

Preliminary Ecological Appraisal

Land At Hertford Close, Fordingbridge, Hampshire, SP6 1HG MARChitecture

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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition.

 Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

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

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

(BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by MARChitecture to undertake a Preliminary Ecological Appraisal (PEA) at Land At Hertford Close, Fordingbridge, Hampshire, SP6 1HG (hereafter referred to as "the site"). The survey was required to inform a planning application for the construction of a new residential dwelling and bike store (hereafter referred to as "the proposed development").

The following is work you will need to commission to comply with planning policy and legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 6 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Designated sites	There are two statutory sites within 2km of the site, including the River Avon SSSI and River Avon SAC located approximately 950m southeast of the site. The presence of non-statutory designated sites within 2km of the site cannot be established without data from HBIC.	The increase in residential units on site could lead to increased recreational pressure and pollution in the area that could impact River Avon SAC.	Best practice measures to minimise the possibility of pollution must be implemented during construction due to the close proximity to River Avon SAC. Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).
Habitats and flora	There are no notable habitats within the site, but six habitats are present within 2km of the site, the closest being Lowland Fens located approximately 65m southwest of the site. The habitats within the site are common and widespread and have low ecological value. Habitats on site comprise bare ground, grassland, one hedgerow, and fencing along the boundary.	No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the urban location of the site with surrounding physical barriers.	Best practice measures to minimise the possibility of pollution must be implemented during construction. To compensate for the habitat losses at the site, the following habitat creation measures should be incorporated: Native shrub planting.
Amphibians	Habitats recorded within and adjacent to the site are assessed to provide limited foraging, commuting, and refuge opportunities for amphibians in the form of a hedgerow along the north boundary. Other habitats within the site including bare ground, scattered grass, and extensively managed and regularly mown	No impacts are anticipated on great crested newt, as a result of the proposed development as this species is considered to be absent from the site. Bare ground and grassland as well as the hedgerow north of the site will be removed to facilitate the proposed development. However,	Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures:

grassland are considered suboptimal.

Furthermore, the site is enclosed along the east, south, and west boundaries of the site by large wooden fencing as well as residential dwellings with enclosed gardens which are likely to provide a significant barrier to dispersal.

Given the limited suitable habitat within the site as well as the limited availability of suitable aquatic breeding opportunities within 500m, GCN are considered unlikely to be present within the site. However, the presence of other common amphibians within the site cannot be discounted.

construction activities could result in the death or injury of common amphibians if present. The loss of such habitats is likely to be inconsequential to local amphibian populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of amphibians, if present.

- Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas.
- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.
- Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians could use.
- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.
- If any common amphibians are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.

In the unlikely event that a great crested newt is identified, works must cease and advise must be sought from a suitably qualified ecologist.

Reptiles

Habitats recorded within and adjacent to the site are assessed to provide limited commuting, and refuge opportunities for reptiles in the form of a hedgerow along the north boundary. Other habitats within the site including bare ground, scattered grass, and extensively managed and regularly mown grassland are considered suboptimal. Furthermore, the site is enclosed along the east, south, and west boundaries of the site by large wooden fencing as well as residential dwellings with enclosed gardens which are likely to provide a significant barrier to dispersal.

Bare ground and grassland as well as the hedgerow north of the site will be removed to facilitate the proposed development. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles if present.

Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures:

- Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent reptiles from utilising these areas.
- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.

	Reptiles are considered unlikely to be present within the site.		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 advise must be sought from a suitably qualified ecologist.
Foraging and commuting bats	The hedgerow 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 the hedgerow 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 on to bat roosting, foraging or commuting habitat 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 spill on to the adjacent scrub should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultraviolet 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. • 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	Habitats recorded north of the site are assessed to provide foraging and commuting opportunities for badgers in the form of dense scrub, and woodland. However, the majority of habitats within the site including bare ground, scattered grass, and extensively managed and regularly mown grassland are suboptimal. Badgers are considered highly unlikely to be present within the site, however, cannot be discounted for transient periods.	No works will be undertaken within 30m of a badger sett. Approximately 0.00ha of bare ground and grassland as well as the hedgerow north of the site will be removed to facilitate the proposed development. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers if present.	Owing to the nature of the proposed development and the low potential for impacts to badgers, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: • Heras fencing will be erected around the working area to prevent encroachment into retained habitats where badger setts could be present. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which badgers could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. In the unlikely event that a badger sett is identified, works must cease and advise must be sought from a suitably qualified ecologist.
Hedgehog	Dense scrub, and woodland north of the site and within the immediate landscape could provide suitable shelter and foraging opportunities for hedgehogs. However, the habitats within the site have limited suitability in the form of one hedgerow, bare ground, scattered grass, and	Bare ground and grassland as well as the hedgerow north of the site will be removed to facilitate the proposed development. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could	A precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.

	extensively managed and regularly mown grassland. The presence of hedgehogs within suitable habitats on site cannot be discounted.	result in the death or injury of hedgehogs if present.	 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.
Birds	Dense scrub, and nearby woodland north of the site as well as the hedgerow along the north boundary would all provide abundant foraging and nesting habitat for birds. There was abundant foraging activity recorded during the survey. Species observed included house sparrows, black birds, and a robin. No nesting material was found.	The proposed development will result in the loss of the hedgerow north of the site. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	The removal of the hedgerow should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by 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 Context	10
1.1 Background	
1.2 Site Location and Landscape Context	
1.3 Scope of the Report	10
2.0 Methodology	12
2.1 Desk Study	12
2.2 Field Survey	
2.3 Limitations	13
3.0 Results and Evaluation	14
3.1 Designated Sites	
3.2 Field Survey Results	14
4.0 Conclusions, Impacts and Recommendations	22
4.1 Informative Guidelines	22
4.2 Evaluation	
5.0 Bibliography	31
Appendix 1: Proposed Development Plan	34
Appendix 2: Site Location Plan	35
Appendix 3a: Habitat Survey Plan	36
Appendix 3b: Habitat survey plan and pond	37
Appendix 3c: Pond Location Plan	38
Appendix 4: Legislation and Planning Policy	3c

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by MARChitecture to undertake a Preliminary Ecological Appraisal (PEA) at Land At Hertford Close, Fordingbridge, Hampshire, SP6 1HG (hereafter referred to as "the site"). The survey was required to inform a planning application for the construction of a new residential dwelling and bike store (hereafter referred to as "the proposed development"). A plan showing the proposed development is provided in **Appendix 1**.

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

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

1.2 Site Location and Landscape Context

The site is located at National Grid Reference SU14581522 and has an area of approximately 0.1ha comprising recently removed scrub, bare ground, grassland, fencing, and a hedgerow. The site is located in a semi-rural area of Hampshire, north of the small town of Fordingbridge. The local landscape comprises residential dwellings with enclosed gardens, and large arable fields, with tree lines and hedgerows connecting to woodlands in the wider landscape. The River Avon is located approximately 950m southeast of the site. 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

(Oldham et al. 2000).

The survey was undertaken by Georgia Chapman (Natural England bat licence number: 2023-11290-CL17-BAT) on 31st October 2023.

Preliminary Ecological Appraisal

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

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

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

Ponds on and adjacent to the site were assessed for their suitability to support great crested newts using the Habitat Suitability Index (HSI) Assessment Methodology

A visual inspection of the trees on the site 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 an endoscope, torch, and ladders. 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** 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 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.

(Difficult to separate moderate or high value trees from ground level without a close up inspection)	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 was not authorised at the time of publication.

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

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in **Table 2** below.

The presence of non-statutory designated sites within 2km cannot be established without biological records data from Hampshire Biodiversity Information Centre (HBIC).

The site lies within the impact risk zone for River Avon System SSSI. The proposed development is not listed as a possible high risk with regard to this designation.

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

Designated site	Distance from	Reasons for notification from Natural England
name	site	
River Avon Site of Special Scientific Interest (SSSI)	~950m southeast	The Avon is richer and more varied than in most chalk streams with over 180 species of aquatic plant having been recorded, one of the most diverse fish faunas in Britain and a wide range of aquatic invertebrates. The water crowfoot is dominant through most of the river. Other water crowfoot species are present, reflecting different conditions. Adjacent and associated habitats comprise swamp, wet woodland and flood pasture habitats that are now rare both locally and nationally, although they would once have dominated the floodplains of the upper Avon. The river system and its adjacent vegetation provide a variety of habitats for breeding, wintering, and migrating birds. The system as a whole is well used by water voles and water shrews, with occasional recent evidence of otter.
River Avon Special	~950m	n/a
Area of	southeast	
Conservation (SAC)		

3.2 Field Survey Results

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

Table 3: Weather conditions during the survey.

Date:	31/10/2023
Temperature	11°C
Humidity	52%
Cloud Cover	40%
Wind	11mph
Rain	None

Habitats and Flora

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

- h3a, 510, 517, 532 Bramble scrub, bare ground, recent management, scattered grass
- u1, 828 Built-up areas and gardens, vegetated garden
- h2b Non-native and ornamental hedgerow
- u1e, 612 Built linear features, fence

A description and photographs of each habitat are provided in **Table 4**.

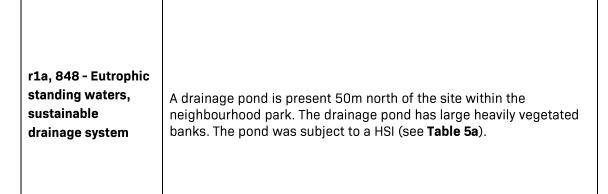
No protected or non-native invasive plant species (as listed under Schedules 8 or 9 of the Wildlife and Countryside Act 1981) were identified on the site.

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

Habitat type	Habitat description	Photograph
h3a, 510, 517, 532 – Bramble scrub, bare ground, recent management, scattered grass	The site is dominated by bare ground with areas if grassland, herbs, and bramble scrub re-growth. The site appears to be recently cleared scrub. A review of aerial imagery from 2021 indicates the site was dominated by scrub. Grassland species at the time if the survey comprised dominant perennial rye grass. Herb species comprised dominant dandelion, and bristly oxtongue, abundant yarrow, mugwort, and spurge. As well as frequent cranesbill and occasional narrow leaved plantain.	

u1, 828 – Built-up areas and gardens, vegetated garden	An area of garden is present northwest of the site. The garden is dominated by grassland which is extensively managed and regularly mown. At the time of the survey the grassland comprised dominant perennial rye grass, with frequent dandelion and common daisy, as well as occasional dock and ragwort along the north boundary.	
h2b - Non-native and ornamental hedgerow	There is one hedgerow north of the site which is comprised of dominant cypress Leylandii.	

u1e, 612 - Built linear features, fence	The site is enclosed along the east, south, and west boundaries.	
h3h, 50, 521 - Mixed scrub, ditch, unmanaged	Outside the development to the north is dominated by scrub comprising dominant bramble, hawthorn and abundant holly, hazel, dogwood. As well as frequent dog rose, and blackthorn and cotoneaster Jameri. Abundant buddleia and occasional Japanese knotweed were also present within the area of scrub.	





<u>Fauna</u>

An assessment of the suitability of the site for protected or notable species is provided in **Table 5**.

Table 5: Assessment of the suitability of the site for protected or notable species.

Species	Assessment of suitability
	A review of the MAGIC database returned no granted EPSL records for great crested newts (GCN) within 2km of the site, however, one record indicating the presence of historic pond surveys is present approximately 650m northwest of the site. Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). Therefore, the population known to be present approximately 650m northwest is not suitably connected to the site.
Amphibians	A review of aerial imagery indicates that there are four ponds within 500m of the site.
	The closest pond, designated as P1, is located approximately 45m northwest of the site. The second is located approximately 215m northeast, the third is located approximately 245m northwest and the last is located approximately 285m south of the site. The pond approximately 45m northwest of the site is separated by regularly mown and extensive grassland as well as hard standing which is suboptimal for great crested newts due to a lack of refuge from predation. However, it is acknowledged that great crested newts are able to commute over short, modified grassland. The ponds

located over 250m from the site are separated from by urban and residential infrastructure including roads and residential dwellings with enclosed gardens and areas of extensively managed grassland. These features are likely to present a significant barrier to dispersal.

Habitats recorded within and adjacent to the site are assessed to provide limited foraging, commuting, and refuge opportunities for amphibians in the form of a hedgerow along the north boundary. Other habitats within the site including bare ground, scattered grass, and extensively managed and regularly mown grassland are considered suboptimal. Furthermore, the site is enclosed along the east, south, and west boundaries of the site by large wooden fencing as well as residential dwellings with enclosed gardens which are likely to provide a significant barrier to dispersal.

Pond P1 was subject to a HSI (see **Table 5a**). P1 is assessed to provide Below Average suitability to support GCN. The pond functions as a drainage pond located within a neighbourhood park. The pond is approximately 45m2 with dense bankside vegetation. The pond at the time of the survey was shallow with little to no fish present; however, a small number of fish cannot be discounted. No waterfowl were observed at the time of the survey. The surrounding habitat comprises extensively managed and regularly mown grassland with an area of dense scrub and woodland approximately 35m east and approximately 50m south of the pond.

Given the limited suitable habitat within the site as well as the limited availability of suitable aquatic breeding opportunities within 500m, GCN are considered unlikely to be present within the site. However, the presence of other common amphibians within the site cannot be discounted.

Table 5a: HSI Calculation of Ponds.

HSI Index	HSI Index Parameter	HSI Score P1
1 – Location	Zone A	1.0
2 – Pond Area	<50m2	0.05
3 – Pond Drying	Never dries	0.9
4 – Water Quality	Moderate	0.67
5 – Shade	0-60%	1
6 – Waterfowl	Minor	0.7
7 – Fish	Possible	0.7
8 – Waterbody count in	3	0.7
wider landscape within		
500m with suitable		
terrestrial connectivity		
9 – Terrestrial Habitat	Good	1
10 – Macrophytes	11-15%	0.45
TOTAL	-	0.575
CATEGORY	-	Below Average

	A review of the MAGIC database returned no granted EPSL records for reptiles within 2km of the site.
Reptiles	The surrounding landscape is likely to support reptiles due to suitable foraging, commuting and refugia opportunities present within scrub, grassland, and woodland pockets in the wider area. Habitats recorded within and adjacent to the site are assessed to provide limited commuting, and refuge opportunities for reptiles in the form of a hedgerow along the north boundary. Other habitats within the site including bare ground, scattered grass, and extensively managed and regularly mown grassland are considered suboptimal. Furthermore, the site is enclosed along the east, south, and west boundaries of the site by large wooden fencing as well as residential dwellings with enclosed gardens which are likely to provide a significant barrier to dispersal.
	Reptiles are considered unlikely to be present within the site.
Badgers	Habitats recorded north of the site are assessed to provide foraging and commuting opportunities for badgers in the form of dense scrub, and woodland. However, the majority of habitats within the site including bare ground, scattered grass, and extensively managed and regularly mown grassland are suboptimal. No evidence indicating the presence of badgers was recorded during the site survey and no badger setts are present within the site. Urban, and residential infrastructure including roads and residential dwellings with enclosed gardens extending to the east, south, and west of the site could limit but not prevent dispersal on to the site from suitable habitats in the wider landscape.
	Badgers are considered highly unlikely to be present within the site, however, cannot be discounted for transient periods.
Bats	A review of the MAGIC database returned no granted EPSL records for bats within 2km of the site. Habitats on site and adjacent to the site are assessed to provide foraging and commuting opportunities for bats in the form of a hedgerow, grassland as well as the dense scrub, woodland north of the site, and pond 45m northwest. The hedgerow, and scrub north of the site represent significant linear features connecting the site to resources in the wider landscape providing optimal commuting opportunities to woodland pockets and tree lines in the surrounding area. It is likely bats will forage and commute regularly in the area.
	A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site.
Hazel Dormouse	Habitats recorded north of the site and within the immediate landscape are assessed to provide limited foraging, commuting, and nest building opportunities for dormice in the form of dense scrub and woodland approximately 55m northeast. However, dormice typically require a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation; the deciduous woodland adjacent to the east supports this habitat structure. Furthermore, for isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright et al. 1994). The woodland is approximately 0.2ha and does not support this habitat structure. Aerial imagery indicates that urban and residential infrastructure including the town of Fordingbridge and associated roads and residential dwellings with enclosed gardens fragments tree lines and hedgerows which could connect the site to a wider tree and hedgerow network, which in turn, would connect the site to multiple woodland pockets within the wider landscape. The habitats within the site including one hedgerow, bare ground, scattered grass, and extensively managed and regularly mown grassland are suboptimal.
	Hazel dormice are considered highly unlikely to be present within the site.
Hedgehog	Dense scrub, and woodland north of the site and within the immediate landscape could provide suitable shelter and foraging opportunities for hedgehogs. However, the habitats within the site have limited suitability in the form of one hedgerow, bare ground, scattered grass, and extensively managed and regularly mown grassland. Furthermore, urban, and residential infrastructure including residential dwellings with enclosed gardens

	extending to the east, south, and west of the site could limit, but not prevent the dispersal of hedgehogs. The site is open along the south boundary and there are no significant barriers to dispersal between suitable habitats in the wider landscape and habitats on site.			
	The presence of hedgehogs within suitable habitats on site cannot be discounted.			
Riparian mammals	The site has no watercourses or riparian habitats present or immediately adjacent to support otter or water vole.			
Birds	Dense scrub, and nearby woodland north of the site as well as the hedgerow along the north boundary would all provide abundant foraging and nesting habitat for birds. There was abundant foraging activity recorded during the survey. Species observed included house sparrows, black birds, and a robin. No nesting material was found.			
Invertebrates	The habitats onsite, including the bare ground, grassland, and hedgerow will all provide suitable habitat for common invertebrate assemblages.			

Preliminary Ecological Appraisal

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 6** presents an evaluation of the ecological value of the site and details any ecological constraints identified in relation to the proposed development which will comprise the construction of a new residential dwelling and bike store.

Table 6: Evaluation of the site and any ecological constraints.

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Designated sites	There are two statutory sites within 2km of the site, including the River Avon SSSI and River Avon SAC located approximately 950m southeast of the site. The presence of non-statutory designated sites within 2km of the site cannot be established without data from HBIC.		Best practice measures to minimise the possibility of pollution must be implemented during construction due to the close proximity to River Avon SAC. Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).	None.

Preliminary Ecological Appraisal

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

Habitats and flora	There are no notable habitats within the site, but six habitats are present within 2km of the site, the closest being Lowland Fens located approximately 65m southwest of the site. The habitats within the site are common and widespread and have low ecological value. Habitats on site comprise bare ground, grassland, one hedgerow,	No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the urban location of the site with surrounding physical barriers.	Best practice measures to minimise the possibility of pollution must be implemented during construction. To compensate for the habitat losses at the site, the following habitat creation measures should be incorporated: Native shrub planting.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development: • Further native tree, hedgerow, and shrub planting Species-specific enhancement opportunities are detailed later in this table.
Amphibians	and fencing along the boundary. Habitats recorded within and adjacent to the site are assessed to provide limited foraging, commuting, and refuge opportunities for amphibians in the form of a hedgerow along the north boundary. Other habitats within the site including bare ground, scattered grass, and extensively managed and regularly mown grassland are considered suboptimal. Furthermore, the site is enclosed along the east, south, and west boundaries of the site by large wooden fencing as well as residential dwellings with enclosed gardens which are likely to provide a significant barrier to dispersal.	No impacts are anticipated on great crested newt, as a result of the proposed development as this species is considered to be absent from the site. Bare ground and grassland as well as the hedgerow north of the site will be removed to facilitate the proposed development. However, construction activities could result in the death or injury of common amphibians if present. The loss of such habitats is likely to be inconsequential to local amphibian populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of amphibians, if present.	Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures: • Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic	None.
	Given the limited suitable habitat within the site as well as the limited availability of suitable		habitats that amphibians could use.	

	aquatic breeding opportunities within 500m, GCN are considered unlikely to be present within the site. However, the presence of other common amphibians within the site cannot be discounted.		 Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any common amphibians are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. In the unlikely event that a great crested newt is identified, works must cease and advise must be sought from a suitably qualified ecologist. 	
Reptiles	Habitats recorded within and adjacent to the site are assessed to provide limited commuting, and refuge opportunities for reptiles in the form of a hedgerow along the north boundary. Other habitats within the site including bare ground, scattered grass, and extensively managed and regularly mown grassland are considered suboptimal. Furthermore, the site is enclosed along the east, south, and west boundaries of the site by large wooden fencing as well as residential dwellings with enclosed gardens which are likely to provide a significant barrier to dispersal.	Bare ground and grassland as well as the hedgerow north of the site will be removed to facilitate the proposed development. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles if present.	Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: • Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent reptiles from utilising these areas. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Any chemicals or pollutants used or created by the development should be stored	None.

	Reptiles are considered unlikely to be present within the site.		 and disposed of correctly according to COSHH regulations. In the unlikely event that a reptile is identified, works must cease and advise must be sought from a suitably qualified ecologist. 	
Roosting	The site contains no suitable habitat for roosting bats.	None.	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.	The installation of a minimum of two bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be installed on new buildings. Beaumaris Bat Box (buildings) Or a similar alternative brand. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat boxes will be a specification suitable for crevice dwelling bats such as common pipistrelles.
Foraging and commuting bats	The hedgerow 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 the hedgerow 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 on to bat roosting,	A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spill on to the adjacent scrub should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats: • The creation of a wildlife pond. • Planting of native tree, shrub, and hedgerows to increase foraging opportunities.

	foraging or commuting habitat and deter bats from using these areas.	 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. 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 	
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Badger	Habitats recorded north of the site are assessed to provide foraging and commuting opportunities for badgers in the form of dense scrub, and woodland. However, the majority of habitats within the site including bare ground, scattered grass, and extensively managed and regularly mown grassland are suboptimal. Badgers are considered highly unlikely to be present within the site, however, cannot be discounted for transient periods.	No works will be undertaken within 30m of a badger sett. Bare ground and grassland as well as the hedgerow north of the site will be removed to facilitate the proposed development. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers if present.	make use of the most up to date technology available. Owing to the nature of the proposed development and the low potential for impacts to badgers, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: • Heras fencing will be erected around the working area to prevent encroachment into retained habitats where badger setts could be present. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light	None.
	site, however, cannot be	, , ,	 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 	
			badger sett is identified, works must cease and advise must be sought from a suitably qualified ecologist.	
Hazel dormouse	Habitats recorded north of the site and within the immediate landscape are assessed to provide	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.

	limited foraging, commuting, and nest building opportunities for dormice in the form of dense scrub and woodland approximately 55m northeast. The habitats within the site including one hedgerow, bare ground, scattered grass, and extensively managed and regularly mown grassland are suboptimal. Hazel dormice are considered highly unlikely to be present within the site.			
Hedgehog	Dense scrub, and woodland north of the site and within the immediate landscape could provide suitable shelter and foraging opportunities for hedgehogs. However, the habitats within the site have limited suitability in the form of one hedgerow, bare ground, scattered grass, and extensively managed and regularly mown grassland. The presence of hedgehogs within suitable habitats on site cannot be discounted.	Bare ground and grassland as well as the hedgerow north of the site will be removed to facilitate the proposed development. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs if present.	A precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses in shady areas.

Riparian mammals	The site has no watercourses present or immediately adjacent to support otter or water vole.	No impacts are anticipated on otters or water vole as a result of the proposed development.	None.	None.
Birds	Dense scrub, and nearby woodland north of the site as well as the hedgerow along the north boundary would all provide abundant foraging and nesting habitat for birds. There was abundant foraging activity recorded during the survey. Species observed included house sparrows, black birds, and a robin. No nesting material was found.	The proposed development will result in the loss of the hedgerow north of the site. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	The removal of the hedgerow should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.	The installation of a minimum of two bird boxes on mature trees around the site boundaries or on new buildings will provide additional nesting habitat for birds e.g. • Vivara Pro Woodstone Swift Nest Box (buildings) • House Sparrow Terrace FSC Nest Box (buildings) • Vivara Pro Seville 28mm WoodStone Nest Box (buildings or trees) Or a similar alternative brand. The Schwegler 1B Nest Boxes, Vivara Pro Woodstone Open Robin Nest Box and Vivara Pro Seville 28mm WoodStone Nest Box should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain, and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift and sparrow boxes should be positioned at the eaves of a tall building and can be incorporated into the fabric of the building during construction.
Invertebrates	The habitats onsite, including the bare ground, grassland, and hedgerow will all provide suitable	The proposed development will result in the loss of dense mixed scrub. The loss of such habitats is	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed

habitat for common invertebrate	likely to be inconsequential to local		development which would be beneficial for invertebrates:	
assemblages.	invertebrate populations owing to			
	their low value and the presence of		•	Native tree, hedgerow,
	more extensive habitat locally.		•	and shrub planting.
			•	Retention of deadwood on
			i	the site.

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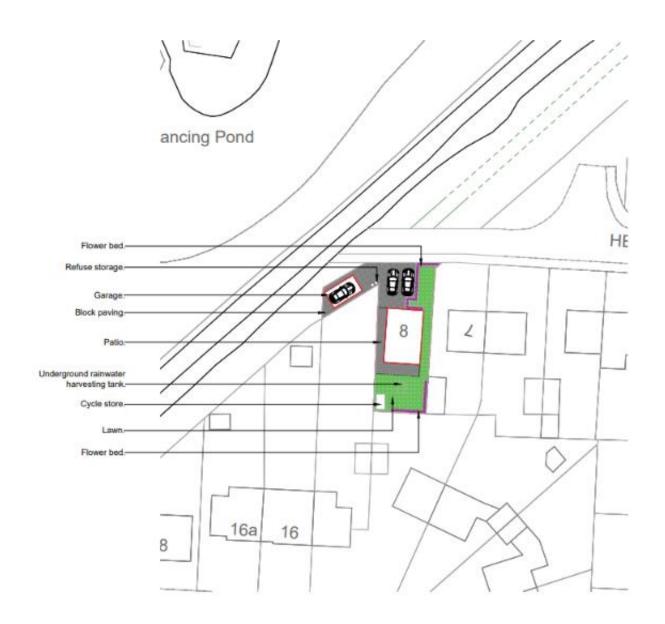
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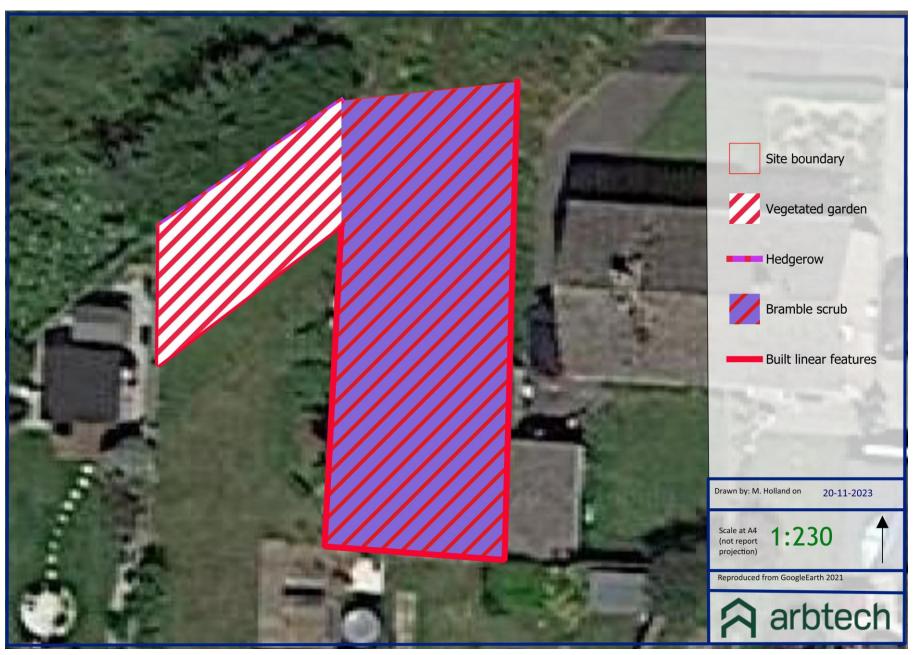
Appendix 1: Proposed Development Plan



Drawn by: M. Holland on 20-11-2023 1:25,000 Scale at A4 (not report projection) arbtech

Appendix 2: Site Location Plan

Appendix 3a: Habitat Survey Plan



Site boundary Pond Vegetated garden Hedgerow Built linear features Bramble scrub Drawn by: M. Holland on 20-11-2023 1:650 projection) Reproduced from GoogleEarth 2021 arbtech

Appendix 3b: Habitat survey plan and pond

Site boundary 500m buffer Pond Drawn by: M. Holland on 20-11-2023 1:9,150 projection) Reproduced from GoogleEarth 2021 arbtech

Appendix 3c: Pond Location 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 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 precommencement condition that requires approval of a biodiversity net gain plan. This will ensure the delivery of a minimum of 10% measurable biodiversity net gain. The principal tool to calculate this will be the Defra Biodiversity 3.0 Metric. Works to enhance habitats can be carried out either onsite or offsite or through the purchase of 'biodiversity credits' from the Secretary of State. However, this flexibility may be removed (subject to regulations) if the onsite habitat is 'irreplaceable'. Both onsite and offsite enhancements must be maintained for at least 30 years after completion of a development (which period may be amended).

National Planning Policy Framework 2021

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

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

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

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

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

EUROPEAN PROTECTED SPECIES POLICIES

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

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

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