

Preliminary Ecological Appraisal

Survey site:

Bearwood Path, Winnersh, Wokingham, Berkshire, RG41 5EZ

Client:

Kieth Pape

Survey date:

3rd September 2025

Project:

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

Full application for the proposed change of use of land for the siting of a mobile home with associated parking and landscaping

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

Site Location and Context					
The survey site is centred on National Grid Reference SU 77402 70835 and has an area of approximately 0.0365ha. The site comprises sparsely vegetated urban land with areas of soil piles and small area of grass and hard standing. The site is adjacent to a small ditch and a line of trees with a large housing development to the south, a mobile home park to the west, and residential dwellings to the north and east. It is surrounded by residential properties, with the village of Winnersh, with the town of Wokingham to the south-east and the town of Reading to the north-west. The wider landscape comprises agricultural fields connected with hedgerows to each other and the adjacent residential properties, as well as two motorways to the north and south.					
Survey Details					
The site survey was undertaken by Beth Ellison-Perrett BSc (Hons) MSc, MRSB, Senior Ecologist, an ecologist with four years of experience, and holder of Natural England survey licences for bats [2023-11066-CL17-BAT] and great crested newt [2024-11998-CL08-GCN].					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
03/09/2025	19	87	100	19	Light rain
Survey limitations					
It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records. A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report. There were no specific limitations to the survey.					
Validity					
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.					

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).	
<i>Summary of Survey Findings</i> <i>(UKHab codes used)</i> • u1b – developed land; sealed surface • u1f – Sparsely vegetated urban land	Local notable habitats 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 is adjacent to a ditch which could be of value to local wildlife populations (as detailed in subsequent sections of this table). Habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km, including ancient woodland (~50m south-west), deciduous woodland (~50m south-west and 335m west), floodplain and coastal grazing marsh (~400m west), traditional orchards (~1065m north-east), woodpasture and parkland (~1100m south) and lowland fens (~1180m north). On-site habitat descriptions <u>u1b – Developed land/sealed surface</u> Running through the centre of the site, from the western boundary towards the eastern boundary, is an area of developed land; sealed surface. The hard standing is comprised of tarmac and is of negligible habitat value for protected species. Additionally, there is a small rubble pile within the centre of the hard standing, comprised of bricks and concrete slabs. <u>u1f – Sparsely vegetated urban land [bare ground 510, scattered grass 532]</u> The majority of the site is comprised of sparsely vegetated urban land with large areas of bare ground and scattered grass and ruderal species throughout. This area is comprised of approximately 50% bare ground and 50% vegetation which is subject to management resulting in a uniform sward of approximately 3cm in length. Species composition is comprised of creeping

	cinquefoil (A), plantain (A), scarlet pimpernel (F), nettles (F), yarrow (F), petty spurge (F), Yorkshire fog (F), horsetail (O), knot grass (O), small-flowered cranesbill (O), black meddick (O), clover (O), ragwort (R), bristly oxtongue (R), thistle (R), dock (R), daisy (R), shepherd's purse (R) and bindweed (R). Sparsely vegetated urban land with ruderals condition assessment: 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. b) The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year. c) Invasive non-native plant species (listed on 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. Score: 3/3- Good condition
<i>Foreseen Impacts</i>	On-site habitats The proposed development will result in the loss of developed land; sealed surface and sparsely vegetated urban land. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats. 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 woodland (50m south-west) and the adjacent ditch which flows into the river Loddon, indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.
<i>Recommendations</i>	On-site habitats None required. Notable habitats

	Best practice measures to minimise the possibility of pollution affecting the nearby ancient 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 comes 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 one of the exemptions (self-build), however the Local Planning Authority may still request a net gain assessment under their own local planning policy.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	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: <u>Maiden Eriegh Park Local Nature Reserve (LNR)</u> – located 2km west Habitats include lowland mixed deciduous woodland, ancient semi natural woodland and eutrophic open water. The site lies within the impact risk zone for Lodge Wood and Sandford Mill SSSI. Non-statutory designated sites The presence of non-statutory designated sites within 2km of the site cannot be established without data from Thames Valley Environmental Records Centre.
<i>Foreseen Impacts</i>	On-site designations No impacts foreseen.

	Statutory and non-statutory designated sites The site lies within the impact risk zone for Lodge Wood and Sandford Mill SSSI. The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) indicate that at the location selected, the proposed development is unlikely to have a harmful effect on terrestrial Sites of Special Scientific Interest (SSSIs) and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin.
<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>	N/A
<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, 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>	Developed land; sealed surface and sparsely vegetated urban land will be removed during construction. 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 habitat locally.
<i>Recommendations</i>	No further surveys.
Bats	

Summary of Survey Findings	EPSL data																								
	A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. There are five EPSLs 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>EPSM2009-1161</td><td>Common pipistrelle and brown long-eared</td><td>315m south-east</td><td>Destruction of a resting place</td></tr><tr><td>EPSM2009-899</td><td>Common pipistrelle</td><td>810m south</td><td>Destruction of a resting place</td></tr><tr><td>2015-13607-EPS-MIT 2015-13607-EPS-MIT-1</td><td>Common pipistrelle</td><td>1670m south-east</td><td>Destruction of a resting place</td></tr><tr><td>2015-18114-EPS-MIT 2015-18114-EPS-MIT-1 2015-18114-EPS-MIT-2 2015-18114-EPS-MIT-3 2015-18114-EPS-MIT-4</td><td>Common pipistrelle, soprano pipistrelle, Daubentons and brown long-eared</td><td>1845m south</td><td>Destruction of a breeding site and resting place</td></tr><tr><td>EPSM2012-4390</td><td>Brown long-eared bat</td><td>1865m west</td><td>Destruction of a breeding site and resting place</td></tr></table>	EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	EPSM2009-1161	Common pipistrelle and brown long-eared	315m south-east	Destruction of a resting place	EPSM2009-899	Common pipistrelle	810m south	Destruction of a resting place	2015-13607-EPS-MIT 2015-13607-EPS-MIT-1	Common pipistrelle	1670m south-east	Destruction of a resting place	2015-18114-EPS-MIT 2015-18114-EPS-MIT-1 2015-18114-EPS-MIT-2 2015-18114-EPS-MIT-3 2015-18114-EPS-MIT-4	Common pipistrelle, soprano pipistrelle, Daubentons and brown long-eared	1845m south	Destruction of a breeding site and resting place	EPSM2012-4390	Brown long-eared bat	1865m west	Destruction of a breeding site and resting place
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Foraging and commuting habitat																									
Habitats recorded on site are assessed to provide no commuting opportunities for bats. Additionally, the sparsely vegetated urban land provides limited foraging suitability. The adjacent ditch and tree line to the south of the site could provide suitable foraging and commuting opportunities as this tree line connects to a pocket of woodland to south-west. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites. The surrounding area provides suitable habitat for bats to forage, roost and commute due to the mix of open gardens and corridors of trees and																									

	hedges connecting the habitat areas. Additionally, the river Loddon is located 390m west of the site which could be utilised by foraging and commuting bats. Roosting habitat There are no buildings or trees onsite and therefore, no suitable roosting habitats.
<i>Foreseen Impacts</i>	Roosting habitat [Buildings and Trees] None. Foraging and commuting habitat The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. However, the proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas. 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>	Foraging and commuting habitat No further surveys are required. Artificial lighting A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2
Birds	

<i>Summary of Survey Findings</i>	Trees and vegetation No bird nests were identified within the sparsely vegetated urban land on-site, and the site has limited resources for nesting opportunities and nest-building due to the lack of suitable vegetation. 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>	Vegetation No impacts are anticipated on nesting birds as a result of the proposed development. Barn owls None foreseen. Overwintering birds None foreseen.
<i>Recommendations</i>	Vegetation Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. Barn owls None required.

	Overwintering birds None required. Suggested biodiversity enhancements The installation of a minimum of one bird box on site will provide additional nesting habitat for birds e.g. Schwegler 1B Nest Boxes, Woodstone Nest Box, or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.
Reptiles	
<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 dominant habitat onsite (sparsely vegetated urban land) is considered unsuitable for reptiles due to the species content (common and widespread species with minimal diversity) and associated management regime, where at the time of the survey the grassland/ ruderals were recorded as being a relatively short sward. Given the management regime employed on the sparsely vegetated urban land, as well as the species composition, it is considered unlikely that this faunal group would be present within this habitat. The rubble pile located within the centre of the site, could be used opportunistically by reptiles, however, is located on hard standing which is sub-optimal for reptiles and is surrounded by further sub-optimal habitats. Additionally, the site is surrounded by urban development (i.e. roads and buildings) which is considered sub-optimal for reptile migration and therefore reptiles are considered unlikely to migrate from any nearby suitable habitats to the development site. As such it is likely that reptiles are absent from the development site.

	Wider landscape The adjacent ditch and tree line have some ecological value within the wider landscape; however, the ditch has steep, vertical banks, which are manmade and covered with wooden boards which reduces suitability for reptiles. The woodland located 50m south-west of the site is of elevated ecological value within the wider landscape and may represent important resources for local reptile populations. These habitats provide optimal foraging, commuting, and refuge opportunities for reptiles and are well connected to further suitable habitat in the wider landscape. The presence of reptiles utilising these adjacent habitats cannot be discounted.
<i>Foreseen Impacts</i>	Developed land; sealed surface and sparsely vegetated urban land will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. Additionally, 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 rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent reptiles from utilising these areas. • 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.

Amphibians		
Summary of Survey Findings	EPSL and survey data	
	A review of the MAGIC database returned four granted EPSL records for great crested newts within 2km of the site as detailed below:	
	EPSL reference	Distance from site
	EPSA2013-6712-A-AD2	590m north-east
	EPSA2013-6712-A-AD2-1	
	EPSA2013-6712-A-AD2-2	
	EPSA2013-6712-A-AD2-3	
	2015-14054-EPS-MIT	1480m north-east
	2014-718-EPS-MIT	1480m north-east
	2019-41221-EPS-MIT	1805m east
	2019-41221-EPS-MIT-1	
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 <i>et al.</i> 2001). As such, the great crested newt metapopulation known to be present over 590m from the site are not suitably connected to the site. Additionally, the MAGIC database returned evidence indicating the presence of great crested newts resulting from historic pond surveys undertaken between 2014 and 2017. There are 13 records within 2km, of which only two are within 500m of the site, located 105m north-west and 180m north-west. Although, these records are within 500m of the site, they are separated from the site by urban development, including roads with high kerbs and residential dwellings with their associated enclosed gardens which are considered sub-optimal for amphibians.		

	Aquatic habitat suitability (including ponds within 500m) Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). There are no ponds on the site, but a review of aerial imagery (MAGIC and OS Maps) indicates the presence of five ponds within 500m of the site, located 150m north (P1), 150m south (P2), 320m east (P3), 340m east (P4) and 379m south-west (P5). It is noted that P1 was previously known to have a population of GCN but were translocated to P3 as part of the mitigation measures for the Westbury housing development. P4 is adjacent to P3, and both are located within a small area of woodland which provides optimal terrestrial opportunities for amphibians including foraging, commuting, refuge and hibernation opportunities. P2 and P5 were created as part of the housing development to the south of the site. However, both ponds were dry at the time of the survey and full of grassland species and young trees, including thistle, cocks foot and willow saplings, suggesting a lack of water for extended periods of time. Additionally, ponds P1, P3, P4 and P5 are separated from the site by urban infrastructure including tarmac roads, buildings, and extensively managed gardens with fencing, which is regularly mown resulting in a short sward length. Additionally, the eastern and western site boundaries are enclosed by a timber fence that is in good condition and impermeable to amphibians. This fence represents a barrier to dispersal between the water body adjacent to the south and the site. Furthermore, the southern boundary is adjacent to a ditch which has steep, vertical banks that is clad in wooden boarding, preventing access onto site. The ditch also has relatively fast flowing water and no submergent vegetation and is sub-optimal for GCN. Terrestrial habitat suitability The site provides limited suitable terrestrial habitat for amphibians given the lack of optimal habitat (i.e. scrub, rank grassland). The areas of hard standing and sparsely vegetated urban land offer sub-optimal habitat for terrestrial amphibians. Additionally, 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
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	terrestrial habitat across the wider landscape reducing the likelihood of amphibians being present on site and across the surrounding areas.																								
Foreseen Impacts	When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss or significant disturbance of 0.03ha of sparsely vegetated urban land. If great crested newts are present within the pond 150m to the north of the site, when completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces a Green risk score, which states: Offence Highly Unlikely (see Figure 1 below). <table><tr><th>Component</th><th>Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)</th><th>Notional offence probability score</th></tr><tr><td>Great crested newt breeding pond(s)</td><td>No effect</td><td>0</td></tr><tr><td>Land within 100m of any breeding pond(s)</td><td>No effect</td><td>0</td></tr><tr><td>Land 100-250m from any breeding pond(s)</td><td>0.01 - 0.1 ha lost or damaged</td><td>0.01</td></tr><tr><td>Land >250m from any breeding pond(s)</td><td>0.01 - 0.1 ha lost or damaged</td><td>0.001</td></tr><tr><td>Individual great crested newts</td><td>No effect</td><td>0</td></tr><tr><td colspan="2">Maximum:</td><td>0.01</td></tr><tr><td colspan="2">Rapid risk assessment result:</td><td>GREEN: OFFENCE HIGHLY UNLIKELY</td></tr></table> Figure 1: Screenshot of Natural England GCN rapid Risk Assessment completed in accordance with the proposed development plans.	Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score	Great crested newt breeding pond(s)	No effect	0	Land within 100m of any breeding pond(s)	No effect	0	Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01	Land >250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.001	Individual great crested newts	No effect	0	Maximum:		0.01	Rapid risk assessment result:		GREEN: OFFENCE HIGHLY UNLIKELY
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Recommendations	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: • Vegetation will be maintained at a short sward (5cm) to discourage amphibians. • 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.
Badger	
<i>Summary of Survey Findings</i>	No badger setts were noted on site or within a 30m radius of the site. The site is considered unsuitable for badgers given the lack of suitable sett excavation areas/ground. Further, there is limited suitable badger foraging habitat on site given the lack of fruiting trees/scrub. The site is also surrounding by urban development (i.e. roads and buildings), which is sub-optimal habitat therefore reducing the likelihood of badgers being present within the surrounding area of the site. Although no evidence indicating the presence of badgers was recorded during the site survey, the site does have connectivity to the wider landscape for badgers. As such, the future presence of badgers foraging and commuting for transient periods cannot be discounted, but is likely limited due to the sub-optimal habitats onsite.
<i>Foreseen Impacts</i>	Developed land; sealed surface and sparsely vegetated urban land 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.
<i>Recommendations</i>	Owing to the nature of the proposed development and the low potential for impacts to bat roosts, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: - 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 advice must be sought from a suitably qualified ecologist.
Riparian animals	
<i>Summary of Survey Findings</i>	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There is no riparian habitats present on site. The river Loddon is located 390m west of the site. However, it is separated from the site by urban infrastructure including tarmac roads, buildings, and extensively managed gardens with fencing, which is regularly mown resulting in a short sward length. No habitats on site are considered suitable to support otters. Although the wet ditch retains a consistent water flow, the ditch will not support a fish density suitable to support a viable otter population. No habitats on site have potential to support water vole. The wet ditch that runs adjacent to the southern boundary is unsuitable to support water vole due to a suboptimal water depth and an absence of dense vegetated banks that could supply a sufficient diversity of feeding grasses and tall herbs to support a viable population.
<i>Foreseen Impacts</i>	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.
<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 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>	EPSL data A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. Habitat suitability 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. Furthermore, for isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright <i>et al.</i> 1994). 20ha of woodland is not present on or directly adjacent to the site and there are no hedgerows onsite. The site is enclosed by urban infrastructure including roads and significant residential development. These landscape features fragment suitable dormice habitat in the wider landscape and are likely to limit dispersal opportunities to the site. As such it is considered likely that hazel dormice are absent from site.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None foreseen.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	Habitats recorded on site are assessed to provide limited foraging, commuting, and refuge opportunities for hedgehogs in the form of sparsely vegetated urban land, albeit limited. However, no evidence indicating the presence of hedgehogs was recorded on site. Although no evidence indicating the presence of hedgehogs was recorded during the site survey, the site does have connectivity for the wider landscape for hedgehogs. As such, the future presence of hedgehogs foraging and commuting for transient periods cannot be discounted.

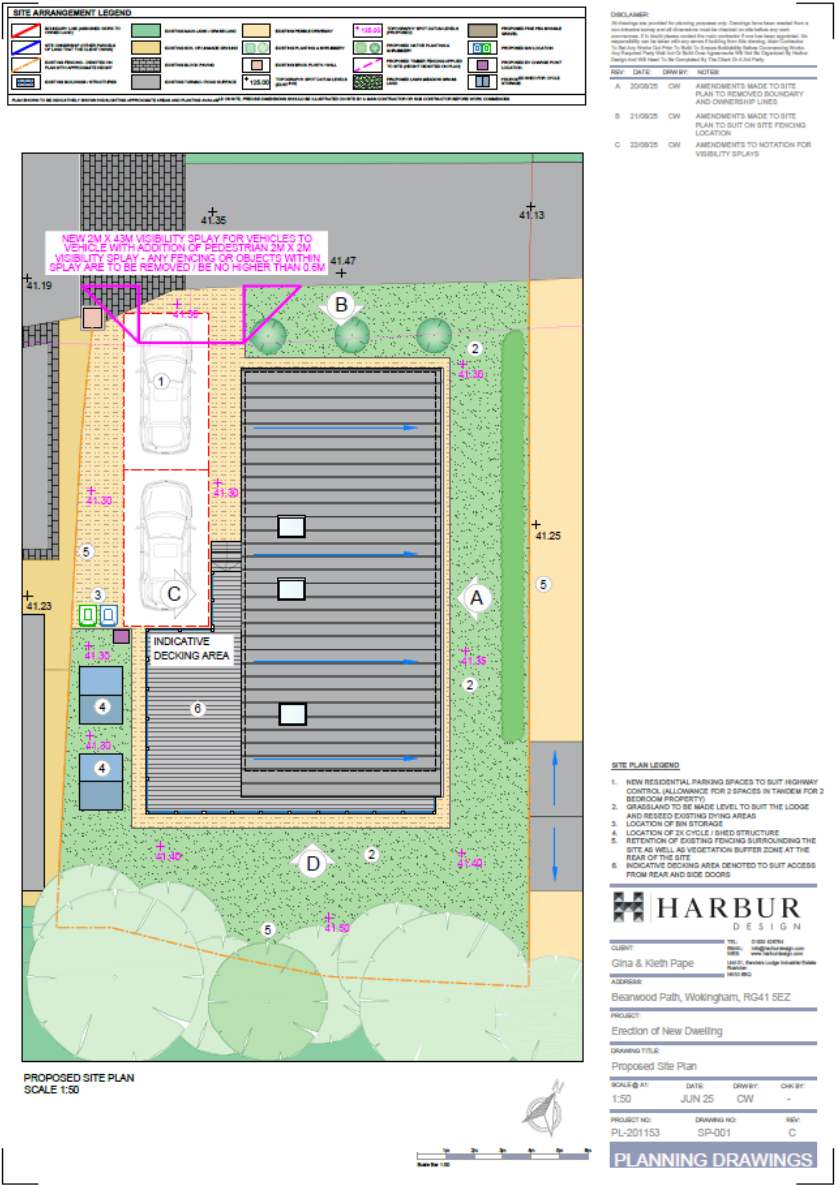
<i>Foreseen Impacts</i>	Developed land; sealed surface and sparsely vegetated urban land will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.
<i>Recommendations</i>	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: Survey/Habitat map



Appendix 2: Location map





Appendix 4: Habitat Photos

Developed land; sealed surface	
Photograph	Description
	Hard standing, located in the middle of the site, running west to east
Sparsely vegetated urban land	
Photograph	Description
	Sparsely vegetated urban land, with large areas of bare ground

Adjacent ditch	
Photograph	Description
	Ditch adjacent to the site on the southern boundary

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