



Preliminary Ecological Appraisal and Preliminary Roost Assessment

Sulby Croft, Heathlands Road, Wokingham, RG40 3AR

Maverick Property Investments Ltd

Status	Issue	Name	Date
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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation, and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary, and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by Maverick Property Investments Ltd to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Sulby Croft, Heathlands Road, Wokingham, RG40 3AR (hereafter referred to as “the site”). The survey was required to inform a planning application for the extension of the building (hereafter referred to as “the proposed development”).

The following is work you will need to commission to comply with planning policy and legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 8 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Designated sites	There are two statutory sites within 2km of the site, the closest being Heath Lake Local Nature Reserve (LNR) located approximately 225m southeast of the site. The site lies within the impact risk zone for Heath Lake Site of Special Scientific Interest (SSSI). The proposed development is not listed as a possible high risk with regard to this designation. The presence of non-statutory designated sites within 2km of the site cannot be established without data from TVERC.	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.	Retained trees and hedgerows 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).
Habitats and flora	There are no notable habitats within the site, but six habitats are present within 2km of the site, the closest being deciduous woodland located adjacent to the north of the site. Habitats within the site are common and widespread and have low ecological value. Habitats on site comprise buildings, grassland, gravel, trees, hedgerows, and a tennis court. No protected or notable plant species were recorded during the survey.	The proposed development is predominantly located over existing modified grassland of limited ecological value. Hard standing and modified grassland will be removed to facilitate the proposed development. This is likely to have a minimal impact on biodiversity due to the low ecological value of this habitat. 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.	Retained trees and hedgerows 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).

Amphibians	The presence of GCN within the site is considered highly unlikely, however, the presence of common amphibians cannot be discounted.	The proposed development is predominantly located over existing modified grassland of limited ecological value. Hard standing and modified grassland will be removed to facilitate the proposed development. The loss of such habitats is likely to be inconsequential to local amphibian 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 common amphibians if present. No vegetated habitats suitable for GCN will be removed. No impacts on GCN are anticipated as a result of the proposed development.	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.
Reptiles	The presence of a small population of common reptiles within the scrub and woodland along the site peripheries cannot be discounted.	The proposed development is predominantly located over existing modified grassland of limited ecological value. Hard standing and modified grassland will be removed to facilitate 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.	Owing to the nature of the proposed development and the low potential for impacts to amphibians, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.
Roosting bats (B1)	In line with Good Practice Guidelines (Collins, J. (Ed) 2023) B1 is assessed to have 'high' habitat value for roosting bats. The building is also a confirmed roost due to the presence of approximately 15-20 live long-eared bats roosting along the ridge line directly above the loft hatch within loft space A. As well as the presence of approximately 100+ droppings scattered throughout loft space A and 10-20 droppings scattered around the loft hatch and water tank within loft space B.	The proposed development will include the extension and renovation of this building. This will result in the destruction of any bat roosts present and could cause disturbance, death, or injury to bats. No proposed plans were available at the time of writing this report. Therefore, a description of the building works and how this would impact bats roosting in the building could not be made. The report should be updated to reflect this.	Three bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to characterise the roosts present. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive. Infra-red cameras should be used as an aid. Surveys should be a minimum of two weeks apart. Four surveyors are required to provide full coverage of the building.

			An EPSL application to Natural England will be required. The EPSL application requires that 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.
Foraging and commuting bats	Grassland, trees, and hedgerows could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats.	A low impact lighting strategy will be adopted for the site during and post-development.
Badger	Although no evidence indicating the presence of badgers was recorded during the site survey, the site does have connectivity to the wider landscape for badgers. As such, the future presence of badgers foraging and commuting for transient periods cannot be discounted.	Given the limited vegetation removal required to facilitate the development in addition to the presence of suitable habitat in the wider landscape, proposed habitat removal is likely to be inconsequential for the local badger population. However, construction activities could result in the death or injury of badgers if present	Owing to the nature of the proposed development and the low potential for impacts to badgers, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.
Hedgehog	Grassland, hedgerows, and adjacent woodland could provide suitable shelter and foraging opportunities for hedgehogs. The presence of hedgehogs within suitable habitats on site cannot be discounted.	Given the limited vegetation removal required to facilitate the development in addition to the presence of suitable habitat in the wider landscape, proposed habitat removal is likely to be inconsequential for the local hedgehog population. However, construction activities could result in the death or injury of hedgehogs if present.	A precautionary working method will be implemented during construction.

Contents

1.0 Introduction and Context	8
1.1 Background	8
1.2 Site Location and Landscape Context.....	8
1.3 Scope of the Report	8
2.0 Methodology.....	10
2.1 Desk Study	10
2.2 Field Survey	10
2.3 Limitations	11
3.0 Results and Evaluation	12
3.1 Designated Sites	12
3.2 Field Survey Results	12
4.0 Conclusions, Impacts and Recommendations	24
4.1 Informative Guidelines.....	24
4.2 Evaluation	24
5.0 Bibliography.....	33
Appendix 1: Proposed Development Plan.....	36
Appendix 2: Site Location Plan	40
Appendix 3a: Habitat Survey Plan	41
Appendix 3b: PRA Plan.....	42
Appendix 3c: Proposed BERS Plan.....	43
Appendix 4: Legislation and Planning Policy.....	44

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Maverick Property Investments Ltd to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Sulby Croft, Heathlands Road, Wokingham, RG40 3AR (hereafter referred to as “the site”). The survey was required to inform a planning application for the extension of the building (hereafter referred to as “the proposed development”). A plan showing the proposed development is provided in **Appendix 1**.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development. The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging, or commuting.

No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author’s knowledge, by any other consultancy.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference SU82546568 and has an area of approximately 0.3ha comprising one large residential dwelling and garden. The site is located in a semi-rural area of Berkshire, in the market town of Wokingham. It is surrounded by large woodland pockets, grassland, arable land, heathland, parkland, and waterbodies. The B3430 is located approximately 200m south of the site. The wider landscape comprises large arable fields, woodland pockets, and urban and residential infrastructure with the town of Bracknell extending to the north. A site location plan is provided in **Appendix 2**.

1.3 Scope of the Report

The PEA element of this report describes the baseline ecological conditions at the site, evaluates habitats within the survey area in the context of the wider environment and describes the suitability of those habitats for notable or protected species. It identifies possible ecological constraints as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

The PRA element of this report provides a description of all features suitable for roosting, foraging and commuting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It provides information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

To achieve this, the following steps have been taken:

- A desk study has been carried out.

- A field survey has been undertaken to record baseline information on the site and surrounding area including habitat types and their suitability for notable or protected species, including roosting bats.
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Potential impacts on features of value, as a result of the proposed development, have been identified.
- Recommendations for further surveys and mitigation have been made.
- Opportunities for the enhancement of the site for biodiversity have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a review of the magic.gov.uk database for statutory designated sites within a 2km radius of the site. Landscape value and the presence of notable habitats as well as granted European Protected Species Licence (EPSL) and notable species records held on magic.gov.uk database has also been considered where these are within influencing distance of the site.

2.2 Field Survey

The survey was undertaken by Georgia Chapman (Natural England bat licence number: 2023-11290-CL17-BAT. Class Level 1 and Accredited Agent on Natural England bat licence number: 2019-41480-CLS-CLS. Class Level 2) on 10th October 2023.

Preliminary Ecological Appraisal

An extended habitat survey was undertaken, following the methodology set out in The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure, and management. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

For ease of reading, scientific names are omitted from this report for widespread, ubiquitous, and well-known species. Scientific names are only included where deemed necessary in conveying correct information to the reader, for example where common names differ regionally or in specialised, notable, unusual, or challenging taxa, or if there is any ambiguity in identification (e.g., where a species can only be identified to genus level).

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species.

Preliminary Roost Assessment

The PRA focussed on one built structure which will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging and commuting habitat.

For any surveyed buildings:

A non-intrusive visual appraisal was undertaken from the ground, using binoculars to inspect the external features of the building for features which bats could use for roosting, including access or egress points and for signs of bat use including droppings, scratch marks, insect remains and urine smear marks. An internal inspection of the building was also made, including the living areas and any accessible roof spaces, using a torch and ladders.

Built structures were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in **Table 1** below. Roost suitability is classified as high, moderate, low, and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats.

Classification	Feature of building and its context
High	Buildings or structures with features of particular significance for larger numbers of roosting bats e.g. mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g. river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data). Buildings with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.
Moderate	Buildings or structures with one or more features suitable for more regular roosting due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation value such as maternity or hibernation roosts. Continuous habitat connected to the wider landscape which could be used by bats for commuting such as lines of trees, linked gardens. Foraging habitat in the surrounding area such as trees, scrub, grassland or water.
Low	Buildings or structures with one or more features suitable for use sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators. Habitat suitable for foraging in close proximity, but largely isolated in the landscape. Or an isolated site not connected by prominent linear features.
Negligible	Unsuitable for use by bats.

2.3 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.

No biological records data (BRD) was available at the time of writing this report and this should be obtained, and the report updated to enable a robust ecological impact assessment to be completed.

These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in **Table 2** below. The presence of non-statutory designated sites within 2km cannot be established without biological records data from Thames Valley Environmental Records Centre (TVERC).

The site lies within the impact risk zone for Heath Lake Site of Special Scientific Interest (SSSI). The proposed development is not listed as a possible high risk with regard to this designation.

Table 2: Statutory designated sites within 2km radius of the site.

Designated site name	Distance from site	Reasons for notification from Natural England
Heath Lake Local Nature Reserve (LNR)	~225m southeast	Heath lake is an area of woodland and heathland. The shallow 7-acre lake is the only acid lake in Berkshire. This means it has a naturally high pH which supports several rare plants, including the water-milfoil and the 6 stemmed water crowfoot.
Heath Lake Site of Special Scientific Interest (SSSI)	~365m southeast	The site consists of a small, shallow lake, surrounded by birch and pine woodland with areas of relict heathland. Heath Lake is a long-established open water habitat supporting specialist communities of native plants and animals. Of particular interest are populations of some uncommon and rare aquatic plant species.

3.2 Field Survey Results

The results of the field survey are illustrated in **Appendix 3**. The weather conditions recorded at the time of the survey are shown in **Table 3**.

Table 3: Weather conditions during the survey.

Date:	10/10/2023
Temperature	18°C
Humidity	75%
Cloud Cover	40%
Wind	11mph
Rain	None

Habitats and Flora

The following habitats are present within and adjacent to the site:

- u1b5, 818 – Buildings, residential building
- u1, 818, 821 – Built areas and gardens, vegetated garden, artificial sports pitch
- u1c, 310 – Artificial unvegetated, unsealed surface, gravel bed
- g4, 32 – modified grassland, scattered trees
- h2b – Non-native and ornamental hedgerow
- u1e, 612 – Built linear features, fence

A description and photographs of each habitat are provided in **Table 4**. No protected or non-native invasive plant species (as listed under Schedules 8 or 9 of the Wildlife and Countryside Act 1981) were identified on the site.

Table 4: Description and photographs of habitats within and adjacent to the site.

Habitat type	Habitat description	Photograph
u1b5, 818 – Buildings, residential building	There is one residential building on site. The building was assessed for its suitability to support roosting bats in the PRA section below.	

u1, 818, 821 – Built areas and gardens, vegetated garden, artificial sports pitch	The site is dominated by extensively managed and regularly mown grassland which retains a short sward length of less than 5cm. The community present at the time of the survey comprised dominant perennial rye grass with abundant clover and creeping buttercup. Hard standing is present around the west side of B1 enabling pedestrian access around the building. A large tennis court is also present west of the site.	
u1c, 310 - Artificial unvegetated, unsealed surface, gravel bed	An area of gravel is present east of the site which enables vehicular and pedestrian access to the site.	
g4, 32 – modified grassland, scattered trees	Three semi-mature are present in the garden south and west of the site. Species include cherry, and magnolia.	No photograph available.

h2b - Non-native and ornamental hedgerow	A dominant laurel hedgerow is present along the south boundary of the site, and a conifer hedgerow with dominant cypress leylandii is present along the west boundary of the site.	
u1e, 612 - Built linear features, fence	A large wooden fence is present along the east, and west boundaries of the site and a small wooden fence is present east of the garden. A wire mesh fence is also present along the north boundary.	

Fauna

Bats

The results of the PRA are provided in **Table 5**. Approximately 15-20 live bats were found roosting along the ridge line, above the loft hatch within the loft space in the main roof of B1.

Table 5: Assessment of the suitability of the site for bats.

Feature	Description	Photographs
Historical records	A review of the MAGIC database returned 17 EPSL records for bats within 2km of the site. The closest record is located approximately 770m northeast for the destruction of a Brandts bat, brown long-eared bat, common pipistrelle, soprano pipistrelle, and Whiskered bat roost. 16 EPSL records are located over 1,075m southwest of the site.	
Bat foraging and commuting habitat	Grass and trees within the site, as well as the boundary hedgerows and adjacent woodland north of the site will all provide suitable foraging and commuting habitat for local bats. It is likely that bats will forage and commute regularly in the area along linear vegetated features.	
B1 - overview	Building B1 is a large two storey, brick-built residential dwelling with a cross-pitched and gabled roof clad in clay roof tiles. There is one chimney present on the north roof elevation of the building. The second storey external walls are lined with clay hanging tiles. There are no bargeboards, soffit boxes, or fascia boards around the building. The windows and doors are uPVC framed. There are two loft spaces within the main roof of B1. One loft space is located within the north section of the building (loft space A), and the other is located south of the building (loft space B). The roof is constructed of modern timber beams and is lined with lead flashing. The floor of loft space A is lined with mineral wool insulation and is fully boarded enabling a thorough investigation, however, loft space B was not boarded and could not be fully investigated.	

B1 – South and west elevations	The ridge and roof tiles appear in relatively good condition, however, there are numerous raised and naturally curved roof tiles which crevice dwelling bats could access and roost within the subspace between the tiles and the roof lining. Any evidence of bat activity, in the form of droppings would also likely be trapped within the subspace. The hanging tiles around the second storey of the dwelling could also provide suitable habitat for crevice dwelling bats to roost. There are gaps in the mortar along the verge tiles on the south gable wall, this could provide access into the loft space for bats to roost. The windows and doors are uPVC framed, there are no gaps around the framework for bats to roost. The brickwork around the building is well mortared, with no gaps or cracks in the mortar for bats to roost.	
B1 – Close up of the south gable end	This picture shows a close-up of the mortar along the verge tiles on the south gable end. There is a large gap (circled in red) which would provide suitable access for bats to enter and roost within the loft space.	

B1 – West elevation	Raised and naturally curved roof tiles as well as hanging tiles around the second storey of the building could all provide suitable habitat for crevice dwelling bats to roost.	
B1 – West elevation	There is a two-storey double pitched roof on the west elevation of the building. The mortar along the verge tiles is in good condition, with no gaps or cracks present in which bats could access to roost. The brickwork around the building is in good condition with no suitable bat roosting sites.	

B1 – North elevation	Roof tiles on the north elevation are raised and naturally curved and would allow access for crevice dwelling bats to roost within the subspace between the tiles and roof lining. Furthermore, broken, and missing hanging tiles as well as gaps between the hanging tiles would allow access for bats to roost. The mortar along the verge tiles on the north gable end appears in good condition with no gaps or crack sin the mortar.	
B1 – Close-up of the north elevation	Missing and broken roof tiles are present on this elevation (circled in red). Crevice dwelling bats such as pipistrelles could access and roost in this location.	
B1 – Loft space A and B	There are two loft spaces within the main roof of B1. Loft space A is L-shaped, and located in the north section of the building and loft space B is located in south section of the building. The roof is constructed of modern timber beams and is lined with bitumen felt. The floor of loft space A is lined with mineral wool insulation and is fully boarded. The floor of loft space A is lined with mineral wool insulation but is not boarded. Daylight enters through arrow slits on the south and west	No photograph available.

	gable elevations. Daylight also enters through the gap in the mortar along the verge tiles on the south gable wall. Approximately 15-20 long-eared bats were observed roosting along the ridge line, above the loft hatch within loft space A. Furthermore, approximately 100+ droppings were found located throughout the loft space. The size and morphology of the droppings indicate they were likely deposited by long-eared species of bat. Additionally, approximately 10-20 droppings were found within loft space B. Scattered around the loft hatch and water tank. The size and morphology indicate they are likely deposited by a long-eared species of bat. Dimensions: Loft space A – L: 15m x W: 6m x H: 2.5m Loft space B – L: 6m x W: 4.5m x H: 2.5m	
B1 – Suitability assessment	In line with Good Practice Guidelines (Collins, J. (Ed) 2023) B1 is assessed to have 'high' habitat value for roosting bats. There are raised and naturally curved roof tiles across all roof elevations, extensive hanging tile coverage, missing and broken hanging tiles on the north elevation and missing mortar along the verge tiles on the south gable wall. The features identified would all provide suitable habitat for both void dwelling and crevice dwelling species of bat. Furthermore, due to the presence of high value habitat including grassland, trees and hedgerows as well as the woodland adjacent to the north it is likely that bats will forage and commute regularly in the area. The building is also a confirmed roost due to the presence of approximately 15-20 live long-eared bats roosting along the ridge line directly above the loft hatch within loft space A. As well as the presence of approximately 100+ droppings scattered throughout loft space A and 10-20 droppings scattered around the loft hatch and water tank within loft space B.	

Other Species

An assessment of the suitability of the site for protected or notable species is provided in **Table 7**.

Table 7: Assessment of the suitability of the site for protected or notable species.

Species	Assessment of suitability	Biological records data
Amphibians	A review of the MAGIC database returned no granted EPSL records for great crested newts (GCN) within 2km of the site or evidence indicating the presence of great crested newts resulting from historic pond surveys. Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). No ponds are present within the site. A review of aerial imagery indicates that there are three ponds located approximately 370m northeast of the site. The ponds are well connected to suitable habitats within the wider landscape via dense vegetation, unperturbed grassland, scrub, tree lines, and deciduous woodland. However, they are separated from the site by residential dwellings with enclosed gardens and Heathlands Road adjacent to the east. These landscape features are likely to provide a significant barrier to dispersal. However, the ponds are suitably connected to woodland north of the site. Habitats recorded on and adjacent to the site are assessed to provide suboptimal value for amphibians, the site itself has very limited terrestrial value for amphibians as the habitats within the site are dominated by modified grassland and gravel. The gravel driveway and extensively managed and regularly mown grassland are considered suboptimal for great crested newts due to a lack of refuge from predation. Although it is acknowledged that great crested newts are able to commute over short, modified grassland, exposure to predation limits the likelihood of great crested newts travelling through these areas. Although the site is dominated by habitats that provide suboptimal value to support amphibians, common amphibians including common toads (s41) have better mobility compared with newts and are able to travel further from breeding sites and utilise suboptimal habitats more frequently. The presence of GCN within the site is considered highly unlikely, however, the presence of common amphibians cannot be discounted.	Awaiting results of BRD.
Reptiles	A review of the MAGIC database returned no granted EPSL records for reptiles within 2km of the site.	Awaiting results of BRD.

	The surrounding landscape is likely to support reptiles due to suitable foraging, commuting and refugia opportunities present within scrub, grassland, and woodland pockets in the wider area. However, surrounding urban and agricultural infrastructure including large arable fields, frequently mown grassland, tarmac roads, and residential dwellings with enclosed gardens are likely to limit, but not prevent dispersal on to the site from suitable habitats in the wider landscape. Habitats recorded on site including gravel and grassland are suboptimal for reptiles. However, woodland and scrub adjacent to the north could provide suitable habitat for common reptiles. Therefore, the presence of a small population of common reptiles within the scrub and woodland along the site peripheries cannot be discounted.	
Badgers	Habitats recorded adjacent to the site are assessed to provide foraging and commuting opportunities for badgers in the form of grassland, hedgerows, and tree lines. However, habitats dominating the site including modified grassland and gravel are suboptimal for sett construction as well as foraging and commuting. No evidence indicating the presence of badgers was recorded during the site survey and no badger setts are present on or within 30m of the site. Although no evidence indicating the presence of badgers was recorded during the site survey, the site does have connectivity to the wider landscape for badgers. As such, the future presence of badgers foraging and commuting for transient periods cannot be discounted.	Awaiting results of BRD.
Hazel Dormouse	A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. Habitats recorded adjacent to the north and east boundaries of the site are assessed to provide foraging, commuting, and nest building opportunities for dormouse in the form of deciduous woodland, and scrub. Dormice typically require a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation; the woodland adjacent to the north and east supports this habitat structure. For isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright et al. 1994). Gorrick plantation is located adjacent to the north of the site. The woodland is approximately 26ha and is planted with Corsican and Scots pine. Birch readily colonises open ground as a	Awaiting results of BRD.

	pioneer species, with oak along woodland boundaries and roadsides. The woodland is connected to the wider Bramshill forest. Habitats within the site including gravel and modified grassland are considered sub-optimal habitat for foraging, commuting, and nest building dormice. The site itself lacks a mixed habitat and lacks a diversity of trees suitable for dormice. Hazel dormice are considered unlikely to be present within the site, and therefore will not be impacted by the proposed development.	
Hedgehog	Grassland, and hedgerows within the site as well as adjacent tree lines, woodland and scrub could provide suitable shelter and foraging opportunities for hedgehogs. However, the large wooden panel and wire fencing is likely to limit but not prevent dispersal onto the site. The surrounding habitat comprises woodland pockets, arable fields, and grassland. There are no significant barriers to dispersal between suitable habitats in the wider landscape and habitats on site. The presence of hedgehogs within suitable habitats on site cannot be discounted.	Awaiting results of BRD.
Riparian mammals	The site has no watercourses or riparian habitats present or immediately adjacent to support otter or water vole.	Awaiting results of BRD.
Birds	Scattered trees and hedgerows could provide abundant foraging and nesting habitat for birds. No nesting behaviour or bird nests were observed during the survey.	Awaiting results of BRD.
Invertebrates	The habitats onsite, including the grassland, trees, and hedgerows will all provide suitable habitat for common invertebrate assemblages.	Awaiting results of BRD.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative Guidelines

A summary of the relevant legislation and planning policies is provided in **Appendix 4**.

Likelihood of the Presence of Protected Species

Where physical evidence of the presence of protected species is indeterminate during the survey, the habitats on site are evaluated as to their likelihood to provide sheltering, roosting, foraging, basking, or nesting habitat.

Where this report supports a planning application, the ecological interest of the study area (i.e., the area covered by the desk study and field survey) and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity.

4.2 Evaluation

Taking the desk study and field survey results into account, **Table 8** presents an evaluation of the ecological value of the site and details any ecological constraints identified in relation to the proposed development which will comprise the extension of this building.

Table 8: Evaluation of the site and any ecological constraints.

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Designated sites	There are two statutory sites within 2km of the site, the closest being Heath Lake Local Nature Reserve (LNR) located approximately 225m southeast of the site. The site lies within the impact risk zone for Heath Lake Site of Special Scientific Interest (SSSI). The proposed development is not listed as a possible high risk with regard to this designation.	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.	Retained trees and hedgerows 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).	None.

¹ The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021).

	The presence of non-statutory designated sites within 2km of the site cannot be established without data from TVERC.			
Habitats and flora	There are no notable habitats within the site, but six habitats are present within 2km of the site, the closest being deciduous woodland located adjacent to the north of the site. Habitats within the site are common and widespread and have low ecological value. Habitats on site comprise buildings, grassland, gravel, trees, hedgerows, and a tennis court. No protected or notable plant species were recorded during the survey.	The proposed development is predominantly located over existing modified grassland of limited ecological value. Hard standing and modified grassland will be removed to facilitate the proposed development. This is likely to have a minimal impact on biodiversity due to the low ecological value of this habitat. 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.	Retained trees and hedgerows 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).	The following habitat creation and enhancement opportunities could be incorporated into the proposed development: • Further native tree, hedgerow, and shrub planting. Species-specific enhancement opportunities are detailed later in this table.
Amphibians	Habitats recorded on and adjacent to the site are assessed to provide suboptimal value for amphibians, the site itself has very limited terrestrial value for amphibians as the habitats within the site are dominated by modified grassland and gravel. The gravel driveway and extensively managed and regularly mown grassland are considered suboptimal for great crested newts due to a lack of refuge from predation. The presence of GCN within the site is considered highly unlikely, however, the presence of	The proposed development is predominantly located over existing modified grassland of limited ecological value. Hard standing and modified grassland will be removed to facilitate the proposed development. The loss of such habitats is likely to be inconsequential to local amphibian 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.	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: • Grassland should be maintained at a short sward length to limit colonisation of amphibians. • Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed	None.

	common amphibians cannot be discounted.	No vegetated habitats suitable for GCN will be removed. No impacts on GCN are anticipated as a result of the proposed development.	from the site to prevent amphibians from utilising these areas. - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - Best practice pollution prevention measures will be implemented to minimise impacts to nearby 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.	
Reptiles	Habitats recorded on site including gravel and grassland are suboptimal for reptiles. However, woodland and scrub adjacent to the north could provide suitable	The proposed development is predominantly located over existing modified grassland of limited ecological value. Hard standing and modified grassland will be removed	Owing to the nature of the proposed development and the low potential for impacts to amphibians, further surveys are considered to be disproportionate. A precautionary	None.

	habitat for common reptiles. Therefore, the presence of a small population of common reptiles within the scrub and woodland along the site peripheries cannot be discounted.	to facilitate 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.	working method will be implemented during construction, including the following measures: - Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent reptiles from utilising these areas. - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - 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.	
Roosting bats (B1)	In line with Good Practice Guidelines (Collins, J. (Ed) 2023) B1 is assessed to have 'high' habitat value for roosting bats. There are raised and naturally curved roof tiles across all roof elevations, extensive hanging tile coverage, missing and broken hanging tiles on the north elevation and missing mortar along the verge tiles on the south gable wall. The features identified would all provide suitable habitat	The proposed development will include the extension and renovation of this building. This will result in the destruction of any bat roosts present and could cause disturbance, death, or injury to bats. No proposed plans were available at the time of writing this report. Therefore, a description of the building works and how this would impact bats roosting in the building could not be made. The report should be updated to reflect this.	Three bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to characterise the roosts present. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive. Infra-red cameras should be used as an aid. Surveys should be a minimum of three weeks apart. Four surveyors are required to provide full coverage of the building.	To be confirmed upon completion of the surveys.

	for both void dwelling and crevice dwelling species of bat. Furthermore, due to the presence of high value habitat including grassland, trees and hedgerows as well as the woodland adjacent to the north it is likely that bats will forage and commute regularly in the area. The building is also a confirmed roost due to the presence of approximately 15-20 live long-eared bats roosting along the ridge line directly above the loft hatch within loft space A. As well as the presence of approximately 100+ droppings scattered throughout loft space A and 10-20 droppings scattered around the loft hatch and water tank within loft space B.		An EPSL application to Natural England will be required. The EPSL application requires that 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. A Material Changes Check will be required within three months of the EPSL submission, if no survey work has been undertaken within that period. If bat droppings were found during the PRA, a sample will need to be sent off for DNA analysis to confirm the bat species present, to inform the EPSL application. Biological records data will also need to be obtained to inform the application.	
Foraging and commuting bats	Grassland, trees, and hedgerows could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. The proposed development will include the use of lighting which could spill onto bat foraging and commuting habitat.	A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spill on to trees and hedgerows should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats: • Planting of native tree, shrub, and hedgerows to increase foraging opportunities.

			attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use	
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			of the most up to date technology available.	
Badger	Habitats recorded adjacent to the site are assessed to provide foraging and commuting opportunities for badgers in the form of grassland, hedgerows, and tree lines. However, habitats dominating the site including modified grassland and gravel are suboptimal for sett construction as well as foraging and commuting. Although no evidence indicating the presence of badgers was recorded during the site survey, the site does have connectivity to the wider landscape for badgers. As such, the future presence of badgers foraging and commuting for transient periods cannot be discounted.	The proposed development is predominantly located over existing modified grassland of limited ecological value. Hard standing and modified grassland will be removed to facilitate the proposed development. Given the limited vegetation removal required to facilitate the development in addition to the presence of suitable habitat in the wider landscape, proposed habitat removal is likely to be inconsequential for the local badger population. However, construction activities could result in the death or injury of badgers if present	Owing to the nature of the proposed development and the low potential for impacts to badgers, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - In the unlikely event that a badger sett is identified, works must cease and advice must be sought from a suitably qualified ecologist.	None.
Hazel dormouse	The site and surrounding area lack suitable complex vegetative structure and connectivity to support dormice.	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.

Hedgehog	Grassland, hedgerows, and adjacent woodland could provide suitable shelter and foraging opportunities for hedgehogs. The presence of hedgehogs within suitable habitats on site cannot be discounted.	The proposed development is predominantly located over the existing building and hardstanding curtilage of limited ecological value. Hard standing and grassland within the site will be removed to facilitate the development. Given the limited vegetation removal required to facilitate the development in addition to the presence of suitable habitat in the wider landscape, proposed habitat removal is likely to be inconsequential for the local hedgehog population. However, construction activities could result in the death or injury of hedgehogs if present.	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.	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.
Riparian mammals	The site has no watercourses present or immediately adjacent to support otter or water vole.	No impacts are anticipated on otters or water vole as a result of the proposed development.	None.	None.
Birds	Trees and hedgerows could provide abundant foraging and nesting habitat for birds.	The proposed development is predominantly located over existing modified grassland of limited ecological value. Hard standing and grassland within the site will be	None.	The installation of a minimum of two bird boxes on mature trees around the site boundaries or on new buildings will provide additional nesting habitat for birds e.g.

		removed to facilitate the development. Trees and hedgerows will be retained. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally.		• Vivara Pro Woodstone Swift Nest Box (buildings) • Schwegler 1B Nest Boxes (trees) • Vivara Pro Seville 28mm WoodStone Nest Box (buildings or trees) Or a similar alternative brand. The Schwegler 1B Nest Boxes, Vivara Pro Woodstone Open Robin Nest Box and Vivara Pro Seville 28mm WoodStone Nest Box 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 tall building and can be incorporated into the fabric of the building during construction.
Invertebrates	The habitats onsite, including the grassland, trees, and hedgerows will all provide suitable habitat for common invertebrate assemblages.	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: • Native tree, hedgerow, and shrub planting. • Retention of deadwood on the site.

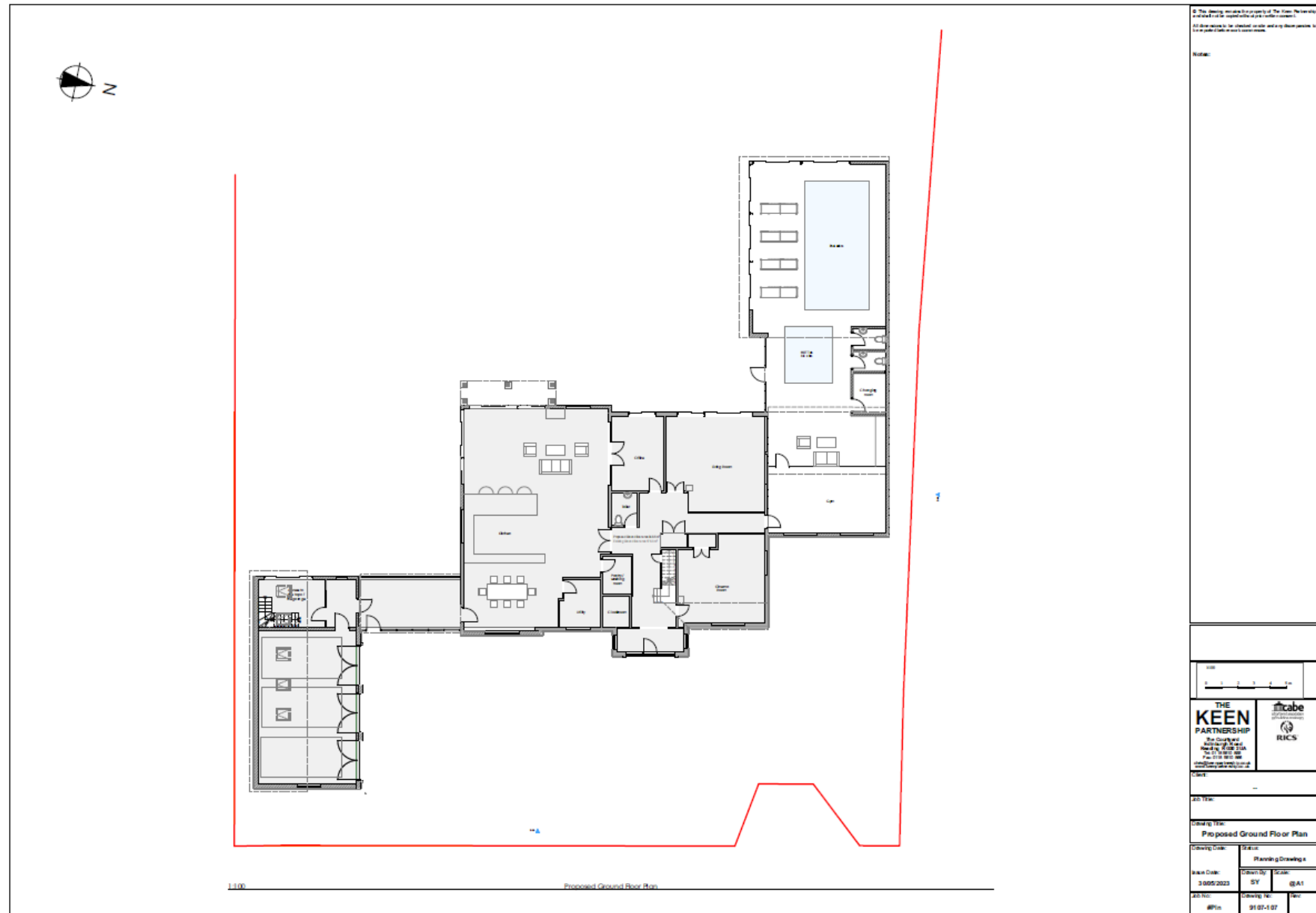
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Appendix 1: Proposed Development Plan





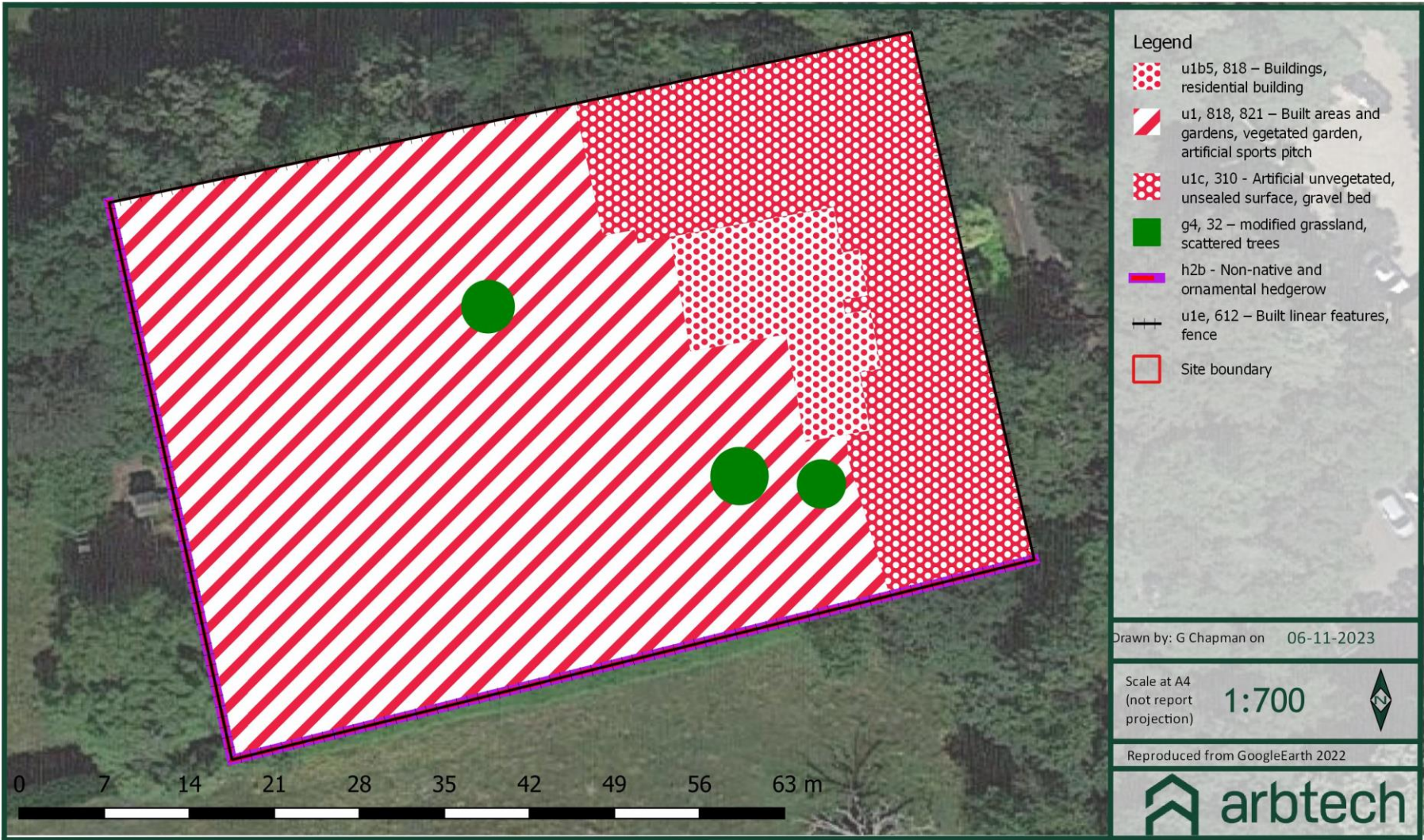




Appendix 2: Site Location Plan



Appendix 3a: Habitat Survey Plan



Appendix 3b: PRA Plan



Appendix 3c: Proposed BERS Plan



Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds (the Wild Birds Directive) respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe. Over 1000 animal and plant species, as well as 200 habitat types, listed in the directive's annexes are protected in various ways:

Annex II species (about 900): core areas of their habitat are designated as Sites of Community importance (SCIs) and included in the Natura 2000 network. These sites must be managed in accordance with the ecological needs of the species.

Annex IV species (over 400, including many Annex II species): a strict protection regime must be applied across their entire natural range, both within and outside Natura 2000 sites.

Annex V species (over 90): their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

SPAs are classified under Article 2 of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds both for rare bird species (as listed on Annex I) and for important migratory species.

The Conservation of Habitats and Species Regulations 2017 (as amended) form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12 nautical miles in England and Wales (including the inshore marine area) and to a limited extent in Scotland and Northern Ireland.

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as “*areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres*”. However, they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended 01.04.1996) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs). Further provisions for the protection and management of SSSIs have been introduced by the Nature Conservation (Scotland) Act 2004.

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species***The Conservation of Habitats and Species Regulations 2017 (as amended)***

The Conservation of Habitats and Species Regulations 2017 (as amended) aims to promote the maintenance of biodiversity by requiring the Secretary of State to take measures to maintain or restore wild species listed within the Regulations at a favourable conservation status.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979, implemented 1982) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CROW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act 1992 which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof

- Intentionally or recklessly disturb a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A development licence will be required from the relevant countryside agency (i.e. Natural England) for any development works likely to affect an active badger sett, or to disturb badgers whilst they occupy a sett. Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. It is no possible to obtain a licence to translocate badgers.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and are commonly referred to as “Schedule 1” birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Amphibians and Reptiles

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

Water Voles

The water vole *Arvicola terrestris* is fully protected under Schedule 5 of the WCA. This makes it an offence to:

- Intentionally kill, injure or take (capture) water voles
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection
- Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural England) must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

Otters

Otters *Lutra lutra* are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect otter breeding or resting places (often referred to as holts, couches or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works are likely to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSL. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Hazel Dormice

Hazel dormice *Muscardinus avellanarius* are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require a European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England). The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

White Clawed Crayfish

There is a considerable amount of legislation in place in an attempt to protect the White-clawed crayfish *Austropotamobius pallipes*. This species is listed under the European Union's (EU) Habitat and Species Directive and is listed under Schedule 5 of the Wildlife and Countryside Act (1981). This makes it an offence to:

- Protected against intentional or reckless taking
- Protected against selling, offering or advertising for sale, possessing or transporting for the purpose of sale

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

The relevant countryside agency (i.e. Natural England) will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned and

executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Legislation Afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
- Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species
- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural England) for works which are likely to affect species of planted listed on Schedule 5 of the Conservation of Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed *Fallopia japonica*
- Giant hogweed *Heracleum mantegazzianum*
- Himalayan balsam *Impatiens glandulifera*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site, however, it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain ‘injurious weeds’ including (but not limited to):

- Spear thistle *Cirsium vulgare*
- Creeping thistle *Cirsium arvense*
- Curled dock *Rumex crispus*
- Broad-leaved dock *Rumex obtusifolius*
- Common ragwort *Senecio jacobaea*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY***Environment Act 2021***

The Environment Act 2021 (EA 2021) received Royal Assent on 9 November 2021 and is expected to become fully mandated within the next couple of years. The Act principally creates a post Brexit framework to protect and enhance the natural environment. Through amendments to the Town and Country Planning Act 1990, the Act will require all planning permissions in England (subject to exemptions which is likely to include householder applications) to be granted subject to a new general pre-commencement condition that requires approval of a biodiversity net gain plan. This will ensure the delivery of a minimum of 10% measurable biodiversity net gain. The principal tool to calculate this will be the Defra Biodiversity 3.0 Metric. Works to enhance habitats can be carried out either onsite or offsite or through the purchase of 'biodiversity credits' from the Secretary of State. However, this flexibility may be removed (subject to regulations) if the onsite habitat is 'irreplaceable'. Both onsite and offsite enhancements must be maintained for at least 30 years after completion of a development (which period may be amended).

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;
- Policy 2; provides greater flexibility in the location of compensatory habitat;
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,
- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.