

Kent Botany



ECOLOGICAL IMPACT ASSESSMENT

THE WHITE HOUSE, MEOPHAM, KENT

ON BEHALF: OF PENFOLD PROJECT SERVICES

March 2023

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Ecological Impact Assessment

Quality assurance and document version

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- 1.1** This Ecological Impact Assessment (ECIA) was undertaken to assess the potential impacts of a small householder development of a single property in Meopham, Kent, called the White House. The development involves the replacement of a conservatory at the rear of the property with an extension. There will be no impacts to the grounds of the property or the surrounding land.
- 1.2** The purpose of this report is to identify all potentially significant ecological effects, to set out any mitigation measures required to ensure compliance with nature conservation legislation, to identify how mitigation measures can be secured, to make suggestions for any necessary further survey work and for ecological enhancements which are proportionate to the scale of the development.
- 1.3** The methodology involved a careful examination of the exterior of the building using binoculars and a torch to assess the potential for it to support bat roosts. The assessment involved looking for possible access and egress points in the exterior walls and roof. The loft space of the building was also examined, using a high powered torch, for signs of bats such as feeding remains, bat fly pupal cases, droppings, staining and scratch marks.
- 1.4** This is a very small householder development, involving an alteration to a single property by replacing a conservatory with an extension to the rear of the house. The conclusion of this assessment is that the proposal will not have any impact upon protected species of wildlife or surrounding habitats. The house was assessed as having negligible potential to support bat roosts and therefore it has not been necessary to recommend further survey work. Enhancements to biodiversity which are proportionate to the scale of the proposal have been recommended.

2. INTRODUCTION

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- 2.1** The survey was completed by P. J. Smith BSc (Hons) MCIEEM, who has approximately twenty seven years of experience as a professional ecologist, specialising in botany and habitat assessment. The report was commissioned by Penfold Project Services on behalf of the clients, Mr & Mrs Joseph.
- 2.2** The purpose of this report is to identify all potentially significant ecological effects, to set out any mitigation measures required to ensure compliance with nature conservation legislation, to identify how mitigation measures can be secured, to make suggestions for any necessary further survey work and for ecological enhancements which are proportionate to the scale of the development.
- 2.3** The survey work aimed to assess the possible presence of species protected under current legislation. These species are protected under the Conservation of Habitats & Species Regulations 2017 (as amended) and the Wildlife & Countryside Act 1981 (as amended by CROW). Also assessed was the possible presence of species of principal importance for biodiversity conservation listed in Section 74(2) of the Countryside and Rights of Way Act 2000 and Section 41 of the Natural Environment and Rural Communities Act 2006.
- 2.4** The site is a four bedroom dwelling called the White House, set within a garden. The property dates back to the 1930s and has been extended previously. The house is set within a rural location in Meopham, west Kent. It lies just outside the boundary of the Kent Downs AONB.
- 2.5** The project is seeking full planning permission for a householder application to extend the rear of the property. The scope of works involves the demolition of the existing conservatory, which has a flat roof and is utilised as a balcony. An extension is proposed to replace the conservatory at the rear of the property. This will have a slightly larger footprint and will also have a flat roof, which will be used as a balcony. There will be very little impact to the existing pitched roof over the main dwelling. The site is located at central grid reference TQ65306607. The postal address of the property is The White House, Foxenden Lane, Meopham, Kent DA13 0BP. An architect's plan showing the development location is provided at appendix 1.

3. METHODOLOGY

3.1 SCOPE OF THE ASSESSMENT

Considering the very small size of this development, the zone of influence has been defined as not exceeding the boundaries of the garden surrounding the property. The assessment area for this project in terms of field study was therefore limited to the house and garden. Features considered within the assessment included proximity to statutory and non-statutory designated sites, areas of priority habitat and protected species.

3.2 DESK STUDY

Information on nearby designated sites, priority habitat types and European protected species licence returns was sought from:

MAGIC www.magic.gov.uk

KLIS [Default \(kent.gov.uk\)](http://Default(kent.gov.uk))

3.3 The total survey area is approximately 0.1 hectares. This includes the house and garden, as measured on magic.gov.uk. Designated sites, areas of priority habitat, and licence returns for European protected species were searched for within a one kilometre radius. The OS map was checked for ponds within a 500 metre radius. Appendix 2 and 3 includes maps showing the proximity of the development site to statutory & non statutory designated sites and areas of priority habitat types.

3.4 FIELD SURVEY

3.5 The survey was carried out during cold, damp weather conditions on the 10th of March 2023. Approximately two hours were spent on site, assessing the exterior of the building and the internal loft space.

3.6 The work has been carried out with reference to CIEEM's guidelines for Ecological Impact Assessment and the Bat Conservation Trust publication, Bat surveys for professional ecologists: good practice guidelines, 2016. The survey aimed to establish baseline ecological information about the site, identify important habitat features, assess the impacts of development upon them and make recommendations for mitigation and enhancement.

3.7 The loft space was searched for signs of bats including droppings, feeding remains, bat fly pupal cases, staining and scratch marks, using a high powered torch. The torch was also turned off within the loft space to allow detection of any light ingress through potential gaps in the roof, which may act as entrance and exit points for bats.

3.8 The exterior of the building was examined at ground level on all sides, using binoculars and a torch, paying particular attention to the soffit, the fascias, the roof tiles and the hanging tiles on the walls above the rendered lower sections of the house, searching for possible access points. Window sills, cobwebs and sheltered areas of the white rendered

3. METHODOLOGY

walls underneath open fronted wood stores (on the front and east facing sides of the house), were searched for signs of bats. The roof and walls were checked for missing tiles. The summerhouse and storage area beneath the conservatory at the rear of the house were also checked, for signs of bats, although it is entirely possible that the winter weather has removed any signs.

SURVEY LIMITATIONS

3.9. This report highlights the potential for protected and notable species evident on the day of the survey visit. It does not record any ecological features that may only appear at other times of the year and therefore were not evident at the time of the visit. A proportionate approach was taken due to the small development footprint and the proposal being limited to the alteration of one property. It was therefore decided that retrieving species records from the Kent & Medway Biological Records Centre would probably not add to the study.

3.10. The absence of desk study records cannot be relied upon to infer absence of a species or habitat. Often, the absence of records is a result of under-recording within the given data search area. Where ecological assessments indicate that there may be impacts to ecologically sensitive features, an outline of the requirement for further species surveys should be provided, with detailed mitigation suggested once the recommended further surveys are completed.

3.11. The above limitations are not considered likely to significantly affect the conclusions drawn within this ECIA. This report deals with matters of legal significance but does not constitute professional legal advice. The Client may wish to seek professional legal interpretation of the relevant wildlife legislation cited in this document.

3.12 In accordance with the 2019 CIEEM advice note on the lifespan of ecological reports and surveys, this survey report is valid for a period of twelve months from the date of the survey because the assessment is primarily concerned with bats, which are mobile species. If the development has not commenced within this timeframe then further assessment will be needed.

4. BASELINE ECOLOGICAL CONDITIONS

4.1 There are no statutory designated sites within a one kilometre radius of the development zone. The site lies just outside of the Kent Downs AONB which is to the north of Foxenden Lane. There are three Local Wildlife Sites within a one kilometre radius. Henley and Wood Pasture lies 54 metres to the north east. Strawberry hill pasture and woodland lies 500 metres to the south east and Happy Valley Meopham lies one km to the south west.

4.2 There are numerous areas of priority habitat within a 1 km radius of the site, including ancient woodland, wood pasture and parkland and traditional orchard.

4.3 There are no ponds within a 500 metre radius of the development site and no licence returns for European protected species, including bats.

4.4 The south facing rear of the property, (where the new extension is proposed) has a lower section which is rendered and a triangular upper section covered in hanging tiles. The conservatory occupies most of this side of the house. It is built upon brick supports beneath timber, with a glass fronted middle section, a wooden balcony on the top and a storage area built into the base. There is a small summerhouse directly in front of the rendered wall to the side of the conservatory and a small wooden storage area in between the summerhouse and the conservatory. There are no missing roof tiles or hanging tiles on the triangular section of roof. The soffit and fascia look mostly intact, with just one very small hole in the far south east corner. The summer house has timber cladding and a bitumen flat roof. It looks recently built and in good condition. The storage area beneath the conservatory is open sided and well lit, so offers no opportunities for bats.

4.5 The east facing side of the house looks in good condition. There are no gaps in the soffit or fascia and no missing roof tiles. There is an open fronted wood store in front of the rendered section of the wall. The sheltered section of the wall beneath the roof of the wood store was checked for signs of bats but none were found.

4.6 The west facing side of the house appears to have been extended with an upper section. The lower section is rendered and the upper section is covered in hanging tiles, which look intact. There are no obvious missing roof tiles. There are no holes in the soffit or fascia.

4.7 The bottom half of the north facing front of the house is rendered and the top section is covered in hanging tiles. The chimney stack runs along this side of the house and the brick work looks intact. There are no gaps in the soffit or fascia, which run flush to the wall and no missing hanging tiles. There is a very small area of damage to the corner of the triangular section of roof near the front door. The window sills and cobwebs above a small wood store were checked for signs of bats but none were found.

4. BASELINE ECOLOGICAL CONDITIONS

4.8 The loft space is very small with very limited features for bats. The internal space and insulation material were checked for droppings, feeding remains and bat fly pupal cases using a high powered torch, but none were found. The torch was also turned off while inspecting the loft to check for light ingress, which can indicate access points in the roof but none were revealed.

4.9 The garden consisted of a mown lawn with shrub borders. There were no ponds present and no other habitats which may be used by protected species. No were signs of badger setts or features which might be used by species of reptiles.

5. IMPACT ASSESSMENT AND MITIGATION MEASURES

5.1 The project is seeking full planning permission for a householder application to extend the rear of the property. The scope of works involves the demolition of the existing conservatory, which has a flat roof and is utilised as a balcony. An extension is proposed to replace the conservatory at the rear of the property. This will have a slightly larger footprint and will also have a flat roof, which will be used as a balcony.

5.2 This assessment did not record any priority or notable habitats within the development zone. The proposals will not affect the ecology of any designated sites, or areas of priority habitat type, considering the small scale of the building works, the distance from the sites and the lack of pathways for impact.

5.3 Bats are more likely to use the following types of building, (particularly during summer):

- Agricultural buildings (e.g. farmhouses, barns and outbuildings) of traditional brick or stone construction and/or with exposed wooden beams.
- Pre WWI housing, especially timber framed buildings, with exposed wooden beams or under slate or Kent peg tile roofs, with gable ends, particularly within 200m of woodland and/or water.
- Pre-1960 detached buildings and structures within 200m of woodland and/or water.
- Buildings not affected by artificial light levels
- Buildings with lots of access points that bats can fly into, in the form of cracks or crevices, with a roof warmed by the sun, particularly those that are south facing.
- Those with an uneven roof covering with gaps (but are not too draughty)
- Those with a large roof area with clear flying spaces.
- Those with large roof timbers (over 20cm in diameter), with cracks, joints and holes
- Those with hanging tiles or weather boarding (wood cladding), especially on south-facing walls and/or within 200m of woodland &/or water.

5.4 The house was assessed as having negligible potential to support bat roosts due to the lack of suitable features within the loft space and access points. The project is therefore not predicted to have any impacts upon protected or priority species. The alteration to the building is restricted to one side of the house. It will not fundamentally change the structure of the building or remove the loft space and there will be very little impact to the existing pitched roof over the main dwelling.

5.5 The surrounding rural area contains numerous blocks of suitable habitat (woodland, grassland, orchard and wood pasture) which are important to bats for foraging, commuting and feeding. However this development will not have any direct impacts upon the surrounding landscape or indirect impacts such as light spill.

5. IMPACT ASSESSMENT AND MITIGATION MEASURES

5.6 As a precautionary mitigation measure, the construction work affecting the pitched roof could be timed to avoid impacts upon bats. The least sensitive periods are autumn (September and October), after the maternity season has finished but before hibernation commences and early in the year (April) before the maternity season starts. If bats are found during the course of construction work then all work must cease and an ecologist will need to make a further assessment. The works could then only proceed lawfully under a development licence issued by Natural England. Bats and their roosts are fully protected under the Conservation of Habitats & Species Regulations 2017, (as amended) and the Wildlife & Countryside Act 1981 (as amended). Their roosts are protected regardless of whether the bats are currently occupying them.

6. RECOMMENDATIONS FOR ECOLOGICAL ENHANCEMENT

6.1 This section of the report makes qualitative recommendations for ecological enhancements which are proportionate to the scale of the development proposal. The requirement for biodiversity net gain is set out within the NPPF and the legal requirement for a minimum of 10% of measurable net gain is enshrined within the Environment Act 2021. This becomes legally binding in November 2023 at the end of the transition period. However, householder applications are exempt from the requirement to deliver measurable biodiversity net gain, demonstrated through the use of the DEFRA BNG metric. There is no specific policy on measurable biodiversity net gain within the Core Strategy of Gravesham Borough Council.

6.2 A proportionate suggestion for ecological enhancement would be the installation of bird nesting boxes and bat boxes to provide additional roosting sites. For example, the Kent Bat Box, Habibat, EcoSurv Bat Box or Schwegler Bat tube. Habibat is a large, solid bat box made of concrete with an internal roost space, which can be incorporated into the fabric of a building:

<http://www.habibat.co.uk/>

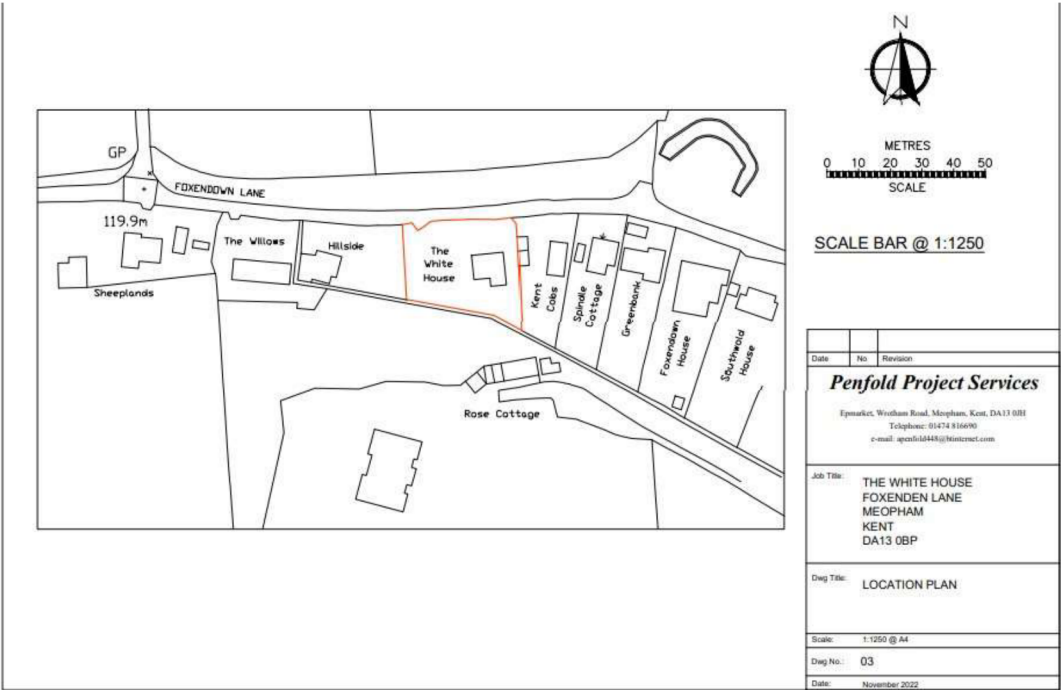
[Search \(nhbs.com\)](#)

<https://www.nhbs.com/1fr-schwegler-bat-tube>

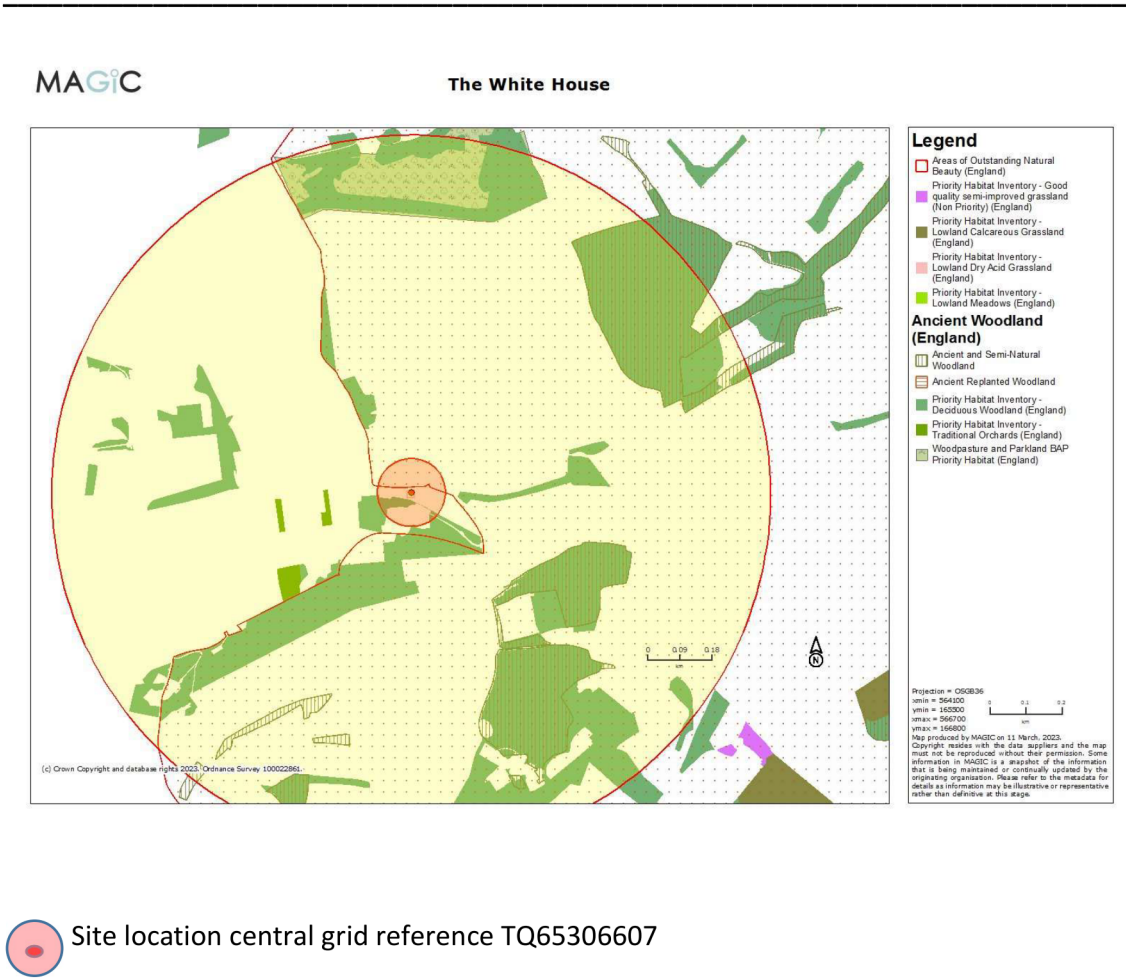
6.3 The Eco Kent Bat Box is designed to provide somewhere for crevice dwelling bats to roost. The wood used is rough sawn to provide good grip for bats inside the box. The two crevices are approximately 18mm wide, which is the ideal width for pipistrelles. The boxes can be mounted on both buildings and trees. They should be sited at least 4 metres from the ground and face south west to south east so that the box warms up during the day. (Bat Workers Manual, 3rd edition). It's also very important that they are not directly lit by outside lighting. The following website gives further guidance on how and where to install bat boxes. [Bat Boxes - Buildings, planning and development - Bat Conservation Trust \(bats.org.uk\)](#)

6.4 Installing bird boxes near to bat boxes is recommended to prevent birds from using the bat boxes to the detriment of bats. This could include sparrow terrace timber boxes or house martin nests, or a mix of open-fronted and hole-nesting boxes constructed from woodcrete. <https://www.nestbox.co.uk/products/sparrow-terrace-nest-box>

APPENDIX 1 LOCATION PLAN



APPENDIX 2 PROXIMITY TO DESIGNATED SITES AND PRIORITY HABITATS



Site location central grid reference TQ65306607

APPENDIX 3 PROXIMITY TO LOCAL WILDLIFE SITES PRIORITY HABITATS



APPENDIX 4 PHOTOGRAPHS

Photo 1 rear of property



Photo 2 rear of property



Photo3 east side of house



photo 4 west side of house



APPENDIX 4 PHOTOGRAPHS

Photo 5 front of house



APPENDIX 5 PROTECTED SPECIES LEGISLATION AND PLANNING POLICY

The legal protection of plants and animals in the UK is mainly provided for by:

- The Wildlife & Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000,
- The Conservation of Habitats and Species Regulations 2017 (as amended).

The level of protection for each species varies according to the conservation status of the species.

There are in addition a number of relevant but more specific Acts such as:

- The Protection of Badgers Act 1992

The Countryside and Rights of Way Act 2000 supplemented existing legislation for wildlife protection by prohibiting reckless acts that result in the killing or injuring of protected species.

The Natural Environment and Rural Communities Act 2006 requires that every public authority in exercising its functions must have regard as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Section 41 of this Act requires the Secretary of State to have prepared lists of species and habitats which are considered to be of principal importance for the purpose of conserving biodiversity. (the UK Biodiversity Action Plan Species)

Great crested newt, dormouse and all bats are among the species afforded the highest level of protection. These species are listed in Schedule 2 of the 2017 Regulations and in Schedule 5 of the Wildlife & Countryside Act 1981. For example for bats the legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture (or take) bats;
- Deliberately disturb bats (whether in a roost or not);
- Recklessly disturb roosting bats or obstruct access to their roosts;
- Damage or destroy bat roosts;
- Possess or transport a bat or any part of a bat, unless acquired legally;
- Sell (or offer for sale) or exchange bats, or parts of bats.

The legislation requires that development works affecting these species are subject to a licence granted by Natural England, as the appropriate authority for England.

All wild birds (birds in a wild state resident in or visiting Great Britain) and their nests and eggs are protected under the Wildlife & Countryside Act 1981. Particular emphasis is given to the protection of breeding birds. With certain exceptions, it is an offence to:

- Kill, injure or take wild birds
- Take, damage or destroy the nest of wild birds while in use or being built;
- Take or destroy the eggs of wild birds;
- Disturb wild birds listed in Schedule 1 when nest building or at a nest containing eggs or young, or disturb dependent young of wild birds

APPENDIX 5 PROTECTED SPECIES LEGISLATION AND PLANNING POLICY

Reptiles, including common lizards, slow-worms and grass snakes, are protected under the Wildlife & Countryside Act 1981 against deliberate killing, injuring and sale (Sub-Sections 9 (1) and 9 (5)). These species are listed in Schedule 5 of the Act.

In April 2008, water voles were given full protection under Section 9 of the amended 1998 Wildlife and Countryside Act of 1981. It is an offence to:

- Kill, injure or take water voles;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection;
- Disturb water voles while they are using such a place

A small number of invertebrates, including some species of beetle, cricket, butterfly and moth are protected under Section 9, Schedule 5 of the amended 1998 Wildlife and Countryside Act of 1981 against deliberate killing, injuring and taking.

A number of plant species are protected under Section 13 of the amended 1998 Wildlife and Countryside Act of 1981. It is an offence to intentionally pick, uproot or destroy any wild plant listed in Schedule 8 of the Act. The list includes both higher plants including several of the rarer orchids and lower plants including several mosses and lichens.

NATIONAL PLANNING POLICY FRAMEWORK (NPPF)

In addition to primary legislation, the government published the National Planning Policy Framework on 19th February 2019. Within the NPPF, Chapter 15 is headed Conserving and enhancing the natural environment

(Paragraphs 170 to 183).

Of relevance are the following statements: -

34. 'The planning system should contribute to and enhance the natural and local environment by, amongst other things... 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures...' (Paragraph 170); and

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 biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by establishing coherent ecological networks that are more resilient to current and future pressures...'

(Paragraph 170); and

To protect and enhance biodiversity and geodiversity, plans should: -

APPENDIX 5 PROTECTED SPECIES LEGISLATION AND PLANNING POLICY

'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 biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; 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.'

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.'

Gravesham Borough Council Policy

There is no specific policy on measurable biodiversity net gain within the Core Strategy (adopted September 2014). Policy CS12: Green Infrastructure states the following, in regard to protected species:

Where a negative impact on protected or priority habitats/species cannot be avoided on development sites and where the importance of the development is considered to outweigh the biodiversity impact, compensatory provision will be required either elsewhere on the site or off-site, including measures for ongoing maintenance.

APPENDIX 6 REFERENCES

Guidelines for Ecological Impact Assessment (ECIA) in the UK & Ireland CIEEM September 2018 V1.2 updated April 2022

Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition 2016

Advice Note on the Lifespan of Ecological Reports CIEEM April 2019