

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

58 Finchampstead Road, Wokingham, Berkshire, RG40 2NS

Client:

Blueking Holdings Limited

Survey date:

26th November 2024

Project:

This report is prepared to inform a planning application with the Wokingham Borough Council. The proposal is described as: proposed erection of 4no detached dwelling houses following demolition of the existing main dwelling (B1) only.

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

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 SU 81129 67962 and has an area of approximately 0.57ha. The site comprises one main residential dwelling (B1), which is due to be demolished and was subject to survey. There is an additional bungalow and outbuildings present on site, which were not subject to survey as they are due to be retained. The site is situated within the town of Wokingham. The site is adjacent to the south of a railroad and is bordered on the south and north by woodland. There are expansive farmlands to the east and south of the site. the wider landscape comprises residential and commercial properties, with interspersed amenity greenspace.					
Survey Details					
The site survey was undertaken by Jamie-Lee Anderson, Consultant Ecologist (Class 2 Natural England Bat Licence Number: 2024-12356-CL18-BAT).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
26/11/2024	5.7	85	0	8.9	None
Executive Summary					
Bats: B1 is assessed as 'moderate', two bat emergence/re-entry surveys will be required. <i>These surveys have now been undertaken by Plan Ecology – a likely-absence of roosting bats was concluded. The Plan Ecology report is provided separately.</i> Amphibians, reptiles, badgers, nesting birds, hedgehogs: a precautionary method of working is required for these species. Additional surveys are considered disproportionate. A CEMP will detail the precautionary methods of working during the development phase, while a LEMP will detail the long-term management prescriptions to ensure that these species are not negatively impacted. A ditch is present along the southern boundary and this will be enhanced as part of the development. Measures to ensure that ditch enhancement/management activities do not impact protected species will be secured with a CEMP (for the construction phase impacts) and a LEMP (for the management impacts).					
Background					
A Preliminary Roost Assessment (PRA) was undertaken by Plan Ecology Ltd in November 2023. Their report found the context to be: 'The Site consists of a brick build house with a tiled roof and accessible loft space, a green house, an outbuilding and a timber clad shed with trees surrounding the area and areas of shrubbery. Immediately outside of the site there are residential and commercial areas whereas the wider landscape comprises of arable and pastoral fields and copses of trees. All buildings were assessed as negligible for bat roosting. An Arboricultural Impact Assessment (AIA) was carried out by Mark Welby Consulting Arborists in March 2024. This report should be read in conjunction with the AIA.					

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 was undertaken in February 2024, and the records obtained from this search have been incorporated (where relevant) into this report.												
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).												
<i>Summary of Survey Findings</i> <i>(UKHabs codes used)</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). However, the site also contains mature scattered trees which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). Other habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km. On-site habitat descriptions - Buildings – u1b5 - There are numerous buildings on site. B1 is the main residential dwelling on site and was subject to survey as it is due to be demolished to facilitate the proposed development. The construction of B1 is discussed in detail in the relevant section below. - Sealed surface – u1d - There are areas of paving and hardstanding surrounding the buildings and providing vehicular parking space. - Artificial unvegetated, unsealed surface – u1c - The site is granted access by the presence of a track comprised of dirt/gravel. - Scattered trees – 32 <table><tr><th>Size category</th><th>Approximate number of trees</th><th>Total number of trees</th><th>Condition assessment</th></tr><tr><td>Small (DBH <30cm)</td><td>13</td><td>43</td><td>Good</td></tr></table>			Size category	Approximate number of trees	Total number of trees	Condition assessment	Small (DBH <30cm)	13	43	Good
Size category	Approximate number of trees	Total number of trees	Condition assessment									
Small (DBH <30cm)	13	43	Good									

	Medium (DBH 30-60cm)	27		
	Large (DBH 60-90cm)	3		
	Very large (DBH >90cm)	0		

a. There are approximately 43 scattered trees across the site. Numerous trees were felled prior to the survey. These felled trees are dealt with separately below. Tree species comprise: D: oak, hornbeam, A: holly, sycamore, F: beech, ash, O: willow, yew, R: hawthorn, larch and pear. Condition assessment of retained trees below.

- i. >70% of trees are native.
- ii. Tree canopy is continuous.
- iii. More than 50% of the trees are mature.
- iv. There is no evidence of an adverse impact on tree health due to human activities.
- v. There are natural ecological niches present
- vi. >20% of the tree canopy is oversailing vegetation beneath.
- vii. Condition assessment: **Good**.

b. Felled trees

- i. The condition of the felled trees cannot be accurately determined owing to the fact that they have been felled. As a worst case-scenario, and taking into consideration the retained trees, the felled trees are assumed to have been of **good** condition.
- ii. Approximately 13 trees have been felled. Species composition could not be fully obtained as key identifying features had been lost. Species that could be identified included birch, cypress, yew, oak and hazel. This is not a comprehensive list. Of the felled trees; there were *approximately* five with a DBH of <than 30cm, four with a DBH of 30-60cm, one with a DBH of between 60-90cm, and three with a DBH >90cm.
- iii. These felled trees will need to be incorporated into the baseline of the biodiversity net gain calculation.

5. Vegetated garden – 828

- a. The site includes a large, vegetated garden which is dominated by an amenity lawn grassland. The grassland at the time of the survey was unmown and of heterogenous sward length. Species composition of the grassland included: D: meadow grass, common bent, creeping buttercup, nettles A: sorrel, curly dock, F: cleavers, self-heal, O: spear thistle, R: dandelion, ragwort, red and white clover, creeping cinque foil .
- b. Other plants included ornamental shrubbery and vegetation, including hydrangeas, cherry laurel and rhododendron.

6. Other neutral grassland – g3c

- a. The eastern extent of the garden is well-established grassland with anthills and uneven ground present, though indicator species imply historic over-fertilisation, this area has been mapped as other neutral grassland to avoid undervaluing the baseline habitat value of the site.
- b. Sward height is varied and cover of bracken is <20% and scrub <5%, all other criteria are failed.

	Condition assessment: Poor. 7. Bramble scrub – h3d - At the rear of the site, there are large areas of scrub, dominated by bramble, with some ivy and bindweed present. - Condition assessment: N/A. 8. Ditch (seasonally wet) – 50 - Along the southern boundary is a drainage ditch that was dry at the time of the survey (and a revisit in May 2025) but is seasonally wet depending on rain levels. This is within the site boundary along the southern boundary and outside of the site boundary along the eastern boundary. - Physical damage is evident along <5% of the ditch, cover of filamentous algae or duckweed is <10% and there is an absence of non-native and invasive species; all other conditions are failed. Condition assessment: Poor. Local notable habitats Patches of lowland mixed deciduous woodland (LMDW) are present in close proximity to the site. The closest is located adjacent to the south of the site, with a second patch adjacent to the north. The trees on-site likely have functional connectivity to these patches of woodland, given their proximity to the site and the presence of numerous trees throughout the garden landscape. LMDW is classed as a priority habitat under Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006. Further priority habitats are present within 2km of the site, including ancient woodland (~505m southeast) and traditional orchards (~710m southeast).
	On-site habitats The habitats on-site are widespread and not notable; however, the proposed development will result in the loss of vegetated garden and neutral grassland habitat. Furthermore, mature trees have already been felled, these have been included in the report retrospectively. Many of these trees were very large and mature and were likely to have ecological niches for vertebrates and invertebrates alike. This is likely to have a negative impact on biodiversity. The ditch will be retained and enhanced as part of the proposals. 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 LMDW (adjacent to the south and north of the site), indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.
<i>Recommendations</i>	On-site habitats Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). Measures to ensure that ditch enhancement/management activities do not impact protected species will be secured with a CEMP (for the construction phase impacts) and a LEMP (for the management impacts).

	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. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain.												
Locality and Designated Sites													
Summary of Survey Findings	On-site designations The site is not subject to any designation. Statutory designated sites (within 2km) There is one statutory site within 2km of the site, as detailed below: <table><tr><th>Site name</th><th>Distance from site</th><th>Reason for designation</th></tr><tr><td>Holt Copse & Joel Park local Nature Reserve (LNR)</td><td>~1270m northwest</td><td>Habitats include lowland mixed deciduous woodland. Ancient semi-natural woodland and a large noctule bat roost.</td></tr></table> The site lies within the impact risk zone for Longmoor Bog Site of Special Scientific Interest (SSSI), Heath Lake SSSI, and Broadmoor to Bagshot Woods & Heath SSSI. The proposed development type is not listed as a possible high risk for this designation. Statutory designated sites (within 10km) There is one national network site (SAC, SPA, Ramsar) located within 10km, as detailed below: <table><tr><th>Site name</th><th>Distance from site</th><th>Reason for designation</th></tr><tr><td>Thames Basin Heaths Special Protection Area (SPA)</td><td>~4570m southeast</td><td>Reference: UK9012141.</td></tr></table> Non-statutory designated sites There are no non-statutory designated sites within influencing distance of the development, according to Wokingham Borough Council’s Planning Policies and Constraints Map. The nearest non statutory designated site is Woodland Near Ludgrove School, a Local Wildlife Site ~500m south-east of the development site.	Site name	Distance from site	Reason for designation	Holt Copse & Joel Park local Nature Reserve (LNR)	~1270m northwest	Habitats include lowland mixed deciduous woodland. Ancient semi-natural woodland and a large noctule bat roost.	Site name	Distance from site	Reason for designation	Thames Basin Heaths Special Protection Area (SPA)	~4570m southeast	Reference: UK9012141.
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Site name	Distance from site	Reason for designation											
Thames Basin Heaths Special Protection Area (SPA)	~4570m southeast	Reference: UK9012141.											
Foreseen Impacts	On-site designations No impacts foreseen.												

	Statutory and non-statutory designated sites No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites as well as the urban location of the site with surrounding physical barriers.
Recommendations	On-site designations None required. Statutory and non-statutory designated sites None required.
Invasive / Non-native species	
Summary of Survey Findings	Rhododendron (<i>Rhododendron</i>), buddleia (<i>Buddleia davidii</i>) and cherry laurel (<i>Prunus laurocerasus</i>) were all identified on site. These species are listed as an invasive, non-native species under Schedule 9 of the Wildlife and Countryside Act 1981. BRD returned from February 2023 recorded the presence of Japanese Knotweed (<i>Fallopia japonica</i>) and Himalayan balsam (<i>Impatiens glandulifera</i>) within a 2km search radius of the site.
Foreseen Impacts	Construction could result in the spread of rhododendron, buddleia and cherry laurel. As the site is bordered on the south and north by LMDW, the spread of these species into the woodland may be caused by construction activities.
Recommendations	Rhododendron, buddleia and cherry laurel present across numerous areas within the vegetated garden (i.e. close to the development area, and therefore likely to be impacted by construction) will be sensitively removed prior to the commencement of works to prevent the spread of a non-native, invasive species listed on Schedule 9 of the WCA (see Appendix 1a). The Rhododendron, buddleia and cherry laurel will be removed using hand tools only. The most effective method of removal is through hand pulling, which results in minimal soil disturbance. Hand-pulling young shrubs will typically result in the full removal of the shrub and associated root network, which will prevent the re-establishment. Mature shrubs are likely to have a deeper and more established root network unlikely to be removed in full by hand pulling alone. Where there are mature shrubs, removal should be aided using hand tools to expose the root network in full so the entire shrub and associated roots can be removed. Development works will not commence until Rhododendron has been successfully removed from the site. Rhododendron, buddleia and cherry laurel present on site will be sensitively removed prior to the commencement of works to prevent the spread of a non-native, invasive species listed on Schedule 9 of the WCA (see Appendix 4). The Rhododendron will be removed using hand tools only. The most effective method of removal is through hand pulling, which results in minimal soil disturbance. Hand pulling young shrubs will typically result in the full removal of the shrub and associated root network, which will prevent the re-establishment. Mature shrubs are likely to have a deeper and more established root network unlikely to be removed in full by hand pulling alone. Where there are mature shrubs, removal should be aided using hand tools to expose the root network in full so the entire shrub and associated roots can be removed. Development works will not commence until Rhododendron, buddleia and cherry laurel has been successfully removed from the site.

Invertebrates					
Summary of Survey Findings		BRD returned the presence of four-banded flower bee, red-gridled mining bee, ridge-saddled carpenter bee, yellow loosestrife bee, stag beetle, grayling butterfly, small heath butterfly, white admiral butterfly, common darter butterfly, beaded chestnut moth, blood-vein moth, brindled beauty moth, buff ermine moth, bulrush veneer moth, centre-barred sallow moth, cinnabar moth, common fan-foot moth, dark spinach moth, dot moth, grey dagger moth, knot grass moth, mottled rustic moth, oak hook-tip moth, powdered quaker moth, sallow moth, September thorn moth, shoulder-striped wainscoat moth, small phoenix moth, small square-spot moth, spinach moth, toadflax brocade moth, waste grass-veneer moth, white ermine moth, white-barred knot-horn moth and a true fly within a 2km search radius of the site. The habitats present on-site, including lawns, ornamental shrubs and trees, 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.			
Foreseen Impacts		Vegetated garden and neutral grassland 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.			
Recommendations		No further surveys.			
Bats					
Summary of Survey Findings		EPSL data and local records 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:			
		EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence
		2015-11806-EPS-MIT	Common pipistrelle	~590m northwest	Damage of a resting place and destruction of a resting place.
		2018-34805-EPS-MIT	Brown long-eared bat & common pipistrelle	~740 east	Destruction of a resting place.
		EPSM2009-1496	Noctule	~1390m northwest	Impact on a breeding site, destruction of a breeding site & destruction of a resting place.
		2016-22176-EPS-MIT	Brown long-eared bat	~1470m northwest	Destruction of a resting place.
		2014-2425-EPS-MIT	Brown long-eared bat & common pipistrelle	~1640 west	Destruction of a resting place.

			There are 175 record returns from BRD from a 2km search radius of the area, including brown long-eared bat, common pipistrelle, Leisler's bat, myotis species, Nathusius pipistrelles, Natterer's bat, noctule, serotine, and soprano pipistrelle. There are no Special Areas of Conservation designated for bats within 10km of the site. Foraging and commuting habitat Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of grassland, scattered scrub, ornamental shrubs and trees. 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 hedgerows on site are mature and extend 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. Roosting habitat Buildings to be impacted by the proposed development are assessed for their suitability to support roosting bats below. The main dwelling B1 was subject to survey, as its demolition is required to facilitate the proposed development. All other buildings will be retained. No additional trees are due to be removed. Felled trees cannot be assessed for their suitability to host roosting bats. No evidence of roosting bats was identified on or within B1.
B1 Building description			Photographs
<i>Summary</i> B1 is a large brick-built two-storey residential dwelling. The roof is pitched and hipped and clad in clay tiles, there are two chimneys on the roof of B1. There is one loft space within the interior of B1 which was fully boarded and accessible for survey. There are numerous gaps in the brickwork and timber soffits, as well as gaps in the clay tiles and areas of raised lead flashing. B1 will be demolished to facilitate the proposed development. B1 is assessed as having 'moderate' potential to support roosting bats.			
Feature	Materials	Condition/description/suitability	Photograph(s)

Walls	Brick and mortar	Condition/description Numerous gaps in the brickwork where mortar is missing. The extension on the northwest of B1 has pulled away from B1, creating gaps. Suitability/access/evidence of bats Gaps in the brickwork provide suitable roosting features for crevice dwelling bats. Binoculars were used to assess these gaps, and they were deemed deep enough to support roosting bats. Please see Figure 1, Figure 2 & Figure 3 in Appendix 4 for additional photos.	
Roof	Clay tiles	Condition/description Pitched and hipped roof. Heavily moss covered with some raised examples. Flat roof could not be seen. Suitability/access/evidence of bats Space under tiles could accommodate crevice dwelling bats. Please see Figure 4 in Appendix 4 for additional photos.	

Soffit boxes	Timber	Condition/description There are two gaps in the soffit boxes on the eastern elevation of B1. There is an additional gap on the northeastern elevation. The rest of the soffit boxes appear to be in moderate condition, with areas of peeling paint. Suitability/access/evidence of bats Provides possible bat access into internal void and crevices on wall tops. No evidence found but recent and current rain would wash this away externally.	
Window/doors frames and lintels	Timber	Tight fitting	

Internal voids	Timber rafters and ridge beam. Open floor to ridge. Timber sarking on underside of tiles. chimney stacks fully visible internally.	Condition/description Abiotic recordings within the interior of the loft space at the time of the survey were recorded at 8.7°C and 92.9% relative humidity. The internal loft space measures approx. 13m long, 11m wide. The internal timbers appear to be original and have traditional mortise and tenon joints. The timber sarking appears to be in good condition, with no gaps or cracks present. A small amount of daylight could be seen entering the loft space on the southern elevation. This is due to the growth of vines from the outside (see Figure 5 in Appendix 4). Suitability/access/evidence of bats No bat droppings were found within the loft space, nor any other evidence of bat presence.	
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<i>Foreseen Impacts</i>	Roosting habitat The proposed development will result in the demolition of this building. This could result in the destruction of any bat roosts present and could cause disturbance, death or injury to bats. 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>	Roosting habitat Two bat emergence/re-entry surveys are required on B1 during the active bat season (May – September) to confirm presence/likely-absence of bats roosting in or on the building. These survey visits should be completed during the optimal survey period mid-May to August inclusive. The survey visits should be at least three weeks apart. Sub-optimal: early May and September. Would require greater justification of timing e.g., weather conditions, known local bat activity.

	One of the surveys could be a dawn re-entry survey, or all three can be at dusk if supported by night vision aids (NVA). Four surveyors are required to provide full coverage of the building's elevations to look for emerging/re-entering bats. An infrared camera should also be employed as part of the survey to see where any specific roost locations are located. Lighting mitigation may be required based on the outcome of the night bat survey(s). If any bat roosts are confirmed from this survey schedule, a bat licence would be required to demolish the buildings as it would involve the destruction of roosts. This is applied for with the help of a class 2 licensed bat ecologist after planning permission is granted, but before commencement of works. An EPSL application to Natural England will be required. The EPSL application requires that all surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. Please refer to Appendix 1b. <i>These surveys have now been undertaken by Plan Ecology – a likely-absence of roosting bats was concluded. The Plan Ecology report is provided separately. The survey by Plan Ecology also concluded that the outbuildings on site offer negligible habitat value.</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 Suggested biodiversity enhancements Enhancements are dependent on the outcome of further surveys.
Birds	
Summary of Survey Findings	Buildings No evidence of nesting birds was identified on or within B1. B1 is deemed to provide negligible habitat value for nesting birds due to a lack of suitable nesting sites or access points. Trees and vegetation No bird nests were identified within the trees or scrub on-site; however they all offer nesting opportunities and nest-building resources for birds. Barn owls

	The site does not appear to provide any suitable nesting sites for barn owls. Overwintering birds Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.
<i>Foreseen Impacts</i>	The removal of vegetation could destroy birds' nests or disturb the occupants. Barn owls None foreseen. Overwintering birds None foreseen.
<i>Recommendations</i>	If vegetation removal is undertaken within the bird nesting season (March to September inclusive), a nesting bird check will be required within 48 hours of the commencement of works. Any active nests will need to be retained, with a suitable buffer area (5-10m), until the chicks have fledged. Barn owls None required. Overwintering birds None required. Suggested biodiversity enhancements The installation of a minimum of two bird boxes on mature trees around the site boundaries or on retained buildings will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box (buildings) Schwegler 1SP Sparrow Terrace (buildings) Schwegler 1B Nest Boxes (trees) Schwegler 2H Robin Boxes (trees) Woodstone Nest Box (buildings or trees) Or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift and sparrow boxes should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction.

Reptiles	
<i>Summary of Survey Findings</i>	EPSL data and local records A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. BRD returned the following from a 2km search radius of the site: five records of common lizard, two records of grass snake, and 25 records of slow-worm. Habitat suitability Habitats recorded on site are assessed to provide optimal foraging, commuting, basking and refuge opportunities for reptiles. The tree lines, retained deadwood, and scrub provide elevated value for reptiles as these habitats provide a suitable structure for refuge, whilst also providing foraging and commuting opportunities. However, it is important to note that the site is dominated by frequently managed grassland, introduced shrubs, buildings, and hardstanding of limited value to reptiles. These habitats are suboptimal due to an absence of notable habitat structure and diversity, which significantly limits refuge, foraging, and commuting opportunities, albeit they do provide some basking opportunities when located adjacent to potential refugia. The site has good connectivity to further suitable reptile habitat in the wider landscape via woodland. The presence of reptiles on site cannot be discounted, albeit likely limited to low numbers within peripheral scrub.
<i>Foreseen Impacts</i>	Vegetated garden and neutral grassland 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. However, site clearance could result in the death or injury of reptiles, if present.
<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. Suggested biodiversity enhancements The site could be enhanced for reptiles post-development with the inclusion of log piles (created from felled materials) and planting of areas of native shrubs, to provide sheltering opportunities.
Amphibians	

<i>Summary of Survey Findings</i>	EPSL and survey data (and biological records data) A review of the MAGIC database returned one granted EPSL record for great crested newts within 2km of the site (approximately 1860m north - 2020-47555-EPS-MIT). Three class survey licence returns were present within 2km of the site, the closest was located approximately 830m east of site. BRD returned three records of GCN within a 2km search radius. Position of these records can be found in Appendix 1c. Aerial imagery indicates the presence of a pond adjacent to the southwest of the site. The survey concluded that this pond has since been infilled with felled tree cuttings. 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 two ponds within 500m of the site. Pond 1 (P1) is located approximately 120m southeast of the site. Pond 2 (P2) is located approximately 280m southeast of the site. P1 is separated from site via tree lines and a short-sward length well-managed arable field. P2 is separated from site by numerous tree lines, two short sward length fields and hardstanding. These landscape features are likely to represent a significant barrier to dispersal due to heavy traffic flow and high kerbs along the road, eliminating connectivity to the site for great crested newts. A pond map showing approximate pond locations is provided in Appendix 1c. Terrestrial habitat suitability The site provides limited suitable terrestrial habitat for amphibians. The areas of hard standing and amenity grass offer sub-optimal habitat for terrestrial amphibians. The scrub may offer refuge for these species, however given the urban nature of the surrounding landscape (i.e. dominated by roads and hard standing which are sub-optimal for amphibians) it is unlikely that amphibians will migrate on to site. Further, there is limited suitable terrestrial habitat across the wider landscape reducing the likelihood of amphibians being present on site and across the surrounding areas.
<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. Suggested biodiversity enhancements 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>	BRD returned seven records of badgers within a 2km search radius of the site. No badger setts were noted on site or within a 30m radius of the site. Further, no evidence of foraging badgers was noted within the development area. However, the site was considered suitable for badger sett excavation and foraging habitat.
<i>Foreseen Impacts</i>	No works will be undertaken within 30m of a badger sett. Vegetated garden, including scrub, will be removed during construction. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present.
<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: - A toolbox talk will be given to contractors regarding the possible presence of badgers at the site. - A pre-commencement inspection of the site will be undertaken for any new badger activity if works do not commence within three months. - Heras fencing will be erected around the working area to prevent encroachment into retained habitats where badger setts could be present. - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use.

	Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. In the unlikely event that a badger sett is identified, works must cease and advice must be sought from a suitably qualified ecologist. Suggested biodiversity enhancements Planting fruit bearing trees and species-rich grassland to increase foraging opportunities for badgers.
Riparian animals	
<i>Summary of Survey Findings</i>	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	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).
<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>	BRD returned 27 records of hedgehog within a 2km search radius of the site. The scattered scrub onsite provides limited foraging and commuting opportunities for hedgehogs, with woodland habitat nearby.
<i>Foreseen Impacts</i>	Vegetated garden will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.

<i>Recommendations</i>	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.
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Appendix 1a: Survey/Habitat map



Appendix 1b: PRA plan



Appendix 1c: GCN returns from BRD and pond map



Appendix 2: Location map

Appendix 3: Proposed plan



Appendix 4: Habitat Photos

Photograph	Description
	Figure 1: B1 – northwest elevation The flat-roof single storey extension on the northwest elevation of B1 has missing mortar above the arch (see circles). These gaps provide suitable roosting features for crevice dwelling bats.
	Figure 2: B1 – northwest elevation The flat-roof single storey extension on the northwest elevation of B1 has pulled away from the main two-storey construction. There are significant gaps between the main residence and the extension. These gaps are suitable for crevice dwelling bats to utilise for roosting.



Figure 3: B1 – northwest elevation
There are holes in the brickwork on this elevation which provide suitable roosting features for crevice dwelling bats.



Figure 4: B1 – south elevation
There are several (<10) raised tiles across the entirety of B1. These raised areas provide suitable gaps for crevice dwelling bats.

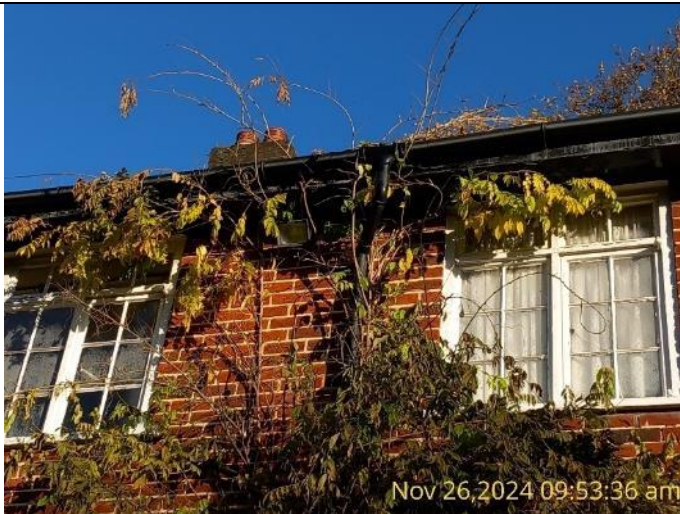


Figure 5: B1 – south elevation
Vines have grown underneath the soffit boxes and grown into the interior of the loft space within B1. This growth has allowed a small amount of light to enter the loft space.



Figure 6: Artificial unvegetated, unsealed surface
Gravel/dirt track providing vehicular access to site.



Figure 7: Felled tree
One of the felled trees on site. These have been described in the relevant section above.



Figure 8: Vegetated garden
Looking east from the rear of B1.



Figure 9: Invasive species
Rhododendron on site.



Figure 10: Trees
Vegetated garden and scattered trees.

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