

Preliminary Ecological Appraisal

Survey site:

19 Ogmore Close, Reading, RG30 4SX

Client:

Khan Herbert

Survey date:

2nd April 2023

Project:

This report is prepared to inform a planning application for a 'Construction of 1no Dwelling'.

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

The site survey was undertaken by Consultant Ecologist Oliver Bevilacqua, BSc (Hons), MSc; - Level 1 GCN Licence (2022-10923-CL08-GCN)					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
02/04/2024	12	81	75	8	None

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, photos in appendix 3 and proposal plan 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>	The site is located at National Grid Reference SU67104 73451 and has an area of approximately 0.066 ha comprising of a house, shed, driveway, garden, and felled trees. The site is predominantly surrounded by housing in all directions with the exception of the Blundells Copse Local Nature Reserve ancient woodland which lies directly adjacent to the eastern boundary. <u>Buildings (u1b5) [Photo 2, 4]</u> There is a house and shed present on site, please see the bats section for descriptions. <u>Developed land, sealed surface (u1b) [Photo 4]</u> There is an approximate 2.5m wide paved driveway along the southwestern section of the site.

Built up areas and gardens (u1) – vegetated garden (828) with ruderal or ephemeral (81) [Photo 1]

The remainder of the site is comprised of regularly managed vegetated garden that closely resembles a modified grassland, most of which will be removed during the development. The sward is maintained at <5 cm for over 80% of the total area with several small patches of ruderals and ephemerals scattered around the garden. Bare ground is also present in small, scattered patches around the garden as well as two larger patches beside the shed and the entrance to the garden. The species present in the garden are common and widespread, with roughly 5 species per m².

A full species list of the garden is presented in the table below:

Common name	Scientific name	DAFOR scale
Annual meadowgrass	<i>Poa annua</i>	A
Common daisy	<i>Bellis perennis</i>	F
Common nettle	<i>Urtica dioica</i>	F
Cock's foot	<i>Dactylis glomerata</i>	O
Bramble	<i>Rubus fruticosus</i>	O
Lesser celandine	<i>Ficaria verna</i>	O
Wood avens	<i>Geum urbanum</i>	O
Yarrow	<i>Achillea millefolium</i>	O
Common ivy	<i>Hedera helix</i>	R
Lords and ladies	<i>Arum maculatum</i>	R
Cleavers	<i>Galium aparine</i>	R

Bitter dock	<i>Rumex crispus</i>	R
Spear thistle	<i>Cirsium vulgare</i>	R
Goat willow (sapling)	<i>Salix caprea</i>	R

Built up areas and gardens (u1) - scattered trees (32) [Photo 3]

There are 5 scattered trees present on site which were felled prior to the site visit. 2 of these trees were medium-sized and 3 were small-sized.

Geology

The British Geological Survey describes the lithology of the site as London Clay. London Clay mainly comprises bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, with some layers of sandy clay. It also includes a few thin beds of shells and fine sand partings or pockets of sand, which commonly increase towards the base and towards the top of the formation. At the base, and at some other levels, thin beds of black rounded flint gravel occurs in places.

Local habitats

The following notable and priority habitats are present within 2 km of the site (in order of proximity to site): ancient woodland (0m, directly adjacent to eastern boundary), ancient woodland (594m south), open mosaic (645m southeast), wood pasture and parkland (732m south), lowland dry acid grassland (991m northeast), and floodplain and grazing marsh (1950m south).

Foreseen Impacts	Despite the adjacent ancient woodland LNR not being directly affected by this development, due to the close proximity, indirect effects such as pollution or tree damage could occur during construction.		
Recommendations	Best practice measures to minimise the possibility of pollution affecting the adjacent ancient woodland must be implemented during construction. The overhanging trees from the adjacent ancient woodland should also 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). A Construction Environment Management Plan (CEMP) will be required to outline how to protect the woodland. In addition, a 15m buffer around the woodland will need to be implemented as a protection zone where no works should take place.		
Locality and Designated Sites			
Summary of Survey Findings	The following statutory designated sites are present within 2km of the site:		
	Designated site name	Distance from site	Reasons for notification from Natural England
	Blundells Copse Local Nature Reserve (LNR)	0m east	‘Ancient woodland with a stream. There are large alder trees , cherry, willow and coppiced willow, alder and hazel with oak and ash standards. There is opposite leaved golden saxifrage, marsh marigold, yellow archangel, and fools water cress along the stream. Animals include bats, hedgehogs, muntjac deer, field mice and frogs.’

	Lousehill Copse (LNR)	751m east	'Semi-ancient woodland surrounded by housing. Mature oak and hazel woodland with some coppice. There are many bluebells and other spring flowers, streams, relics of old ponds and boggy areas. The site is on sand and gravel. There is an open meadow with gorse and broom in the northern section with sandy soil which children use as a digging area.'
	Round Copse (LNR)	847m northeast	'Adjacent to and joining McIlroy Park, Round Copse is a dense woodland with a variety of birdlife, with the chance for the patient observer of seeing all three species of Woodpecker, as well as Nuthatch, Treecreeper, Thrushes and Blackbirds.'
	McIlroy Park (LNR)	974m northeast	'An extensive natural park with good views over the River Thames. It is mostly grassland with heather and broom. The semi-ancient woodland, mostly around the edges of the site, has bluebells, wood anemones and butcher's broom. The site has a sunken ancient track "Gypsy Lane" lined with beech trees. Romany Lane bounds the eastern side. There are old chalk pits in the west woodland area from the old clay extraction industry . A possible Saxon mound is at the entrance from Weald Way.'

	North Wessex Downs Area of Outstanding Natural Beauty (AONB)	1343m west	'Around 9% of chalk grassland in the UK lies within the North Wessex Downs and supports nationally important populations of the early gentian, a scheduled protected species and one of Britain's few endemic plants. The spring-fed streams and rivers of the North Wessex Downs AONB support an extremely diverse range of plant and animal communities. In turn, the rivers irrigate adjacent areas creating the distinctive valley landscape with its remnant fens and water meadows. In recognition of their outstanding nature conservation value, the Lambourn, Kennet, and Hampshire Avon rivers are all designated SSSIs, while the Lambourn, the Hampshire Avon, and the Kennet and Lambourn Floodplain – a series of discrete sites supporting the globally vulnerable Desmoulin's whorl snail – are SACs. A nationally significant area of chalk grassland including rare flora such as field fleawort, bastard toadflax, musk orchid and burnt orchid, early gentian, chalk eyebright, Chiltern gentian, dwarf mouse-ear, tuberous thistle, and round-headed rampion; invertebrates such as the wartbiter cricket and important butterfly populations including Adonis blue, silver-studded blue, marsh fritillary, chalkhill blue, small blue, silver-spotted skipper, and Duke of Burgundy fritillary. Substantial areas of broadleaved woodland and wood pasture, chalk streams and rivers, arable habitats, and wetland habitats.'
--	---	---------------	--

	The site also lies within the impact risk zone for Sulham and Tidmarsh Woods and Meadows Site of Special Scientific Interest (SSSI). The proposed development is not listed as a possible high risk regarding this designation.
<i>Foreseen Impacts</i>	Despite Blundells Copse LNR not being directly affected by this development, due to how close the proposed development is, indirect effects such as pollution or tree damage could occur during construction.
<i>Recommendations</i>	Best practice measures to minimise the possibility of pollution affecting the adjacent ancient woodland must be implemented during construction. The overhanging trees from the adjacent ancient woodland should also 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). A Construction Environment Management Plan (CEMP) will be required to outline how to protect the woodland. In addition, a 15m buffer around the woodland will need to be implemented as a protection zone where no works should take place.
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>	It is expected that only small assemblages of common invertebrates will be present on site due to the lack of connecting habitat with the exception of the adjacent ancient woodland. Plant species found on site are unlikely to attract larger assemblages or rarer invertebrates due to the lack of nectar-rich plants, deadwood, and overall species richness and diversity. The garden resembles a homogenous habitat that lacks enough complexity in vegetation type, height, and density to be considered a high-value habitat for invertebrates.
<i>Foreseen Impacts</i>	None foreseen.
<i>Recommendations</i>	No further surveys.
Bats	
<i>Summary of Survey Findings</i>	The house on site will not be affected by the proposed development, hence, no preliminary roost assessment was required. The small wooden shed will be removed to make room for the development. The shed is enclosed on all sides with a height of approximately 2.5m and area of approximately 6m². This shed has negligible value for roosting bats due to the shed being in good condition with no visible entry points, lack of flight room inside the shed, small height and size, and due to the abundance of more suitable roosting sites presented by the adjacent ancient woodland. Due to the close proximity of the ancient woodland, it is likely that foraging and commuting bats are present directly adjacent to the site and may occasionally forage in the garden.

	There are four EPSL records for bats within 2km of the site. The closest record is 498m south to allow the destruction of a resting place of common pipistrelle, soprano pipistrelle, and brown long-eared bats, in effect 2011-2013.
<i>Foreseen Impacts</i>	Bats are very unlikely to be roosting on the site and as such, there are not anticipated to be any impacts on roosting bats. In addition, no trees are to be affected by these works. The loss of a section of the vegetated garden is likely to have an inconsequential impact on foraging and commuting bats due to the presence of higher quality habitat such as the ancient woodland and an abundance of alternate vegetated gardens present adjacent to the site and in the wider area. However, 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 still disturb foraging and commuting bats.
<i>Recommendations</i>	No further surveys are required. 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 The installation of one bat box at the site will provide additional roosting habitat for bats. The bat boxes will be installed on the new or existing dwelling. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from

	artificial light. The bat boxes will be suitable for crevice and void dwelling bats such as NHBS Beaumaris Woodstone Bat Box and NHBS Improved Cavity Bat or a similar alternative brand.
Birds	
<i>Summary of Survey Findings</i>	The adjacent ancient woodland presents good potential for nesting birds, despite no nests being spotted during the field survey, a lot of bird activity was observed. Within the site itself, there is minimal potential for nesting birds due to the lack of any trees and tall shrubs that could provide suitable nesting habitat.
<i>Foreseen Impacts</i>	An area of vegetated garden will be removed during construction. The loss of such habitats is likely to be inconsequential to local birds owing to their low value and the presence of higher quality habitat locally such as the ancient woodland. However, it is possible for birds to nest in any of the overhanging trees from the ancient woodland. The close proximity of the proposed development could result in the disturbance and subsequent abandonment of active bird nests.
<i>Recommendations</i>	A minimum 5m buffer will need to be created from the woodland where no works are to take place in order to minimise the disturbance created by the proposed development. This is only relevant if active bird nests are present in the overhanging trees until the young have fledged. The installation of one bird box at the site will provide additional nesting habitat for birds. The bird boxes will be installed on the new or existing dwelling. General purpose bird boxes should be positioned 2-3m above ground level where they will be sheltered from prevailing wind, rain, and strong sunlight, have a clear flight path to the box, letting it point a tiny fraction downwards stops rain from entering nest holes.
Reptiles	

<i>Summary of Survey Findings</i>	The site is unlikely to support significant populations of reptiles as the site is too restricted in size and complexity, with the existing habitats being managed more intensely than habitats that are typically associated as being highly suitable e.g. mosaic grassland. In addition, the site is largely fragmented from other suitable habitats due to the surrounding urban infrastructure, with the exception of the ancient woodland. However, gardens such as the one on site does present some suitability for common reptiles such as slow worms (<i>Anguis fragilis</i>) and grass snakes (<i>Natrix helvetica</i>) which are known to traverse through gardens even in urban areas. While there is a lack of opportunities for shelter and hibernation on site as the vegetation is neither dense or tall enough for reptiles, the presence of foraging and commuting reptiles cannot be discounted.
<i>Foreseen Impacts</i>	Only an area of vegetated garden will be removed for the proposed development. 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>	<i>A precautionary working method will be implemented for widespread reptiles during construction, including the following measures:</i> • A pre-commencement inspection of the site will be undertaken for reptiles. • A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any reptiles 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 reptiles from the working area. This is only relevant for the cutting back of the ruderals and ephemerals in the southeast corner. The remainder of the garden should be kept at its current height <5cm.

	- 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 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 reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist. Enhancement opportunities include: - Create refugia and hibernacula using deadwood, and debris and brash from works. - Planting of native scrub species along edges of garden to increase foraging opportunities. - Create basking areas such as rock piles.
Amphibians	
<i>Summary of Survey Findings</i>	Great crested newts (GCN; <i>Triturus cristatus</i>) 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). There are no ponds and GCN EPSL records present within 500m of the site, meaning that the potential for GCN being present on site is very unlikely. In addition, the habitats on site don't present many opportunities for hibernation, shelter, foraging, and commuting, and are largely fragmented by urban infrastructure. Common amphibians are more adapted to urban environments and are likely to be present in the ancient woodland due to the presence of a stream running through it.
<i>Foreseen Impacts</i>	GCN are likely to be absent from the site and will not be impacted by the proposed development. Site clearance could result in the death or injury of common amphibians.

<i>Recommendations</i>	If a common amphibian is found during works, it should be allowed to leave the works area of its own accord or picked up and moved into the ancient woodland using gloves.
Badger	
<i>Summary of Survey Findings</i>	No evidence of badgers or badger setts were found on site. However, a full 30m buffer around the site could not be searched as much of this land is within third-party land. The site presents minimal opportunities for shelter, hibernation, foraging, and commuting, and sett excavation on site is unlikely.
<i>Foreseen Impacts</i>	Sett excavation within 30m of the development inside the ancient woodland is possible, meaning that there is some risk of disturbance of a badger sett.
<i>Recommendations</i>	Basic precautionary mitigation during works is recommended: - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - 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 within 30m, works must cease and advice must be sought from a suitably qualified ecologist.
Riparian animals	
<i>Summary of Survey Findings</i>	There are no suitable habitats on site. There is one small stream present in the adjacent woodland, this stream is highly unlikely to support riparian species such as otters and water voles due to its limited size and connectivity to riparian habitat.
<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	

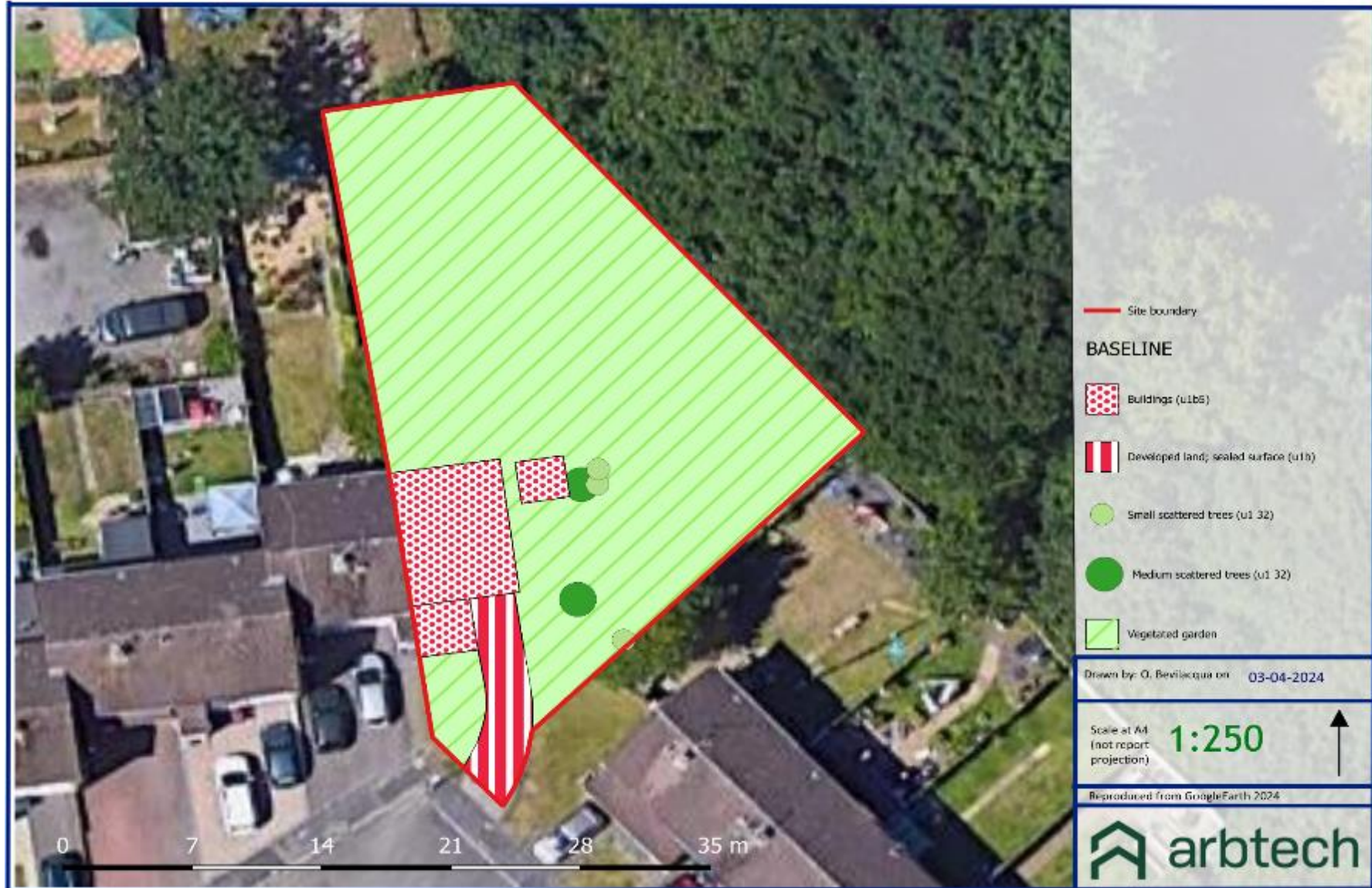
<i>Summary of Survey Findings</i>	Hazel dormice are considered to be present in the wider area of the site regarding the current distribution in the UK map provided by the People's Trust for Endangered Species (2018). While the site itself presents very limited opportunities for shelter, hibernation, foraging, and commuting, the adjacent ancient woodland is likely to resemble highly valuable habitat for dormice. However, the size and isolation of the woodland will limit the likelihood of dormouse presence and population size (Bright et al., 1994). The dense urban infrastructure surrounding the woodland resemble significant barriers to commuting dormice. Therefore, the lack of suitable habitat on site, and fragmentation of the adjacent woodland, means that dormouse presence is unlikely.
<i>Foreseen Impacts</i>	Site clearance could result in the death or injury of dormice if present.
<i>Recommendations</i>	In the unlikely event that a dormouse or evidence of dormouse is identified, works must cease and advice must be sought from a suitably qualified ecologist.
Hedgehog	
<i>Summary of Survey Findings</i>	The site offers limited opportunities for shelter, hibernation, and foraging. However, due to the presence of the adjacent ancient woodland, coupled with how well adapted hedgehogs are to urban environments, the potential of commuting hedgehogs cannot be discounted.
<i>Foreseen Impacts</i>	An area of vegetated garden will be removed during construction. The loss of such habitats is likely to be inconsequential to hedgehogs owing to their low value and the presence of more extensive habitat locally such as the adjacent ancient woodland. However, site clearance could result in the death or injury of hedgehogs if present.
<i>Recommendations</i>	A precautionary working method will be implemented during construction, including the following measures: • A pre-commencement inspection of the site will be undertaken for hedgehogs.

- A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 30cm and left overnight to allow any hedgehogs 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 hedgehogs from the working area.
- 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.

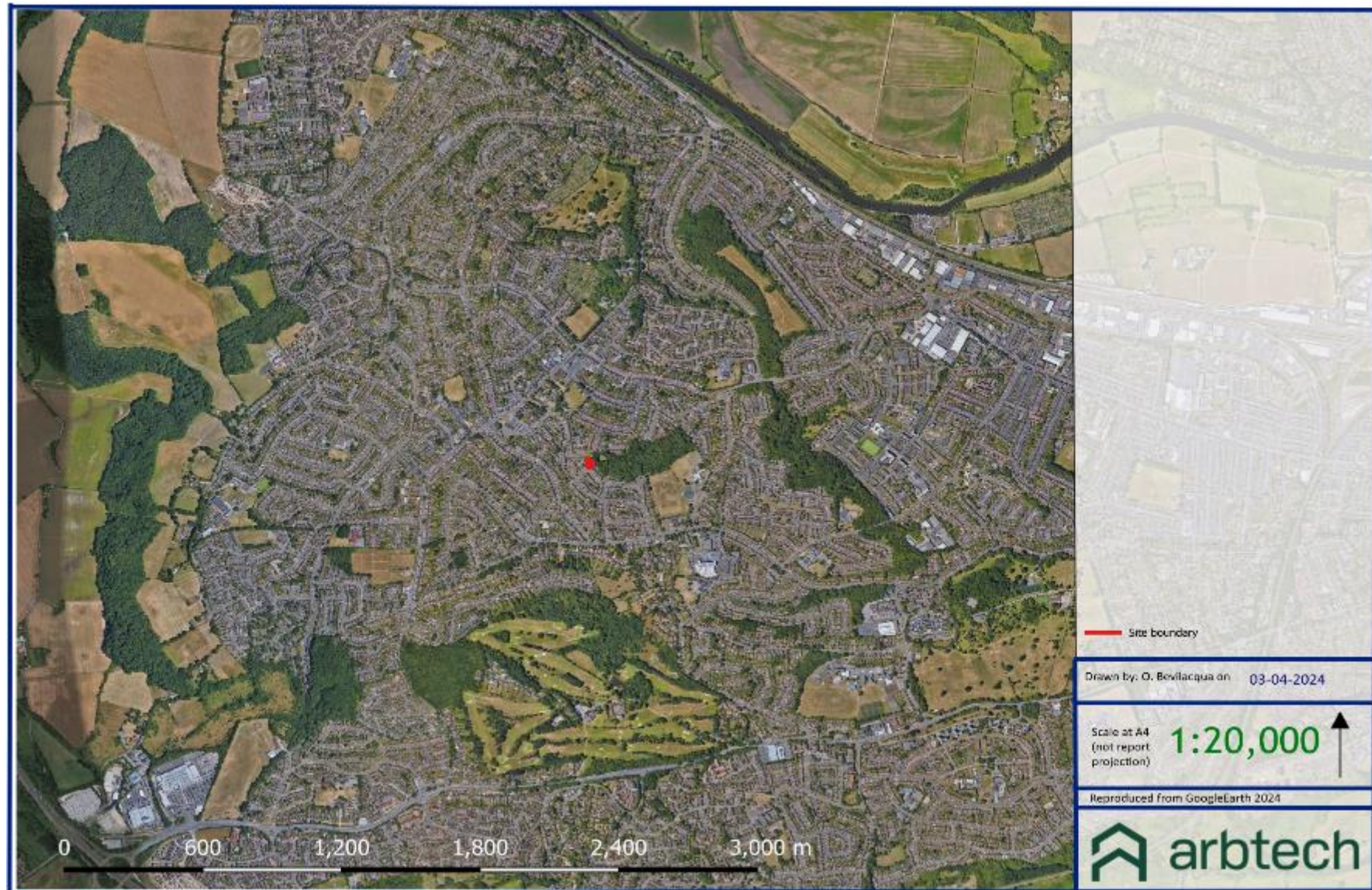
Enhancement opportunities include:

- Create refugia and hibernacula using deadwood, and debris and brash from works.
- Planting of native scrub species along edges of garden.

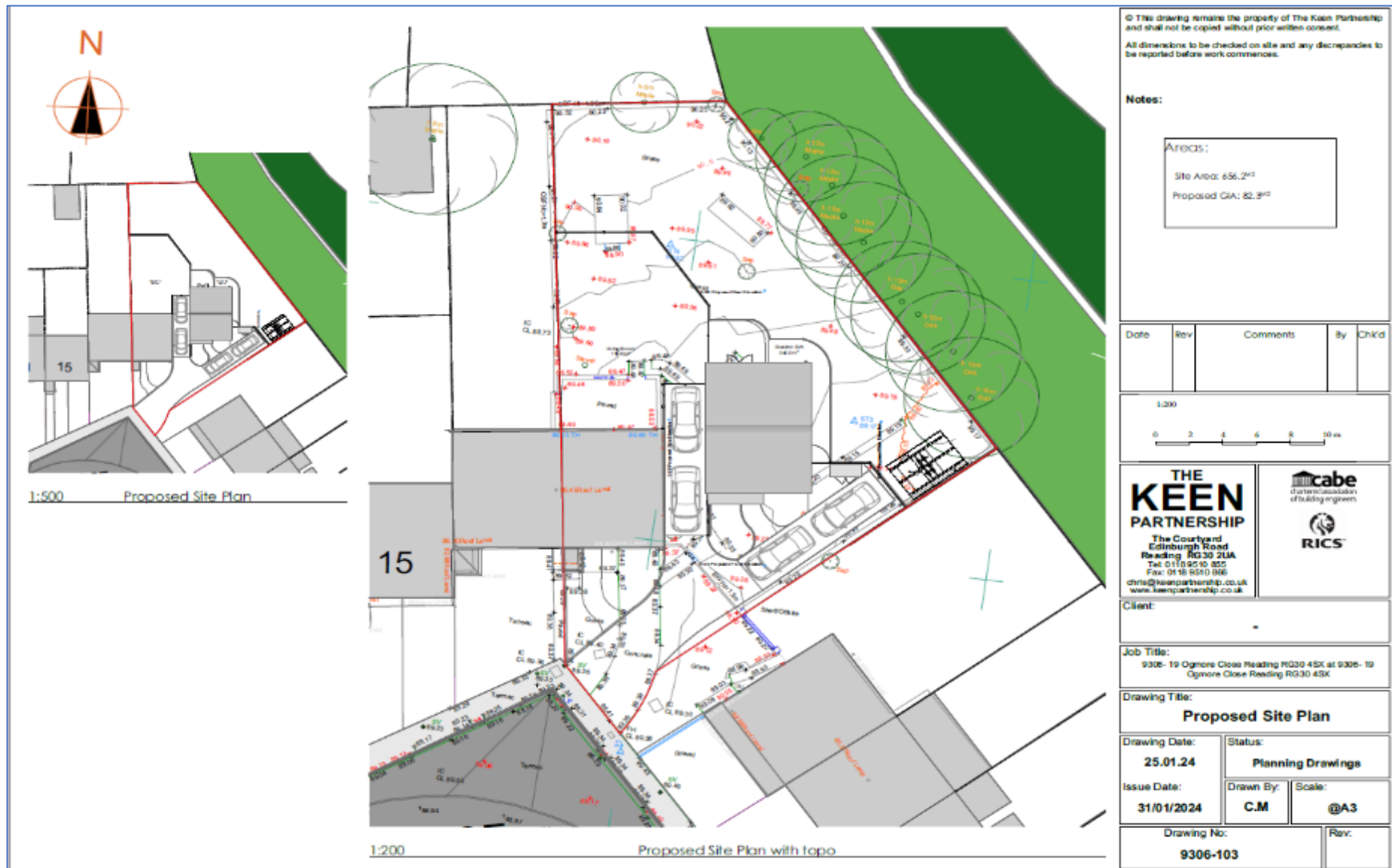
Appendix 1: Survey/Habitat map



Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Photos



Photo 1: looking southeast at the vegetated garden with the overhanging trees from the ancient woodland and the patch of ruderals and ephemerals.



Photo 2: south facing elevation of the wooden shed.



Photo 3: one of the medium-sized and small-sized felled scattered trees.



Photo 4: looking northeast at the driveway and front garden.

Limitations and Copyright

Legal

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

Version control			
Status	Issue	Name	Date
Draft	0.1	OLIVER BEVILACQUA, CONSULTANT ECOLOGIST, MSc, BSc (HONS)	03/04/2024
Proof	0.2	Mel Reid BSc (Hons) MRes MRSB, Senior Consultant	10/04/2024
Final	1.0	OLIVER BEVILACQUA, CONSULTANT ECOLOGIST, MSc, BSc (HONS)	10/04/2024