



Preliminary Ecological Appraisal

Old Well Cottage, Powney Street, Milden, Ipswich, Suffolk, IP7 7AL

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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 Jodie Baker to undertake a Preliminary Ecological Appraisal (PEA) at Old Well Cottage, Powney Street, Milden, Ipswich, Suffolk, IP7 7AL (hereafter referred to as “the site”). The survey was required to inform a planning application for the erection of a two-storey, detached dwelling within the existing site garden (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
Habitats and Flora	The site contains native hedgerow along the northern and western boundaries and centre of the site classed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). The S41 boundary hedgerows are well connected to a network of hedgerows within the wider landscape and will be retained. There is also a small pond, vegetated ditch and non-native hedgerow which may be of value to local wildlife.	<p>The proposed development will result in the loss of approx. 0.03ha of habitat including the onsite pond, vegetated ditch, modified grassland, some ornamental planting, a young willow tree, ~4.5m section of non-native, h2b hedgerow at the eastern boundary and the isolated S41 native hedgerow at the centre of the site (approx. 17m). This could result in a net loss in biodiversity at the site but will be compensated with new soft landscaping to improve biodiversity with approx. 50m of tree/hedge planting along southern boundary.</p> <p>Due to the proximity of the works to retained trees and hedgerows, indirect effects such as pollution or tree damage could occur during construction.</p>	<p>Best practice measures to minimise the possibility of pollution and tree damage. 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).</p> <p>To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated:</p> <ul style="list-style-type: none"> • If possible, the creation of a new pond for wildlife to include native plant species. • The planting of native species within the proposed new hedge and tree planting to compensate for the removal of native hedgerow at the centre of the site.
Amphibians	There is one onsite pond and vegetated ditch and four connected ponds within 500m of the site. The pond, ditch, scattered trees/shrubs and hedgerows may provide opportunities for GCN and other common amphibians. The short grassland is sub-optimal owing to the lack of refuge opportunities.	The proposed development is likely to result in the loss or significant disturbance of 0.03ha of suitable and suboptimal great crested newt habitat (i.e pond, ditch, grassland, hedgerows). When completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces a RED risk score , which states: Offence HIGHLY LIKELY . When completing the assessment for connected ponds over 250m from the site, it produces a GREEN risk score , which states: Offence HIGHLY UNLIKELY .	Environmental DNA (eDNA) surveys will be required of the onsite pond and vegetated ditch to determine the presence or absence of great crested newts. Such surveys must be undertaken between mid-April and June, in accordance with current survey guidelines (Biggs et al, 2014). Please refer to Table 6. If eDNA surveys find an absence of GCN within the onsite pond and ditch, a precautionary working method can be implemented during construction.

Reptiles, hazel dormice and hedgehogs	Habitats on site which may provide foraging, commuting and sheltering opportunities for reptiles, dormice and hedgehogs include the hedgerows, scattered trees, shrubs and grassland. The short grassland is sub-optimal for reptiles owing to the lack of refuge opportunities.	The proposed loss of approx. 0.03ha of habitat including the onsite pond, vegetated ditch, modified grassland, ornamental planting, a young willow tree, and some sections of hedgerow are likely to be inconsequential to local reptile, hazel dormouse and reptile populations owing to the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, dormice and hedgehogs, if present.	Precautionary working method strategies will be adopted for the site during and post-development, please refer to Table 6.
Foraging and commuting bats	The scattered trees and hedgerows on 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 include the use of lighting which could spill on to bat 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, please refer to Table 6.
Birds	The site is not considered suitable to support a significant assemblage of protected and/or notable bird species. However, the scattered trees and hedgerows are suitable to support common nesting bird species.	The proposed loss of one willow tree and sections of hedgerow is likely to be inconsequential to local bird populations owing to the presence of more extensive habitat locally. However, clearance works could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Tree and hedgerow removal/clearance should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the hedgerows/trees 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. Please refer to Table 6.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Jodie Baker to undertake a Preliminary Ecological Appraisal (PEA) at Old Well Cottage, Powney Street, Milden, Ipswich, Suffolk, IP7 7AL (hereafter referred to as “the site”). The survey was required to inform a planning application for the erection of a two-storey, detached dwelling within the existing site garden (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. 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 TL9521646022 and has an area of approximately 0.14ha comprising a vegetated garden with hedgerows, scattered trees, a small pond and a drainage ditch. It is set in a rural context within the small village of Milden, Suffolk. It is surrounded by residential properties and gardens to the north and south and arable land to the east and west. The site currently forms part of the existing garden of the adjacent property within the land of ownership to the south. A minor road (Powney St) runs adjacent to the eastern site boundary. The wider landscape predominantly comprises arable land and grassland with scattered residential/agricultural infrastructure and a network of hedgerows and trees connecting to scattered pockets of woodland within 2km, including UK BAP priority deciduous woodland and ancient woodland. Other small pockets UK BAP priority habitats within the wider expanse of arable land within 2km include woodpasture and parkland, traditional orchards, lowland fen and coastal and floodplain grazing marsh. A site location plan is provided in Appendix 2.

1.3 Scope of the Report

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. 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.
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Potential impacts on features of value, as a result of the proposed development, have been identified.

- Recommendations for further surveys and mitigation have been made.
- Opportunities for the enhancement of the site for biodiversity have been set out.

2.0 Methodology

2.1 Desk Study

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

2.2 Field Survey

The survey was undertaken by Georgia Arnold (BSc, MSc and Accredited Agent under Natural England Bat Licence Number: 2018-33540-CLS-CLS) on 08/06/2023.

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.

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* (Oldham et al, 2000).

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. 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 and the ecology and biology of species as currently understood.

There were no specific limitations to the survey.

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.

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 Suffolk Biodiversity Information Service (SBIS). However, it is considered unlikely that such sites would be present in the immediate vicinity due to the presence of residential properties and arable land directly surrounding the site.

The site lies within the impact risk zone for Milden Thicks Site of Special Scientific Interest (SSSI). The proposed development for one new residential dwelling is not listed as a possible high risk with regard to this designation (high risk includes any residential development of 50 or more houses outside existing settlements/urban areas).

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

Designated site name	Distance from site	Reasons for notification from Natural England
Milden Thicks SSSI	Closest woodland located approx. 950m south-west from site.	The Milden Thicks Woods are an important and inter-related group of ancient woods forming a transition from the mainly ash-maple-hazel woods of Mid Suffolk to the lime and lineage elm woods of South Suffolk. The tendency of East Anglian woods to be a complex mosaic of different woodland types reaches its extreme in the Milden Thicks. Maple wood, maple-hazel, ash-hazel, hornbeam, lime and suckering elm are all present within the group. Some of this variation can be explained by differences of soil and history. The earthworks of the woods are elaborate and to some extent are related to the occurrence of trees such as lime (which occurs in all the woods apart from Long). All the woods are of ecological and historical interest as individual woods. As a group they are of national importance for the comparison that can be made between them, especially in explaining the ecological behaviour of trees and the distribution of tree communities. The woods are in good condition, of coppice-with-standards structure, although they have suffered from decades without coppicing and consequent excessive shade. The ground flora in the woods is rich and typical of ancient woodland.
Brent Eleigh Woods SSSI	Approx 1480m west from site.	The Brent Eleigh group of woods contains Spragg's, Langley and Camps Woods. Each of these is an important ancient woodland of the wet ash-maple and or pedunculate oak-hornbeam, ash-maple variant type; the main 'heavy soil coppice type' of the calcareous clay soils of Eastern England. In addition, there are some smaller areas of the wet ash-lime-maple and the lowland wet ash-elm woodland types in Camps Wood. There are two ponds and a stream in the northern area of Langley Wood and two moderately sized and heavily shaded ponds within Camps Wood, all of which create additional habitat diversity.

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 below.

Table 3: Weather conditions during the survey

Date:	08/06/2023
Temperature	15°C
Humidity	75%
Cloud Cover	35%
Wind	12mph
Rain	None

Habitats and Flora

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

- u1e, 69 – Built linear feature, fence
- u1b – Developed land, sealed surface
- u1, 11, 231, 1160 - Built up areas and gardens, scattered trees, vegetated garden, introduced shrubs
- h2a, 47, 190 – Hedgerow (priority habitat), native, with trees
- h2a, 47 – Hedgerow (priority habitat), native
- h2b, 48 – Other hedgerows, non-native
- r1, 19 – Standing open water, pond
- r2b, 191 – Other rivers and streams, ditch

A description and photograph of each habitat is 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
u1e, 69 – Built linear feature, fence	The site is partially enclosed by chicken wire and wood panel fencing adjacent to the hedgerows along the site boundaries.	No photo.

<p>u1b – Developed land, sealed surface</p>	<p>There is a small area of hardstanding at the north-east corner of the site comprising concrete foundations. This type of surface will offer negligible habitat value for protected species.</p>	 <p>A photograph showing a small, rectangular concrete foundation slab in a garden. The slab is covered in moss and surrounded by low-growing plants and weeds. The background shows dense green foliage and trees.</p>
<p>u1, 11, 231 - Built up areas and gardens</p>	<p>The site comprises a garden with modified grassland on slightly acid loamy and clayey soils with impeded drainage. The garden is well managed and subject to regular mowing, resulting in a short grass sward of approximately 3-5cm and limited structural and species diversity. The species assemblage is dominated by perennial ryegrass, with frequent common daisy and small flowered cranesbill, and occasional broadleaf plantain, springy turf moss, common hogweed and creeping thistle.</p>	 <p>A photograph of a large, open grassy area, likely a garden or sports field. The grass is short and green. In the background, there is a white goalpost and a dense hedge. The sky is clear and blue.</p>

<p>(u1 continued) 11 – Scattered trees</p>	<p>There are scattered trees present within the garden which vary in age and size, comprising a mix of mature, semi-mature and young trees. Species present include occasional white willow, hawthorn, field maple, pinus sp., and laburnum.</p>	
<p>(u1 continued) 231, 1160 – Vegetated garden, introduced shrubs</p>	<p>The garden is vegetated with several flower beds and sections of introduced/ornamental shrubs. Some species present include box, forget me nots, rose, evergreen spindle and lilac.</p>	

<p>h2a, 47, 190 – Hedgerow (priority habitat), native, with trees</p>	<p>The western and northern site boundaries are bordered by native hedgerow, which fits the criteria of S41 native hedgerow - a priority habitat or habitat of principal importance for biodiversity conservation. This hedgerow is flailed in places, resulting in a short trim with some unmanaged, mature trees present. The hedgerow on the western boundary is dominated by hawthorn, with occasional bramble, poplar trees and honeysuckle. The hedgerow on the northern boundary is dominated by Lawson’s cypress, with frequent cedar and occasional Scot’s pine, poplar, honeysuckle, bramble, laurel, cherry, and dog rose.</p>	
<p>h2a, 47 – Hedgerow (priority habitat), native</p>	<p>There is an isolated section (<20m length) of species-poor, native hedgerow extending through the garden at the centre of the site which fits the criteria of S41 native hedgerow. The hedgerow is managed, resulting in a short trim. The species composition is dominated by hawthorn, with occasional laurel and dogwood.</p>	

<p>h2b, 48 – Other hedgerows, non-native</p>	<p>There is a short section (<20m length) of non-native hedgerow running along the eastern site boundary, adjacent to the road. The hedgerow is managed, resulting in a short trim. The species composition is dominated by cedar, with occasional box, hawthorn and Persian ivy.</p>	
<p>r1, 19 – Standing open water, pond</p>	<p>A small pond with an area of approximately 9m² is present near the centre of the site within the garden. The pond is noted to be dry for most of the year due to a damaged pump/lining. There was a small amount of rainwater present within the pond at the time of the survey and no submerged vegetation present. The pond is predominantly surrounded by short, modified grassland and ornamental vegetation. See Table 6a for the Habitat Suitability Index assessment of the pond for great crested newts.</p>	

<p>r2b, 191 – Other rivers and streams, ditch</p>	<p>There is a drainage ditch less than 5m wide running through the garden at the east of the site. The ditch contains a small amount of water and is enclosed by managed grassland and shrubs, with some submerged vegetation present. The northern end of the ditch was dry during the site visit. Species present include cleavers, carex sp., common nettle, giant rhubarb, iris, lily and pampas grass.</p>	
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Fauna

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
<p>Amphibians</p>	<p>A review of the MAGIC database returned no granted EPSLs record for great crested newts (GCN), GCN class license returns or pond survey data within 2km of the site.</p> <p>Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; GCN are typically found within terrestrial habitats up to 500m from breeding ponds (Langton <i>et al.</i> 2001). There is a small pond with an area of approximately 9m² near the centre of the site. The pond is noted to be dry for most of the year due to a damaged pump/lining. There was a small amount of water present within the pond at the time of the survey. There is also a vegetated drainage ditch with a small amount of water running through the site. An HSI assessment was conducted to assess the suitability of the pond for GCN, the results of which can be found below in Table 5a. The HSI produced a score of ‘poor’ suitability for GCN, though this cannot be used to rule out the presence of GCN.</p>

Table 5a: HSI calculation of ponds.

SI Description	SI Value P1
Geographic location	1
Pond Area	0.05
Pond Permanence	0.1
Water Quality	0.33
Shade	1
Waterfowl Effect	1
Fish Presence	1
Pond Density	0.9
Terrestrial Habitat	0.67
Macrophyte Cover	0.3
HSI Score	0.44
HSI Category	Poor

A review of aerial imagery indicates the presence of an additional four ponds within 500m of the site; one pond is located approximately 320m north-east, two ponds approximately 425m south, and one pond 450m south-west. The ponds appear to have suitable connectivity to the site via a network of hedgerows and tree lines, arable field margins and small woodland pockets. There is a minor road with no curb between the site and the ponds to the south and north-east. The site itself is dominated by managed modified grassland, which is generally considered sub-optimal habitat for amphibians owing to the short sward and low structural and species diversity which results in a lack of refuge opportunities. However, the hedgerows, scattered trees and shrubs on site may provide some refuge and commuting opportunities. As such, the presence of great crested newts and other amphibians on site cannot be discounted.

A GCN rapid assessment was conducted to determine potential impacts from the development (see below). Based on the loss of the waterbodies on site with potential suitability for GCN, the proximity of the nearest potential breeding ponds and the anticipated quantity of land to be lost to the proposed development (0.03ha), the resulting notional offence probability score is classed as **RED**, meaning an offence to GCN is **HIGHLY LIKELY** under the proposed development if present on site. When completing the rapid risk assessment for ponds over 250m from the site, the proposed development produces a **GREEN** risk score, which states: Offence **HIGHLY UNLIKELY**. As such, if eDNA surveys find an absence of GCN within the onsite pond and ditch, a precautionary working method can be implemented during construction.

	Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
	Great crested newt breeding pond(s)	Damaged or destroyed	1
	Land within 100m of any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.3
	Land 100-250m from any breeding pond(s)	No effect	0
	Land >250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.001
	Individual great crested newts	No effect	0
		Maximum:	1
	Rapid risk assessment result:	RED: OFFENCE HIGHLY LIKELY	
Reptiles	A review of the MAGIC database found no granted ESPLs for rare reptile species within 2km of the site. The site is dominated by modified grassland, which is generally considered sub-optimal habitat owing to the short sward and low structural and species diversity which results in a lack of refuge opportunities. The hedgerows, scattered trees and shrubs may provide some opportunities for sheltering and foraging reptiles and the site is connected to nearby woodland pockets suitable for reptiles via a network of hedgerows/trees and arable field margins which could be used for commuting. As such, the presence of reptiles on site cannot be discounted.		
Badgers	No evidence of badgers was found within site. There are no setts on site and overall, the site is relatively flat, limiting its suitability for sett excavation. The presence of non-permeable wood panel and chicken wire fencing bordering the site and adjacent connected garden within the land of ownership is likely to act as a barrier to dispersal for foraging and commuting badgers, as is the gated driveway at the east of the site. As such, the presence of foraging and commuting badgers on site is considered highly unlikely.		
Bats	A review of the MAGIC database found no granted ESPLs for bats within 2km of the site. There are no buildings/structures within the site boundary. The hedgerows and trees on site may be used by foraging and commuting bats and are well connected to pockets of woodland within the wider landscape via a network of hedgerows and trees which will provide further opportunities for foraging and commuting. The nearby woodland pockets may also provide bat roosting value. One young willow tree adjacent to the existing pond will be removed for the proposed works (T1). This tree is assessed to have negligible roost value for bats due to a lack of roosting features. Other mature scattered trees at the northern boundary will be retained.		
Hazel Dormouse	A review of the MAGIC database found no granted ESPLs for dormice within 2km of the site. Habitats recorded along the western, northern and eastern site boundaries are assessed to provide foraging, commuting, and nest building opportunities for dormouse in the form of hedgerows with trees. Dormice typically utilise a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation. Furthermore, for isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright <i>et al.</i> 1994). Although 20ha of woodland is not present on or directly adjacent to the site, the hedgerows on the site boundaries are connected to an extensive hedgerow network within the wider landscape, which in turn, are connected to multiple woodland pockets. Given that the hedgerows along the western and northern site boundary are		

	considered suitable to support dormice and are well connected to further habitat in the wider landscape, the presence of dormice in these hedgerows cannot be discounted.
Hedgehog	The grassland/vegetated garden and hedgerows on site may offer suitable foraging and sheltering opportunities for hedgehogs. As such, the presence of foraging and sheltering hedgehogs on site cannot be discounted, though the wood panel and chicken wire fencing bordering the site and adjacent connected garden may act as a barrier to dispersal.
Otter and Water Vole	A review of the MAGIC database found no granted ESPLs for otters or water voles within 2km of the site. There is no suitable riparian habitat on or adjacent to the site. The onsite pond and ditch are considered unsuitable for water vole and otter due to a lack of connectivity to other watercourses.
Birds	The site is likely to offer nesting value for a broad range of bird species. Due to the type and extent of habitats recorded, the site is not considered suitable to support a significant assemblage of protected and/or notable bird species. However, the hedgerows and scattered trees are suitable to support common nesting bird species.
Invertebrates	The grassland, trees, hedgerows, shrubs, pond and ditch will provide habitat for common and widespread invertebrate species. No evidence of any protected, rare or notable invertebrate species was identified during the survey.

4.0 Conclusions, Impacts and Recommendations

Taking the desk study and field survey results into account, Table 6 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 a two-storey, detached dwelling within the existing site garden.

Table 6: Evaluation of the site and any ecological constraints

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Designated sites	<p>There are two statutory sites within 2km of the site, the closest being Milden Thicks SSSI located approx. 950m south-west from the site.</p> <p>The site lies within the impact risk zone for Milden Thicks Site of Special Scientific Interest (SSSI). The proposed development for one new residential dwelling is not listed as a possible high risk with regard to this designation.</p> <p>The presence of non-statutory designated sites within 2km of the site cannot be established without data from Suffolk</p>	No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known).	None.	None.

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

	<p>Biodiversity Information Service (SBIS). However, it is considered unlikely that such sites would be present in the immediate vicinity due to the presence of residential properties and arable land directly surrounding the site.</p>			
<p>Habitats and flora</p>	<p>The site contains native hedgerow along the northern and western boundaries and along the centre of the site which meets the criteria to be listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). These hedgerows are of good quality and the boundary hedgerows are well connected to a network of hedgerows within the wider landscape. As such, they could be of value to local wildlife populations (as detailed in subsequent sections of this table).</p>	<p>The proposed development will result in the loss of approx. 0.03ha of habitat including the onsite pond, vegetated ditch, modified grassland, some ornamental planting, a young willow tree adjacent to the pond, a small section of h2b non-native hedgerow at the east of the site (approx. 4.5m) to create access into the new property, and the isolated S41 hedgerow at the centre of the site (approx. 17m). This could result in a net loss in biodiversity at the site. However, this will be compensated with new soft landscaping to improve biodiversity with approx. 50m of tree/hedge planting along southern boundary alongside a new fence which will be constructed to divide the existing plots.</p> <p>Due to the proximity of the works to retained trees and hedgerows, indirect effects such as pollution or tree damage could occur during construction.</p>	<p>Best practice measures to minimise the possibility of pollution and tree damage 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).</p> <p>To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated:</p> <ul style="list-style-type: none"> • If possible, the creation of a new pond for wildlife to include native plant species. • The planting of native species within the proposed new hedge and tree planting along the southern boundary to compensate for the removal of native hedgerow at the centre of the site. 	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development:</p> <ul style="list-style-type: none"> • Planting of additional native trees, shrubs and hedgerows. <p>Species-specific enhancement opportunities are detailed later in this table.</p>

	<p>Further notable habitats are present within 2km, including deciduous woodland, approx. 180m northeast.</p> <p>Other habitats within the site, such as the short, modified grass throughout the garden are common and widespread and have low ecological value.</p> <p>No protected or notable plant species were recorded during the survey.</p>			
<p>Amphibians</p>	<p>There is one small onsite pond and ditch and four connected ponds within 500m of the site.</p> <p>The site is dominated by short grassland, which is sub-optimal owing to the low structural and species diversity which results in a lack of refuge opportunities for GCN and amphibians. The vegetated areas of the garden, scattered trees, shrubs and hedgerows may provide some</p>	<p>The onsite pond and ditch and sections of modified grassland, ornamental planting and hedgerow will be removed during construction. When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss or significant disturbance of 0.03ha of suitable and suboptimal great crested newt habitat (i.e. pond, ditch, grassland and hedgerow). When completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces a RED risk score, which states: Offence HIGHLY LIKELY.</p> <p>When completing the rapid risk assessment for connected ponds over 250m from the site, the proposed</p>	<p>Environmental DNA (eDNA) surveys will be required of the onsite pond and vegetated ditch to determine the presence or absence of great crested newts. This will comprise collecting water samples and sending them off for laboratory analysis and such surveys must be undertaken between mid-April and June, in accordance with current survey guidelines (Biggs et al, 2014).</p>	<p>To be confirmed upon completion of the surveys.</p>

	opportunities for sheltering, foraging and commuting amphibians.	development produces a GREEN risk score , which states: Offence HIGHLY UNLIKELY . As such, if eDNA surveys find an absence of GCN within the pond and ditch on site, a precautionary working method can be implemented during construction.		
Reptiles	<p>The site is dominated by short, managed grassland, which is sub-optimal for reptiles owing to the low structural and species diversity which results in a lack of refuge opportunities.</p> <p>The hedgerows, scattered trees and shrubs may provide some refuge and foraging and commuting opportunities for reptiles.</p>	<p>The proposed development will result in the loss of approx. 0.03ha of habitat including the onsite pond, vegetated ditch, modified grassland, ornamental planting, a young willow tree, a small section of non-native hedgerow at the east of the site and the isolated native hedgerow at the centre of the site. The loss of such habitats is likely to be inconsequential to local reptile populations owing to the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if crossing the construction zone.</p>	<p>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:</p> <ul style="list-style-type: none"> • The modified grassland will be maintained at a short sward (5cm) for the duration of construction to deter reptiles from the working area. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist. 	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for reptiles:</p> <ul style="list-style-type: none"> • Creation of reptile refugia and hibernacula using debris and brash from site clearance. • The creation of basking areas such as rock piles or areas of cleared ground with shelter nearby. • Planting of native scrub and grassland to increase foraging opportunities.
Roosting bats	<p>The trees on the site have negligible value for roosting bats due to a lack of potential roost features.</p>	<p>One willow tree adjacent to the pond will be removed for the proposed development. Bats are very unlikely to be roosting on the site and as such, there are not anticipated to be any impacts on roosting bats.</p>	<p>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.</p>	<p>The installation of one bat box at the site will provide additional roosting habitat for bats. The bat box will be installed on the new building or on retained mature trees. 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</p>

				<p>the entrance, away from artificial light. The bat boxes will be a specification suitable for crevice dwelling species, such as the NHBS Beaumaris Woodstone Bat Box. Or a similar alternative brand.</p>
<p>Foraging and commuting bats</p>	<p>The hedgerows and trees on 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.</p>	<p>The proposed loss of a young willow tree adjacent to the pond and sections of hedgerow at the east and centre of the site is likely to be inconsequential for bats given the presence of more extensive areas of foraging and commuting habitat in the locality, such as the nearby woodland pockets.</p> <p>However, the proposed development will include the use of lighting which could spill on to bat foraging or commuting habitat and deter bats from using these areas.</p>	<p>A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures:</p> <ul style="list-style-type: none"> • Light spill on to nearby hedgerows and trees should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect 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. 	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats:</p> <ul style="list-style-type: none"> • The creation of a new wildlife pond. • Planting of native tree, shrub and hedgerows to increase foraging opportunities.

			<ul style="list-style-type: none"> 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 are no setts on site and the site is relatively flat, limiting its suitability for sett excavation. The presence of badgers on site is considered unlikely due to the presence of wood panel and chicken wire fencing enclosing the garden.	No impacts are anticipated on badgers as a result of the proposed development.	None.	None.
Hazel dormouse	The hedgerows on site may offer foraging, commuting, and nest building opportunities for dormouse and are well connected to a network of hedgerows and small pockets of woodland in the	Two sections of hedgerow will be removed for the proposed development; approximately 4.5m of non-native hedgerow at the eastern boundary to create access from the road into the new property and a section of isolated native hedgerow at the centre of the site. This likely to be inconsequential to local dormouse populations owing to their low value and the presence of more extensive	Owing to the nature of the proposed development and the low potential for impacts to dormice, further dormouse surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: <ul style="list-style-type: none"> Clearance of the eastern hedgerow for the new access point will be undertaken outside of the dormouse 	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for dormice: <ul style="list-style-type: none"> Planting of native tree, shrub and hedgerows, including ground, understory and canopy

	<p>surrounding landscape.</p> <p>The presence of dormice in the isolated hedgerow at the centre of the site is considered less likely due to the lack of connectivity to the wider hedgerow network.</p>	<p>habitat locally. However, site clearance could result in the death or injury of dormice, if present.</p>	<p>hibernation season (November to March) insofar as is possible.</p> <ul style="list-style-type: none"> • A pre-commencement inspection of the hedgerows to be cleared/removed will be undertaken for dormice. • In the unlikely event that a dormouse or evidence of dormouse is identified, works must cease and advice must be sought from a suitably qualified ecologist. 	<p>layers for habitat complexity.</p> <ul style="list-style-type: none"> • Planting of fruiting species such as hazel to increase foraging opportunities.
Hedgehog	<p>The grassland, hedgerows, scattered trees and shrubs on site may offer suitable foraging, sheltering and commuting opportunities for hedgehogs. As such, the presence of hedgehogs on site cannot be discounted, though the fencing enclosing the site may act as a barrier to dispersal.</p>	<p>The proposed loss of approx. 0.03ha of habitat including ornamental planting, a young willow tree, modified grassland, and sections of hedgerow is likely to be inconsequential to local hedgehog populations owing to the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.</p>	<p>A precautionary working method will be implemented during construction, including the following measures:</p> <ul style="list-style-type: none"> • The modified grassland will be maintained at a short sward (5cm) for the duration of construction to deter reptiles from the working area. • 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. 	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs:</p> <ul style="list-style-type: none"> • Planting fruit bearing trees to increase foraging opportunities. • Creation of brush piles or installation of hedgehog houses in shady areas. • Creation of gaps in new boundary fencing to maintain commuting routes for hedgehogs between the site and the surrounding areas.
Otter and Water vole	<p>There is no suitable riparian habitat on, or adjacent to, the site.</p>	<p>No impacts are anticipated on otters or water voles as a result of the proposed development.</p>	<p>None.</p>	<p>None.</p>

<p>Birds</p>	<p>Due to the type and extent of habitats recorded, the site is not considered suitable to support a significant assemblage of protected and/or notable bird species. However, the scattered trees and hedgerows on site are suitable to support common nesting bird species.</p>	<p>The proposed loss of a young willow tree adjacent to the pond near the centre of the site and some sections of hedgerow at the centre of the site and the eastern boundary is likely to be inconsequential to local bird populations owing to the presence of more extensive habitat locally, such as the nearby woodland pockets. However, the works could result in the destruction or the disturbance and subsequent abandonment of active bird nests.</p>	<p>Tree and hedgerow removal/clearance for the new plot should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the hedgerows and tree 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.</p>	<p>The installation of an additional two bird boxes at the site will provide additional nesting habitat for birds. The bird boxes could be installed on the new building, or on retained trees or hedgerows. e.g. Vivara Pro woodstone oval nest box (trees) Vivara Pro woodstone swift box (buildings) Woodstone sparrow nest box (buildings) Woodstone Nest Box (buildings or trees) Or a similar alternative brand. 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.</p>
<p>Invertebrates</p>	<p>Habitats on site are considered suitable to support an invertebrate assemblage that is common and widespread only and are unlikely to be of particular habitat value to any specialist or notable species.</p>	<p>The proposed development will result in the loss of approx. 0.03ha of habitat including the onsite pond, vegetated ditch, modified grassland, some ornamental planting, a small section of h2b other hedgerow at the east of the site for access into the new property, and the isolated h2b hedgerow at the centre of the site is likely to be inconsequential to local invertebrate populations owing to the presence of more extensive habitat within the wider landscape.</p>	<p>None.</p>	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates:</p> <ul style="list-style-type: none"> • Native tree, hedgerow and shrub planting. • Creation of wildflower grassland. • Creation of a new pond for wildlife to include native plant species. • Planting of pollinator friendly species.

5.0 Bibliography

- Babergh and Mid Suffolk Joint Local Plan (2020). <https://www.babergh.gov.uk/assets/Strategic-Planning/JLPExamination/CoreDocLibrary/A-SubmissionDocs/A01-Part-1-Objective-and-Strategic-Policies-Part-2-Local-Policies.pdf>
- 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 14/06/2023.
- 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 14/06/2023.
- 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 14/06/2023.
- 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., Heaver, 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.
- Suffolk Local Biodiversity Action Plan. <https://www.suffolkbis.org.uk/>
- 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



Appendix 2: Site Location Plan



Appendix 3a: Habitat Survey Plan



Appendix 3b: 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 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 plants listed on Schedule 5 of the Conservation of Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

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

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

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

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

Injurious weeds

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

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

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

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

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

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

National Planning Policy Framework 2021

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

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

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

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

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

LOCAL PLANNING POLICY***Babergh and Mid Suffolk Joint Local Plan (2020)***

The Babergh and Mid Suffolk Joint Local Plan (2020) can be viewed here: <https://www.babergh.gov.uk/planning/planning-policy/new-joint-local-plan/>

The following planning policies have implications in relation to biodiversity and the proposed development:

- Policy SP09 – Enhancement and Management of the Environment:
 - The Council will require development to support the enhancement and management of the natural and local environment and networks of green infrastructure, including: landscape; biodiversity, geodiversity and the historic environment and historic landscapes through detailed development management policies set out in the Plan, including environmental protection measures, such as biodiversity net gain and sustainable urban drainage systems.
- Policy SP10 – Climate Change:
 - The Councils will: a. Require all developments to take a proactive approach to mitigate and adapt to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes and visual impacts, and the risk of extreme winter and summer temperatures; overheating from rising temperatures; Proactive approaches may include sustainable construction techniques that regulate building temperatures, tree planting and shelter in public realms including public transport nodes and stops and biodiversity net gain.
- Policy LP18 - Biodiversity & Geodiversity:
 - All development should follow a hierarchy of seeking firstly to; enhance habitats, avoid impacts, mitigate against harmful impacts, or as a last resort compensate for losses that cannot be avoided or mitigated for. Adherence to the hierarchy should be demonstrated. Development should:
 - Conserve, restore and contribute to the enhancement of biodiversity and geological conservation interests including priority habitats and species. Enhancement for biodiversity should be commensurate with the scale of development.
 - Plan positively for the creation, protection, enhancement and management of local networks of biodiversity with wildlife corridors that connect areas. Where possible, link to existing green infrastructure networks and areas identified by local partnerships for habitat restoration or creation so that these ecological networks will be more resilient to current and future pressures.
 - Identify and pursue opportunities for securing measurable net gains, equivalent of a minimum 10% increase, for biodiversity. Where biodiversity assets cannot be retained or enhanced on site, the Councils will support 'biodiversity offsetting' to deliver a net gain in biodiversity off-site in accordance with adopted protocols.
 - Apply additional measures to assist with the recovery of species listed on S41 of the NERC Act 2006.

- Development which would have an adverse impact on species protected by legislation, or subsequent legislation, will not be permitted unless there is no alternative and the local planning authority is satisfied that suitable measures have been taken to:
 - Reduce disturbance to a minimum.
 - Maintain the population identified on site.
 - Provide adequate alternative habitats to sustain at least the current levels of population.
- Where appropriate, the local planning authority will use planning obligations and/or planning conditions to achieve appropriate mitigation and/or compensatory measures and to ensure that any potential harm is kept to a minimum.

Suffolk Local Biodiversity Action Plan

The Suffolk Local Biodiversity Action Plan can be viewed here: <https://www.suffolkbis.org.uk/>

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:

- Arable field margins, hedgerows, lowland mixed deciduous woodland, ponds.

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:

- Great crested newt, Smooth newt, Common toad, Common frog, Slow-worm, Brown long-eared bat, Common Pipistrelle, Nathusius' pipistrelle, Noctule, Soprano pipistrelle.

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.