

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

20a Norcot Road, Reading, RG30 6BU

Client:

Sajmir Klosi

Survey date:

03/12/2024

Project:

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

The demolition of existing workshops and construction of one new workshop.

[Unsubmitted]

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 67128 73900 and has an area of approximately 0.08ha. The site comprises four buildings and hardstanding. A carwash (B1), the workshops (B2), the waiting room (B3) and a paint workshop (B4). It is situated within the town of Reading. Aerial imagery shows the local landscape to have an urban character, with several areas of well-managed grassland, residential and commercial properties, gardens and scattered trees in close proximity to the site. The River Thames is located approximately 1.24km northeast.					
Survey Details					
The site survey was undertaken by Rebecca Gane BSc (Hons) Graduate Ecologist, an accredited agent on the Natural England survey licences for bats [2018-33540-CLS-CLS (class 1).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
03/12/2024	7	76	30	0	None
Survey limitations					
It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records. 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.					

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> (UKHab codes used)	The site does not contain any habitats listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Other habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 2km. On-site habitat descriptions <u>u1b</u> – Developed land/sealed surface The site consists predominantly of concrete hardstanding. <u>u1b5</u> – Buildings Four buildings are located onsite. B1 is a brick-built shelter that is open on the northern and southern aspects. B2 is a breezeblock-built structure containing workshops. B3 is a small, waiting room, and B4 is a spray room. <u>u1b6</u> – Other developed land PVC sheet awnings are located adjacent the eastern elevation of B1 and B2. These structures are open on all sides. Local notable habitats Patches of lowland mixed deciduous woodland (LMDW) are present in close proximity to the site. The closest is located ~0.24km to the northeast, with a second patch of LMDW ~0.34km to the southeast. LMDW is classed as a priority habitat under Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006, however there are no trees or other habitats on site therefore there is no functional connectivity to these patches of woodland.

	Further priority habitats are present within 2km of the site, including lowland dry acid grassland ~0.75km northeast, woodpasture and parkland ~1.1km south), and ancient woodland ~0.67km northeast.
<i>Foreseen Impacts</i>	On-site habitats The proposed development will result in the loss of buildings and hardstanding. This is likely to have a no impact on biodiversity due to the low ecological value of these habitats. Notable habitats No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the urban location of the site with surrounding physical barriers.
<i>Recommendations</i>	On-site habitats None required. Notable habitats None required. 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 (state exemption e.g. self-build, less than 25m² of habitat being impacted etc), however the Local Planning Authority may still request a net gain assessment under their own local planning policy: <25m² of habitat affected.
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 are 5 statutory sites within 2km of the site, as detailed below:

	North Wessex Downs National Landscape - ~1.3km west Blundells Copse Local Nature Reserve (LNR) - ~0.41km south Designated for its ancient woodland habitat and stream. Round Copse LNR - ~0.72km east A dense woodland containing woodpecker, as well as nuthatch, treecreeper, thrushes and blackbirds Lousehill Copse LNR - ~0.76km southeast A semi-ancient bluebell woodland that contains mature oaks and hazel, some of which are coppiced. McIlroy LNR - ~0.66km northeast A natural park comprising of grassland, heather and broom with semi-ancient woodland at the perimeter of the site. The site lies within the impact risk zone for Sulham and Tidmarsh Woods and Meadows SSSI Statutory designated sites (within 10km) There is 1 national network sites (SAC, SPA, Ramsar) located within 10km, as detailed below: Hartslock Wood SAC - ~6.7km northwest The steep slopes of this site above the River Thames on the chalk of the Chilterns comprise a mosaic of chalk grassland, chalk scrub and broadleaved woodland, and one of the few examples of ancient yew <i>Taxus baccata</i> wood in the Chilterns. It's primary reason for SAC designation are the annex 1 habitats: • <i>Taxus baccata</i> woods of the British Isles, • Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) Non-statutory designated sites
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	The presence of non-statutory designated sites within 2km of the site cannot be established without data from Thames Valley Environmental Records Centre (TVERC)
<i>Foreseen Impacts</i>	On-site designations No impacts foreseen. Statutory and non-statutory designated sites No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers. The site lies within the impact risk zone for Sulham and Tidmarsh Woods and Meadows SSSI. The proposed development type is not listed as a possible high risk for this designation.
<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 hardstanding and buildings, provide suboptimal opportunities for common invertebrates with opportunities to forage and shelter. The site contains no notable habitats which may provide niches for specialised or protected invertebrates.
<i>Foreseen Impacts</i>	None foreseen.
<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 4 EPSLs within a 2km radius of site as detailed below:

EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence
EPSM2011-3384	Common pipistrelle	0.7km east	Destruction of a resting place
EPSM2011-3499	Common pipistrelle, brown long-eared bat, soprano pipistrelle	0.9km south	Destruction of a resting place
2015-18545-EPS-MIT	Common pipistrelle, brown long-eared bat, soprano pipistrelle	1.2km north	Destruction of a resting place
2019-41955-EPS-MIT	Common pipistrelle	1.7km southeast	Destruction of a resting place

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 suboptimal foraging and commuting opportunities for bats in the form of hardstanding and buildings. These habitats are unlikely to provide micro-climatic conditions that support invertebrates. However, the gardens located adjacent to the south and east are likely to contain habitats suitable for foraging and commuting bats that may extend beyond into the wider landscape. Whilst it may be that the site is not utilised by bats as a primary location for foraging, it is likely that bats are present within the area and commute across site to reach foraging habitat in the local 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. There are a total of 4 buildings on site; the car wash (B1), workshops (B2 & B4) and the waiting room (B3). All buildings were surveyed as all will be removed during development. No evidence of roosting bats was identified on or within any of the buildings.	
B1 Car Wash		Photographs
<i>Summary</i> B1 is a brick built open structure, with an asbestos roof and metal framing. Wooden cladding is present on the northern face. This building is subject to a high level of disturbance, from floodlighting, foot traffic, noise and chemicals used to wash vehicles. Gaps that are of a suitable size of crevice dwelling species are situated in between the concrete supports and roof sheets, however these features would not provide much protection from the elements and disturbance below, making it unlikely that they would be utilised by bats to roost. The building will be retained during development. The building has negligible habitat value.		



B2 Workshops

Summary

B2 is a collection of workshops situated to the east of the PVC awning (pictured) located within the south easter corner of the site. The building is constructed from breezeblocks and roofed with metal sheeting. The walls are well-sealed. The eastern elevation was not visible. Gaps that are of a suitable size for crevice dwelling species are situated in between the metal sheets on the western elevation, however the levels of light disturbance, and building materials are not suitable for roosting, as they are poorly insulated which will create fluxes in temperature and humidity.

The building is considered to have low potential to support roosts of crevice-dwelling bat species due to the presence of small gaps on the exterior of the building. However, the likelihood of bats using these features for roosting is reduced due the materials used and

Photographs



urban context of the building. The poorly insulated building materials, high level of disturbance from the workshops below and adjacent, the constant influx of cars, manoeuvring of car parts, chemical usage and lighting all constitute to a poor environment for roosting bats. In addition, there is likely to be better roosting locations within residential buildings close by.

B2 is **negligible** for roosting bats.



The southern elevation of B2



Interior of the workshops within B2



The western elevation of B2



Interior of the workshops within B2

B3 Waiting room*Summary*

B3 is a waiting room situated to the west of B1. This building has a flat roof and is clad with PVC. No gaps were noted within the soffits or cladding. The internal area has no void, there is an absence of textured roosting surfaces associated with wood and stone, and absence of insulative materials that result in unstable abiotic conditions therefore no habitat value for void dwelling bats.

B3 is **negligible** for roosting bats.

Photographs

B4 Paint shop	
<i>Summary</i> B4 is a paint workshop situated to the west of B2. This structure is clad with PVC and has a flat roof. The cladding and soffits are well sealed, with no areas of roosting habitat available for crevice dwellers. The internal area has no void, therefore no habitat value for void dwelling bats. As there is an absence of textured roosting surfaces associated with wood and stone, and absence of insulative materials that result in unstable abiotic conditions no habitat value for void dwelling bats. B4 is negligible for roosting bats.	
<i>Foreseen Impacts</i>	Roosting habitat [Buildings] Bats are very unlikely to be roosting within B2, B3 and B4 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 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.

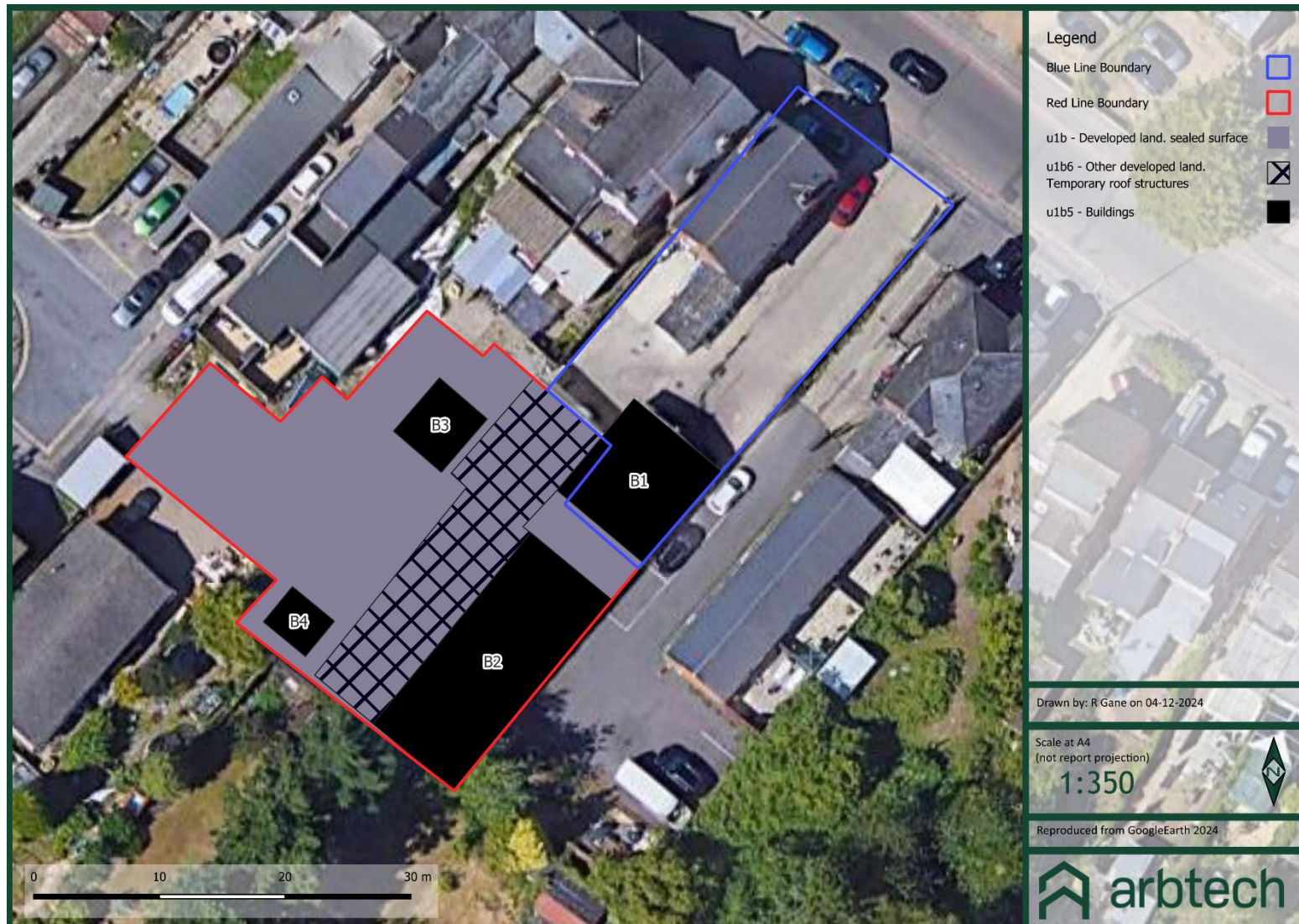
	Artificial lighting The proposed development will likely include external lighting. No change to the level of lighting is anticipated.
<i>Recommendations</i>	Roosting habitat [Buildings] In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop, and 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-2 Suggested biodiversity enhancements The installation of one bat box at the site will provide additional roosting habitat for bats. The bat boxes will be incorporated into the fabric of the new building. They will be suitable for pipistrelles (which have been identified locally through EPSL data). Suitable bat boxes include Habibat Bat Box, Ibstock Enclosed Bat Box or similar alternative brand. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light.
Birds	
<i>Summary of Survey Findings</i>	Buildings No evidence of nesting birds was identified on or within any of the buildings. B1, B3 and B4 are deemed to provide negligible habitat value for nesting birds due to the high level of disturbance (B1) and lack of suitable nesting sites or access points (B3 and B4). Due to the size and construction of B2, there is the possibility that common species that are able to nest in small gaps and are less affected by human disturbance, such as robins, may be present.

	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 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.

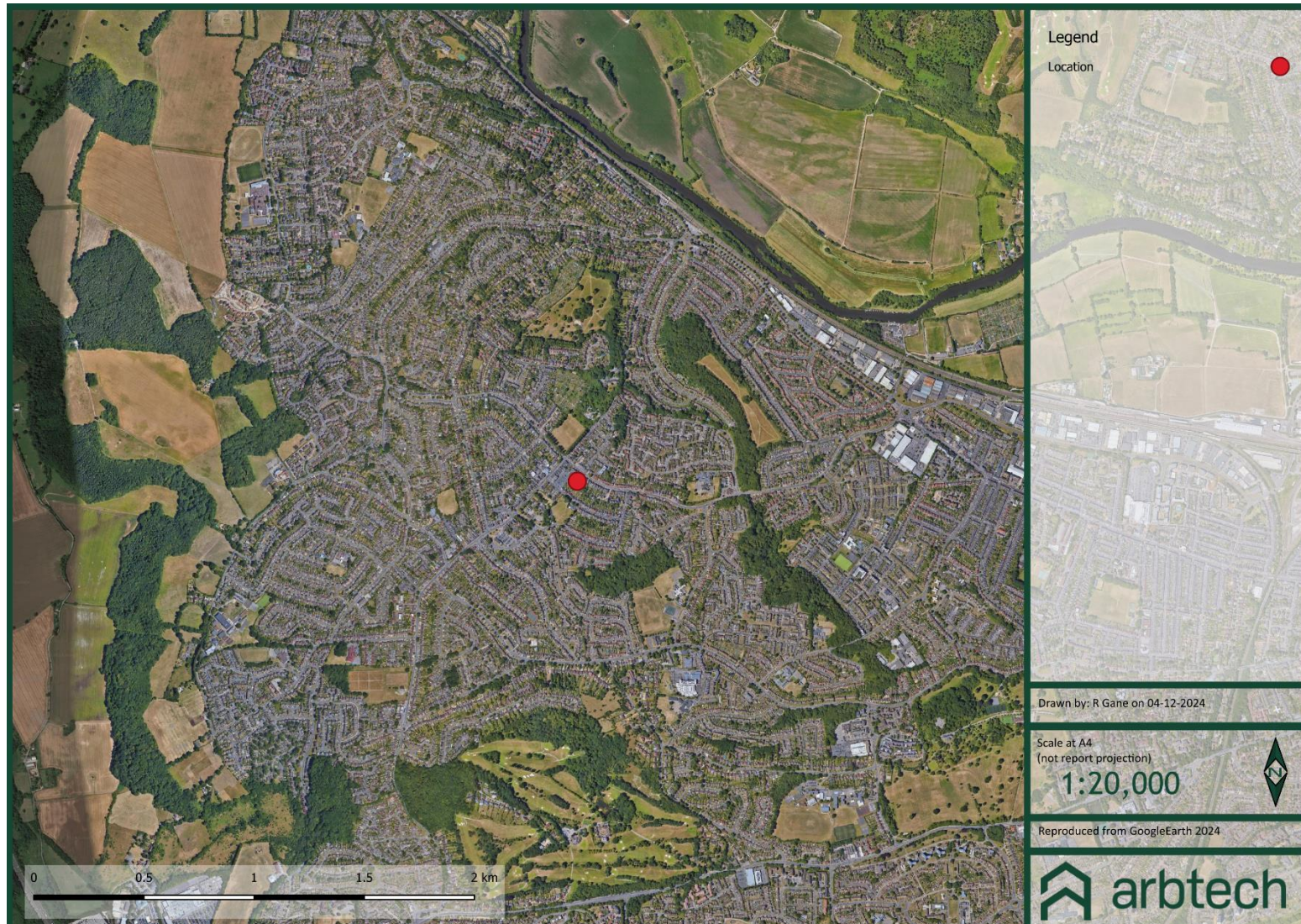
	Suggested biodiversity enhancements The installation of a minimum of one bird boxes on new buildings will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box (buildings) Schwegler 1SP Sparrow Terrace (buildings) Or a similar alternative brand. Tree boxes should be positioned 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	
Summary of Survey Findings	EPSL data A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. Habitat suitability There is no suitable habitat present on site for reptiles due to a lack of habitats such as scrub and rank grassland which would offer refuge for these species. Further, 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 sections of habitats are highly urbanised, consisting of roads, buildings and pathways. Small areas of managed grassland exist, but in small quantities and are unlikely to support a large number of reptiles. Species such as slow worms may exist in a garden context, however other species, such as adders, grass and smooth snakes are highly unlikely to be present in the area in close proximity to the site.
Foreseen Impacts	No impacts are anticipated on reptiles as a result of the proposed development.
Recommendations	None required.
Amphibians	
Summary of Survey Findings	EPSL and survey data

	A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. Further, no positive class survey licence return or DLL historic survey data (2017 – 2019) were present within 2km of the site. Aquatic habitat suitability (including ponds within 500m) Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). No ponds are present on site or within 500m of the site. Terrestrial habitat suitability 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 amenity grass offer sub-optimal habitat for terrestrial amphibians. The hedgerows 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>	None required.
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 surrounded 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.
<i>Foreseen Impacts</i>	No impacts are anticipated on badgers as a result of the proposed development.

<i>Recommendations</i>	None required.
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.
<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>	The hardstanding onsite provides very limited foraging opportunities for hedgehogs. Private gardens and areas of grassland are located within the wider landscape, it likely that they are present within these areas.
<i>Foreseen Impacts</i>	No impacts are anticipated on hedgehogs as a result of the proposed development.
<i>Recommendations</i>	None required.

Appendix 1: Survey/Habitat map

Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Habitat Photos

Buildings	
Photograph	Description
	Figure 1: B1



Figure 2: B2

		Figure 3: B3	
Other developed land			
Photograph		Description	



Figure 4: Plastic temporary roofing



Figure 5: Area adjacent B2



Figure 6: PVC sheet temporary shelter

Developed land, sealed surface

Photograph

Description



Figure 7: Hardstanding

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