawn on site (to rear of B1)</p>

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Version control			
Status	Issue	Name	Date
Draft	0.1	Gareth Hey BSc (Hons) MSc ACIEEM, Ecological Consultant	07/11/2025
Proof	0.2	Mel Reid BSc (Hons) MRes AMRSB, Principal Ecologist	11/11/2025
Final	1.0	Gareth Hey BSc (Hons) MSc ACIEEM, Ecological Consultant	11/11/2025