

Preliminary Ecological Appraisal

Survey site:

Land Southeast of Half Acre House, Roch Valley Way, Rochdale, OL11 4DB

This report contains sensitive information that is unsuitable for release to the public. A redacted version of this report can be provided upon request.

Client:

Mrs Anita Lewis

Survey date:

28th October 2024

Project:

This report is prepared to inform a planning application with the Rochdale Metropolitan Borough Council. The proposal is described as:
The construction of 5no. dwellings.

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

Site Location and Context					
The site is centred on National Grid Reference: SD 88112 12727 and has an area of approximately ~0.3ha. The site comprises grassland, scrub and woodland. The site is set within an urban high-density area of Rochdale which comprises residential dwellings with associated vegetated gardens and tarmacked roads to the north, industrial infrastructure to the south, and hedge and tree lined amenity fields to the southwest with dense pockets of woodland. These woodlands extend into the wider landscape and act as linear landscape elements which facilitate dispersal for many species of wildlife. The River Roch runs ~120m to the southeast and Rochdale Cemetery is situated ~460m to the north.					
Survey Details					
The site survey was undertaken by Amber Williams BSc, MSc, Graduate Ecologist (Accredited on Natural England Bat Licence Number: 2018-33540-CLS-CLS.)					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
28/10/2024	15	94	90	3	Showers
Executive Summary					
A Biodiversity Net Gain (BNG) assessment will be required for the site. A badger scoping survey will be required to characterise the sett types present and the usage of the site by badgers. A Ground Level Tree Assessment will be required for all trees impacted by the proposed development to assess the impacts to roosting bats.					

Ecological Survey Factor	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.
Conclusion, Impact or Recommendations	
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 is set within an urban high-density area of Rochdale which comprises residential dwellings with associated vegetated gardens and tarmacked roads to the north, industrial infrastructure to the south, and hedge and tree lined amenity fields to the southwest with dense pockets of woodland. These woodlands extend into the wider landscape and act as linear landscape elements which facilitate dispersal for many species of wildlife. The River Roch runs ~120m to the southeast and Rochdale Cemetery is situated ~460m to the north. <u>Other neutral grassland [g3c]</u> The majority of the site comprises unmanaged other neutral grassland situated at the centre site boundary (Fig. 1). This grassland was notably wet. Species present include cocks foot grass (D), red fescue (D), common rush (D), perennial rye grass (D), ribwort plantain (D), reed grass (A), greater plantain (A), dandelion (A), red stemmed feathermoss (A), creeping buttercup (A), common bent grass (A), bitter dock (F), bramble (F), common nettle (O), creeping thistle (O), Himalayan balsam (O), goose grey (O). This habitat was subject to a condition assessment using the Grassland habitat type (medium, high and very high distinctiveness): Grassland – Other neutral grassland habitat condition sheet. The results are detailed below:

- A. The parcel does not represent a good example of its habitat type
- B. Sward height is varied.
- C. Cover of bare ground is between 1-5%.
- D. Cover of bracken is <20% and bramble <5%
- E. Invasive species are present.
- F. There is <10 vascular plant species per m².

It is considered that the other neutral grassland is classified as **moderate** condition.

Other broadleaved woodland [w1g]

The majority of the site is comprised of other broadleaved woodland (Fig. 2). There were several trees with deadwood (Fig. 3) Species present include sycamore (D), silver birch (D), alder (D), field maple (A), oak (O), goats willow (O), beech (O) and Austrian pine (R). The woodland understorey shrub habitat (Fig. 4) comprises of species including Himalayan balsam (D), bramble (D), nettle (A), hart's-tongue fern (A), male fern (A), creeping buttercup (F), wood avens (O). This habitat was subject to a condition assessment using the Woodland habitat type: Woodland and forest – Other woodland; broadleaved habitat condition sheet. The results are detailed below:

- A. There are three age classes present.
- B. There was no significant browsing damage.
- C. There was a dominant presence of invasive species.
- D. >5 native tree species were present.
- E. >80% of canopy trees were native however <50% of understory shrubs were invasive species.
- F. 21-40% of woodland has areas of temporary open space.
- G. All three age classes were present.

- H. 11-25% of trees had indicators of damage, pest or disease.
- I. No recognisable woodland NVC plant community present at ground level.
- J. There were two storeys across all survey points.
- K. No veteran trees present.
- L. 25-50% of survey plot has presence of deadwood.
- M. <1ha in total of nutrient enrichment and <20% of woodland area has ground damage.

It is considered that the woodland is classified as **moderate** condition.

Mixed scrub [h3h]

Buffering the woodland from the grassland along the northern site boundary is dense mixed scrub (Fig. 5). Species present include bramble (D), Himalayan balsam (D), common nettle (A) with saplings of oak and alder scattered throughout. This habitat was subject to a condition assessment using the Scrub habitat type: Heathland and scrub – Mixed scrub habitat condition sheet. The results are detailed below:

- A. The parcel does not represent a good example of its habitat type due to dominant presence of Himalayan balsam.
- B. Saplings are present.
- C. There is a dominant presence of an invasive species.
- D. There is a well-developed edge between the habitat and adjacent habitats.
- E. There are clearings within the scrub.

It is considered that the mixed scrub is classified as **moderate** condition.

Built linear features [u1e]

Along the northern site boundary is a stone-built wall measuring ~2m high and ~0.25m wide (Fig. 6).

	<u>Local notable habitats</u> There is a parcel of Priority Deciduous woodland situated to the southeastern site boundary which extends off site. Additionally, there are several other priority habitats within 2km of the site boundary. These are as follows: • There are several patches of Ancient Woodland, the closest is located ~730m southwest of the site boundary. • There are several areas of Priority Woodpasture and Parkland, the closest is located ~1.2km east of the site boundary.
<i>Foreseen Impacts</i>	<u>On-site habitats:</u> The proposed development will result in the loss of ~0.07ha of other neutral grassland, ~0.05ha mixed scrub and ~0.195ha of woodland. This could result in a net loss in biodiversity at the site. Indirect impacts are foreseen on the adjacent habitats from the construction or operation of the development if left unmitigated (dust, litter, surface run off etc).
<i>Recommendations</i>	A Biodiversity Net Gain (BNG) assessment will be required for the site. Due to the loss of ~0.07ha of other neutral grassland, ~0.05ha mixed scrub and ~0.195ha of woodland development will be required to demonstrate a minimum 10% biodiversity net gain through use of the latest Defra Biodiversity Metric as to comply with legislation (Environmental Act 2021). It is noted that the development is not exempt from demonstrating a complaint biodiversity net gain, as per current Natural England Guidance: https://www.gov.uk/guidance/biodiversity-net-gain-exempt-developments 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).

	Best practice measures to minimise the possibility of pollution affecting adjacent habitats must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	<u>On-site designations:</u> The site is not subject to any designation. <u>Statutory designated sites (within 2km):</u> There is one statutory designated sites situated within 2km of the site boundary. These are as follows: • Rochdale Canal Site of Special Scientific Interest (SSSI) Special Area of Conservation (SAC) – ~1.6km southeast – <i>The Rochdale Canal contains important habitats for submerged aquatic plants and emergent vegetation, including extensive colonies of the nationally scarce SAC species floating waterplantain Luronium natans. The site also supports a diverse assemblage of aquatic flora, notably its assemblage of pondweeds, Potamogeton spp; the nine species of which found in the canal represent a balanced community which reflects the quality of water.</i> The site lies within the impact risk zone for Rochdale Canal (SSSI). The proposal is not listed as posing a significant threat to the designation. <u>European designated sites (10km)</u> There are two European designated sites within 10km of the site boundary. The closest of these is Rochdale Canal (SSSI) (SAC), detailed above.
<i>Foreseen Impacts</i>	<u>On-site designations:</u>

	No impacts foreseen. <u>Statutory and non-statutory designated sites:</u> No direct impacts foreseen, given the small scale of the proposed development and distance of the proposed development from statutory designated sites.
<i>Recommendations</i>	<u>On-site designations:</u> None required. <u>Statutory and non-statutory designated sites:</u> None required.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	Dense Himalayan balsam was identified within the mixed scrub, woodland understorey, and scattered throughout the grassland (Fig. 4,5 & 8). Himalayan balsam is listed as an invasive, non-native species under Schedule 9 of the Wildlife and Countryside Act 1981.
<i>Foreseen Impacts</i>	The removal of the habitat could result in the spread of Himalayan balsam if not mitigated for.
<i>Recommendations</i>	The following measures should be implemented to control and/or eradicate Himalayan balsam from the site: • Himalayan balsam removal should be undertaken between April and June, prior to seeding. • Pull the plant up by grasping the base of the stem and giving a steady gentle pull to bring up roots. • Dispose of Himalayan balsam in line with appropriate controlled waste measures or by leaving it in a pile to compost down (this stops the balsam re-growing from the roots or the nodules on the stem). • Ensure biosecurity measures are in place and clean boots, clothing and vehicle tyres before leaving site.
Invertebrates	

Summary of Survey Findings	No habitat for protected or notable invertebrates is found on site. The habitats within the site, such as the grassland, could offer opportunities for a diverse community of generalist invertebrate fauna.														
Foreseen Impacts	None foreseen.														
Recommendations	No further surveys. <u>Suggested biodiversity enhancements:</u> The site could be further enhanced via the provision of native wildflowers or wildflower turf, and the installation of insect hotels and log piles into the new garden areas which would provide foraging and sheltering opportunities for invertebrates.														
Bats															
Summary of Survey Findings	<u>EPSL data:</u> A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licenced 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 are three EPSLs within a 2km radius of site. <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>EPSM2009-709</td><td>Common pipistrelle</td><td>~1.1km northeast</td><td>Destruction of a resting place</td></tr><tr><td>2015-8047-EPS-MIT</td><td>Common pipistrelle, soprano pipistrelle, Daubenton's bat,</td><td>~1.5km northeast</td><td>Destruction of a resting place</td></tr></table>			EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	EPSM2009-709	Common pipistrelle	~1.1km northeast	Destruction of a resting place	2015-8047-EPS-MIT	Common pipistrelle, soprano pipistrelle, Daubenton's bat,	~1.5km northeast	Destruction of a resting place
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	EPSM2011-2750	Common pipistrelle, soprano pipistrelle	~1.9km east	Destruction of a resting place
<i>Foreseen Impacts</i>	There are no Special Areas of Conservation designated for bats within 10km of the site. <u>Roosting bats:</u> There are several mature trees within the woodland on site that likely offer suitable bat roosting habitat. <u>Foraging and commuting bats:</u> The woodland provides good foraging and commuting habitat for bats within the local area. <u>Roosting (trees)</u> As the proposal involves the felling of onsite trees, any bat roosts within them will be destroyed. Bats could be injured or killed as a result of this. <u>Foraging and commuting bats:</u> Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of woodland and other neutral grassland. 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 woodland on site extends 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.			

	The proposed development will result in the loss of ~0.07ha of other neutral grassland, ~0.05ha mixed scrub and ~0.195ha of woodland (i.e., suitable foraging habitat), but 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.
<i>Recommendations</i>	<u>Roosting bats:</u> A Ground Level Tree Assessment will be required for all trees impacted by the proposed development. If any suitable roosting features are identified on these trees, then a close-up inspection of any features that could be used by roosting bats will be undertaken to determine the presence or likely absence of roosting bats. This may require a qualified climbing team or a Mobile Elevated Work Platform (MEWP) to access the features. <u>Foraging and commuting bats:</u> 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 <u>Suggested biodiversity enhancements:</u> The installation of two bat boxes onto buildings post-development or mature trees at the site would provide additional roosting habitat for bats. 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. The bat boxes should be a specification suitable for crevice/void-dwelling species of bat such as: • Habibat Bat Box (buildings) • Beaumaris Bat Box (buildings) • NHBS Improved Cavity Bat Box (trees or buildings) • Vivara Pro Woodstone Bat Box (trees or buildings) • Eco bat box (trees or buildings) (Or a similar alternative brand). The site could also be enhanced for foraging and commuting bats, by planting native trees and shrubs, and planting of native hedgerow across the site (i.e., hawthorn or blackthorn).
Birds	
<i>Summary of Survey Findings</i>	<u>Trees:</u> No bird nests were identified within the vegetation on-site; however, the woodland, grassland and scrub provide foraging opportunities and nest-building resources for birds. No habitat for schedule 1 birds was observed. <u>Barn owls:</u> The site does not appear to provide any suitable nesting sites for barn owls. <u>Overwintering birds:</u> 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.

<i>Foreseen Impacts</i>	Buildings/trees The felling of trees could result in the destruction or the disturbance and subsequent abandonment of active bird nests. Barn owls None foreseen. Overwintering birds None foreseen.
<i>Recommendations</i>	Any 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. <u>Suggested biodiversity enhancements:</u> The installation of a minimum of four bird boxes on the new buildings will provide additional nesting habitat for birds e.g. ▪ Vivara Pro WoodStone Swift Nest Box (buildings)

	▪ House Sparrow Terrace FSC Nest Box (buildings) ▪ Swallow Nest Bowl (buildings) (Or a similar alternative brand). 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	
<i>Summary of Survey Findings</i>	<u>EPSL data:</u> A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. <u>Habitat suitability:</u> Habitats recorded on site are assessed to provide suitable foraging, commuting, and refuge opportunities for reptiles in the form of dense scrub and woodland. Further, the woodland adjacent to the site will likely facilitate dispersal of reptiles from the wider landscape. Although the landscape to the north and west is predominantly built up residential area with high volume of traffic on tarmac roads. These landscape features are likely to significantly limit dispersal opportunities onto the site for reptiles from the north and west. Although potential connectivity to the site for reptiles is limited in extent, the presence of a small population of common reptiles cannot be fully discounted.
<i>Foreseen Impacts</i>	The removal of ~0.07ha of other neutral grassland, ~0.05ha mixed scrub and ~0.195ha of woodland will occur 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.

	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.
<i>Recommendations</i>	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 advice must be sought from a suitably qualified ecologist. <u>Suggested biodiversity enhancements:</u> The site could be enhanced for reptiles post-development by planting additional native hedgerows across the site (i.e., hawthorn or blackthorn), and the inclusion of log piles and a compost heap.
Amphibians	
<i>Summary of Survey Findings</i>	<u>EPSL and survey data:</u> A review of the MAGIC database returned no granted EPSL records for Great Crested Newts (GCN) within 2km of the site.

	No positive class survey licence returns are present within 2km of the site. <u>Aquatic habitat suitability (including ponds within 500m):</u> GCN exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; GCN are typically found within terrestrial habitats up to 500m from breeding ponds (Langton <i>et al.</i> 2001). There are no ponds on site or within 500m of the site boundary. <u>Terrestrial habitat suitability:</u> The site contains grassland with varied short sward height which provides terrestrial opportunities for common amphibians for foraging. However, the presence of GCN within the site for transient periods in the grassland is unlikely, given the lack of suitable connecting ponds to the site (i.e., possible GCN breeding ponds) and the site's location within a built-up area. There is a higher likelihood of common amphibian occurrence, as amphibians such as common toads have better mobility compared to newts and can travel further distances (including over suboptimal habitat).
<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>	Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures:

	• 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 advice must be sought from a suitably qualified ecologist. <u>Suggested biodiversity enhancements</u> 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	
<i>Summary of Survey Findings</i>	A badger sett was identified at National Grid Reference SD 88163 12722 which is situated to the eastern of the site within the woodland (Fig. 7). Additionally, a mammal track was identified north of the set within the Himalayan

	balsam (Fig. 8). The sett entrance measured 32cm L x 35cm W. There was evidence of leaf litter clustered at the sett entrance. As there was only one sett located on site it is assumed to be an outlier sett.
<i>Foreseen Impacts</i>	The proposed development could result in the destruction of the badger sett on the site and could kill or injure any badgers present.
<i>Recommendations</i>	A badger scoping survey will be required to characterise the sett types present and the usage of the site by badgers. This will comprise the deployment of 2 wildlife cameras (one at the sett entrance and one observing the mammal path) over a period of 3-4 weeks and such surveys can be undertaken throughout the year, in accordance with current survey guidelines (Harris et al, 1989). The surveys are likely to be required before planning permission can be granted. Disturbance, damage or destruction of active badger setts will require a badger development licence. <u>Suggested biodiversity enhancements:</u> The site could be enhanced for badgers by planting bramble <i>Rubus fruticosus</i> and damson <i>Prunus domestica</i> subsp. <i>insititia</i>, as well as planting fruit-bearing trees to increase foraging opportunities for badgers.
Riparian animals	
<i>Summary of Survey Findings</i>	<u>EPSL data:</u> A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. <u>Habitat suitability:</u> There are no water courses onsite however the River Roch runs ~50m southeast.

<i>Foreseen Impacts</i>	Otters The proposed development will not result in the loss of any riparian habitats and no works will be undertaken within 8m of the watercourse (as per Environment Agency regulations). However, due to the presence of the watercourse within close proximity of the site, indirect effects such as pollution could occur during construction. Water voles No works will be undertaken within 5m of the top of the banks of the watercourse. Therefore, no impacts are anticipated on water vole as a result of the proposed development.
<i>Recommendations</i>	Owing to the nature of the proposed development and the low potential for impacts to otter, further otter surveys are considered to be disproportionate. 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 the watercourse and any retained habitats which otters could use. • Best practice pollution prevention measures will be implemented to minimise impacts to the watercourse and any retained habitats that otters 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 an otter holt or den is identified, works must cease and advice must be sought from a suitably qualified ecologist.
Hazel dormouse	

<i>Summary of Survey Findings</i>	<u>EPSL data:</u> A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. <u>Habitat suitability:</u> 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.
<i>Foreseen Impacts</i>	None foreseen.
<i>Recommendations</i>	None required.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The woodland, grassland and scrub provides foraging and commuting opportunities for hedgehogs. The surrounding area consists of dwellings with associated gardens, further woodland and grassland fields which may support hedgehogs, therefore, it is likely that hedgehogs are utilising the site.
<i>Foreseen Impacts</i>	The removal of ~0.07ha of other neutral grassland, ~0.05ha mixed scrub and ~0.195ha of woodland the site is likely to be inconsequential to local hedgehog populations owing to the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.
<i>Recommendations</i>	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.

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.

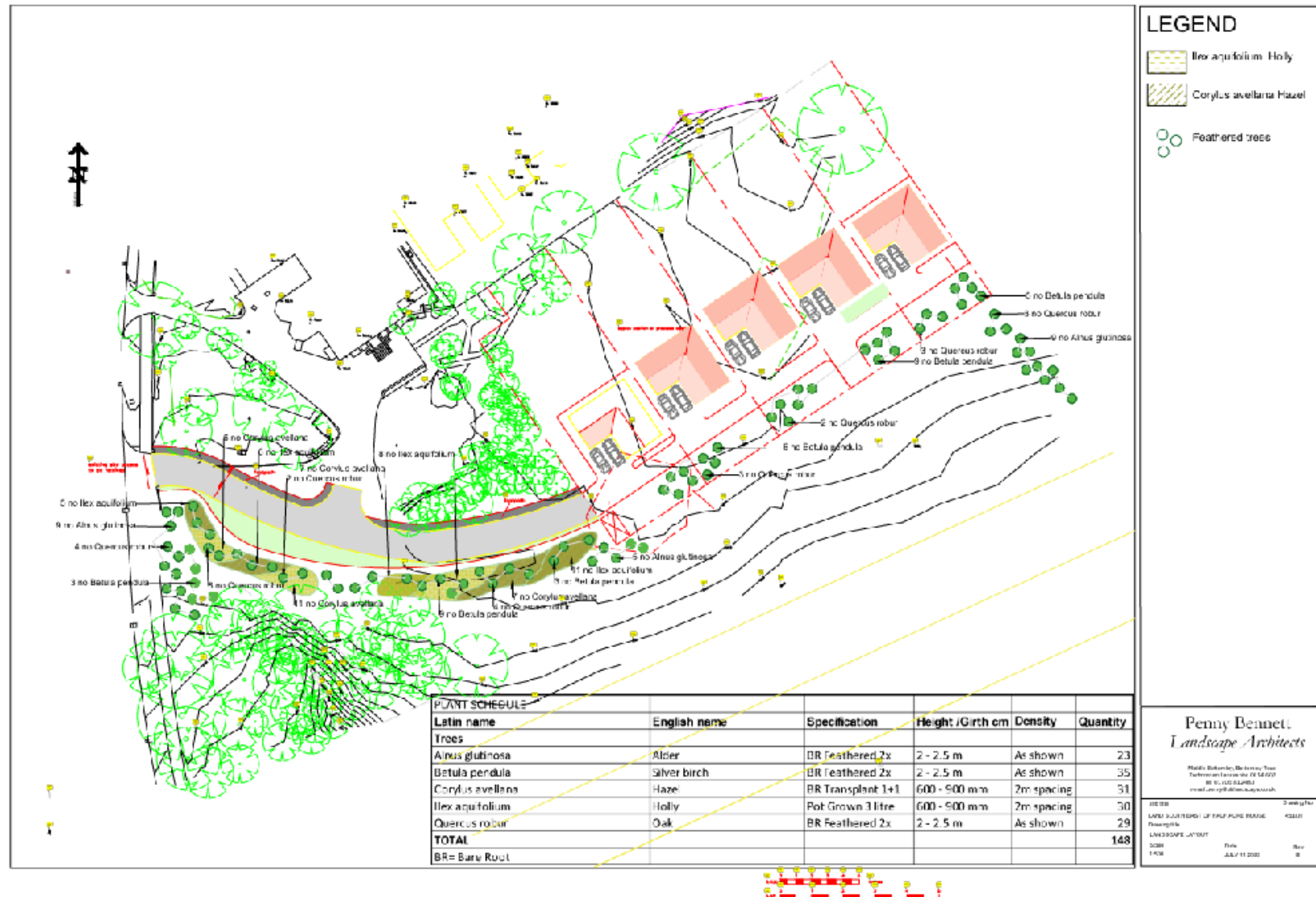
Appendix 1: Habitat map



Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Photos

	 A photograph showing a grassy field with tall, dry grasses in the foreground and a line of trees in the background.		Figure 1 Showing the grassland on site
	 A photograph showing a wooded area with several trees and a grassy clearing in the foreground.		Figure 2 Showing the woodland on site



Figure 3 Showing the standing deadwood on site



Figure 4 Showing the woodland understorey



Figure 5 Showing the mixed scrub on site



Figure 6 Showing the built linear feature on site



Figure 7 Showing the badger sett on site



Figure 8 Showing the mammal path on site

Legal

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Version control			
Status	Issue	Name	Date
Draft	0.1	Amber Williams BSc (Hons), MSc, Graduate Ecologist	30/10/2024
Proof	0.2	Mel Reid BSc (Hons) MRes MRSB, Senior Consultant	01/11/2024
Final	1.0	Amber Williams BSc (Hons), MSc, Graduate Ecologist	02/10/2024