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Preliminary Ecological Appraisal and Roost Assessment

Survey site:

The Old Piggery, Fryern Road, Storrington, West Sussex, RH20 4BJ.

Client:

Mrs Jessica Mead

Survey date:

21st July 2025 - *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.*

Project:

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

Change of use, conversion, extensions and alterations to existing barn to form 1no single storey detached self-build dwelling with associated works.

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.](#)

Site Location and Context				
The survey site is centred on National Grid Reference TQ 08939 15606 and has an area of approximately 0.059a. The site comprises a disused agricultural barn and hard standing, which are overgrown with ruderal species and a hedgerow. Agricultural fields border the site to the north and west, with an access track directly to the east and a residential dwelling to the south. The surrounding area is predominantly rural, characterised by a mix of agricultural fields, pockets of woodland, hedgerows and scattered residential development. Notably, there are habitats of elevated ecological value nearby, including an area of priority habitat ancient and deciduous woodland, located approximately 8m to the east of the site. The area is hydrologically active, featuring a network of ponds, sluices, and drainage channels integrated into the wider landscape. The site is located on slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils, with an underlying bedrock geology of mudstone. A site location plan has been provided in Appendix 2. No previous ecological surveys have been carried out to the authors' knowledge.				
Survey Details				
The site survey was undertaken by Consultant Ecologist Kelly Clarke (Accredited Agent on Natural England Bat Licence Number: (2018-33540-CLS-CLS).				
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (Beaufort Scale)
21/07/2025	26	50	40	0
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 the 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. No proposed development plans were available at the time of writing this report, and therefore a detailed impact assessment could not be made. This report should be updated once the plans are available.				
Key Recommendations				
• Best practice measures to minimise the possibility of pollution affecting the nearby ancient and deciduous woodland must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this.				

- 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.
- Precautionary working methods for birds, reptiles, amphibians, badgers, otters and hedgehogs.

Ecological Factor	Survey	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 5).		
Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant; F = Frequent, O = Occasional, R = Rare).		
<i>Summary of Findings</i>	<i>Survey</i>	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).
u1b – Developed land/sealed surface [81 – ruderal or ephemeral]	<i>Developed land/sealed surface [81 – ruderal or ephemeral]</i>	On-site habitat descriptions u1b – <u>Developed land/sealed surface [81 – ruderal or ephemeral]</u> There are several areas of developed land, sealed surface on the site, including an area of hardstanding by the entrance gate and to the south of the site behind the building. Both areas of hardstanding are in a state of disrepair and ruderal species were observed growing from cracks. Species comprise Bull thistle <i>Cirsium vulgare</i> , Yorkshire fog <i>Holcus lanatus</i> , Scarlet pimpernel <i>Anagallis arvensis</i> , Bramble <i>Rubus agg</i> , and Common ivy <i>Hedera helix</i> . Despite the presence of some ruderal species, this habitat is considered to be of low ecological value.
u1b5 – Buildings		
u1c – Artificial unvegetated, unsealed surface [81 – ruderal or ephemeral]	<i>Artificial unvegetated, unsealed surface [81 – ruderal or ephemeral]</i>	u1b5 – <u>Buildings</u> There is a disused barn structure (B1) on site. Further information on the B1, as well as suitability for bats, is provided in the bats section. u1c – <u>Artificial unvegetated, unsealed surface [81 – ruderal or ephemeral]</u> To the rear of B1, there is a small area of gravel in between two areas of hardstanding. This habitat contained the same species as the adjacent hardstanding and is considered to be of low ecological value.

u1f – Sparsely vegetated urban land [81 – ruderal or ephemeral] g3c – Other neutral grassland h2a – Native Hedgerow [50 – ditch]	u1f – <u>Sparsely vegetated urban land</u> [81 – ruderal or ephemeral] The majority of the site is comprised of sparsely vegetated urban land, which appears to have previously been gravel and is now a mixture of bare ground, gravel and ruderal species. Ruderal species account for approximately 50% of the habitat and include Bull thistle <i>Cirsium vulgare</i>, Teasle <i>Dipsacus fullonum</i>, Scarlet pimpernel <i>Anagallis arvensis</i>, Bristly ox tongue <i>Helminthotheca echinoides</i>, Yorkshire fog <i>Holcus lanatus</i>, Cut-leaved cranesbill <i>Geranium dissectum</i>, Broadleaf plantain <i>Plantago major</i>, Scentless mayweed <i>Tripleurospermum inodorum</i>, Creeping cinquefoil <i>Potentilla reptans</i> and Common mouse-eared chickweed <i>Cerastium fontanum</i>. This habitat is likely to develop into grassland through succession if left unmanaged. Sparsely Vegetated Urban Land Condition Assessment: Good A. Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area: PASS B. The habitat parcel contains different plant species that are beneficial to wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year: PASS C. Invasive non-native plant species (listed of Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area: PASS g3c – <u>Other neutral grassland</u> To the east of the site, there is a small verge adjacent to the access track, which has developed into an area of other neutral grassland. There were approximately 4 species per square metre at the time of the survey. Species comprised dominant Yorkshire fog <i>Holcus lanatus</i>, abundant False oat grass <i>Arrhenatherum elatius</i> and frequent Stinging nettle <i>Urtica dioica</i>. Occasional Willow herb <i>Epilobium</i>, Scarlet pimpernel <i>Anagallis arvensis</i>, Ground ivy <i>Glechoma hederacea</i>, Nipplewort <i>Lapsana communis</i> and Bramble <i>Rubus</i> agg. Medium, High and Very High Distinctiveness Grassland Condition Assessment: Moderate 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: PASS B. Sward height is varied (at least 20% of the sward is less than 7cm and at least 20% is more than 7cm), creating microclimates with provide opportunities for vertebrates and invertebrates to live and breed: PASS C. Cover of bare ground is between 1% and 5%, including localised areas: 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 for less than 5% of total area: FAIL F. There are 10 or more vascular plant species per m2: FAIL h2a – <u>Native Hedgerow</u> [50 – ditch]
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Along the northern site boundary, there is a small section of native hedgerow which is dominated by Blackthorn *Prunus spinosa* with occasional Bramble *Rubus agg.* and Common ivy *Hedera helix*. The hedgerow is more than 1.5m in height but less than 1.5m in width and has gaps between the base of the canopy and the ground for more than 90% of its length. The hedge joins a larger hedgerow that extends beyond the site boundary to the north and is associated with a ditch. The ditch was dry at the time of the survey and appears to have been dry for a prolonged period of time.

The hedgerow is not considered to meet the criteria for an 'important hedgerow' under the Hedgerow Regulations 1997 as per the assessment in **Table 1**.

Table 1. Hedgerow Regulations Assessment

Criteria	Result	
The hedgerow marks the boundary of a historic parish or township existing before 1850	No	
The hedgerow incorporates an archaeological feature or is part of or associated with an archaeological site	No	
The hedgerow marks the boundary of or is associated with a pre-1600 AD estate or manor	No	
The hedgerow forms an integral part of or is associated with a field system pre-dating the Enclosures Act	No	
Average number of woody species within a 30m section	1	
Total number of features	2	
Features	Associated with a bank or wall	No
	Associated with a ditch	Yes
	Intact hedgerow	No
	Trees present within the hedgerow	No
	The hedgerow supports at least 3 valuable ground flora species within 1m	No
	Connections	1
	Parallel hedge	No

Native Hedgerow Condition Assessment (H1): **Moderate**

A1. > 1.5m average height along length: PASS

A2. > 1.5m average width along length: FAIL

B1. Gap between ground and base of canopy <0.5m for >90% of length: FAIL

B2. Gaps make up <10% of total length; and no canopy gaps >5m: PASS

C1. >1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: FAIL

C2. Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground: PASS

	D1. >90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species: PASS D2. >90% of the hedgerow or undisturbed ground is free of damage caused by human activities: PASS Local notable habitats There are no priority habitats within or immediately adjacent to the site. The nearest priority habitat is ancient and deciduous woodland, which is located ~8m to the east. Additionally, within 2km of the site, there are pockets of ancient woodland, deciduous woodland, good quality improved grassland, lowland heathlands and wood-pasture and parkland BAP throughout the wider landscape.
<i>Foreseen Impacts</i>	On-site habitats No development plans are available at the time of writing; however, it is anticipated that the proposals will result in the loss of all buildings, hardstanding, gravel and sparsely vegetated land. This could result in a net loss of 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 ancient and deciduous (8m east), indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.
<i>Recommendations</i>	On-site habitats To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated: - Planting of native tree species present in the wider area, such as Oak, Elder, Crab Apple, Hazel, Beech, Holly, and Hawthorn. - Retaining and enhancing ecological connectivity across the site through the planting of hedgerows around the site boundaries. Wherever possible, hedgerows are favourable over fencing as they allow the movement of species across the site and increase biodiversity. Notable habitats Best practice measures to minimise the possibility of pollution affecting the nearby ancient and 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. This is mandatory for larger developments and came into force for smaller developments on 2nd April 2024. The project is unlikely to trigger the requirement for a biodiversity net gain assessment as it falls under the self-build exemption.

Locality and Designated Sites																
Summary of Survey Findings	On-site designations The site is not subject to any designation.															
	Statutory designated sites (within 2km) The following Statutory Designated sites are present within 2km of the site:															
	Table 2. Statutory Designated sites within 2km of site.															
	<table><tr><th>Statutory Designated Sites</th><th>Location</th><th>Reason for Designation</th></tr><tr><td>Hurston Warren (SSSI)</td><td>~1,500m northwest</td><td>Designated for its heathland habitat, including lowland dwarf shrub heath, lowland wet heath and raised bog</td></tr><tr><td>Parham Park (SSSI)</td><td>~1,940m west</td><td>Designated for its lowland bogs and broadleaved, mixed and yew woodland that support a diverse range of invertebrates and important plant species.</td></tr><tr><td>Sullington Warren (SSSI)</td><td>~1,044m southeast</td><td>Designated for its lowland dwarf shrub heath and woodland that support assemblages of breeding birds.</td></tr><tr><td>Chantry Mill (SSSI)</td><td>~1,705m south</td><td>Designated for its geological importance.</td></tr></table>	Statutory Designated Sites	Location	Reason for Designation	Hurston Warren (SSSI)	~1,500m northwest	Designated for its heathland habitat, including lowland dwarf shrub heath, lowland wet heath and raised bog	Parham Park (SSSI)	~1,940m west	Designated for its lowland bogs and broadleaved, mixed and yew woodland that support a diverse range of invertebrates and important plant species.	Sullington Warren (SSSI)	~1,044m southeast	Designated for its lowland dwarf shrub heath and woodland that support assemblages of breeding birds.	Chantry Mill (SSSI)	~1,705m south	Designated for its geological importance.
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Chantry Mill (SSSI)	~1,705m south	Designated for its geological importance.														
	The site lies within the impact risk zone for Hurston Warren and Sullington Warren SSSI. Non-statutory designated sites The presence of non-statutory designated sites within 1km/2km of the site cannot be established without data from the Sussex Biodiversity Record Centre.															
Foreseen Impacts	On-site designations No impacts are 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 falls within the Hurston Warren and Sullington Warren SSSI. Impact Risk Zone (IRZ), however, the development does not meet the criteria for impacts that would likely lead to a significant effect on this SSSI. Therefore, no consultation with Natural England and no mitigation is required for this SSSI.															

<i>Recommendations</i>	On-site designations None required.
	Statutory and non-statutory designated sites None required.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species recorded on site.
<i>Foreseen Impacts</i>	No impacts are foreseen.
<i>Recommendations</i>	No further surveys but remain vigilant.
Invertebrates	
<i>Summary of Survey Findings</i>	The habitats present on-site, including sparsely vegetated urban land and other neutral grassland, 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.
<i>Foreseen Impacts</i>	No development plans are available at the time of writing; however, it is anticipated that the proposals will result in the loss of all buildings, hardstanding, gravel and sparsely vegetated land. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitats locally.
<i>Recommendations</i>	No further surveys.
Bats	
<i>Summary of Survey Findings</i>	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 less than 2km away from the survey site will find alternative habitats either within the mitigation measures implemented as part of the licence or will relocate to other known roost sites in close proximity to the licensed site. There are 2 EPSLs within a 2km radius of the site as detailed below:

Table 3. Bat ESPLs within 2km of the site.

ESPL reference	Bat species affected	Distance from site	Impacts allowed by licence
2014-5033-EPS-MIT	Soprano pipistrelle	~1,560m southeast	Destruction of a breeding place
2015-15064-EPS-MIT	Common pipistrelle, soprano pipistrelle and brown long-eared bat	~2,000m southwest	Destruction of a resting place

Foraging and commuting habitat

The habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of other neutral grassland and sparsely vegetated urban land. 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 native hedgerow on site extends beyond the site to the north, 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. There is a pocket of priority habitat ancient and deciduous woodland 8m to the east of the site, which is likely to be of elevated ecological value for local bat populations.

Roosting habitat

Buildings to be impacted by the proposed development are assessed for their suitability to support roosting bats below. There are no trees on site.

Building B1

B1 is a single-storey structure that was historically used as a piggery. The building is currently disused and in a state of disrepair. It is constructed from brick with a timber frame, incorporating areas of both metal and timber cladding. The roof is made of corrugated metal sheets. Internally, the building is divided into seven rooms with open access.

Several gaps were observed beneath lifted roofing sheets; however, due to the nature of the building materials, these are not considered suitable for roosting bats. The unstable thermal conditions associated with the metal roofing significantly reduce its suitability. No further crevices were identified, and the internal spaces are not considered suitable for cavity-dwelling bats due to the exposed nature of the building. No bats or evidence of bats (i.e. droppings or urine stains) were observed. As such, the building is assessed as providing **negligible habitat value** for roosting bats.

	 Figure 1. Northern elevation of B1.	 Figure 2. Southern elevation of B1.
<i>Foreseen Impacts</i>	Roosting habitat [Buildings] Bats are very unlikely to be roosting within B1 and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development. Foraging and commuting habitat No development plans are available at the time of writing; however, it is anticipated that the proposals will result in the loss of all buildings, hardstanding, gravel and sparsely vegetated land. Given their low value of these habitats 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.	
<i>Recommendations</i>	Roosting habitat [Buildings] 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. 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 Suggested biodiversity enhancements The installation of two bat boxes 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 brands. 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>	Buildings No evidence of nesting birds was recorded in B1 during the survey, however, there is value for common nesting bird species such as House Sparrows and Swifts. Trees and vegetation The other neutral grassland and hedgerow on site provide suitable nesting opportunities and materials for a range of bird species. No habitat for schedule 1 birds was observed. 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.
<i>Foreseen Impacts</i>	Buildings/trees 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.
<i>Recommendations</i>	Buildings/trees 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 the new dwelling will provide additional nesting habitat for birds. Suitable boxes include: • Schwegler No 17 Swift Nest Box • Schwegler 1SP Sparrow Terrace • Woodstone Nest Box Swift and sparrow boxes should be positioned in groups of two or more, 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>	EPSL data A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. Habitat suitability The majority of the site comprises sparsely vegetated urban land and areas of bare ground, hardstanding and gravel. While the native hedgerow to the north and the area of other neutral grassland to the east of the site may offer some refuge opportunities, the overall lack of structural complexity across the majority of the site renders it generally unsuitable for supporting reptiles. However, fields of tall grassland are present directly adjacent to the north and west of the site which are likely to provide

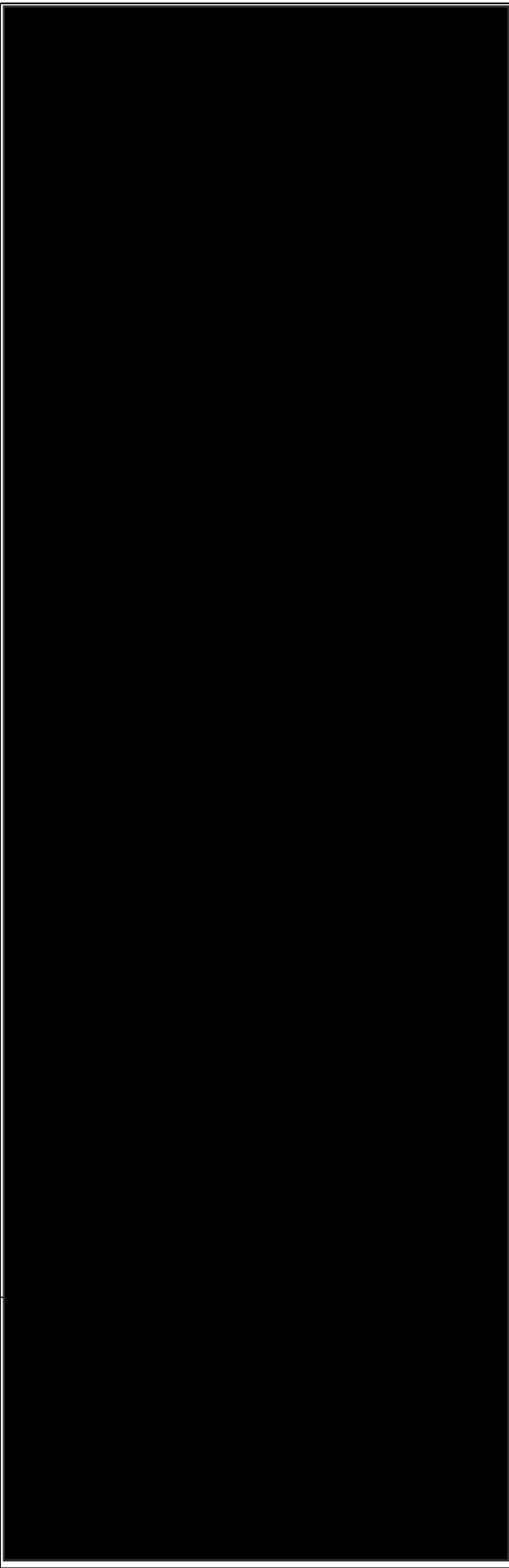
	elevated ecological value for reptiles. Consequently, while the presence of reptiles on-site cannot be entirely ruled out, any use is likely to be occasional or transient in nature.
<i>Foreseen Impacts</i>	No development plans are available at the time of writing; however, it is anticipated that the proposals will result in the loss of all buildings, hardstanding, gravel and sparsely vegetated land. 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 habitats 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 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 stored building materials will be raised from the ground, such as through storage on pallets, to prevent creating temporary hibernacula that may attract reptiles to the development area. • Vegetation clearance works will be undertaken outside of the reptile hibernation period, which is between November and February inclusive. • Vegetation will be subject to a two-staged cut. The first cut down to 15cm, which should be left for 12-24 hours to allow reptiles to disperse from the area. The next cut will be down to ground level. • Vegetation removal will be directional, whereby reptiles will be encouraged to disperse towards retained suitable habitat to the southwest of the site. • 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, work must cease, and advice 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 one granted EPSL records for great crested newts within 2km of the site, as detailed below.			
Table 4. Amphibian ESPLs within 2km of the site.			
EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence
EPSM2012-4355	Great Newt	Crested ~1,630m south Located on the far side of the A283, which forms a significant barrier to dispersal.	Destruction of a resting place
Additionally, the MAGIC database returned evidence indicating the presence of great crested newts resulting from historic pond surveys undertaken in 2014. These records are located ~1,838m south, on the far side of the A283, which forms a significant barrier to dispersal. Great crested newts 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). As such, the great crested newt metapopulation known to be present ~1,838m south is not suitably connected to the site.			
Habitat suitability There are no ponds on the site; however, a review of aerial imagery (MAGIC and OS Maps) indicates the presence of 3 ponds within 250m, as described below. A map showing the location of ponds is provided in Appendix 4 .			
Table 5. Ponds within 250m of the site.			
Pond	Distance from Site	Area	Description
P1	~40m southeast	~2,360m ²	P1 is a large sluice situated between two areas of priority habitat: ancient and deciduous woodland. The sluice forms part of a wider hydrological network connected by drainage channels and additional sluices, originating from the River Stor to the northwest. Due to the flowing nature of the water, it is considered unlikely that great crested newts would use the sluice or associated drainage channels for breeding, as they generally require still or slow-moving water bodies. However, the sluice and nearby drainage channels are surrounded by dense vegetation, which may provide suitable microhabitats for breeding, sheltering and foraging. Additionally, great crested newts may use the drainage network as a commuting corridor between suitable habitats in the wider landscape. A Habitat Suitability Index (HSI) was not carried out

				as it was not known if the waterbodies are located on the applicant's land or private land.
	P2	~194m southwest	~220m ²	P2 is located within the grounds of a residential property, beyond several other dwellings and the main access track. Habitat connectivity to the development site is restricted by the intervening built environment; however, potential movement of species cannot be entirely ruled out, as treelines and garden vegetation within the wider landscape may provide some degree of commuting habitat. A Habitat Suitability Index (HSI) was not carried out as the pond is located on private land.
	P3	~220m west	~290m ²	P3 is located on the far side of Fryern Road, which may act as a barrier to species dispersal. The pond is not visible on available satellite imagery, likely due to screening by a small cluster of trees. Based on aerial mapping, the pond appears to be situated within a paddock used for livestock grazing (likely horses). A Habitat Suitability Index (HSI) was not carried out as the pond is located on private land.
There are 5 additional ponds present within 500m, the closest of which is located ~270m north. Based on the accepted terrestrial range of great crested newts (GCN), typically less than 250m from breeding ponds, occasionally up to 500m, and rarely beyond 1km, and considering that the development site offers limited suitable terrestrial habitat, it can be reasonably concluded that any GCN populations associated with ponds or ditches located between 250m and 500m from the site boundary are unlikely to rely on habitats within the development footprint. The site offers limited suitable terrestrial habitat for amphibians, primarily due to the absence of optimal features such as scrub and rank grassland. The areas of hardstanding, buildings, and sparsely vegetated urban land provide largely sub-optimal conditions for amphibians. the native hedgerow and small patch of other neutral grassland may offer some foraging and refuge opportunities; however, they are limited in extent and quality due to the limited species composition. As such, the presence of great crested newts on site cannot be ruled out, although any presence is likely to be transient in nature.				
<i>Foreseen Impacts</i>	At the time of writing, no detailed development plans are available. However, it is understood that the majority of works will be confined to the footprint of the existing building, with only limited areas of sub-optimal habitat (sparsely vegetated urban land and hardstanding) likely to be lost to facilitate the extension. Consequently, the potential impact on Great Crested Newts and other amphibian species is assessed as 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. Suggested biodiversity enhancements The site could be enhanced for amphibians post-development through the 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

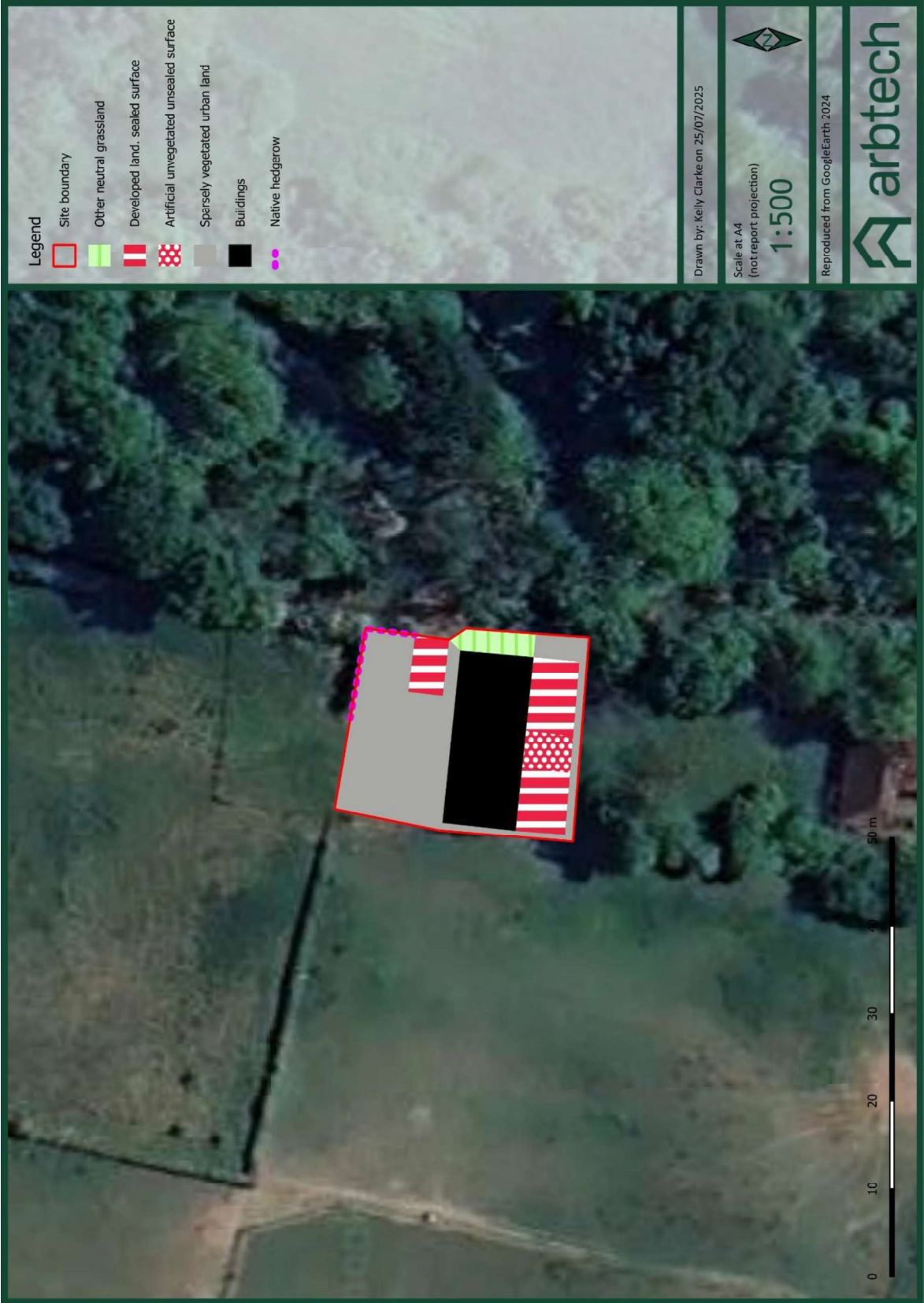
			Riparian animals	
			<i>Summary of Survey Findings</i>	EPSL and survey data A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. Habitat suitability There are no watercourses or riparian habitats on or directly connected to the site. However, there is a drainage channel located approximately 10m to the east of the site. The channel is connected to a network of sluices along its length and originates from the River Storr to the northwest. The riparian habitat associated with the channel extends approximately 5m from the watercourse itself, with an access track situated between the channel and the site. Large sections of the drainage channels are culverted or have artificial banks, rendering them unsuitable for holt or burrow creation. However, as the drainage network is connected to a river, it may still be used by otters and water voles for commuting. Given that the habitats within the site are urban in nature and do not provide suitable foraging, commuting, or refuge opportunities, it is considered unlikely that otters or water voles will be present on-site. However, due to the close proximity of the watercourse, the potential for transient presence cannot be entirely ruled out.
<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. Furthermore, construction activities could result in the death or injury of otters, if present. 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.								
Recommendations	Otters 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: • Heras fencing will be erected around the working area to prevent encroachment within 8m of the watercourse. • 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 advise must be sought from a suitably qualified ecologist.								
Hazel dormouse									
Summary of Survey Findings	EPSL data A review of the MAGIC database returned no one granted EPSL records for hazel dormice within 2km of the site, as detailed below. Table 6. Hazel dormice ESPLs within 2km of the 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>2018-33564-EPS-MIT</td><td>Hazel or common dormouse</td><td>~1,002m north Located on the far side of residential development and Greenhurst Lane, which forms a barrier to dispersal.</td><td>Damage and destruction of a resting and breeding place</td></tr></table>	EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2018-33564-EPS-MIT	Hazel or common dormouse	~1,002m north Located on the far side of residential development and Greenhurst Lane, which forms a barrier to dispersal.	Damage and destruction of a resting and breeding place
EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence						
2018-33564-EPS-MIT	Hazel or common dormouse	~1,002m north Located on the far side of residential development and Greenhurst Lane, which forms a barrier to dispersal.	Damage and destruction of a resting and breeding place						

	Habitat suitability The hedgerow on site extends beyond the site boundary to the north and connects to woodland associated with Hareswith Pond. This woodland is further linked to an area of priority habitat consisting of ancient and deciduous woodland located to the east of the site. These habitats collectively provide structural complexity that could support foraging, commuting, and nesting opportunities for hazel dormice. However, the total area of habitat with continuous aerial connectivity is approximately 8.22ha. Research indicates that isolated habitats in the UK require a minimum of 20ha of suitable habitat to sustain a viable hazel dormouse population (Bright et al., 1994). On this basis, the available habitat is considered insufficient to support a resident population. Furthermore, the hedgerow on site measures approximately 14.4m in length, and removal of this section would be inconsequential to hazel dormice, should a population exist within the wider landscape.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	No further surveys required.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The site offers limited foraging, commuting, and refuge opportunities for hedgehogs due to the urban nature of the habitats present (artificial unvegetated and unsealed surfaces, sparsely vegetated land, buildings and a small area of other neutral grassland). However, the surrounding habitats, including tall grassland, hedgerows, and pockets of woodland, are likely to provide greater ecological value for hedgehogs. While the likelihood of hedgehogs being present on the site is considered low, the surrounding habitats are likely to provide suitable resources. As such, the potential for hedgehogs to use the site for commuting cannot be ruled out.
<i>Foreseen Impacts</i>	No development plans are available at the time of writing; however, it is anticipated that the proposals will result in the loss of all buildings, hardstanding, gravel and sparsely vegetated land. 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 habitats 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: - 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.
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Appendix 1: UK Habs Map



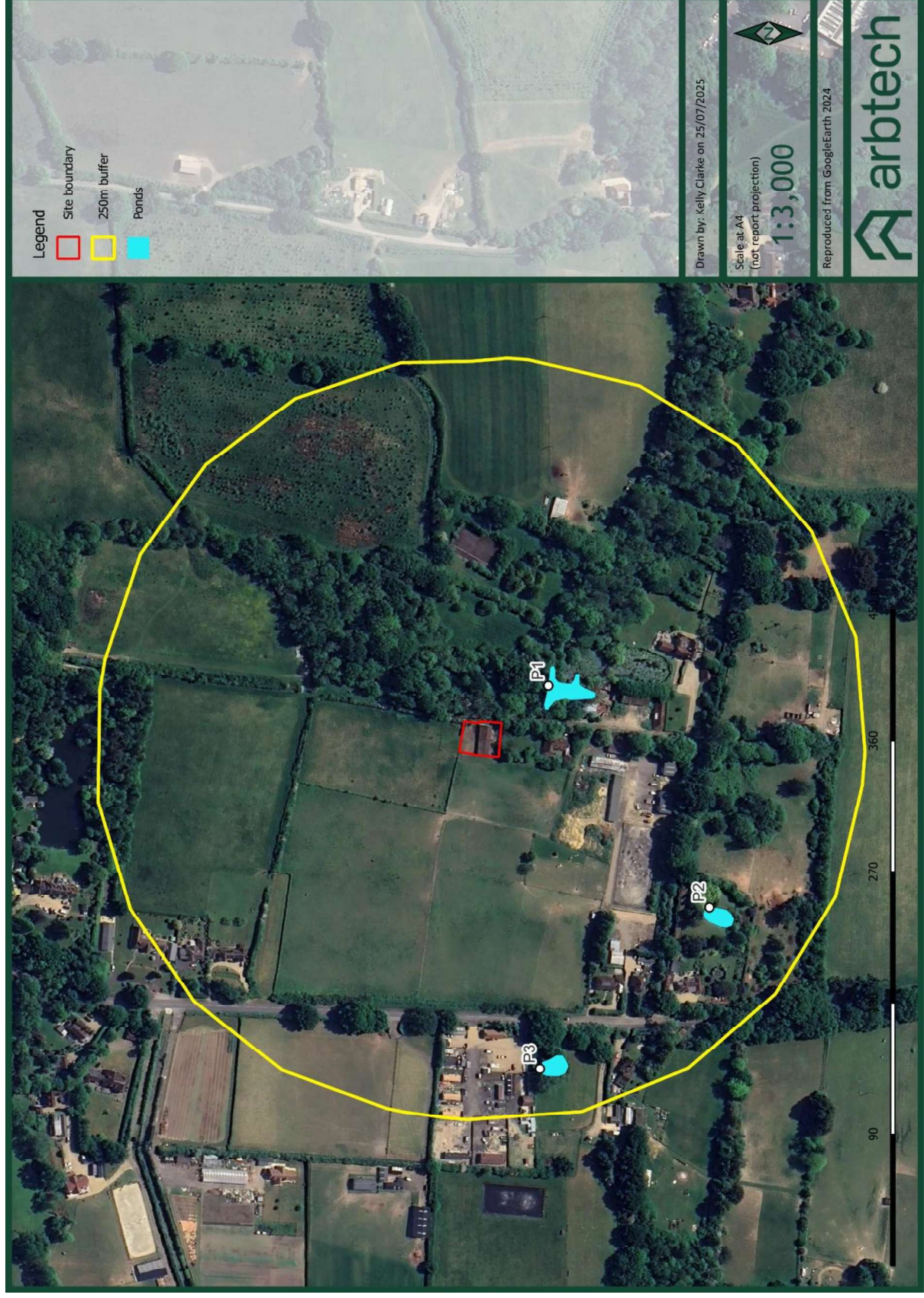
Appendix 2: Location map



Appendix 3: Proposed plan

None available at the time of writing.

Appendix 4: Ponds within 500m of the site



Buildings	
Photograph	Description
	Figure 1: B1
Developed land/sealed surface	
Photograph	Description
	Figure 2: Hardstanding to the east of the site by the entrance gate

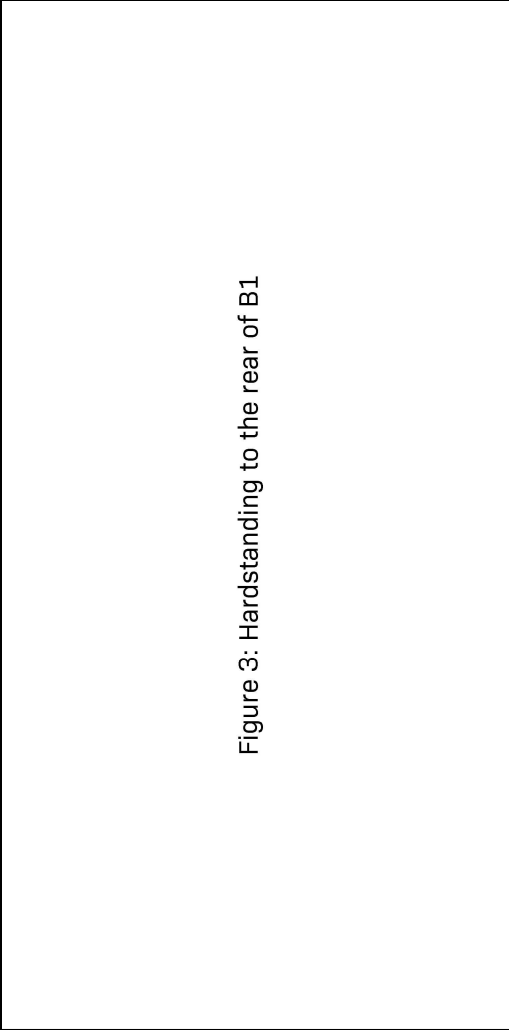
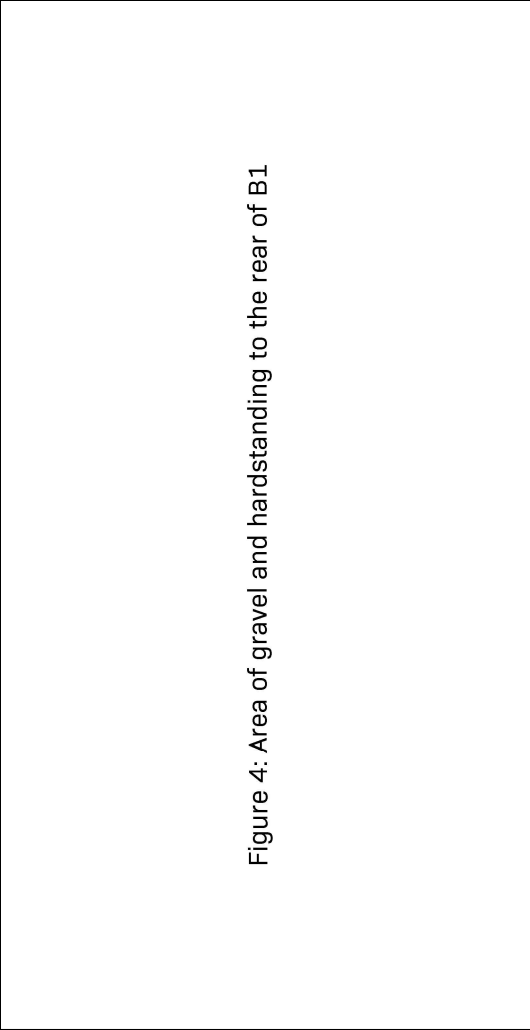
			
Artificial unvegetated, unsealed surface		Description	
			
Sparsely vegetated urban land		Description	
Photograph			

		Figure 5: View of sparsely vegetated urban land looking west	
Other neutral grassland			
Photograph		Description	
		Figure 6: View of grass verge looking north	
Native Hedgerow			
Photograph		Description	

		Figure 7: Native hedgerow along northern site boundary
		Figure 8: Native hedgerow associated with ditch located off site, but connected to the hedgerow on site

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