



Preliminary Ecological Appraisal Survey

Land at Willow Tree Farm and Holly Cottage, Wrotham Road, Meopham, Kent DA13 0AH

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Guidelines

This assessment has been designed to meet:

- Chartered Institute of Ecology and Environmental Management 'Guidelines for Preliminary Ecological Appraisal Second Edition, December 2017'; and
- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and Development'.

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.

This approach is enshrined in Government planning guidance, for example, the National Planning Policy Framework for England 2019 paragraphs 174 and 175. 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)

In consequence of the scale and intensity of the proposed development, the low impact on ecological receptors identified through both the site survey and search of local biological records, and the passive interface with the mitigation hierarchy, this plan-led report is considered adequate and proportionate. It communicates all relevant information necessary to determine a planning application or support the recommendations for further surveys.

Executive summary

Arbtech were commissioned by Mr Gordon McQuade to undertake a preliminary ecological appraisal (PEA) for Land at Willow Tree Farm and Holly Cottage, Wrotham Road, Meopham, Kent DA13 0AH. The survey visit was completed on 19th July 2021. The aim of the survey was to complete an extended Phase 1 Habitat Survey of the survey area (all land that will be impacted by the proposals).

This report is prepared to inform a planning application with Gravesham Borough Council. The proposed development is described as:

- The demolition of an existing bungalow and the construction of eight houses.

Recommendations - This is work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent.

Ecological Factor	Recommendations
Designated sites	No further surveys are required. Planning applications near the SAC may need mitigate the potential impacts of the development to ensure the effects of any increase in visitors are addressed. This may involve payments towards both: Suitable Alternative Natural Greenspace (SANG) - Contributions are likely required by the local authority for the ongoing management and maintenance of local SANGs. Similar, strategic Access Management and Monitoring (SAMM) - A financial contribution towards SAMM will may be needed for ongoing visitor management projects and monitoring in accordance with the SAMM Strategy. The LPA will be able to provide advice on any SANG and SAMM arrangements if required.
Notable habitats and plants	No further surveys. A biodiversity net gain (BNG) metric report comparing the existing habitat baseline to the proposed site may be required by the council to determine if habitat losses can be compensated for with on or off-site offsetting.
Invasive / Non-native species	No further surveys but remain vigilant.
Invertebrates	No further surveys required.
Bats	No further surveys required. Lighting mitigation is required for the boundary trees to maintain dark corridors:

	➤ Lighting will be controlled across the developed site. Research into the effects of artificial lighting on bats has shown that it can impact upon bat emergence times and lead to a reduced foraging time. ➤ As bats are faithful to their roost sites, often returning to the same site for many years, the impact of lighting on emergence times and in turn reduced foraging times can ultimately result in the roosts being abandoned. ➤ Key areas of the site which are sensitive to artificial lighting are the boundary hedges. ➤ The lighting on the developed site will be limited to the renovated building only. No lighting will be installed within the garden area/along the site boundaries, thereby maintaining the existing dark areas within the developed site for bats. ➤ Low impact lighting strategies will be adopted from the guidance outlined in the new Bats and Lighting Publication produced by the Institution of Lighting Professionals and the Bat Conservation Trust "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 ➤ The lighting on the site will: ▪ 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 short wave 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 positioned below the eaves, 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
Birds	Works on vegetation should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building should be undertaken immediately prior to the commencement of works by an experienced ecologist. All active nests will need to be retained until the young have fledged.
Reptiles	Further presence/likely-absence surveys are recommended; this will confirm if any reptile species are using the grass area on site and provide an indication of abundance and distribution. The survey methodology is described below:

	➤ A minimum of 8 visits in suitable weather (9oC - 18oC) are required, one of these is to set-up the survey. ➤ This can be done starting from April, the season ending in October, with the optimal being April, May and September. ➤ Refuges are placed in suitable habitat areas around the site. There is assessed to be ~0.3ha of suitable reptile habitat on site. With a survey density of 100/refugia per hectare there would need to be at least 30 reptile felts placed around the site, ideally more to get a better pattern of any distribution. ➤ After a two-week bedding in period these are then checked in subsequent visits. These checks should be at least a week apart. Any reptiles are recorded. If reptiles are found, a reptile mitigation plan will need to be created for the site based on the species and assumed population size. The site is a significant distance from known locations of smooth snake, which is a European protected species. The BNG provisions of replacement scrub and ruderal herb in the local area should compensate for the loss occurred on this site for reptiles.
Amphibians	No further surveys.
Other Terrestrial Mammals	Badgers No further surveys. However, the following recommendations are given in order to mitigate against potential harm to hedgehogs during the development works. • Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. • Security lighting to be directed away from the undergrowth. Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. Water Vole No further surveys. Otter No further surveys. Dormouse No further surveys. Hedgehogs No further surveys are required. See badger mitigation above.

Contents

1.0 Introduction and Context.....	7
1.1 Background.....	7
1.2 Site Context	7
1.3 Scope of the report.....	7
1.4 Project Description	8
2.0 Methodology.....	8
2.1 Desk Study methodology.....	8
2.2 Site Survey methodology.....	8
2.3 Suitability Assessment	9
2.4 Limitations – evaluation of the methodology	10
3.0 Results and Evaluation	11
3.1 Desk Study Results.....	11
3.2 Field Survey Results	11
3.3 Site descriptions and photos	12
4.0 Conclusions, Impacts and Recommendations	17
4.1 Informative guidelines.....	17
4.2 Evaluation	17
5.0 Bibliography	25
Appendix 1: Phase 1 Habitat Survey Map	27
Appendix 1.2 Landscape.....	28
Appendix 2: Proposed Site Plan	29
Appendix 3: Desk Study Information	30
Appendix 4: Legislation and Planning Policy	33

1.0 Introduction and Context

1.1 Background

Arbtech were commissioned by Mr Gordon McQuade to undertake a preliminary ecological appraisal (PEA) for Land at Willow Tree Farm and Holly Cottage, Wrotham Road, Meopham, Kent DA13 w0AH. The aim of the survey was to complete an extended Phase 1 Habitat Survey of the survey area (all land that will be impacted by the proposals) and analyse this against a desk study.

No previous ecology surveys are known from Arbtech Consulting or others.

1.2 Site Context

The survey site is centred on National Grid Reference TQ 6433 6595 and has an area of approximately 6420m². The survey site consists of a bungalow and outbuildings, amenity grass, ornamental planting, and a stand of ruderal herb and scrub with scattered trees.

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 significant ecological impacts as a result of the development proposals; 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 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.

Establishing the baseline conditions for future monitoring. To achieve this, the following steps were taken:

- The desk study area and field survey area (generally 50m from the site boundary/proposed footprint and including the 'zone of influence' of the scheme) have been identified
- A desk study has been carried out.
- Baseline information on the site and surrounding area has been recorded through an 'extended phase 1 habitat survey', including a phase 1 habitat survey (JNCC 2010) and recording further details in relation to notable or protected habitats and species.
- The ecological features present within the survey area have been evaluated where possible (CIEEM, December 2017).
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Likely impacts on features of value, as a result of the development proposals, have been identified.
- Recommendations for further survey and assessment have been made.
- Recommendations for mitigation and opportunities for enhancement have been provided based on current information.

A survey plan is presented in Appendix 1, proposed plans in Appendix 2 (where available), desk study results in Appendix 3 and a summary of relevant legislation is presented in Appendix 4.

1.4 Project Description

This report is prepared to inform a planning application with Gravesham Borough Council. The proposed development is described as:

- The demolition of an existing bungalow and the construction of eight houses.

2.0 Methodology

2.1 Desk Study methodology

The desk study informing the survey conclusions consists of a review of nearby statutory and non-statutory designated sites, biodiversity action plan (BAP) priority habitats and granted EPSML records held on the Magic database. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

Additionally, to conform to best practice guidelines biological data records (BRD) within a 1km radius of the site will need to be obtained from the local biological records centre (Kent and Medway Biological Records Centre, KMBRC). These will be analysed and summarised in the conclusions and recommendations part of the report where relevant upon arrival.

The data search is confidential information that is not suitable for public release and has been analysed and summarised for presentation in this report. They can be provided on request by the LPA.

2.2 Site Survey methodology

The survey was undertaken by Craig Williams BSc, MSc, DIC (Natural England Protected Species Licence Numbers: [Bats] (2018-33540-CLS-CLS) [Great Crested Newts] (2015-16682-CLS-CLS) [Barn Owls] (CL29/00097) on 19th July 2021.

Preliminary ecological appraisal methodology:

The methodology for the Phase 1 habitat survey is based on the best practice publication Phase 1 Habitat Survey Methodology (JNCC, 2010). All land parcels are described and mapped according to JNCC Phase 1 habitat classification (see site map in Appendix 1). Where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management.

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. The likelihood of the presence of protected species is ranked; the habitats on site are evaluated against their likelihood to provide suitable habitat for protected species.

All features that will be impacted by the project proposals were assessed for their bat roosting and/or commuting habitat. The surveyor systematically surveyed all features suitable for bats and signs of bat activity.

Preliminary roost assessment bat survey methodology:

Buildings:

A non-intrusive visual appraisal from the ground using binoculars, inspecting the external features of the building(s) for potential access/egress points, and for signs of bat use. An internal inspection of the building was also made, including the living areas of derelict or abandoned buildings and the accessible roof spaces of all buildings, using an endoscope, torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

The ecological value of the survey area has been assessed based on the Guidelines for Ecological Impact Assessment (CIEEM, 2006), and the Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring (David Hill, 2005), using geographic frames of reference. The biodiversity value of any identified designated sites, habitat types and associated species assemblages has been considered. The distribution and extent of invasive species listed on Schedule 9 of the Wildlife and Countryside Act (1981) were also noted throughout the survey area.

2.3 Suitability Assessment

The habitats on site were evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat. The likelihood of the occurrence of protected species is ranked according to the criteria listed in Table 1 below.

Table 1: showing criteria considered when assessing the likelihood of occurrence of protected species

Present	Species are confirmed as present from the current survey or historical confirmed records.
High	Habitat and features of high quality for species/species assemblage. Species known to be present in wider landscape (desk study records). Good quality surrounding habitat and good connectivity.
Medium	Habitat and features of moderate quality. The site in combination with surrounding land provides all habitat/ecological conditions required by the species/assemblage. Within known national distribution of species and local records in desk study area. Limiting factors to suitability, including small area of suitable habitat, some severance/poor connectivity with wider landscape, poor to moderate habitat suitability in local area.
Low	Habitats within the survey area poor quality. Few or no records from data search. Despite above, presence cannot be discounted as within national range, all required features/conditions present on site and in surrounding landscape. Limiting factors could include isolation, poor quality landscape, or disturbance.
Negligible	Very limited poor-quality habitats and features. No local records from desk study; site on edge of, or outside, national range. Surrounding habitats considered unlikely to support species/species assemblage.

2.4 Limitations – evaluation of the methodology

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.

- There were no specific limitations to the survey regarding access, biotic or abiotic factors (e.g., wasps, asbestos), seasonality, visibility, or adverse weather.
- Therefore, the results of the survey are considered an accurate baseline to support the conclusions and recommendations of the report.

3.0 Results and Evaluation

3.1 Desk Study Results

The desk study methodology as outlined in 2.1 has been carried out, and any relevant findings regarding sites, habitats or species will be incorporated into the conclusions and recommendations section of this report (4.2) for ease of reading.

3.2 Field Survey Results

The site of the proposed development is briefly described as a bungalow and outbuildings, amenity grass, ornamental planting, and a stand of ruderal herb and scrub with scattered trees.

Table 6: Weather conditions during the survey

Date: 19/07/2021	
Temperature	18°C
Humidity	81%
Cloud Cover	10%
Wind	4mph
Rain	None

3.3 Site descriptions and photos

Phase 1 habitat codes in brackets when they first appear in text.

Buildings and hard standing [J3.6]

Building

There are five main buildings on site, designated as B1-B5.

B1 is a brick built chalet bungalow with a half-hipped roof of clay tiles. These are of a good condition without significant loose missing or broken examples including ridge and hip tiles. Hipped roof dormer windows have hung tile cheeks which are also intact. The northern gable end has more intact hung tiles. Plastic soffit, fascia and barge boards are intact without gaps. Exterior walls are rendered without cracks. Window and door frames are tight fitting. The loft of bungalow shallow and narrow above mainly habitable rooms in the loft void, with an intact bitumen felt under the tiles although with vents.

B2 is a modern metal workshop in the south of the site, with a gabled sheet roof and an open interior which was in use during the survey for car maintenance and well illuminated.

B3 and B4 are small timber framed garages used for storage with sloped, gabled roofs and no internal voids.

B5 is a small timber shed with a shallowly gabled roof.

Other small, undesignated outbuildings are found round the site e.g., small garden sheds.

Hard standing

Paving, gravel driveway and small parking areas are found over the site.

Amenity grass [J1.2]

Small areas of closely mown amenity grass lawn are found on site, the largest in the rear, western garden of the bungalow but also found in the front.

Ornamental planting [J1.5]

Small areas of ornamental planting are scattered across the site, mainly in the front garden of the bungalow.

Scattered scrub and Tall ruderal herb [J1.5]

Much of the northern half of the site consists of a stand of unmanaged ground, which has succeeded into scrub and tall ruderal herb with dominant ragwort, frequent nettle, creeping thistle common hogweed, self-heal and curled dock. Rabbit evidence is scattered. A brash pile in the centre could provide refuge to a range of animals. Scattered bramble scrub gradates into the trees along the northern boundary.

Scattered mixed trees [A3.3]

A short hedge hawthorn hedge runs along the eastern boundary with the road. Other tree lines in boundary include ash, hazel, hawthorn and sycamore. Scattered trees inside the site include Thuja, dawn redwood, cedar, elder, cherry, holly, blackthorn, birch, magnolia and strawberry tree. A short conifer screens is found in the east of the site.

None of the trees on site have any observed internal roosting value.



Photo 1: Looking west at the eastern elevation of B1, with the start of the scrub and tall ruderal herb area to the right.



Photo 2: Looking across the northern scrub and ruderal herb area.



Photo 3: Hard standing area to the west of the site



Photo 4: Outbuildings in the south-western corner of the site, with the outbuildings B3, B4 and B5.



Photo 5: Parking area in the west of the site.



Photo 6: Looking south-west at B2.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative guidelines

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. The likelihood of occupancy of protected species is ranked according to the criteria listed in Table 1.

Where this report supports a planning application, the ecological interest of the study area (including the survey area) and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity. It is clearly stated where a preliminary value can be given and where further information is required.

Appropriate justification for this assessment is provided in Section 2.3 and Table 1 of this report.

4.2 Evaluation

Taking the desk study and site survey results into account, the following conclusions for ecological factors has been reached.

Table 7: Evaluation of site

Ecological Factor	Survey assessment conclusions (with justification)	Foreseen impacts	Recommendations	Enhancements
Designated sites	The site itself is not subject to any statutory or non-statutory designation, and there are none known close by.	The construction of a eight new residential unit on the site could cause an increase in recreational pressure (of a net gain of seven units) on the nearby European designated	No further surveys are required. Planning applications near the SAC may need mitigate the potential impacts of the development to ensure the effects of any increase in visitors are addressed. This may involve payments towards both:	The Local Planning Authority has a duty to ask for enhancements under the NPPF N/A

	The site is ~3.2km north-west from the North Downs Woodlands Special area of Conservation (SAC).	site (SAC) e.g., dog walking, trampling, refuse etc. This could be a likely significant effect. No other impact pathways are foreseen due distance attenuation.	Suitable Alternative Natural Greenspace (SANG) - Contributions are likely required by the local authority for the ongoing management and maintenance of local SANGs. Similar, strategic Access Management and Monitoring (SAMM) - A financial contribution towards SAMM will may be needed for ongoing visitor management projects and monitoring in accordance with the SAMM Strategy. The LPA will be able to provide advice on any SANG and SAMM arrangements if required.	
Notable habitats and plants	No protected, designated or notable habitat is found on site or nearby.	No impacts foreseen.	No further surveys. A biodiversity net gain (BNG) metric report comparing the existing habitat baseline to the proposed site may be required by the council to determine if habitat losses can be compensated for with on or off-site offsetting.	Any hedge shrubs or trees removed should be replaced on site or close by, at a ratio of 1:1 or greater. Any new trees or shrubs planted should be of native species of local provenance.
Invasive / Non-native species	No invasive and non-native species recorded on site.	N/A	No further surveys but remain vigilant.	N/A
Invertebrates	Although they may be useful for a range of generalist invertebrates,	None foreseen.	No further surveys required.	The creation of long grass or nectar rich meadow areas on or

	the habitats on site are widespread even locally and are very unlikely to contain notable or protected assemblages.			around the site would be of benefit to these taxa, as would log and stone piles in sunny areas. Beetle loggeries of semi-sunken vertical timbers would provide habitat for larvae.
Bats	There are no features of bat roosting value on site. The bungalow and outbuildings have no suitable crevices or voids and no evidence was found externally or internally. None of the trees were observed to have any roosting features, although bats are likely to commute and forage along the boundaries at night.	No impacts foreseen on roosting bats. Any new lighting near the boundaries may disrupt commuting bats.	No further surveys required. Lighting mitigation is required for the boundary trees to maintain dark corridors: ➤ Lighting will be controlled across the developed site. Research into the effects of artificial lighting on bats has shown that it can impact upon bat emergence times and lead to a reduced foraging time. ➤ As bats are faithful to their roost sites, often returning to the same site for many years, the impact of lighting on emergence times and in turn reduced foraging times can ultimately result in the roosts being abandoned. ➤ Key areas of the site which are sensitive to artificial lighting are the boundary hedges. ➤ The lighting on the developed site will be limited to the renovated building only. No lighting will be installed within the garden area/along the site boundaries, thereby maintaining the existing dark areas within the developed site for bats. ➤ Low impact lighting strategies will be adopted from the guidance outlined in the new Bats and Lighting Publication produced by the Institution of Lighting Professionals and the Bat Conservation Trust "Guidance Note 08/18 Bats and artificial lighting in the UK Bats and the Built Environment series" publication:	A range of woodcrete bat boxes could be installed on the renovated building or retained trees, between 3-5m in height, on the south or south-east side of the trunk or elevation with clear flightpaths and away from lighting.

			http://www.bats.org.uk/news.php/406/new_guidance_on_bats_and_lighting	
			➤ The lighting on the site will: ▪ 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 short wave 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 positioned below the eaves, 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 'dimnable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity	
Birds	Birds may nest on or within the building, trees and hedges on site in the active season.	Any works on the buildings, trees or shrubs could destroy nests if undertaken within the breeding season.	Works on vegetation should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building should be undertaken immediately prior to the commencement of works by an experienced ecologist. All active nests will need to be retained until the young have fledged.	Install woodcrete bird boxes with a range of hole diameters on retained trees between 3 and 5m in height and out of

	There is no habitat for other schedule 1 birds of the Wildlife and Countryside Act 1981 (as amended) e.g., peregrine falcons, barn owls or black redstart.			direct sunlight, with clear flight paths. Woodcrete swift boxes on the new buildings would be used by a range of bird species. Grass buffer areas around the wider site to grow long for invertebrate diversity, which birds prey upon.
Reptiles	The rough area of scrub and tall ruderal herb in the north of the site offers good habitat for reptiles and links to other suitable areas in fields to the west. Brash piles strewn in the area provide refugia and hibernacula, and quiet areas of hard standing could be used for basking.	The reptile habitat will be lost for the development scheme.	Further presence/likely-absence surveys are recommended; this will confirm if any reptile species are using the grass area on site and provide an indication of abundance and distribution. The survey methodology is described below: ➤ A minimum of 8 visits in suitable weather (9oC - 18oC) are required, one of these is to set-up the survey. ➤ This can be done starting from April, the season ending in October, with the optimal being April, May and September. ➤ Refuges are placed in suitable habitat areas around the site. There is assessed to be ~0.3ha of suitable reptile habitat on site. With a survey density of 100/refugia per hectare there would need to be at least 30 reptile felts placed around the site, ideally more to get a better pattern of any distribution.	Dependant on the results of the further surveys, however included in the ecological plan should be areas of longer grass and meadow would provide reptile habitat, as well as loose piles of logs and stones – hibernacula.

			➤ After a two-week bedding in period these are then checked in subsequent visits. These checks should be at least a week apart. Any reptiles are recorded. If reptiles are found, a reptile mitigation plan will need to be created for the site based on the species and assumed population size. The site is a significant distance from known locations of smooth snake, which is a European protected species. The BNG provisions of replacement scrub and ruderal herb in the local area should compensate for the loss occurred on this site for reptiles.	
Amphibians	No protected amphibian EPSL has been granted within 1km of the survey site, and no previous positive surveys are known nearby. Although there is suitable terrestrial habitat value site for protected amphibians with the scrub and tall ruderal herb, there are no known aquatic habitats i.e ponds on site or nearby. Therefore, as both are	None foreseen.	No further surveys.	A small wildlife pond (no fish or waterfowl provision) would bring the most enhancement for amphibians, also with rough grass habitat and refugia nearby for their terrestrial phase.

	critical for the amphibian life cycle, it is very unlikely that protected amphibians use the site at any time of year.			
Other Terrestrial Mammals	Badgers No badger setts were found and none are suspected within 30m of the survey area. Badgers could be commuting across the site, however.	Badgers No impacts on any badger setts is foreseen, although individuals may become trapped in the works site.	Badgers No further surveys. However, the following recommendations are given in order to mitigate against potential harm to hedgehogs during the development works. - Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. - Security lighting to be directed away from the undergrowth. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.	Badgers Fruit trees could be planted to increase foraging value for badgers.
	Water Vole No habitat Value.	Water Vole None foreseen.	Water Vole No further surveys.	Water Vole N/A
	Otter No habitat Value.	Otter None foreseen.	Otter No further surveys.	Otter N/A
	Dormouse No suitable habitat on site. No EPSLs for the species are known nearby.	Dormouse None foreseen.	Dormouse No further surveys.	Dormouse N/A
	Hedgehogs	Hedgehogs No impacts foreseen.	Hedgehogs No further surveys are required. See badger mitigation above.	Hedgehogs Permeability of fences is essential to retain

	Hedgehogs may currently use the site for commuting or foraging.			commuting routes, and 13cm² gaps should be included frequently. Hedgehog houses (made of wood without wires) could be installed in quiet corners.
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Appendix 1: Phase 1 Habitat Survey Map



Appendix 1.2 Landscape

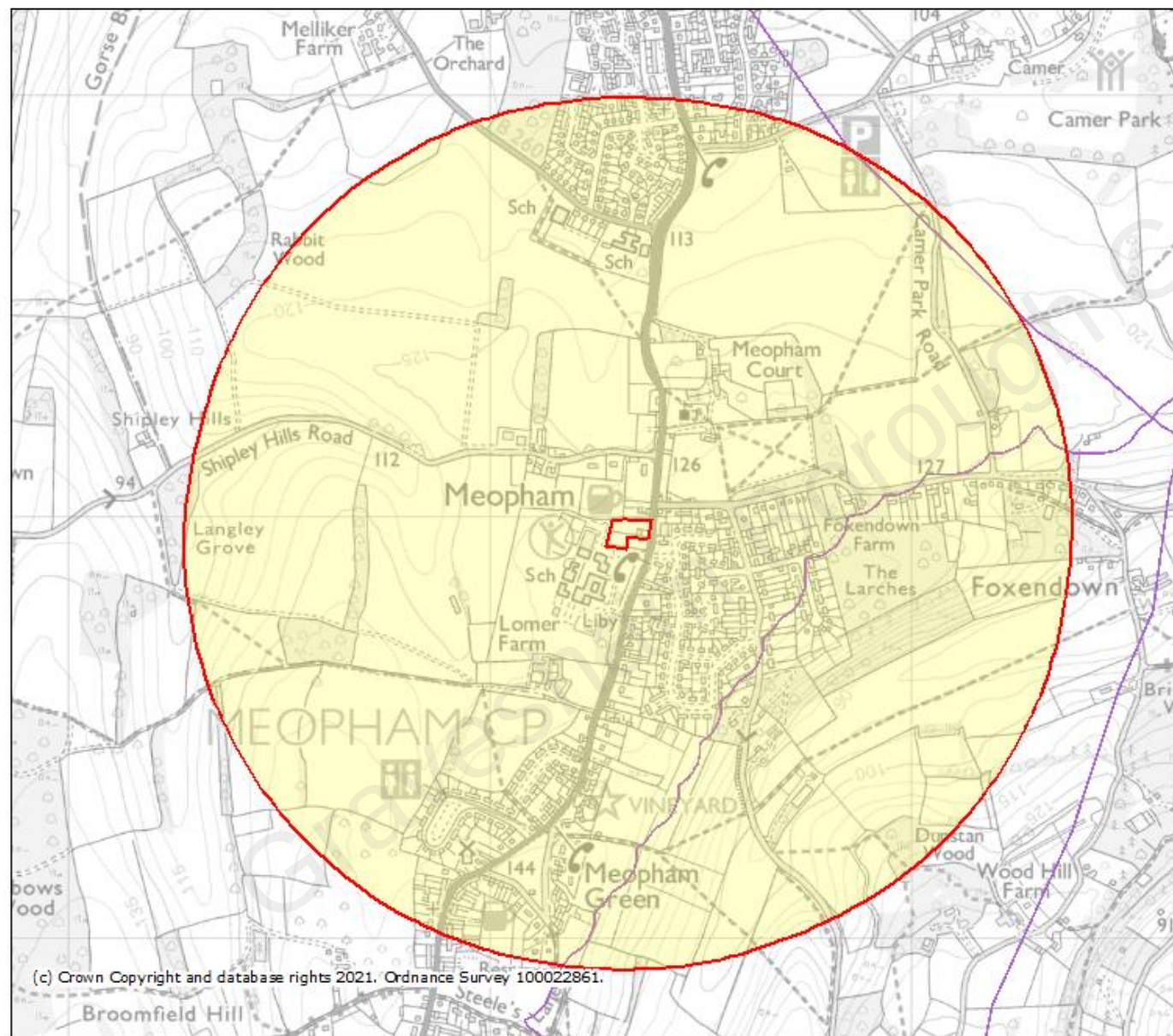


Appendix 2: Proposed Site Plan



Appendix 3: Desk Study Information

Statutory sites



Legend

SSSI Impact Risk Zones -
to assess planning
applications for likely
impacts on
SSSIs/SACs/SPAs &
Ramsar sites (England)

Projection = OSGB36

xmin = 560700

ymin = 164200

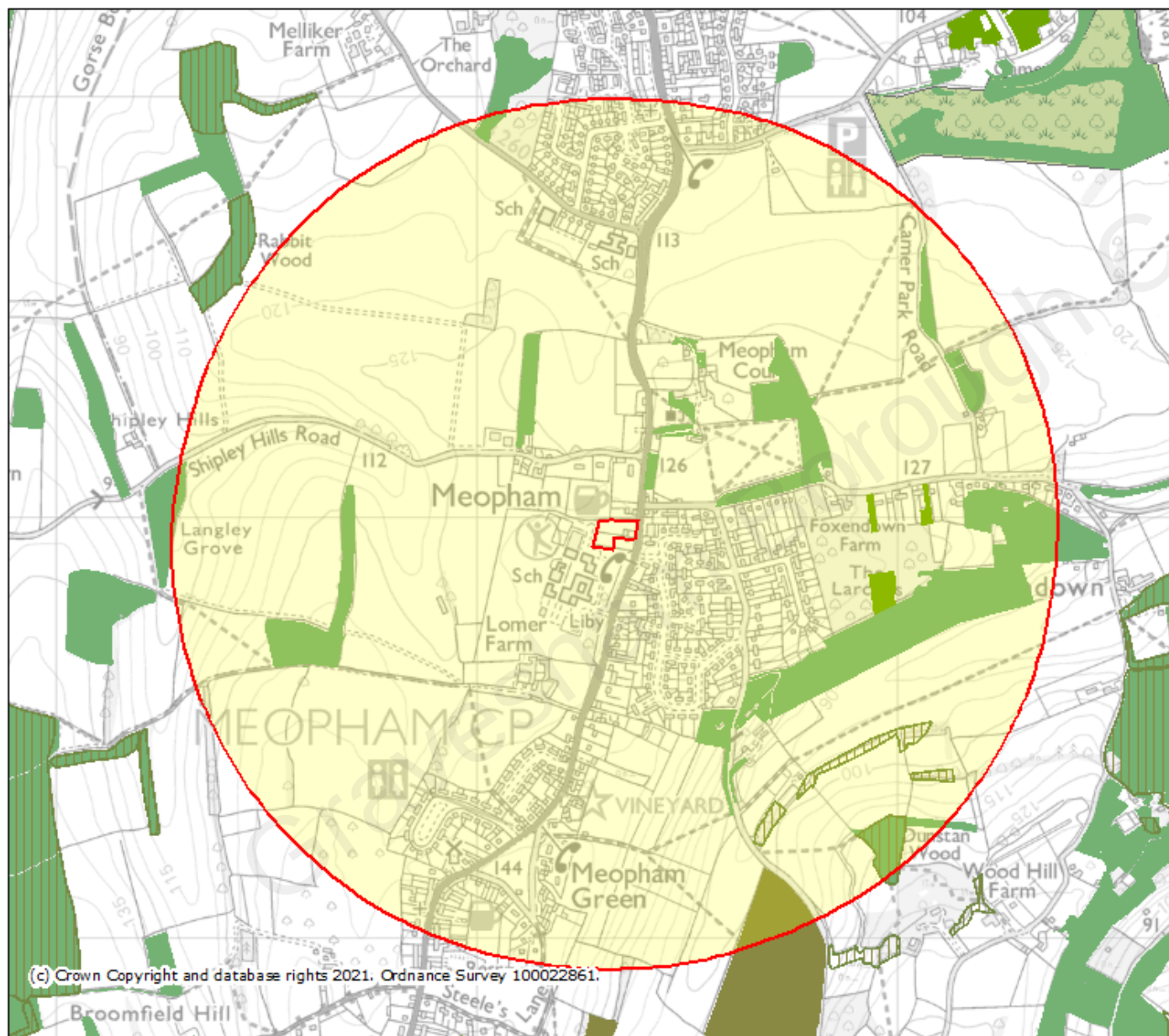
xmax = 567800

ymax = 167700

Map produced by MAGIC on 21 July, 2021.

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Habitats



Legend

Priority Habitat Inventory -
Lowland Calcareous
Grassland (England)

Ancient Woodland (England)

Ancient and Semi-Natural
Woodland

Ancient Replanted
Woodland

Priority Habitat Inventory -
Deciduous Woodland
(England)

Priority Habitat Inventory -
Traditional Orchards
(England)

Woodpasture and
Parkland BAP Priority
Habitat (England)

Projection = OSGB36

xmin = 560700

ymin = 164200

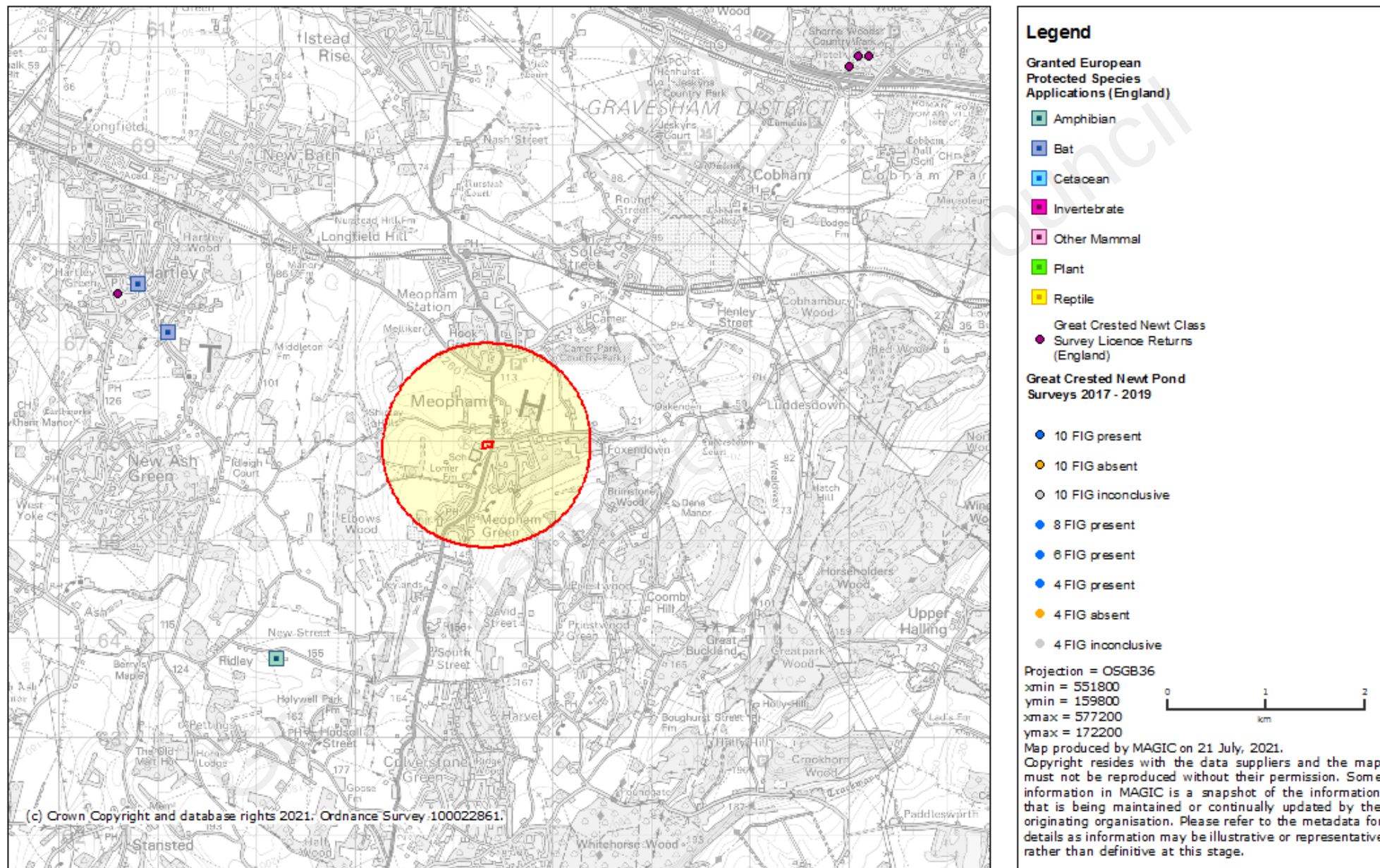
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Map produced by MAGIC on 21 July, 2021.

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EPSMIs



Appendix 4: Legislation and Planning Policy

New legislation (2020)

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 came into force when Britain left the European Union on 31st January 2020. It covered amendments relevant to this survey to:

Wildlife and Countryside Act 1981: England and Wales (x1 amendment)

Conservation of Habitats and Species Regulations 2017 (x29 amendments)

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 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 1,000 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 within the EU, both within and outside Natura 2000 sites.

Annex V species (over 90): Member States must ensure that 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.

SACs and SPAs up to 12 nautical miles from the coast (i.e. 'territorial waters') are afforded protection in the UK under the Conservation of Habitats and Species Regulations 2017 which consolidate all amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994.

The Conservation of Offshore Marine Habitats and Species Regulations 2017 consolidate and update the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007. The 2017 Regulations introduce amendments which transfer responsibility for European nature conservation in the Welsh offshore region to Welsh Ministers. This gives Welsh Ministers similar powers in Welsh offshore waters to those currently exercised by Scottish Ministers in Scottish offshore waters. These regulations transpose into national law Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive), and elements of Council Directive 2009/147/EC on the conservation of wild birds (Wild Birds Directive) in the UK offshore area. They came into force on 30th November 2017. These regulations apply to the UK's offshore marine area which covers waters beyond 12 nautical miles, within British Fishery Limits and the seabed within the UK Continental Shelf Designated Area. The Conservation of Habitats and Species Regulations 2017 form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12nm 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 Habitats Directive

The EC Habitats Directive aims to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those species of European importance. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (the Conservation Regulations) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended). The following notes are relevant for all species protected under the EC Habitats Directive:

In the Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.

The Habitats Regulations do not define the act of 'migration' and, therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.

In order to obtain a European protected species mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three 'tests':

- The action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment;
- There is no satisfactory alternative; and
- The action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

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) and Nature Conservation (Scotland) Act 2004.

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

Effects on development works:

A development licence will be required from the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 agency's 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 (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) 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.
- Intentionally or recklessly obstruct or prevent any wild bird from using its nest (Scotland only)

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC) 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
- In Scotland only, intentional or reckless disturbance whilst lekking
- In Scotland only, intentional or reckless harassment

Effects 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.

Reptiles (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.

Effects on development works:

A European Protected Species Mitigation (EPSM) Licence issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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

Effects on development works:

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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

Effects on development works:

An EPSM Licence issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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

Effects on development works:

An EPSM Licence issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 EPSM licence. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

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

Effects 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 an EPSM licence issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales (NB: Hazel Dormouse are entirely absent from Scotland)). 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

It is also classified as Endangered in the IUCN Red List of Endangered Species. As a result of this and other relevant crayfish legislation such as the Prohibition of Keeping of Live Fish (Crayfish) Order 1996, a series of licences are needed for working with White-clawed and non-native crayfish. These are:

- A licence to handle crayfish (therefore survey work) in England
- A licence for the keeping of crayfish in England and Wales with an exemption for Signal crayfish (England).
- People in the post-code areas listed with crayfish present prior to 1996 do not need to apply for consent for crayfish already established. It does not, however, allow any new stocking of non-native crayfish into waterbodies. Consent for trapping of non-native crayfish for control or consumption is most likely to be granted in Thames and Anglian regions in the areas with "go area" postcodes.
- Harvesting of crayfish is prohibited in much of England and in any part of Scotland and Wales.

Effects on development works:

The relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 (or recklessly in Scotland) picking, uprooting or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only)
- 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.

Effects on development works:

An EPSM licence will be required from the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 and Wales 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*

Effects 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 land owner 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*

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 Framework (ENGLAND)

The following sections are relevant to the report:

Making effective use of land

118. Planning policies and decisions should: a) encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains – such as developments that would enable new habitat creation or improve public access to the countryside;

Conserving and enhancing the natural environment

170. Planning policies and decisions should contribute to and enhance the natural and local environment by: a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

171. Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework⁵³; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Habitats and biodiversity

174. To protect and enhance biodiversity and geodiversity, plans should: a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁵⁶; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation⁵⁷; and b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

175. When determining planning applications, local planning authorities should apply the following principles: a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts) adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest; c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; **and d)**

development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

176. The following should be given the same protection as habitats sites: a) potential Special Protection Areas and possible Special Areas of Conservation; b) listed or proposed Ramsar sites⁵⁹; and c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

177. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.