



Preliminary Ecological Appraisal and Preliminary Roost Assessment

Botley House, 25 High Street, Botley, Southampton SO30 2EA

Giles Dixon

Status	Issue	Name	Date
Draft	1	Annabel Sharpe BSc (Hons) Graduate Ecologist. Bat Class License, level 1.	16/05/2023
Reviewed	1.1	Lizi Pimlott BSc (Hons) MSc MCIEEM MRSB, Principal Ecologist	17/05/2023
Final	2	Annabel Sharpe BSc (Hons) Graduate Ecologist. Bat Class License, level 1	18/05/2023

Arbtech Consultant's Contact Details:

Annabel Sharpe
Graduate Ecologist
Tel: 07749498206 Email: Annabelsharpe@arbtech.co.uk
<https://arbtech.co.uk>

Limitations and Copyright

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.

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 Giles Dixon to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Botley House, 25 High Street, Botley, Southampton SO30 2EA (hereafter referred to as “the site”). The survey was required to inform a planning application for an additional dwelling in the garden of Botley House, accessed over the existing driveway which will become shared. This may also include extending the existing garage instead of a separated detached construction. (hereafter referred to as “the proposed development”).

The following is work you will need to commission to obtain planning permission and to comply with legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 7 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Habitat and Flora	The site contains a small area, approx. 430m² of lowland mixed broadleaf and yew trees which are listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Further notable habitats are present within 2km, which include rivers, ponds, arable field margins, intertidal mudflats, floodplain grazing marshes, lowland meadows, hedgerows and lowland calcareous grassland. Other habitats within the site are common and widespread and have low ecological value. The site also contains several non-native dense hedgerows which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). The remaining habitats are common and widespread and have low ecological value.	No direct impacts to any notable habitats will occur as a result of the construction of a new residential dwelling within the grass area. No mature trees will be removed as part of the proposed construction works. However, due to the proximity of the site to the mature trees, indirect effects such as pollution or tree damage could occur during construction. The proposed development will result in the loss of around 300m² of modified grassland and allotment area. This will also require several bay shrubs and young apple and olive trees within this grass area to be moved or removed entirely. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats.	Best practice measures to minimise the possibility of pollution must be implemented during construction. 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 site has no ponds that could support amphibians and is surrounded by urban barriers which makes it unsuitable for amphibians to travel to the site.	No impacts are anticipated on amphibians, including great crested newts, as a result of the proposed development. There are no loss of bonds and suitability of habitats effected by the proposal is low.	Owing to the nature of the proposed development and the low potential for impacts on reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, full details in table 7.

Reptiles	The grassland on site is of poor value for reptiles, but the hedgerows, compost piles, and brash piles offer some hibernation opportunities. The flowerbed areas and shrubs do offer some foraging opportunities.	Modified grass areas, along with small shrubs and trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitats locally. However, site clearance could result in the death or injury of reptiles, if present.	The precautionary method above for amphibians can also be used for reptiles.
Roosting bats B1	Building B1 has a low roosting value for bats. The structure is open for void-dwelling bats to roost during night-time activities. The tiles on the south side are lifted to provide suitable space for crevice-dwelling bats.	The proposed development will result in the modification of this building to extend its size for a new covered area. This could result in damage to any bat roosts present as the tiles are likely to be re-adjusted to sit flat this could cause a disturbance, death or injury to bats.	One bat emergence or re-entry survey is required during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely-absence of a bat roost in the building. If a new garage can be constructed as a detached building this will not be required.
Roosting bats B3.	B3 contains roost features that could support roosting bats. A full PRA was not done on this building as they won't be directly impacted by the proposed works.	B3 will not be altered or modified as part of the proposal but may experience some light and noise disturbance from nearby works, due to the proximity to B1.	Owing to the nature of the proposed development and the low potential for impacts to bat roosts, further bat surveys are considered to be disproportionate. It is anticipated that any risk to bats can be reduced to an acceptably low level through the implementation of a precautionary working method- see the lighting strategy for foraging and commuting bats.
Foraging and commuting bats	The mature tree area, non-native hedges and flowerbeds around the site 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 result in the loss of small areas of around 300m² of modified grass but given the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats. The proposed development will include the use of lighting which could spill onto bat roosting, foraging or commuting habitats and deter bats from using these areas.	A low-impact lighting strategy will be adopted for the site during and post-development, full details in table 7.
Hedgehog	There is evidence of hedgehogs being on-site, from hedgehog droppings being found on the grassland areas of the site.	Around 300m ² of modified grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more	A precautionary working method will be implemented during construction, full details in table 7.

	There are good foraging and hibernation opportunities for hedgehogs, such as brash and compost piles within the site.	extensive habitats locally and those retained on the site. However, construction activities could result in the death or injury of hedgehogs, if present.	
Birds	There is evidence of nesting birds within B1, with the nests belonging to swallows. This species often returns to the same nest site yearly. There was evidence of foraging within the site, collecting food for young, as well as several species showing interest in the mature trees and non-native hedgerows on site. This could indicate young nearby, or nesting activities. Red-listed species such as starlings were seen entering and exiting several shrubs throughout the visit which could indicate nests.	An area of modified grassland along with several bay shrubs and young trees will be removed during construction. 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 habitats locally, including areas retained on site such as the mature trees, non-native hedgerows, flower bed areas and retained grassland areas adjacent to the proposed site. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. Development to B1 could cause abandonment of any active swallow nests.	Removal of the shrubs and small trees and works to B1 should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building, trees and shrub vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.

Contents

1.0 Introduction and Context8

1.1 Background 8

1.2 Site Location and Landscape Context 8

1.3 Scope of the Report 8

2.0 Methodology10

2.1 Desk Study 10

2.2 Field Survey 10

2.3 Limitations 11

3.0 Results and Evaluation.....13

3.1 Designated Sites 13

3.2 Field Survey Results 15

4.0 Conclusions, Impacts and Recommendations32

4.1 Informative Guidelines 32

4.2 Evaluation 32

5.0 Bibliography39

Appendix 1: Proposed Development Plan..... 42

Appendix 2: Site Location Plan 44

Appendix 3a: Habitat Survey Plan 45

Appendix 3b: PRA Plan 46

Appendix 3c: Proposed BERS Plan..... 47

Appendix 4: Legislation and Planning Policy 48

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Giles Dixon to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Botley House, 25 High Street, Botley, Southampton SO30 2EA (hereafter referred to as “the site”). The survey was required to inform a planning application for an additional dwelling in the garden of Botley House, accessed over the existing driveway which will become shared. This may also include extending the existing garage instead of a separated detached construction (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.

An arboreal S1 survey has been commissioned by Arbtech consultancy and will be submitted alongside this report.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference SY 5112 2896 and has an area of approximately 0.2ha comprising a grade 2 listed building and a large rear garden. It is surrounded by mixed residential and commercial properties as part of Botley high street. This includes The All-Saint’s Church 100m east, which has large grounds including several mature trees. The river Hamble runs 200m to the east and also 200m to the south, which includes a small lake along it’s length. Both river areas are lined with broadleaf woodland. Agricultural areas are situated 300m to the southeast, south and 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 Annabel Sharpe Graduate Ecologist, license number 2023-11145-CL17-BAT on 09/05/2023.

Preliminary Ecological Appraisal

An extended habitat survey was undertaken, following the methodology set out in *UK Habitat Classification User Manual* (UK Habitat Classification Working Group, 2018). 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).

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 2 built structures and 5 trees 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, and scratch marks. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

For any surveyed trees

A visual inspection was undertaken from ground level using binoculars and, where accessible and safe to do so, an internal inspection of any features which bats could use for roosting was completed using torch and ladders.

Suitability Assessment

Built structures and trees 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 and Table 2 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
Moderate to 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.
Low	A small number of possible roost sites or features, used 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 isolated in the landscape. Or an isolated site not connected by prominent linear features. Few features suitable for roosting, minor foraging or commuting.
Negligible	Unsuitable for use by bats.

Table 2: Features of a tree that are correlated with use by bats

Classification	Feature of tree and its context
Moderate to high	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. Trees with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.
Low	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential to be used 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.
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.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

Views of the roof and strip of land directly north of the existing garage were limited due to the growth of plants in this small space. No views of the west side of this building are possible from the site.

The pea gravel underneath the garage structure would make finding evidence of roosting bats limited.

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 3 below.

The site lies within the impact risk zone for Upper Hamble Estuary and woods SSSI. Proposed development type is not listed as a possible high risk with regard to this designation.

Table 3: Statutory designated sites within 2km radius of the site

Designated site name	Distance from site	Reasons for notification from Natural England
Solent and Southampton Water Ramsar	450m southeast	<u>Ramsar criteria 1</u> The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has a long periods of slack water at high and low tide. It includes many wetland habitats characteristics of the biogeographic region: saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs. <u>Ramsar criteria 2</u> The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Data Book invertebrates and at least eight British Red Data Book plants are represented on site. <u>Ramsar criteria 5</u> Assemblages of international importance: Species peak count in winter 51343 waterfowl. <u>Ramsar criteria 6</u> Qualifying Species/populations. <u>Species peak count in spring/autumn.</u> Ringed plover <u>Species peak count in winter</u> Dark-bellied brent goose Eurasian teal Black-tailed godwit

Designated site name	Distance from site	Reasons for notification from Natural England
Solent Maritime Special Area of Conservation (SAC)	450m southeast	<u>Annex 1 habitats that are a primary reason for designation</u> 1130- Estuaries 1320- Spartina Swards 1330- Atlantic salt meadows. <u>Annex 1 habitats that are a qualifying feature</u> 1110 Sandbanks which are slightly covered by sea water all the time 1140 Mudflats and sandflats not covered by seawater at low tide 1150 Coastal lagoons * Priority feature 1210 Annual vegetation of drift lines 1220 Perennial vegetation of stony banks 1310 Salicornia and other annuals colonizing mud and sand 2120 "Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")" <u>Annex 2 species that are present as a qualifying feature</u> 1016- Desmoulin whorl snail.
Solent and Southampton Waters Special Protection Area (SPA)	450m southeast	Qualifying individual species listed in Annex 1 of Wild Bird Directive: A046 Dark-bellied brent goose (Non-breeding) A052 Eurasian teal (Non-breeding) A137 Ringed plover (Non-breeding) A156 Black-tailed godwit (Non-breeding) A176 Mediterranean gull (Breeding) A191 Sandwich tern (Breeding) A192 Roseate tern (Breeding) A193 Common tern (Breeding) A195 Little tern (Breeding)
Upper Hamble Estuary and woods, Site of Special Scientific Interest (SSSI)	450m southeast	Upper Hamble Estuary and Woods Site of Special Scientific Interest comprises the uppermost section of the estuary of the River Hamble and its flanking zones of saltmarsh, reed-swamp and ancient semi-natural woodland. The estuary penetrates the Tertiary strata of the Hampshire Basin and within the SSSI, London Clay, valley gravels, Bagshot Sands and Bracklesham Beds are successively exposed, proceeding up-river, each of which supports woodlands of differing types. Twelve types of ancient broad-leaved woodland occur in the SSSI and collectively comprise one of the most ecologically diverse woodland areas in central southern England.
Manor Farm Local Nature Reserve (LNR)	1.05Km southwest	Abundant wildlife from roe deer in the woods to curlews along the river and skylarks in the fields, plus an amazing array of wildflowers, insects and reptiles.

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 4.

Table 4: Weather conditions during the survey

Date:	09/05/2023
Temperature	13°C
Humidity	92%
Cloud Cover	100%
Wind	6mph
Rain	None

Habitats and Flora

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

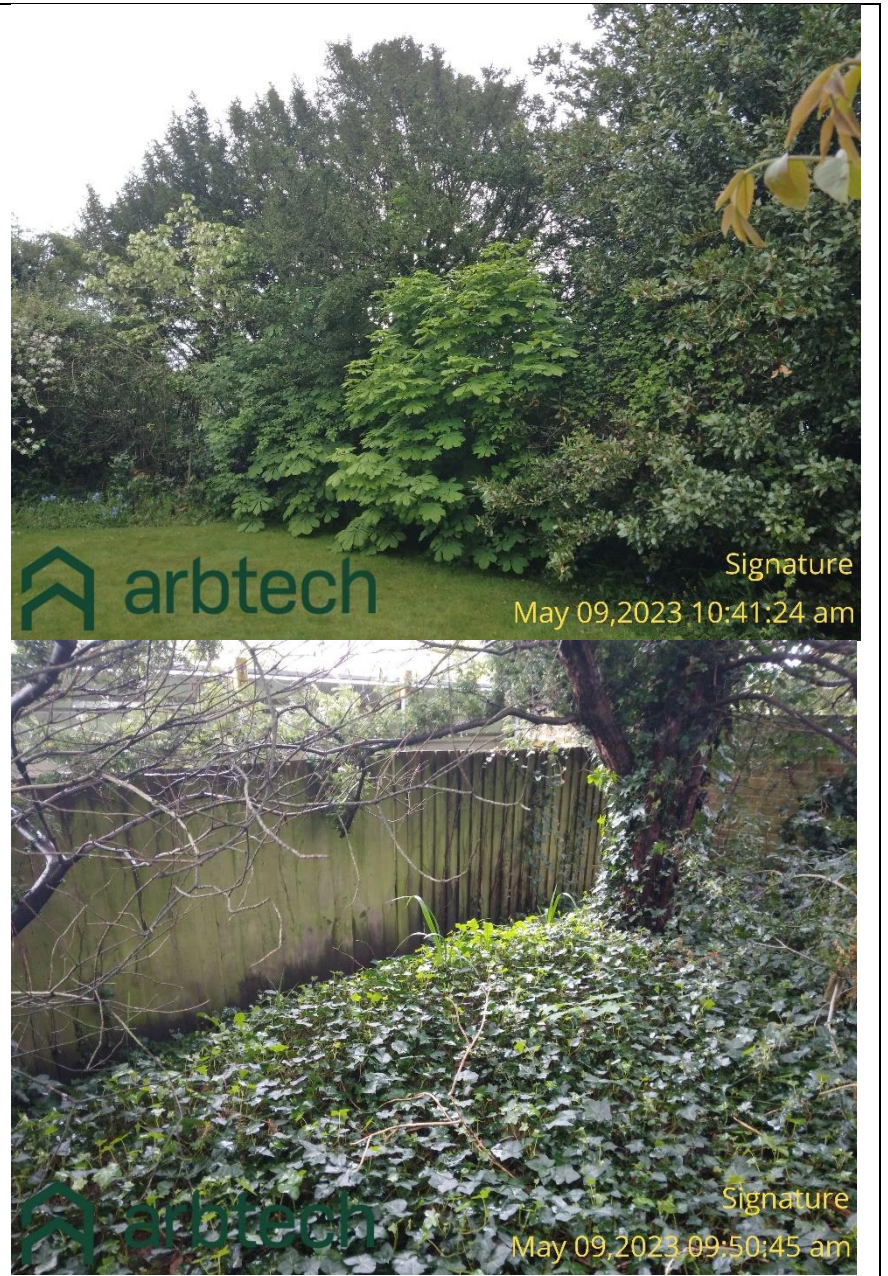
- G4- Modified grassland.
- U1c- Artificial unsealed surface.
- W1h- Mixed woodland, broadleaf and yew
- W1b5- Buildings
- H2b- Non-native hedgerows
- U1e-69 Fence.
- U1-1150- Garden, flowerbeds.
- U1e-69- Built linear feature, fence.

A description and photographs of each habitat are provided in Table 5.

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 5: Description and photographs of habitats within and adjacent to the site

Habitat type	Habitat description	Photograph
G4- 66,75, 230 Modified grassland-frequently mown, active management, garden.	This photograph shows the main area of grassland on site, which is subjected to regular mowing. This has resulted in a sward height of 5cm throughout. The species composition is poor with a dominance of sweet vernal grass and perennial ryegrass, with a sparse scattering of Yorkshire fog. There is also an abundance of turf moss because of the close-mown management strategy. There are scattered herb species in this area, including dandelion, thistle sp, white clover, red-dead nettle, and field speedwell. There is evidence within this grass space of hedgehog foraging, due to the presence of hedgehog droppings in amongst the grass. <i>This area of grassland is the location of the new development.</i>	
U1c- Artificial, unsealed surface	This photograph shows the southern half of the driveway access to the site. This half consists of the pea gravel driveway. A check under this did not reveal a membrane or sealed surface, but there is still poor draining underneath, as evidenced by gathering water from recent, heavy rainfall. This will continue to serve as the access point and parking area of the site and will remain unaffected by the proposal.	

W1h- 47, 48 Mixed woodland-native, non-native. U1e-69 Built linear feature-fence.	These photographs show a small area of trees as part of the southern area of the site. Approximately this area covers 430m² of this site. This is a mixture of broadleaf and evergreen species. Species in this area include horse chestnut, hawthorn, yew, elder, holly, evergreen oak, and apple. There are also small areas of bramble scrub at the base between. Under these trees, the ground cover is dominantly common ivy as the below photograph demonstrates. These trees will remain unaffected by the site's proposal and there are no proposed works in this area.	 arbtech Signature May 09,2023 10:41:24 am arbtech Signature May 09,2023 09:50:45 am
---	--	--

U1-47,48, 1150 Garden- native, non-native, flowerbed	This photograph shows one of the flowerbeds around the site. The flowerbed photographed opposite is that of the southwest boundary. It is not in a current nearly managed state and has a range of ornamental and native plants growing in this space because of it. Native species seen growing in this area include ivy leaf speedwell, common ivy, foxglove, primrose, forget me not and bittercress. While ornamental species include Spanish bluebell and hybrids, various tulips and daffodils, along with other ornamental shrubs. This will remain unaffected by the proposed development.	 arbtech Signature May 09, 2023 10:05:05 am
H2b- Non-native hedgerow.	This photograph shows one of the non-native hedgerows on site, this one being part of the east boundary. The hedge comprises many ornamental species, with a dominance of cypress and bay. There are no plans to remove any hedgerow as part of the site proposal.	 arbtech Signature May 09, 2023 09:56:47 am

U1b5- Buildings	This photograph shows the main grade 2 listed building on the site. Further details on buildings around the site are included in the PRA section of this report in Table 6.	 Signature May 09,2023 10:08:05 am
U1b- Developed land, sealed surface	This photograph showed the area of sealed surface which forms the northern half of the access driveway onto the site. This is a concrete driveway that leads onto the high street and will serve as the access point for the existing house and the new construction. The ecological value of this area of land is poor.	 Signature May 09,2023 10:42:57 am

FaunaBats

The results of the PRA are provided in Table 6. No evidence of roosting bats was identified during the survey.

Table 6: Assessment of the suitability of the site for bats

Feature	Description	Photographs
Historical records	There are four EPSLs within a 2km radius of the site. The closest EPSL is 270m to the southwest. This is EPSM2012-5125 For the destruction of a common pipistrelle resting place. Other species listed on other EPSL within 2km include soprano pipistrelle, brown long-eared and Natterer's bats. All licenses were for the destruction of a resting place.	N/A
Bat foraging and commuting habitat	The site has a large garden, which has several trees, shrubs, hedges and flower beds. This would provide an immediate foraging area for dispersing bats within the area. The sites adjacent also have garden areas which would provide a sub-optimal commuting route, which will be used by urban tolerant species, such as pipistrelle. The All Saint's Church is situated 100m east, which has large grounds including large mature trees. The river Hamble runs 200m to the east, with a part of this river, including Pudbrook Lake running 200m to the south. Both river areas are lined with broadleaf woodland. Agricultural areas are situated 300m to the southeast, south and north. This shows good quality foraging grounds in and around the site.	 Signature May 09, 2023 10:30:31 am

B1 –
overview
and west
elevation

B1 is an open-fronted garage and storage area. It is constructed out of a timber frame, with weatherboarding walls with no internal wall cavity. The building is a double gable-ended building with a single-pitched roof, adorned in clay tiles.

There is no door on this building and is open access all the time.

Views of the east elevation were not possible due to the vegetation and the building set against the eastern boundary wall.

Alterations to this building may occur, such as enlarging with additional cover to the south side.

There is the lifting of the weatherboarding on the west elevation. However, the overlap on these boards is very shallow and would only leave a space of less than 5cm for roosting, as the second photograph shows. This also is seen leading directly inside the building so would not leave a suitable dark space for roosting bats during the day.

No evidence of bats was found around these boards, such as noticing scratch marks, urine stains, grease stains or droppings. Or noticing any live or dead bats where these boards are lifted.



B1 – southern elevation	This photograph is of the south elevation of B1. There were notable areas where the clay tiles were lifted, particularly close to the western gable end, as circled opposite and photographed close below. These tiles have suitable lifting to provide roosting space for bats, in particular crevice-dwelling species like pipistrelles.	 The photograph shows the south elevation of a building, specifically the roof and upper walls. The roof is covered in dark, weathered wooden shingles. A blue circle highlights a specific area on the roof, likely indicating a point of interest for the assessment. The walls below the roof are made of dark, weathered wood. In the bottom left corner, there is a green logo for 'arbtech'. In the bottom right corner, there is a yellow signature and a timestamp: 'Signature May 09, 2023 09:47:02 am'.
--------------------------------	---	---

		
B1- northern elevation	This photograph is of the northern elevation of B1. Views of this elevation were limited due to the growth of shrubs and bushes that line the north elevation as this photograph was taken through the adjacent bushes. The tiles at this elevation are a different shape to those of the south elevation, with a flat tile, rather than rounded. From this viewpoint, no lifted tiles were seen at this elevation that would be suitable for a roosting bat. However, due to the restricted views of the tiles, any features at the northwest corner may be missed.	

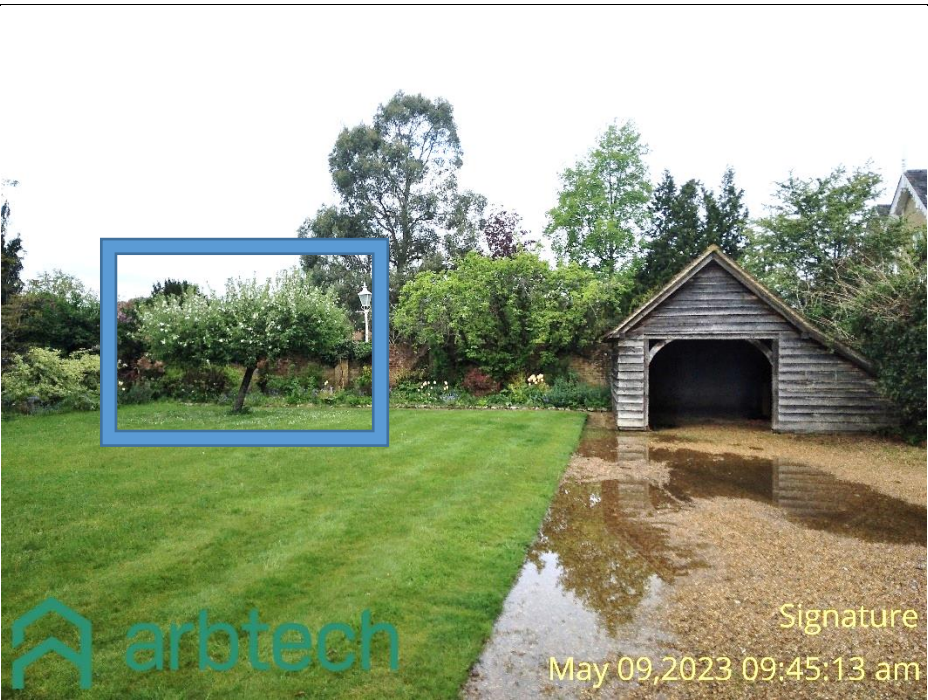
B1 – eastern elevation	This photograph is of the internal space of B1. This area experiences a high volume of light during the day, due to there being no door on this building. The building has exposed wooden beams and rafters and is lined with a breathable lining. This material is known to have a mortality risk to bats. No entangled bats were seen or staining on the lining to indicate bat activity. The floor of this building has a gravel base, which would mean that any evidence dropped would be difficult to locate.	 arbtech Signature May 09, 2023 09:46:44 am
B1- nesting birds	There is evidence of nesting birds in two locations within B1. The construction of these nests in the rafters indicates these may belong to swallows. Several birds were seen flying around the site at the time of the survey. These nests are not of new constructions due to their conditions and are likely the results of last year's nest.	 arbtech Signature May 09, 2023 10:23:45 am

B1 suitability	B1 has a low suitability for roosting bats. The building is open for use by a bat, such as a void-dwelling species during the night, and the external tiles on the south elevation have lifting suitable to support crevice-dwelling species. There are several EPSLs in the area which include crevice-dwelling species like common and soprano pipistrelle are within 2km. The lining does provide a mortality risk, but this does not deter bats from using a structure with this lining. There is good habitat immediately on site to provide foraging grounds for dispersing bats.	N/A
B2—overview	This photograph is of B2- which is a glass greenhouse on the site. This building has negligible roost value as it has no features to support roosting bats.	

B3-Adjacent building	These photographs are of the adjacent grade 2 listed building on the site. The garden of this building is the proposed site location of the new construction. This building will be unaffected by the proposal, so a full PRA was not carried out here. It was observed on this building that there are many features for supporting roosting bats, notably the conditions of the tiles across the roof elevations. There are many suitably lifted tiles, as well as places where tiles are missing or slipped to provide roosting space, particularly for crevice-dwelling bat species. If bats are present within this building, then additional lighting from the new building may affect bats dispersing from this building.	 The top photograph shows the rear of Botley House, a two-story brick building with a conservatory. The garden is green with some plants. A watermark 'arbtech' is visible in the bottom left, and a signature 'Signature May 09,2023 10:08:05 am' is in the bottom right. The bottom photograph is a close-up of the roof tiles, showing some missing or lifted tiles. A watermark 'arbtech' is visible in the bottom left, and a signature 'Signature May 09,2023 10:08:51 am' is in the bottom right.
-----------------------------	---	--

T1 - Suitability assessment	T1 is a large bay shrub situated in the northern part of the site. It measures around 5m high. There are proposed works to remove this shrub for a new garage, but this may now change. This tree has no roosting features for supporting bats and is negligible. This shrub has the potential to support nesting birds, no activity was observed at the time of this survey, and a fingertip search did not produce any nests.	
------------------------------------	---	---

T2 Suitability assessment	T2 is a small olive tree in the northeast corner of the grassland on the site. This tree will be removed to make way for the new building. This tree has no roosting feature for supporting bats. This tree has negligible roosting value There is no evidence of nesting birds in this tree.	
T3 Suitability assessment	T3 is another bay shrub- measuring around 2.5m high This shrub will be removed as part of the site proposal. This shrub has no roosting features for supporting bats. This shrub has the potential for supporting nesting birds, though no activity was seen at the time of the survey. This tree has negligible roosting value	

T4- Suitability assessment	T4 is a small apple tree to the south of the site, separated from the woodland area. This tree is likely to be removed or relocated as part of the site proposal. This tree has no roosting features for supporting bats. This tree has negligible roosting value No evidence of nesting birds was seen at the time of this survey.	
T5- Suitability assessment.	T5 is another small apple tree located to the southwest of the site. It's unknown if this tree must be moved or relocated as part of the proposal or can remain in situ within the grass area. T5 had no roosting features for supporting bats. This tree has negligible roosting value. No evidence of nesting birds was seen at the time of the survey.	

Other Species

An assessment of the suitability of the site for protected or notable species is provided in Table 6.

Table 6: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability
Amphibians	There are no ponds on site that could support amphibians. There is a large pond located 380m south. This is separated from the site by agricultural land, the river Hamble, woodland and then a residential area with multiple roads. This makes it very unlikely that amphibians are crossing all these landscapes to visit the site. No other ponds were identified within 500m. The site also has a secure boundary of fences and walls which makes getting on and off-site difficult. However due to hedgehogs on site, this could indicate small spaces somewhere. The onsite habitat is suitability limited for amphibians.
Reptiles	The site has low value for supporting reptiles. Though there are compost and brash piles on site that have the potential for supporting hibernating reptiles, the grasslands around the site had a poor sward height. The compost and brash piles also experience a high level of shading due to the trees south of these areas. A large volume of shading occurs around the shrubs and hedge boundaries. There are a few high-value basking areas identified however these would leave reptiles open to predation due to lack of suitable cover. The garden experiences regular maintenance which reduces the favourability conditions for reptiles and poses a risk. It's not expected that the site supports a significant population of reptiles and may only support a low number.
Badgers	The site has good foraging grounds to suite badgers. However, access on and off-site for badgers is difficult and there's no evidence of an attempt of access such as digging under the fence of the wall boundary. When the access gate is closed, this also will not allow access, for an animal of badger size
Hazel Dormouse	There are two EPSLs within 2km of the site for dormice, the closest being 1.9km to the north. The site is situated within the high-street area, and as such there are no commuting routes or woodlands on or directly adjacent to the site that could support hazel dormice. It's unlikely dormice are present on the site.
Hedgehog	There is evidence of hedgehog activity on the site, with droppings found within the grass areas. The site offers good foraging grounds for hedgehogs, with flowerbeds, shrubs, grassland and woodland areas providing foraging areas. There are also compost piles and brash piles in the corners of the site from gardening activities, this would provide hibernation sites for hedgehogs.
Otter and Water Vole	The river Hamble runs 180m south and 220m east of the site. Between the rivers and the site are multiple houses with gardens, and roads. It's unlikely that otters and water voles are crossing this urban barrier to reach the site. Access directly onto the site is also difficult due to the walls and fences that line the perimeter. The habitats on site are not suitable for these species, such as foraging or otter holt creation. It's not expected these species are visiting the site.
Birds	The site has the suitability to support many nesting birds. Red-listed species like starlings were seen regularly visiting shrubs on the boundary, which could indicate nesting behaviour. Several mature trees around the site could provide nesting habitats. There is evidence of nesting swallows within B1, these nests did not appear to be new constructions, but swallows were seen flying around the site at the time of the survey. This could lead to new nest constructions further in the season, as these species often return to the same nesting site. Several species were seen foraging around the flowerbed and grassland around the site, such as blackbirds, starlings and collared doves.

Invertebrates	The site has a large quality of flowering trees, plants and shrubs to support nectar-foraging invertebrates. The wooded areas, brash piles and compost piles also would support ground invertebrate species. It's not expected the site is supporting a significant population or rare species of invertebrates due to the urban setting of this garden area. It's unknown if the current garden management strategy includes the use of pesticides which may affect this.
---------------	--

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 7 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise the erection of an additional dwelling in the garden of Botley House, accessed over the existing driveway. This may also include extending the existing garage instead of a separated detached construction

Table 7: Evaluation of the site and any ecological constraints

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Designated sites	There are 5 statutory sites within 2km of the site, the closest being Solent and Southampton Water Ramsar/SPA/SAC, located 450m southeast of the site. The site lies within the impact risk zone for Upper Hamble Estuary and Woods SSSI. The proposed development type	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.	Best practice measures to minimise the possibility of pollution must be implemented during construction.	None.

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

	is not listed as a possible high risk concerning this designation. The presence of non-statutory designated sites within 2km of the site cannot be established without data from the Hampshire Biological information Centre.			
Habitats and flora	The site contains a small area, approx. 430m² of mixed broadleaf and yew trees, which has good value for wildlife. Further notable habitats are present within 2km, which include rivers, ponds, arable field margins, intertidal mudflats, floodplain grazing marshes, lowland meadows, hedgerows and lowland calcareous grassland. The site also contains several non-native dense hedgerows which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). The remaining habitats are common and widespread and have low ecological value.	No direct impacts to any notable habitats will occur as a result of the construction of a new residential dwelling within the grass area. No mature trees will be removed as part of the proposed construction works. However, due to the proximity of the site to the mature trees, indirect effects such as pollution or tree damage could occur during construction. The proposed development will result in the loss of around 300m² of modified grassland and allotment area. This will also require several bay shrubs and young apple and olive trees within this grass area to be moved or removed entirely. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats.	Best practice measures to minimise the possibility of pollution must be implemented during construction. 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.
Amphibians	The site has no ponds that could support amphibians and is surrounded by urban barriers which makes it	No impacts are anticipated on amphibians, including great crested newts, as a result of the proposed development.	Owing to the nature of the proposed development and the low potential for impacts on reptiles, further surveys are considered to be disproportionate. A	None

	unsuitable for amphibians to travel to the site.	There are no loss of bonds and suitability of habitats effected by the proposal is low.	precautionary working method will be implemented during construction, including the following measures: - Grasslands on the site will be retained at the short sward height to deter reptiles from venturing into this area while work takes place. - 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.	
Reptiles	The grassland on site is of poor value for reptiles, but the hedgerows, compost piles, and brash piles offer some hibernation opportunities. The flowerbed areas and shrubs do offer some foraging opportunities.	Modified grass areas, along with small shrubs and trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitats locally. However, site clearance could result in the death or injury of reptiles, if present.	The precautionary method above for amphibians can also be used for reptiles.	Creation of safe basking areas within the sunnier parts of the site to the north. Retain the compost and brash piles in the south of the site. Allowing boundary grassland areas to grow to a greater sward height.
Roosting bats B1	Building B1 has a low roosting value for bats. The structure is open for void-dwelling bats to roost during night-time activities. The tiles on the south side are lifted to provide suitable space for crevice-dwelling bats.	The proposed development will result in the possible modification of this building to extend its size for a new covered area. Rather than the proposed detached dwelling. This could result in damage to any bat roosts present as the tiles are likely to be re-adjusted to sit flat this could cause a disturbance, death or injury to bats.	One bat emergence or re-entry survey is required during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely-absence of a bat roost in the building. Infra-red cameras should be used as an aid. Two surveyors are required to provide full coverage of the building. If bat roosts are confirmed in the building two additional surveys may be required to characterise the roost and to inform an EPSL application to Natural England. Surveys should be a minimum of two weeks apart. The EPSL application requires that surveys have been undertaken within the most recent active bat	To be confirmed upon completion of the surveys.

			season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. If a new garage can be constructed as a detached building this will not be required.	
Roosting bats B2	Building B2 has negligible value for roosting bats due to a lack of potential roost features.	Bats are very unlikely to be roosting within this building and as such, there are not anticipated to be any impacts on roosting bats as a result of the demolition of this building.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat-licensed ecologist contacted for further advice	To be confirmed upon completion of the survey on B1
Roosting bats B3.	B3 contains roost features that could support roosting bats. A full PRA was not done on this building as they won't be directly impacted by the proposed works.	B3 will not be altered or modified as part of the proposal but may experience some light and noise disturbance from nearby works, due to the proximity to B1.	Owing to the nature of the proposed development and the low potential for impacts to bat roosts, further bat surveys are considered to be disproportionate. It is anticipated that any risk to bats can be reduced to an acceptably low level through the implementation of a precautionary working method- see the lighting strategy for foraging and commuting bats.	To be confirmed upon completion of the survey on B1
Roosting bats T1-T5	T1-T5 have negligible value for roosting bats due to a lack of potential roost features.	Bats are very unlikely to be roosting within these trees and as such, there are not anticipated to be any impacts on roosting bats as a result of the removal or relocation of these trees.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice	To be confirmed upon completion of the survey on B1
Foraging and commuting bats	The mature tree area, non-native hedges and flowerbeds around the site 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 result in the loss of small areas of around 300m² of modified grass but given the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats. The proposed development will include the use of lighting which could spill onto bat roosting, foraging or commuting habitats and deter bats from using these areas.	A low-impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spills onto the woodland, and hedges should be avoided and onto B3. • 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 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.	None.

			• 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 of the most up to date technology available.	
Badger	There is no evidence of badger activity on-site and there is limited availability for badgers to access the site. It's not expected that badgers are coming onto the site.	No impacts are anticipated on badgers as a result of the proposed development.	None.	None.
Hazel dormouse	The small wooded area on site and non-native hedgerows are isolated from the wider environment due to the urban setting for dormice to visit the site. It's not anticipated that dormice are visiting the site.	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.

Hedgehog	There is evidence of hedgehogs being on-site, from hedgehog droppings being found on the grassland areas of the site. There are good foraging and hibernation opportunities for hedgehogs, such as brash and compost piles within the site.	Around 300m² of modified grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitats locally and those retained on the site. 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: • If required in future, removal of any compost and brash piles will be undertaken outside of the hedgehog hibernation season (November to March) insofar as is possible. • The grassland on site will be retained at the current short sward height. • 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: • Retaining the compost and brash piles on site. • Allowing grass areas closer to the mature trees to grow to a higher sward height. • Cutting an access space in the southern fence line to allow hedgehogs to easily move on and off site.
Otter and water voles	The site is isolated from the rivers to the south and east of the site. The urban barrier along with the walls and fence around the site would prevent access for these species to get on-site. it's not expected that otters and water voles are on site.	No impacts are anticipated on otters as a result of the proposed development.	None.	None.
Birds	There is evidence of nesting birds within B1, with the nests belonging to swallows. This species often returns to the same nest site yearly.	An area of modified grassland along with several bay shrubs and young trees will be removed during construction. 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 habitats locally, including areas retained on site such as the mature	Removal of the shrubs and small trees and works to B1 should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building, trees and shrub vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of	The installation of 2 bird boxes at the site will provide additional nesting habitat for birds. Nest cups are recommended to replace nesting areas for swallows.

	There was evidence of foraging within the site, collecting food for young, as well as several species showing interest in the mature trees and non-native hedgerows on site. This could indicate young nearby, or nesting activities. Red-listed species such as starlings were seen entering and exiting several shrubs throughout the visit which could indicate nests.	trees, non-native hedgerows, flower bed areas and retained grassland areas adjacent to the proposed site. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. Development to B1 could cause abandonment of any active swallow nests	work. All active nests will need to be retained until the young have fledged.	These bird boxes can be installed on the gable end of the garage, or within the eaves of the new building. If no door is being added, these can also be installed within the rafters of B1 where existing nests have been seen. General-purpose bird boxes can be installed on the retained mature trees around the site. General-purpose bird boxes should be positioned 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Species-specific bird boxes should be installed in line with manufacturers specifications.
Invertebrates	There are a large number of flowering plants, shrubs and trees on site to support invertebrates, as well as compost and brash piles and leaf litter layers around the southern woodland area. Due to the urban location of this garden, it's not expected the site supports any significant or rare species of invertebrates. It's unknown if current garden management includes pest control chemicals.	Around 300m² of modified grassland on the site will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitats locally, including areas being retained on the site.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: • Retain compost and brash piles around the site. • Continued planting within the flowerbed areas of the site with pollinator friendly species.

5.0 Bibliography

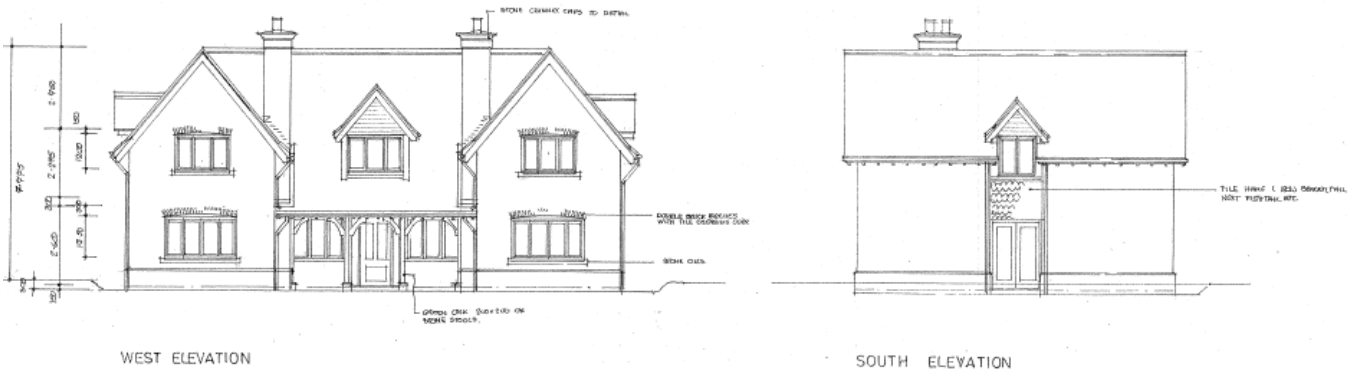
- Biggs, J., Ewald, N., Valentini, A., Gaboriaud, C., Dejean, T., Griffiths, R., Foster, J., Wilkinson, J., Arnell, A., Brotherton, P., Williams, P. and Dunn, F. (2014). Using eDNA to Develop a National Citizen Science-based Monitoring Programme for the Great Crested Newt (*Triturus cristatus*). Biological Conservation. 183. 10.1016/j.biocon.2014.11.029.
- Bright, P., Morris, P., Mitchell-Jones, T. and Wroot, S. (2006). The Dormouse Conservation Handbook Second Edition.
- 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.
- Chanin, P. (2003). Ecology of the European Otter. Conserving Natura 2000 Rivers Ecology Series No. 10. Natural England, Peterborough.
- 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 (2017). Guidelines on Ecological Report Writing. 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 (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Collins, J. (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London.
- Defra (2007). Hedgerow Survey Handbook. A Standard Procedure for Local Surveys in the UK. Defra, London.
- Edgar, P., Foster, J. and Baker, J (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth
<http://downloads.gigl.org.uk/website/Reptile%20Habitat%20Management%20Handbook.pdf>
- Garland, L. & Markham, S. (2008) Is Important Bat Foraging and Commuting Habitat Legally Protected? <http://biodiversitybydesign.co.uk/cmsAdmin/uploads/protection-for-bat-habitat-sep-2007.pdf>
- Gent, T. and Gibson, S. (2003). Herpetofauna Workers' Manual. JNCC, Peterborough.
- Gilbert, G., Gibbons, D.W., and Evans, J. (1998) Bird Monitoring Methods: A Manual of Techniques for UK Key Species. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.
- Google Earth. Accessed on 08/05/2023
- Harris, S., Cresswell, P. and Jefferies, D.J. (1989). Surveying badgers. Mammal Society, London.

- HMSO: Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 <https://www.legislation.gov.uk/uksi/2019/579/contents/made>
- HMSO: Countryside & Rights of Way Act (2000) <http://jncc.defra.gov.uk/page-1378>
- HMSO: Natural Environmental and Rural Communities Act (2006) <http://www.legislation.gov.uk/ukpga/2006/16/contents>
- HMSO: The Protection of Badgers Act 1992 (as amended) <http://www.legislation.gov.uk/ukpga/1992/51/contents>
- HMSO: Wildlife and Countryside Act 1981 (as amended 01.04.1996) <http://jncc.defra.gov.uk/page-1377>
- Institution of Lighting Professionals (2018). Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the Built Environment Series Publication: http://www.bats.org.uk/news.php/406/new_guidance_on_bats_and_lighting.
- JNCC (2004). Bat Workers Manual, 3rd Edition. <http://jncc.defra.gov.uk/page-2861>
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey a technique for environmental audit. http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf
- Langton, T., Beckett, C. and Foster, J (2001). Great Crested Newt Conservation Handbook. Froglife. Suffolk. http://www.froglife.org/wp-content/uploads/2013/06/GCN-Conservation-Handbook_compressed.pdf
- Magic Database. <http://www.magic.gov.uk/MagicMap.aspx> Accessed on 08/05/2023
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
- National Planning Policy Framework (2021). <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- Natural England Designated Sites View. <https://designatedsites.naturalengland.org.uk/SiteSearch.aspx> Accessed on 08/05/2023.
- Natural England (2005). Organising Surveys to Determine Site Quality for Invertebrates: A Framework Guide for Ecologists. Natural England, Peterborough.
- Natural England (2007). Badgers and Development a Guide to Best Practice and Licensing. Natural England. Bristol. <http://www.wildlifeco.co.uk/wp-content/uploads/2014/03/badgers-and-development.pdf>
- Oldham R.S., Keeble J., Swan M.J.S. and Jeffcote M. (2000). Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10(4), 143-155. <https://www.thebhs.org/publications/the-herpetological-journal/volume-10-number-4-october-2000/1617-03-evaluating-the-suitability-of-habitat-for-the-great-crested-newt-triturus-cristatus/file>
- Panks, S., White, N., Newsome, A., Potter, J., Heydon, M., Mayhew, E., Alvarez, M., Russell, T., Scott, S.J., Heaven, M., Scott, S.H., Treweek, J., Butcher, B. and Stone, D. (2021). Biodiversity Metric 3.0: Auditing and Accounting for Biodiversity – Technical Supplement. Natural England.
- Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747.
- Strachan, R., Moorhouse, T. and Gelling, M. (2011). Water Vole Conservation Handbook. Third Edition. Wildlife Conservation Research Unit, Oxford.

- UK Habitat Classification Working Group (2018). UK Habitat Classification User Manual at <http://ecountability.co.uk/ukhabworkinggroup-ukhab>
- Wray, S., Wells, D., Long, E. and Mitchell-Jones, T (2010). Valuing Bats in Ecological Impact Assessment. IEEM In-Practice. Number 70 (December 2010). Pp. 23-25.

Appendix 1: Proposed Development Plan

This drawing is the copyright of the Architects.
Do not scale, except for planning purposes.
For precise details of boundaries and alignments
refer to Land Registry or Deed plans.



		
MICHAEL WARREN ASSOCIATES LTD. CHARTERED ARCHITECTS		
4 Piping Green, Cobden Common Winchester, Hampshire SO30 1TU		
Phone: 01962 841224 Email: mwarren@mcwarren.co.uk		
for		
project		
25 HIGH STREET BOTLEY HANTS SO30 2EA		
title		
PROPOSED DWELLING TO REAR ELEVATIONS		
date	scale	rev.
12/12/13	1:100	
dis. No.	D13/15 06	



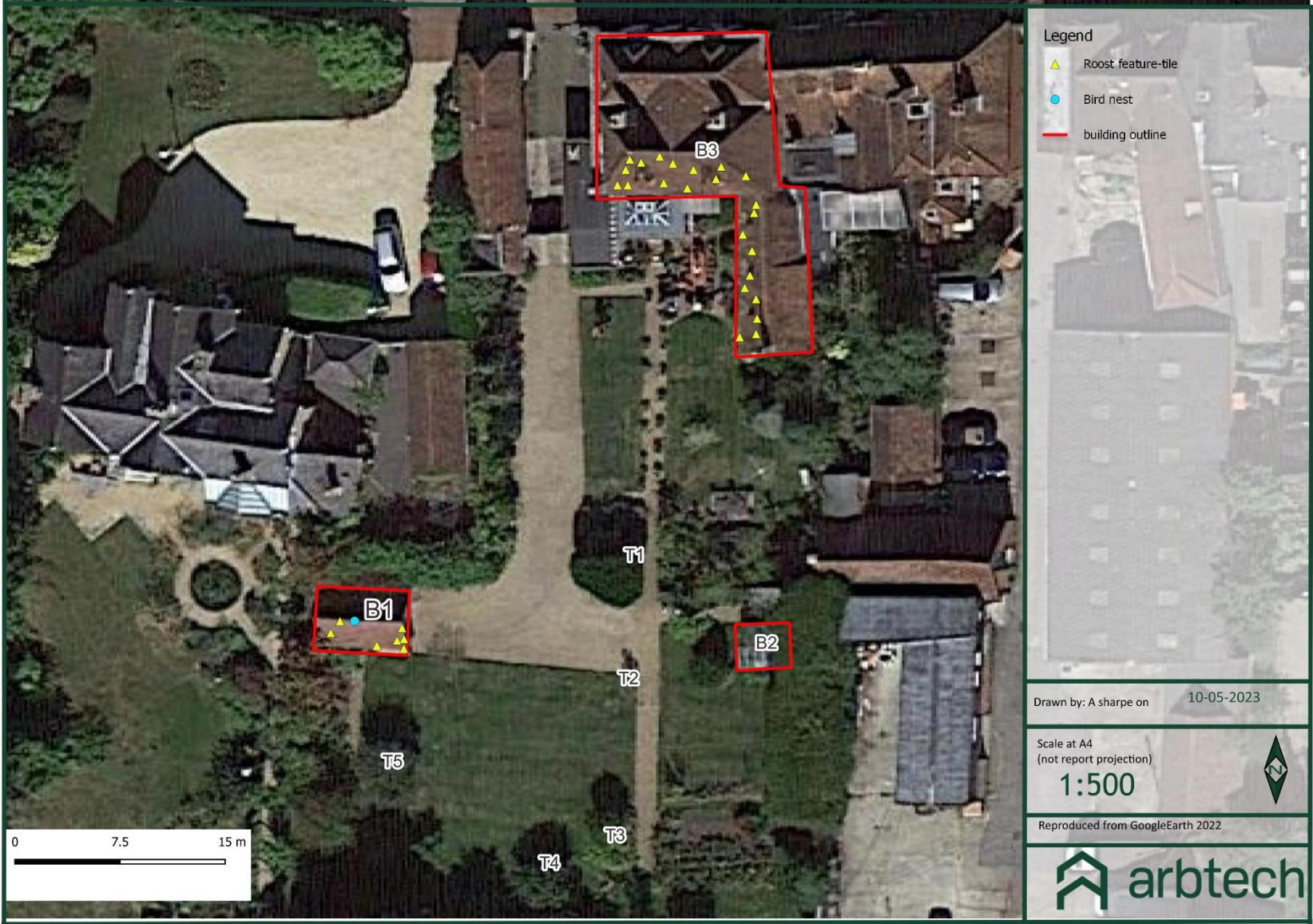
Appendix 2: Site Location Plan



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 or 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.

LOCAL PLANNING POLICY**Eastleigh Borough Local plan 2016-2036**

The Eastleigh Borough Local plan can be viewed here. <https://www.eastleigh.gov.uk/planning-and-building/planning-policy-and-implementation/local-plan/local-plan-adoption>

Policy DM1, General criteria for new development

1. All new development should:
 - a -not have an unacceptable impact on, and where possible should enhance the biodiversity (avoiding significant adverse impacts)
 - d- not involve the loss of or damage to trees, woodlands, hedgerows, ponds, priority habitats or other landscape features of value to the character of the area, for appearance or biodiversity unless they can be replaced with features of equivalent or enhanced value, (recognising that some species and habitats may be irreplaceable);
 - e. include a landscape scheme covering the design and layout of external space

Policy DM11- Nature conservation

Priority habitats, protected and priority species and the local ecological network.

5. Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on priority habitats, protected or priority species, or on the local ecological network unless it can be demonstrated that:

- a. there are no alternative solutions.
- b. the adverse effects are unavoidable.
- c. measures are taken to mitigate or, as a last resort, compensate for the adverse effects;
- d. there is an overall biodiversity net gain; and
- e. if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network

Local BAP Name

The Eastleigh Biodiversity strategy 2022-2032 can be Viewed here

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://meetings.eastleigh.gov.uk/documents/s50031338/Appendix%20One%20Draft%20Biodiversity%20Strategy%2001.06.21.pdf

The following habitats have been identified on or surrounding the site (based on the site survey and a review of the magic.gov.uk database) and are included in the plan:

- Lowland mixed deciduous woodland.

The following species could be present on the site or in the surrounding area (based on the site survey and a review of the magic.gov.uk database) and are included in the plan:

- none

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.