Gareth Hey BSc (Hons) MSc ACIEEM
Ecological Consultant
Email: ecology@arbtech.co.uk
Arbtech Consulting Ltd
arbtech.co.uk

Preliminary Ecological Appraisal

Survey site:

Land off Bretton Street, Dewsbury, Kirklees WF12 9DB

Client:

Jade3 Architecture Ltd

Survey date:

27th February 2025

Project:

This report is prepared to inform a planning application with Kirklees Council. The proposal is described as:

Construction of commercial unit.

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 SE 25005 20226 and has an area of approximately 0.86ha.

The site comprises an area of land, forming a mosaic of woodland, grassland and scrub. It comprises a triangular area of land bound by Bretton Street to the north, the Dewsbury-Wakefield railway line to the west and the Calder and Hebble Canal (Dewsbury Cut) to the east. The site is set down from Bretton Street, with historical evidence indicating the ground was previously utilised for grazing. The wider landscape is dominated by areas of urban land, including significant areas of commercial units, with residential development, also present.

Survey Details

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) (Natural Resource Wales Protected Species Licence Number: [Bats] (S094455/1)

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
27/02/2025	10	78	10	4	None

Survey limitations

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

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

A biological records data search has not been undertaken. Given the ecologically valuable nature of the site, it is recommended that information on protected species and habitats within a 2km radius of the site is received from the West Yorkshire Ecology Service. Once these records have been received, this report should be updated to provide a full assessment of the ecological baseline of the site.

Ecological Survey Factor **Conclusion, Impact or Recommendations**	**Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.**
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, 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).**	
Summary of Survey Findings **(***UKHab codes used)*	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). However the site also contains woodland which is of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). Other habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km. **On-site habitat descriptions** **g4** – Modified grassland Within the northern section of the site is a small area of grassland, that at the time of survey comprised a short and limited sward. It is possible that this section of the site was previously intensively grazed, and as such, the species composition within the patch is limited. The area is dominated by perennial rye-grass and abundant false oat-grass, with a few scattered forbs such as common hogweed, horse-radish, white dead-nettle and white clover. Approximately 3 vascular plant species per square metre on average. The sward height is consistently short across the parcel ranging from 4cm-8cm, less than 20% is more than 7cm. No scrub or bracken is present in the parcels. Physical damage across the grassland parcel is less than 5% of the total grassland area. The total cover of bare ground does not exceed 10%. No invasive schedule 9 plant species were noted. **Condition - Poor** Tall forbs (g4 – 16)

	Located in extensive areas, largely in the western section of the site are sections of tall forbs, which cover approximately 85% of the overall area. Small areas of common bent and creeping buttercup are found in isolated grass areas, but the habitat is mainly forbs. examples are broad leaved dock, common hogweed, ragwort, buddleia, willowherb, creeping thistle and bramble, which is present in the areas adjacent to the bramble scrub patches. The species present are extremely dense throughout these areas. As with the grassland, approximately 3 vascular plant species per square metre on average. The sward height is varied, however, with some patches (above 20%), greater than 7cm, and 20% below 7cm. Some patches of scrub are present within the habitat. Physical damage across the grassland parcel is less than 5% of the total grassland area. The total cover of bare ground does not exceed 10%. No invasive schedule 9 plant species were noted. **Condition - Poor** **w1g** – Other broadleaved woodland Located on the eastern and northern sections of the site, bordering Bretton Street and the Calder and Hebble Navigation (Dewsbury Cut) are sections of semi-mature, broadleaved woodland. Species present within the woodland is extremely limited, with birch and ash dominating the canopy layer, with occasional oak, also present. Also present within the woodland understorey and shrub layer is hawthorn, cherry and willow. The ground flora layer is also limited, with dense strands of bramble scrub dominating, with occasional soft rush, and the grass and tall forb species detailed above, also present. The woodland was subject to a condition assessment which has been repeated below: A. Age distribution of trees. Score = 2 B. Wild, domestic and feral herbivore damage. Score = 3 C. Invasive plant species. Score = 3 D. Number of native tree species. Score = 3 E. Cover of native tree and shrub species. Score = 3 F. Open space within the woodland. Score = 3

	G. Woodland regeneration. Score = 2 H. Tree health. Score = 3 I. Vegetation and ground flora. Score = 1 J. Woodland vertical structure. Score = 1 K. Veteran trees. Score = 1 L. Amount of deadwood. Score = 1 M. Woodland disturbance. Score = 3 **Total: 28 = Condition – Moderate** **h3d** – Bramble scrub Located within sections of the central and western areas of dense strands of bramble scrub, with limited other species present. There are some sections of immature self-set willow also present, occasionally. **Local notable habitats** There are limited areas of priority habitat as designated under Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006 within a 2km radius of the site. The only priority habitat present within this area is deciduous woodland, the closest are of which is located 390m south of the site.
Foreseen Impacts	**On-site habitats** The proposed development will result in the loss of the majority of the habitats within the site. 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, due to the proximity between the site and such areas.
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). To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated: • Creation of species rich grassland; and • Planting of native trees and shrubs throughout the site. **Notable habitats** None required. **Biodiversity net gain** 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.
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 is one statutory site within 2km of the site, as detailed below: • Sparrow Wood Local Nature Reserved (LNR) – 450m west of the site. The site is designated for the presence of Woodland habitat with the associated wildlife and flora. The site is located within the SSSI Impact Risk Zone for Denby Grange Colliery Ponds SSSI.

	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 the local 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 Denby Grange Colliery Ponds 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	

<table>
<tr><td>Summary of Survey Findings</td><td>The habitats present on-site, 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.</td></tr>
<tr><td>Foreseen Impacts</td><td>None foreseen.</td></tr>
<tr><td>Recommendations</td><td>No further surveys.</td></tr>
<tr><td colspan="2">Bats</td></tr>
<tr><td>Summary of Survey Findings</td><td>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. There is one EPSL within a 2km radius of site as detailed below:

<table>
<tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr>
<tr><td>2019-38940-EPS-MIT</td><td>Common pipistrelle</td><td>1.9km north-west</td><td>Destruction of a resting place</td></tr>
</table>

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 woodland, scrub and grassland, including tall forbs. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. In addition to the above, the woodland present on site, along with the adjacent watercourse are likely to provide suitability for commuting bats. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites.

Roosting habitat</td></tr>
</table>

	None of the trees within the site held any features that provide suitability for roosting bats. The woodland areas are dominated by birch and other self-set, largely semi-mature tree specimens, with no suitable knot holes, cavities or loose bark present that could provide suitability for roosting bats. Given the above, all of the trees within the site are determined to be of negligible value (PRF-NONE) for roosting bats.

Foreseen Impacts	**Roosting habitat [Trees]** No features were identified on any of these trees and as such there are unlikely to be any impact to bats as a result of their felling. **Foraging and commuting habitat** The proposed development will result in the loss of small areas of bramble scrub, grassland, and an even smaller area of woodland, that directly abuts the main road. However, given 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 [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. **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. **Suggested biodiversity enhancements**

	The installation of three bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be incorporated into the fabric of the new building. 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	**Trees and vegetation** No bird nests were identified within the vegetation on-site, however they all offer nesting opportunities and nest-building resources for birds. **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	**Trees and vegetation** The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. **Barn owls** None foreseen. **Overwintering birds** None foreseen.

Recommendations	**Trees and vegetation** Any building or vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. 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 two bird boxes 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. Swift and sparrow boxes should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction.
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 woodland and scrub provide elevated value for reptiles as these habitats provide a suitable structure for refuge, whilst also providing foraging and commuting opportunities. However, it is important to note that the site is bound by extensive areas of built form, which present significant dispersal barriers to reptiles. In addition to the above, there is an absence of suitable habitats within the wider landscape, and as such, it is considered the site is largely isolated for reptiles. The presence of reptiles on site cannot be discounted, albeit likely limited to low numbers within scrub and peripheral woodland.
Foreseen Impacts	Although a small area of suitable habitat is being removed as part of the development, there is a low risk that a low number of reptiles could be present in the vicinity of the works. These could be injured or killed without mitigation.
Recommendations	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures: • Vegetation will 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.
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). No ponds are present on site or within 500m of the site. **Terrestrial habitat suitability** Areas of scrub and woodland may provide foraging and sheltering opportunities for amphibians. However, given the urban nature of the surrounding landscape (i.e. dominated by roads and hard standing which are sub-optimal for amphibians) it is unlikely that amphibians will migrate on to site. 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.
Foreseen Impacts	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.
Recommendations	None required.
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. Areas of woodland and scrub 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 badgers, 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. **Suggested biodiversity enhancements** Planting fruit bearing trees and species-rich grassland to increase foraging opportunities for badgers.
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.

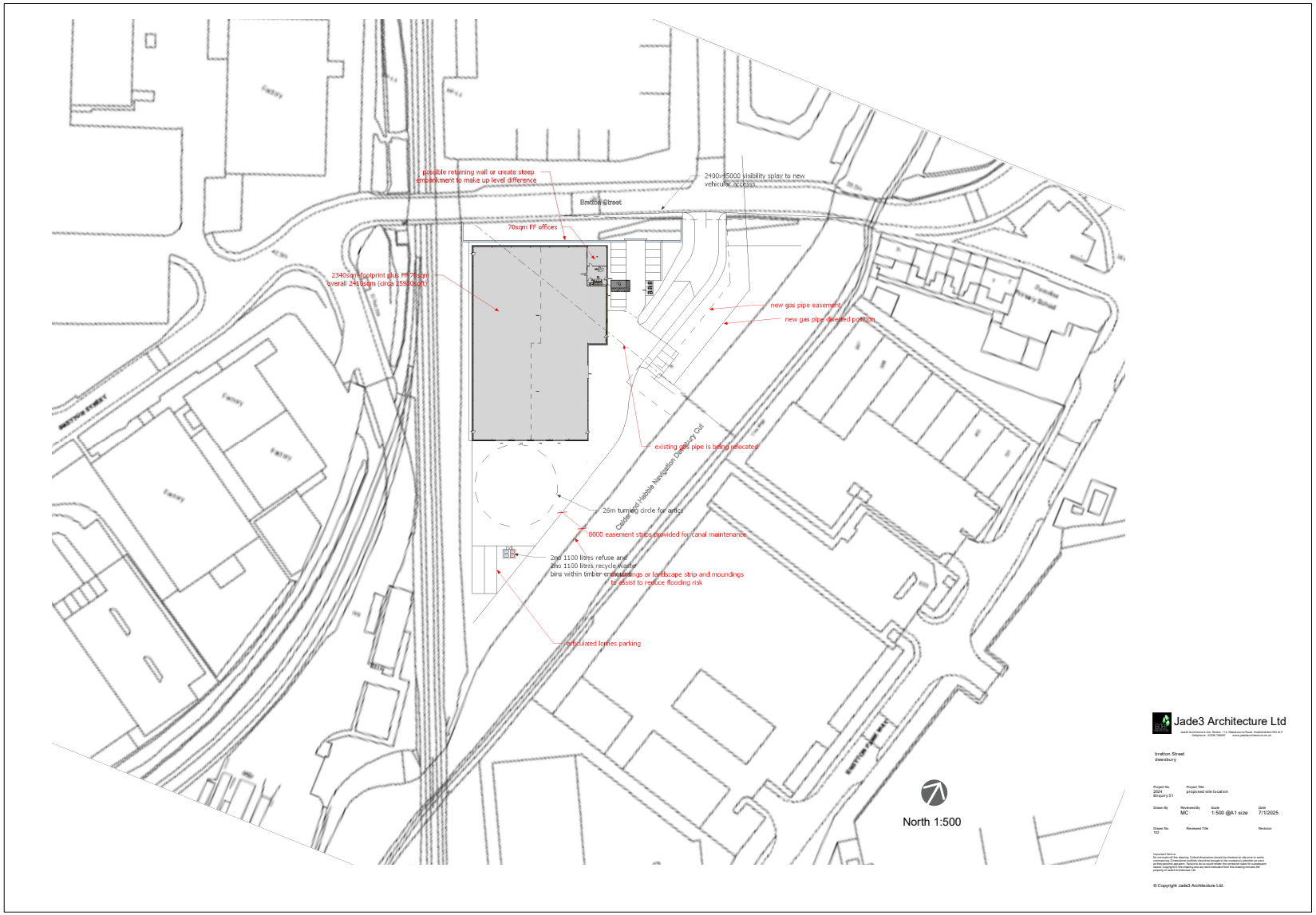
	The Calder and Hebble Navigation located directly adjacent to the site on the eastern boundary is likely to offer suitability for otters, with suitable riparian habitat present for commuting to the wider area. Based on surveyor knowledge, otter are known to be present on the within the catchment area and as such, are likely to commute along its reach, whilst accessing other watercourses within the catchment, such as the River Calder, which is located 140m north-east of the site, and comes into close proximity to the adjacent canal, approximately 50m north of the area that runs adjacent to the site. The adjacent watercourse is considered unsuitable for water vole, as it is a deep and heavily modified watercourse, both of which are known to provide sub-optimal habitat for water vole.
Foreseen Impacts	**Otters** The proposed development will include works within close proximity to the riparian zone of the watercourse, along with some removal of woodland, which could be utilised by otters. The loss of such habitats is likely to be inconsequential to local otter populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the damage, disturbance and destruction of otter holts or breeding habitat and could kill or injure any otters present. **Water voles** The watercourse is considered highly unsuitable for water vole and as such they are considered to be absent from the site, with no impacts anticipated.
Recommendations	**Otters** An otter survey will be required to determine presence or likely absence of otter on the site. This will comprise a walkover of the section of the watercourse within the site as well as up to 200m either side. There are no seasonal constraints to this type of survey (Chanin, 2003). The surveys are likely to be required before planning permission can be granted. **Water voles** 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. As such it is considered likely that hazel dormice are absent from site.
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 woodland, scrub and tall forbs provide suitability for foraging, commuting and refuge seeking hedgehog.
Foreseen Impacts	The majority of the habitats within the site will be removed during construction. However, the woodland present on the eastern section of the site that provides the greatest area of suitability on the site will be retained within the proposals. However, construction activities could result in the death or injury of hedgehogs, if present.
Recommendations	Similar to the badgers, 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.

Appendix 1: Survey/Habitat map

Appendix 2: Location map

Appendix 3: Proposed plan



Appendix 4: Habitat Photos

Modified grassland, bramble scrub and tall forbs	
Photograph	**Description**
	Figure 1: Northern section of the site.
Modified grassland, bramble scrub and tall forbs	
Photograph	**Description**
	Figure 2: Central section of the site.

Woodland	
Photograph	**Description**
	Figure 3: Strip of woodland present on the eastern boundary of the site, adjacent to the watercourse.

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Version control			
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Draft	0.1	Gareth Hey BSc (Hons) MSc ACIEEM, Ecological Consultant	06/03/2025
Final	1.0	Harley Stone BSc (Hons), Consultant Ecologist	17/03/2025