Mockbeggars Farm, Uckfield, East Sussex

Ecological Appraisal

January 2022

Quality Management	
Client:	Obsidian Strategic Asset Management Ltd
Project:	Mockbeggars Farm, Uckfield, East Sussex
Report Title:	Ecological Appraisal
Project Number:	ECO-6212
File Reference:	6212 EcoAp vf /LN/DS
Date:	27/01/2022

Copyright

The copyright of this document remains with Aspect Ecology. All rights reserved. The contents of this document therefore must not be copied or reproduced in whole or in part for any purpose without the written consent of Aspect Ecology.

Confidentiality

This report may contain sensitive information relating to protected species. All records of Badger setts must remain confidential. Where this report is circulated publicly or uploaded to online planning portals, reference to Badger setts must be redacted and any maps pertaining to the locations of Badger setts removed from the document.

Legal Guidance

The information set out within this report in no way constitutes a legal opinion on the relevant legislation (refer to the relevant Appendix for the main provisions of the legislation). The opinion of a legal professional should be sought if further advice is required.

Liability

This report has been prepared for the exclusive use of the commissioning client and unless otherwise agreed in writing by Aspect Ecology no other party may use, or rely on the contents of the report. No liability is accepted by Aspect Ecology for any use of this report, other than for the purposes for which it was originally prepared and provided. No warranty, express or implied, is made as to the advice in this report. The content of this report is partly based on information provided by third parties; Aspect accepts no liability for any reliance placed on such information. This report is subject to the restrictions and limitations referenced in Aspect Ecology's standard Terms of Business.

Contact Details

Aspect Ecology Ltd
Hardwick Business Park I Noral Way I Banbury I Oxfordshire OX16 2AF
t 01295 279721 e info@aspect-ecology.com
w www.aspect-ecology.com

Contents

Text:

Executive Summary 1

1 Introduction 2

2 Methodology 3

3 Ecological Designations 12

4 Habitats and Ecological Features 15

5 Faunal Use of the Site 20

6 Mitigation Measures and Biodiversity Net Gains 31

7 Conclusions 37

Plans:

Plan 6212/ECO1	Site Location
Plan 6212/ECO2	Ecological Designations
Plan 6212/ECO3	Habitats and Ecological Features
Plan 6212/ECO4	Bat Survey Results
Plan 6212/DM	Dormouse Survey Methods
Plan 6212/GCN	Great Crested Newt Survey Results

Photographs:

Photographs 1-8

Appendices:

Appendix 6212/1	Evaluation Methodology
Appendix 6212/2	Legislation Summary

Executive Summary

i) **Introduction.** Aspect Ecology was commissioned by Obsidian Strategic Asset Management in June 2021 to undertake an Ecological Appraisal in respect of proposed development of land at Mockbeggars Farm, Uckfield, East Sussex.

ii) **Proposals.** The proposals are for development of the site to provide 60 residential units, with associated access, drainage and landscaping.

iii) **Survey.** The site was surveyed in May 2021 based on standard extended Phase 1 methodology. In addition, a general appraisal of faunal species was undertaken to record the potential presence of any protected, rare or notable species, with specific surveys conducted in respect of bats, Badger, Dormice and Great Crested Newt.

iv) **Ecological Designations.** The site itself is not subject to any statutory or non-statutory ecological designations. The nearest statutory designation is Buxted Park Site of Special Scientific Interest (SSSI) located approximately 0.5km to the east of the site. The nearest non-statutory designation is the Budlett's Common Rocks Local Wildlife Site, located approximately 50m north of the site. The Ashdown Forest Special Protection Area (SPA) is located approximately 3km north of the site and the overlapping Special Area of Conservation (SAC) approximately 3.4km north. Subject to a financial contribution to strategic mitigation in respect of Ashdown Forest SPA, significant effects on designations are unlikely. Round Wood ancient woodland is located adjacent to the site and a buffer will be provided of at least 15m from the development footprint.

v) **Habitats.** The site is dominated by two semi-improved grassland fields with a very low number of scattered trees, which do not form important ecological features and their loss to the proposals is of negligible significance. Hedgerows are present at the boundary of the western field and a small area of woodland is present. These constitute important ecological features of site to local level value, the majority of which will be retained and protected. Small sections of hedgerow loss will be required to facilitate site access, which would be compensated by new, native, specie-rich, hedgerow planting.

vi) **Protected Species.** The on-site hedgerows, woodland and adjacent ancient woodland provide opportunities for a range of protected species, including foraging and commuting bats and nesting birds. Buffering of off-site ancient woodland, a sensitive lighting scheme, and new hedgerow planting will mitigate for impacts on foraging and commuting bats. The provision of bat boxes will enhance roosting opportunities on-site and new foraging habitat will be created. Mitigation measures for nesting birds will centre on the careful timing of vegetation clearance. Long-term nesting opportunities will be maintained, if not enhanced, under the proposals through new landscape planting and provision of nest boxes. Precautionary safeguards will also be implemented during vegetation clearance in respect of Dormouse, reptiles and amphibians.

vii) **Enhancements.** The proposals present the opportunity to secure a number of biodiversity net gains, including additional native tree, scrub and hedgerow planting, enhancement of the existing grassland, new roosting opportunities for bats, and more diverse nesting habitats for birds.

viii) **Summary.** The proposals have sought to minimise impacts on biodiversity and subject to the implementation of appropriate avoidance, mitigation and compensation measures, it is considered unlikely that the proposals will result in significant harm.

1 Introduction

1.1 Background and Proposals

1.1.1 Aspect Ecology was commissioned by Obsidian Strategic Asset Management in June 2021 to undertake an Ecological Appraisal in respect of proposed development of land at Mockbeggars Farm, Uckfield, East Sussex, centred at grid reference TQ 475230 (see Plan 6212/ECO1), hereafter referred to as 'the site'.

1.1.2 The proposals are for development of the site to provide 60 residential units, with associated access, drainage and landscaping.

1.2 Site Overview

1.2.1 The site is located within an urban-edge context on the northern outskirts of Uckfield. The site is bound to the south by detached residential properties on the edge of Uckfield. Round Wood ancient woodland is also present to the south-east of the site, adjacent to housing. To the west, the site is bound by London Road, beyond which is Paygate Wood and agricultural land. To the north of the site is Mockbeggars Farm, a pond, detached residential properties, woodland and a caravan dealer. The rear gardens of residential properties bound the east of the site, beyond which is Coopers Green Road, fields and woodland.

1.2.2 The site itself comprises two fields grazed by sheep and a single horse. A small area of woodland is present at the south-west of the site, adjacent to off-site woodland, and hedgerows bound the western field. The eastern field is bound partly by hedgerows and partly by fences forming the boundaries of adjacent properties.

1.3 Purpose of the Report

1.3.1 This report documents the methods and findings of the baseline ecology surveys and desktop study carried out in order to establish the existing ecological interest of the site, and subsequently provides an appraisal of the likely ecological effects of the proposals. The importance of the habitats and species present is evaluated. Where necessary, avoidance, mitigation and compensation measures are proposed so as to safeguard any significant existing ecological interest within the site and where appropriate, opportunities for ecological enhancement are identified with reference to national conservation priorities and local Biodiversity Action Plans (BAPs).

2 Methodology

2.1 Desktop Study

2.1.1 In order to compile background information on the site and its immediate surroundings the Sussex Biodiversity Record Centre and Badger Trust Sussex were contacted in May and November 2021, with data requested on the basis of a search radius of 1km for Badger records and 2km for all other records. Where information has been received this is reproduced at on Plan 6212/ECO2, where appropriate.

2.1.2 Information on statutory designations was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC) database, which utilises data provided by Natural England, with an extended search radius (25km). In addition, the MAGIC database was searched to identify the known presence of any Priority Habitats within or adjacent the site. Relevant information is reproduced on Plan 6212/ECO2, where appropriate.

2.1.3 In addition, the Woodland Trust database was searched for any records of ancient, veteran or notable trees within or adjacent to the site.

2.2 Habitat Survey

2.2.1 The site was surveyed in May 2021 in order to ascertain the general ecological value of the land contained within the boundaries of the site and to identify the main habitats and ecological features present.

2.2.2 The site was surveyed based on standard Phase 1 Habitat Survey methodology[1], whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail through Phase 2 surveys. This method was extended, in line with the Guidelines for Preliminary Ecological Appraisal[2] to record details on the actual or potential presence of any notable or protected species or habitats.

2.2.3 Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified. The nomenclature used for plant species is based on the Botanical Society for the British Isles (BSBI) Checklist.

2.3 Faunal Surveys

2.3.1 General faunal activity, such as mammals or birds observed visually or by call during the course of the surveys was recorded. Specific attention was also paid to the potential presence of any protected, rare or notable species, and specific consideration was given to bats, Badger, Dormice and Great Crested Newt, as described below.

[1] Joint Nature Conservation Committee (2010, as amended) *'Handbook for Phase 1 habitat survey: A technique for environmental audit.'*

[2] Chartered Institute for Ecology and Environmental Management (CIEEM) (2013) '*Guidelines for Preliminary Ecological Appraisal.*'

Bats[3]

Visual Inspection Surveys

2.3.2 Trees within and immediately adjacent to the site were assessed for their suitability to support roosting bats based on the presence of features such as holes, cracks, splits or loose bark. Suitability for roosting bats was rated based on relevant guidance[4] as:

- Negligible;
- Low;
- Moderate; or
- High.

2.3.3 Any potential roost features identified were also inspected for any signs indicating possible use by bats, e.g. staining, scratch marks, bat droppings, etc.

Activity Surveys

2.3.4 Walked transect surveys were undertaken in June, July and September 2021 to ascertain the level of usage of the site by foraging or commuting bats. This survey method involves walking a planned transect route with key listening points, specifically covering habitats/features with particular potential for commuting or foraging bats. Anabat Scout handheld bat detectors were employed alongside BatBox Duet detectors to aid identification of any bats observed. The transect was walked from sunset for approximately 2hours, with a minimum 5 minute stop at each listening point. This methodology was repeated from 2 hours prior to sunrise to complete the dawn survey.

2.3.5 This survey work was carried out during suitable weather conditions, as set out in Tables 2.1 and 2.2 below.

Table 2.1. Dusk walked transect survey details.

Date	Start & end times & time of sunset	Equipment used	Weather
29/06/2021	Start time: 21.20 End time: 23.19 Sunset: 21.19	Bat Box Duet and Anabat Scout.	Light rain towards end of survey, 100% cloud, BF1, 14°C
26/07/2021	Start time: 20.55 End time: 23.00 Sunset: 20.55	Anabat Scout.	Dry, 5% cloud, BF1, 17°C
07/09/2021	Start time: 19.32 End time: 21.32 Sunset: 19.32	Anabat Scout.	Dry, 0% cloud, BF1, 23°C
Comments: The surveys were undertaken by 2 surveyors under direction of licence holder 2019-38859-CL-CLS.			

BF0 = calm, BF12 = hurricane force

[3] Surveys based on: English Nature (2004) '*Bat Mitigation Guidelines'* and Collins, J. (ed.) (2016) '*Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn).' Bat Conservation Trust

[4] Collins, J. (ed.) (2016) '*Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn).' Bat Conservation Trust

Table 2.2. Dawn walked transect survey details.

Date	Start & end times & time of sunrise	Equipment used	Weather
08/09/2021	Start time: 04.24 End time: 06.24 Sunrise: 06.24	Anabat Scout	Dry, 0% cloud, BF2, 17°C
Comments: The survey was undertaken by 2 surveyors under direction of licence holder 2019-38859-CL-CLS.			

BF0 = calm, BF12 = hurricane force

2.3.6 Automated static detector surveys were also carried out during which Song Meter 4 (SM4) detectors were positioned at two locations within the site during June, July and September 2021. Detector 1 was situated on the western boundary of the site adjacent to the hedgerow along London Road and detector 2 was located within the central hedgerow (see Plan 6212/ECO4). The detectors were set to switch on approximately 30 minutes before sunset and switch off approximately 30 minutes after sunrise. The weather conditions during the static detector surveys are provided in Table 2.3 below.

Table 2.3. Automated detector survey details.

Survey Date	Weather Conditions			
	Wind (BF)	Temp(°)	Cloud Cover (%)	Precipitation
29/06/2021	3	12-13	100	Moderate rain
30/06/2021	1-2	13-14	19-78	Dry
01/07/2021	1	13-15	17-53	Dry
02/07/2021	1-2	11-15	72-83	Light shower
03/07/2021	2-3	14-15	19-92	Light shower
04/07/2021	2-4	14-13	78-100	Light shower
05/07/2021	4-5	10-17	78-100	Light shower
26/07/2021	2-3	16-17	14-77	Light shower
27/07/2021	2-4	14-16	32-81	Dry
28/07/2021	3-4	13-15	6-14	Dry
29/07/2021	2	13-14	57-100	Dry
30/07/2021	2-3	9-15	43-76	Light shower
31/07/2021	2	12-14	47-81	Light shower
01/08/2021	1-2	13-16	61-100	Moderate shower
08/09/2021	1-2	15-18	49-83	Moderate shower
09/09/2021	2	15-16	47-61	Dry
10/09/2021	2-3	13-17	60-100	Light shower
11/09/2021	2	13-17	19-24	Dry
12/09/2021	2	10-16	6-29	Dry
13/09/2021	2-3	11-16	13-54	Light shower
14/09/2021	2	11-14	11-57	Dry

BF0 = calm, BF12 = hurricane force

Analysis of Bat Survey Recordings

2.3.7 All bat calls were analysed using Analook W v4.4a or Anabat Insight to verify the species recorded during the survey work. Where recordings could not be reliably attributed to species (such as for *Myotis* species) or where overlaps between otherwise distinguishable species occur (such as in Pipistrelle bat calls around 40kHz or 50kHz) calls were identified to

genus level; in the case of calls which could not be distinguished between *Nyctalus* sp. and Serotine, these have been labelled as 'unidentified big bat' species.

Badger (*Meles meles*)[5]

2.3.1 A detailed Badger survey was carried out in May 2021. The survey comprised two main elements. The first element involved searching for evidence of Badger setts. For any setts that were encountered, each sett entrance was noted and mapped. The second element involved searching for signs of Badger activity such as well-worn paths and push-throughs, snagged hair, footprints, latrines and foraging signs, so as to build up a picture of any use of the site by Badger.

Dormouse *(Muscardinus avellanarius)*[6]

2.3.2 Surveys were undertaken to establish the presence/absence of Dormouse within the site between June and November 2021. Survey work followed the methodology set out within best practice guidance, whereby nesting tubes are attached to branches of trees and shrubs and checked on a regular basis for signs of use by Dormouse.

2.3.3 The guidance employs an indexation system to define survey effort, based on the number of tubes deployed and months over which these are in place and are checked for signs of use. Months in which use of nest tubes by Dormouse is more likely afford a higher number of points than months when there is a lower likelihood of use. The guidance recommends that determination of absence of Dormouse from a site should be based on a survey effort score of at least 20 points.

2.3.4 A total of 50 Dormouse nest tubes were deployed within the on-site hedgerows in June 2021 (see Plan 6212/DM). Nest tubes were checked in August, September, October November 2021, giving a total survey effort score of 18 points across the entire survey area.

2.3.5 In addition, a 'nut hunt' was carried out on the 18th November 2021 whereby the site was searched for hazelnuts and examined for evidence of Dormouse tooth marks. In accordance with the best practice guidance[7] to be confident that Dormice are absent 100 hazelnuts that were opened by small rodents (not squirrels) were examined, collected from across all areas of the site with Hazel presence.

Great Crested Newt (*Triturus cristatus)*

Habitat Suitability Index (HSI)

2.3.6 As a first step in identifying the potential presence of Great Crested Newt at the site, a Habitat Suitability Index (HSI) study was undertaken of all relevant water bodies within 250m[8] of the site boundary (based on a review of Ordnance Survey mapping and satellite imagery), where access was granted. Guidance set out within Natural England's Method Statement template, to be used when applying for a Great Crested Newt development licence, states that surveys of ponds within 500m of the site boundary are only required when '(a) data indicates that the pond(s) has potential to support a large Great Crested

5 Based on: Mammal Society (1989) '*Occasional Publication No. 9 – Surveying Badgers*'

6 Based on: English Nature (2003) '*Surveying dormice using nest tubes: Results and experiences from the South West Dormouse Project',* English Nature (2006) '*The Dormouse Conservation Handbook*', 2nd Edition;, English Nature Research Report No. 524; and Natural England (2011) '*Interim Natural England Advice Note – Dormouse surveys for mitigation licensing – best practice and common misconceptions*', WML-537 (12/11)

7 English Nature (2006) '*The Dormouse Conservation Handbook*', 2nd Edition

8 250m is the typical maximum migratory range of this species, see English Nature (2004) '*An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt* Triturus cristatus'. English Nature Research Report 576

Newt population, (b) the footprint contains particularly favourable habitat, (c) the development would have a substantial negative effect on that habitat and (d) there is an absence of dispersal barriers.' Given that in this instance, the site does not provide optimal terrestrial habitat and those ponds between 250m and 500m from the site are separated from the site by roads, it is considered that survey of ponds within 500m of the site boundary is not required, and that survey of ponds within 250m represents adequate survey effort.

2.3.7 An HSI study is used to assess the potential of water bodies to support Great Crested Newt. It is undertaken by attributing a score to a number of factors that can affect the presence or absence of this species. Ten factors are utilised in an HSI assessment, as described below:

- *SI1 Location.* The location of the water body within Great Britain;
- *SI2 Pond area.* The size of the water body;
- *SI3 Permanence.* How often the water body dries out;
- *SI4 Water Quality.* The water quality, based primarily on invertebrate diversity;
- *SI5 Shade.* The percentage of the perimeter of the water body that is shaded;
- *SI6 Fowl.* The presence or absence of water fowl;
- *SI7 Fish.* The presence or absence of fish;
- *SI8 Pond Count.* The number of water bodies within 1km of the surveyed water body (not counting those on the far side of major barriers such as roads);
- *SI9 Terrestrial.* The quality of terrestrial habitat surrounding the water body; and
- *SI10 Macrophytes.* The percentage cover of the surface area of the water body covered by macrophytes (aquatic plants).

2.3.8 The overall suitability of the water body is then determined by entering these figures into an equation devised by Oldham *et al*. (2000)[9]. The suitability of water bodies is classed into one of five categories, either 'poor', 'below average', 'average', 'good' or 'excellent'.

2.3.9 This HSI study was undertaken in line with the guidelines developed by Oldham *et al.* and subsequently adapted by ARG UK (2010)[10]. A suitably experienced ecologist undertook the assessment in line with these guidelines, with the study also supplemented by desktop research where appropriate.

Environmental DNA (eDNA)

2.3.10 An eDNA survey was carried out to determine the presence/absence of Great Crested Newt within an adjacent off-site pond (see P1 on Plan 6212/ECO4). Water samples were collected on the 21st June 2021 following the procedure outlined in the methods manual prepared for DEFRA by Biggs *et al*. (2014)[11]. The survey fell within the acceptable seasonal window set out by Natural England (15th April to 30th June)[12]. Samples were collected by suitably

[9] Oldham RS, Keeble J, Swan MJS & Jeffcote M (2000) '*Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*'. Herpetological Journal 10 (4), 143-155

[10] Amphibian & Reptile Groups of the UK (2010) '*ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index*'

[11] Biggs J., Ewald N., Valentini A., Gaboriaud C., Griffiths R.A., Foster J., Wilkinson J., Arnett A., Williams P. and Dunn F. (2014). '*Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA*'. Freshwater Habitats Trust, Oxford.

[12] Natural England (2015) '*Great crested newts: surveys and mitigation for development projects. Standing advice for local planning authorities who need to assess the impacts of development on great crested newts*'. Last updated at www.gov.uk on 24/12/2015.

licensed Aspect Ecology staff. The water samples were sent for laboratory analysis which was conducted by 'Fera' and also followed the procedure set out by Biggs *et al.* (2014)[14].

2.4 Survey Constraints and Limitations

2.4.1 All of the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent during different seasons. The Phase 1 habitat survey was undertaken within the optimal season therefore allowing a robust assessment of habitats and botanical interest across the site.

2.4.2 Attention was paid to the presence of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, the detectability of such species varies due to a number of factors, e.g. time of year, site management, etc., and hence the absence of invasive species should not be assumed even if no such species were detected during the Phase 1 survey.

2.4.3 The bat activity surveys covered the summer and autumn seasons but due to the timing of instruction no surveys were possible in spring. In addition, a fault with the microphone on one of the static detectors deployed at the end of June 2021 resulted in no recordings. However, based on the survey data obtained during summer and autumn, further survey work in spring would be unlikely to change the overall evaluation of bat activity at the site and, more importantly, would not alter the proposed approach to mitigation for bats. Furthermore, additional survey effort was employed during the summer months to provide additional data. As such, the absence of a spring bat survey is not a significant limitation.

2.4.4 The hand held bat detector used on the manual walked transect survey in June 2021 became faulty after 30mins such that not all calls were recorded or identified during this survey. Nonetheless, sufficient data was collected overall to allow a reasonable evaluation of use of the site by foraging and commuting bats. A recognised limitation of the bat activity surveys is that bat detectors can only provide an index of activity rather than absolute numbers of bats. Therefore, the results of the bat activity surveys should only be considered indicative of the amount of use bats make of an area rather than the abundance of bats. In addition, some bat species, e.g. Brown Long-eared Bat, are difficult to detect due to their quiet echolocation calls.

2.4.5 The recommended Dormouse survey effort of 20 points was not achieved as the limited extent of suitable habitat on-site meant that additional tubes could not be deployed to increase the survey effort. For this reason, a nut hunt was also completed; in accordance with the best practice guidance, subject to collecting 100 hazelnuts opened by small rodents without finding evidence of Dormice it is considered '*highly [probable] that Dormice are not present*.' As such, the combination of the nest tube survey and nut hunt is considered sufficient to determine presence/ absence.

2.4.6 Two ponds are present within 250m of the site boundary. Access was requested to survey both ponds, however permission was only granted to survey pond P1. As such, precautionary mitigation measures are recommended during vegetation clearance, as discussed further in Chapter 5 below.

2.5 Ecological Evaluation Methodology

2.5.1 The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and

Environmental Management (CIEEM, 2018)[13], which involves identifying 'important ecological features' within a defined geographical context (i.e. international, national, regional, county, district, local or site importance). For full details refer to Appendix 6212/1.

2.6 National Policy Approach to Biodiversity in the Planning System

2.6.1 The National Planning Policy Framework (NPPF)[14] describes the Government's national policies on 'conserving and enhancing the natural environment' (Chapter 15). NPPF is accompanied by Planning Practice Guidance on 'Biodiversity, ecosystems and green infrastructure' and ODPM Circular 06/2005[15].

2.6.2 NPPF takes forward the Government's strategic objective to halt overall biodiversity loss[16], as set out at Paragraph 174, which states that planning policies and decisions should contribute to and enhance the natural and local environment by:

'*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*'

2.6.3 The approach to dealing with biodiversity in the context of planning applications is set out at Paragraph 180:

'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 improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'

[13] CIEEM (2018) '*Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*', ver. 1.1, Chartered Institute of Ecology and Environmental Management, Winchester
[14] Ministry of Housing, Communities & Local Government (2021) '*National Planning Policy Framework*'
[15] ODPM (2006) '*Circular 06/2005: Planning for Biodiversity and Geological Conservation – A Guide to Good Practice*'
[16] DEFRA (2011) '*Biodiversity 2020: A strategy for England's wildlife and ecosystem services*'

2.6.4 The above approach encapsulates the 'mitigation hierarchy' described in British Standard BS 42020:2019[17], which involves the following step-wise process:

- **Avoidance –** avoiding adverse effects through good design;
- **Mitigation –** where it is unavoidable, mitigation measures should be employed to minimise adverse effects;
- **Compensation –** where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm; and
- **Enhancement –** planning decisions often present the opportunity to deliver benefits for biodiversity, which can also be explored alongside the above measures to resolve potential adverse effects.

2.6.5 The 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 (BS 42020:2019, section 5.5).

2.7 Local Policy

2.7.1 The draft Wealden Local Plan 2019 has been withdrawn, therefore current local policy consists of the Core Strategy Local Plan (2013) and the saved policies of the adopted Wealden Local Plan (1998).

2.7.2 **Policy WCS12 Biodiversity of the Core Strategy Local Plan** states:

'*In order to contribute to the biodiversity targets provided in the Sussex Biodiversity Action Plan the Council will prevent a net loss of biodiversity, ensure a comprehensive network of habitats, and work with partners to maximise opportunities to ensure habitats, biodiversity features and ecological networks are maintained, restored, enhanced and where possible created to achieve a net gain in biodiversity and sustain wildlife in both rural and urban areas. This will be achieved through the development and implementation of an integrated green network strategy.*

In accordance with Planning Policy Statement 9, please see page 49 'Working with the South Downs National Park Authority' and the reference to publication of the NPPF and cancellation of a number of Planning Policy Statements and Guidance Notes, there may be exceptional circumstances when compensatory measures for a net loss of biodiversity is required. Appropriate compensatory measures will be required to contribute to Wealden's overall biodiversity resource, and may include enhancement of Wealden's Biodiversity Opportunity Areas and other relevant Biodiversity Action Plan habitats, so that there is overall no net loss of biodiversity.

In order to avoid the adverse effect on the integrity of the Ashdown Forest Special Protection Area and Special Area of Conservation it is the Council's intention to reduce the recreational impact of visitors resulting from new housing development within 7 kilometres of Ashdown Forest by creating an exclusion zone of 400 metres for net increases in dwellings in the Delivery and Site Allocations Development Plan Document and requiring provision of Suitable Alternative Natural Green Space and contributions to on-site visitor management measures as part of policies required as a result of development at SD1, SD8, SD9 and SD10 in the Strategic Sites Development Plan Document. Mitigation measures within 7 kilometres of Ashdown Forest for windfall development, including provision of Suitable Alternative Natural Green Space and on-site visitor management measures will be contained within the

[17] British Standards Institution (2013) '*Biodiversity – Code of practice for planning and development*', BS 42020:2019

Delivery and Sites Allocation Development Plan Document and will be associated with the implementation of the integrated green network strategy. In the meantime the Council will work with appropriate partners to identify Suitable Alternative Natural Green Space and on-site management measures at Ashdown Forest so that otherwise acceptable development is not prevented from coming forward by the absence of acceptable mitigation.

The Council will also undertake further investigation of the impacts of nitrogen deposition on the Ashdown Forest Special Area of Conservation so that its effects on development in the longer term can be more fully understood and mitigated if appropriate.'

2.7.3 From the saved policies of the Wealden Local Plan, the following are relevant to biodiversity at the site.

2.7.4 **EN12:** '*The Council will seek to retain and enhance the contribution of trees and woodland areas to the landscape character of the District, including the amenity value of trees in built up areas…*'

2.7.5 **EN13: '***The Council will resist development proposals that involve the clear felling or otherwise prejudice the ecology of Ancient Semi-Natural Woodlands, as defined by English Nature.*'

2.7.6 **EN15**: '*The Council will seek to safeguard designated nature conservation sites by resisting development or land use changes which would be likely to adversely affect their nature conservation value. The weight to be afforded to nature conservation interests will have regard to their status…*'

3 Ecological Designations

3.1 Statutory Designations

Description

International Designations

3.1.1 The Ashdown Forest Special Protection Area (SPA) is located approximately 3km north of the site. The SPA is selected for supporting more than 1% of the British breeding population of Nightjar *Caprimulgus europaeus* and Dartford Warbler *Sylvia undata*. Overlapping much of the Ashdown Forest SPA is the Ashdown Forest Special Area of Conservation (SAC), which is located approximately 3.4km north of the site. This SAC is selected for the presence of the Annex I habitats 'Northern Atlantic wet heaths with *Erica tetralix*' and 'European dry heaths'. The Annex II species Great Crested Newt is present as a qualifying feature, but not a primary reason for selection of the site.

National Designations

3.1.2 The statutory designations of ecological importance that occur within the local area are shown on Plan 6216/ECO2. The nearest statutory designation is Buxted Park Site of Special Scientific Interest (SSSI) located approximately 0.5km to the east of the site. The SSSI is an old deer park designated for the variety of unimproved grassland communities with parkland trees and areas of woodland, which together support a large invertebrate population. Invertebrates are associated with marshlands and river banks but more importantly over mature trees and deadwood. Natural England has developed Impact Risk Zones (IRZs) as an initial tool to help assess the risk of developments adversely affecting SSSIs, taking into account the type and scale of developments. The site sits within an IRZ in relation to Buxted Park SSSI, however the IRZ does not apply to residential development.

3.1.3 The next nearest statutory designation is West Park Uckfield Local Nature Reserve (LNR) located approximately 1.5km to the south-west of the site. This LNR includes mixed woodland, grassland and a sensitive marsh area. A population of Dormouse has also been recorded present.

Evaluation

International Designations

3.1.4 No direct effects on the Ashdown Forest SAC and SPA would result from the proposed development, however there is the potential for indirect effects, in particular from increased recreational activity within the SPA and a reduction in air quality due to increased traffic on roads passing through the SAC.

3.1.5 With regard to recreational pressure, visitor surveys have identified a 7km zone of influence from which the majority of visitors to the SPA are likely to originate. The site is located within this zone of influence and although it is not connected to the Ashdown Forest SPA by the footpath network, it is a relatively short (~4km) drive. Considering the small scale of the development it is unlikely that the proposals alone would have an adverse effect on the SPA due to recreational activity, however there is the potential for in-combination effects. Policy WCS12 of the Core Strategy states that it is '*the Council's intention to reduce the recreational impact of visitors resulting from new housing development within 7 kilometres of Ashdown Forest*'. This takes the form of the provision of Suitable Alternative Natural Green Space (SANG) and Strategic Access Management and Monitoring (SAMM). A financial

contribution will therefore be made to delivery of SANG and SAMM[18]. Subject to this strategic mitigation it is unlikely that the proposals would have an adverse effect on the integrity of Ashdown Forest SPA.

3.1.6 Increased development has the potential to increase Nitrogen deposition, Nitrogen Oxides and ammonia adjacent to roads passing through Ashdown Forest SAC, due to an increase in vehicles on the roads. In February 2019 Natural England published supplementary advice on the conservation objectives for the Ashdown Forest SAC[19] which sets out that '*assessment of improvements in vehicular technology and in particular Euro6/VI standards that all vehicles are currently being manufactured to, will outweigh impacts from new development. The improvements will be marginally retarded by additional development but future nitrogen deposition and concentration will continue to decline with the existing trend.*' The Supplementary Advice continues by stating that the *'Natural England Commissioned Report 210 identifies that expected increase in Nitrogen levels from additional transport would fall below the level that would reduce species richness on the site even if the expected declining trend in Nitrogen failed to materialise.'* Accordingly, it is unlikely that the proposed development would result in significant adverse impacts on the qualifying features of the SAC due to air pollution, either alone or in-combination with other developments.

National Designations

3.1.7 The Buxted Park SSSI is within relatively close proximity of the site, although separated by fields and woodland and with no footpath connection from the site. In accordance with the Natural England IRZs, it is unlikely that the Buxted Park SSSI, and the invertebrate interest for which it is designated, would be significantly affected by the proposals. Other national statutory designations are further removed from the site and unlikely to be significantly affected by the proposals.

3.2 Non-statutory Designations

Description

3.2.1 The non-statutory designations of nature conservation interest that occur within the local area are shown on Plan 6212/ECO2. The nearest non-statutory designation is the Budlett's Common Rocks Local Wildlife Site (LWS), located approximately 50m north of the site. The LWS is designated for extensive rocks located within three large gardens which support rare and uncommon liverworts and mosses. The next nearest non-statutory designation is a Designated Road Verge located approximately 120m to the north-east of the site. No specific information is available on the closest Designated Road Verges, however these sites are typically of importance for wildflowers, invertebrates and fungi and provide a green corridor due to their linear nature.

Evaluation

3.2.2 The site itself is not subject to any non-statutory nature conservation designations. The Buddlett's Common Ricks LWS is separated from the site and is located within private gardens. The interest features (mosses and liverworts) depend on the management of adjacent vegetation to prevent over-shading. As such, significant impacts as a result of the

[18] Ashdown Forest Special Protection Area (SPA) Strategic Access Management and Monitoring strategy. Tariff Guidance for Lewes District Council, Mid Sussec District Council, Sevenoaks District Council, District Council of Tandridge, Tunbridge Wells Borough Council, Wealden District Council. Updated 11th October 2019.
[19] Natural England (2019) *European Site Conservation Objectives: Supplementary advice on conserving and restoring site features – Ashdown Forest Special Area of Conservation (SAC) Site Code UK0030080*

proposed development are unlikely. The Designated Road Verge is separated from the site such that no significant adverse impacts are expected as a result of development. All other non-statutory designations in the local area are well separated from the site by roads and existing development, and given the nature and scale of the proposals, these designations are unlikely to be affected.

3.3 Priority Habitats, Ancient Woodland and Notable Trees

Description

3.3.1 There are no records of any notable or veteran trees within or adjacent to the site. Round Wood ancient woodland is located off-site immediately adjacent to the south-east of the site. During the Phase 1 habitat survey of the site this woodland was noted to be on a bank raised from the site and to have been adversely impacted through clearance, excavation and tree felling (see Photograph 1). Species noted to be present include Ash *Fraxinus excelsior*, English Oak *Quercus robur*, Silver Birch *Betula pendula*, Common Beech *Fagus sylvatica*, Bramble *Rubus fruticosus* agg., Hazel *Corylus avellana*, Holly *Ilex aquifolium* and Bluebell *Hyacinthoides non-scripta*. In addition, Paygate Wood ancient woodland is located to the west of London Road, approximately 14m from the site.

Evaluation

3.3.2 Round Wood ancient woodland is located immediately adjacent to the site and therefore a buffer from the built development of at least 15m will be included within the proposals, in accordance with standing advice[20]. This buffer will include the retained area of on-site woodland as well as new native scrub planting and enhanced grassland, therefore enhancing the woodland edge habitat. The implementation of pollution and dust control safeguards will protect the ancient woodland habitat during construction, and the implementation of a sensitive lighting scheme will ensure the woodland can continue to be used by nocturnal fauna, including bats and Badgers (see Chapter 6).

3.3.3 Although some development may be required within 15m of Paygate Wood ancient woodland for the access road, this is off of London Road which is located between the ancient woodland and the site. As such, the proposals would not have an adverse impact on the habitat, subject to the implementation of suitable pollution safeguards (as discussed in Chapter 6).

3.4 Summary

3.4.1 The site itself is not subject to any statutory or non-statutory ecological designations and, subject to the implementation of appropriate mitigation measures with regard to Ashdown Forest SPA and the adjacent ancient woodland (as described above), it is unlikely that any such designations in the surrounding area will be significantly affected by the proposals.

[20] Forestry Commission & Natural England (2018) *Ancient woodland, ancient trees and veteran trees: protecting them from development.*

4 Habitats and Ecological Features

4.1 Background Records

4.1.1 No specific records of any protected, rare or notable plant species from within or immediately adjacent to the site are included within the information returned from the Records Centre, although numerous records are from the same 10km grid square without specific location data. The closest record is for Meylan's Pouchwort *Calypogeia integristipula* associated with Buddlett's Common Rocks LWS, located approximately 50m north of the site. No evidence for the presence of any of these species within the site was recorded during the survey work undertaken.

4.2 Overview

4.2.1 The habitats and ecological features present within the site are described below and evaluated in terms of whether they constitute an important ecological feature and their level of importance, taking into account the status of habitat types and the presence of rare plant communities or individual plant species of elevated interest. The likely effects of the proposals on the habitats and ecological features are then assessed. The value of habitats for the fauna they may support is considered separately in Chapter 5 below.

4.2.2 The following habitats/ecological features were identified within/adjacent to the site:

- Semi-improved Grassland;
- Hedgerows;
- Trees; and
- Woodland.

4.2.3 The locations of these habitat types and features are illustrated on Plan 6212/ECO3 and described in detail below.

4.3 Priority Habitats

4.3.1 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of habitats which are of principal importance for conservation in England. This list is largely derived from the 'Priority Habitats' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority habitats under the subsequent country-level biodiversity strategies.

4.3.2 Of the habitats within the site, the hedgerows are considered to qualify as Priority Habitats and therefore constitute important ecological features. This is discussed further in the relevant habitat section below.

4.4 Semi-improved Grassland

Description

4.4.1 The site is dominated by two pastoral fields grazed by sheep and a single horse. At the time of the Phase 1 habitat survey all of the livestock were located within the eastern field, however, during some other site visits the majority of sheep were within the western field.

It therefore appears that the two fields are grazed on rotation, and the sward height varies accordingly. At the time of the Phase 1 habitat survey in May 2021 the sward height was approximately 2cm in both fields, but during a site visit in November 2021 the sward reached approximately 10-20cm, except where the horse had been confined to the western part of the eastern field and the sward was very short (~2cm).

4.4.2 The two fields have a similar species composition and are dominated by Perennial Rye-grass *Lolium perenne* and Yorkshire-fog *Holcus lanatus*. Other species present include Creeping Bent *Agrostis stolonifera*, Cock's-foot *Dactylis glomerata*, Meadow Foxtail *Alopecurus pratensis*, Sweet Vernal-grass *Anthoxanthum odoratum*, Creeping Buttercup *Ranunculus repens*, Common Mouse-ear *Cerastium fontanum*, White Clover *Trifolium repens*, Meadow Buttercup *Ranunculus acris*, Common Bird's-foot-trefoil *Lotus corniculatus*, Dandelion *Taraxacum officinale* agg., Dock *Rumex* sp., Common Nettle *Urtica dioica*, Creeping Thistle *Cirsium arvense* and occasional Soft Rush *Juncus effusus* and Marsh Thistle *Cirsium palustre.* Additional species recorded in the eastern field include frequent Yarrow *Achillea millefolium*, occasional Speedwell *Veronica* sp., Spear Thistle *Cirsium vulgare* and Annual Meadow-grass *Poa annua* and rarely Thyme-leaved Speedwell *Veronica serpyllifolia* and Field Woodrush *Luzula campestre*. Both fields have a low abundance of herbs and the western field has discrete areas dominated by Creeping Thistle and Common Nettle.

Evaluation

4.4.3 Overall, the grassland supports a low diversity of common and widespread species and based on the type and abundance of species present it can be classified as species-poor semi-improved grassland[21]. Few indicator species of higher quality grassland are present and some areas have a high abundance of Common Nettle and Creeping Thistle. Semi-improved grassland is likely to be common in the local area. The grassland does not constitute an important ecological feature and its loss to the proposals is therefore of negligible ecological significance. Some of the grassland adjacent to the off-site ancient woodland will be retained under the scheme and a sensitive management regime introduced so as to provide a botanical enhancement (see Chapter 6).

4.5 Hedgerows

Description

4.5.1 Five hedgerows are present within the site or at the boundaries of the grassland fields. The hedgerows are dominated by native species and the majority are mature features. The hedgerows are described in more detail in Table 4.1 overleaf.

[21] Natural England (2010) 'Higher Level Stewardship – Farm Environment Plan (FEP) Manual', 3rd Edition

Table 4.1. Hedgerow descriptions.

No.	H	W	Woody species	Avg. per 30m*	Ground flora & climbers	Associated features	Comments (including structure / management)	Likely to qualify#
H1	6m	4m	Hawthorn, Holly, Hazel, Blackthorn, Dog-rose, Ash (m)	5	Bluebell, Lords & Ladies, Ground Ivy, Nettle, Ivy, Cleavers, Honeysuckle, Bramble	<10% gaps, connects with hedges, dry ditch	Not recently managed except at western end where some face management.	N
H2	5-7m	3-5m	Hawthorn, Holly, Hazel, Blackthorn, Oak, Willow, Dog-rose, Snowberry, Ash (sm), Cherry (y), Beech (sm), Horse Chestnut	6	Lords & Ladies, Ground Ivy, Nettle, Ivy, Cleavers, Honeysuckle, Ground Elder, White Bryony, Cuckoo Flower, Bramble	Bank, <10% gaps, connects with hedges, standard trees	Generally dense, unmanaged. Steep bank to London Road	**Y**
H3	3m	3m	Hawthorn, Holly, Hazel, Blackthorn, Oak	5	Lords & Ladies, Wood Avens, Nettle, Ground Ivy, Cuckoo Flower, Ivy, Bramble	<10% gaps, connects with hedge	Managed to top and off-site, outgrowth into site	N
H4	2m	2-3m	Hawthorn, Holly, Hazel, Willow, Silver Birch, Blackthorn Elder, Ash (m),	6	Lords & Ladies, Nettle	<10% gaps, connects with hedge and woodland, bank	Northern part managed to A shape, southern part unmanaged on western face. On bank to west.	N
H5 (off-site)	1.5m	0.75m	Hawthorn, Holly,	2	Ivy	Connects with woodland	Managed to box. Off-site beyond stock fence.	N

Woody species (as listed under Schedule 3 of the Hedgerows Regulations 1997) and woodland ground flora species (as listed under Schedule 2 of the Hedgerows Regulations 1997) underlined, y = young, sm = semi-mature, m = mature, pv = possible veteran, B = bank, W = wall, br = bridleway, f/p = footpath, b/w = byway, (D) = dominant species

* estimated average number of woody species (as listed under Schedule 3 of the Hedgerows Regulations 1997) in any one 30m stretch

likely to qualify – as 'important' under the wildlife and landscape criteria of the Hedgerows Regulations 1997

Evaluation

4.5.2 The on-site hedgerows are mature, substantial and mostly outgrown in nature, with the western boundary hedgerow (H2) containing a number of young to semi-mature trees, albeit many of the Ash trees within hedgerow H2 have early signs of Ash Dieback. All of the on-site hedgerows are species-rich[22] and from a preliminary appraisal hedgerow H2 is likely to qualify as ecologically 'important' under the Hedgerows Regulations 1997, based on the number of woody species and associated features.

4.5.3 All of the hedgerows within the site qualify as a Priority Habitat based on the standard definition[23], which includes all hedgerows (>20m long and <5m wide) consisting predominantly (≥80%) of at least one native woody species. It has been estimated that approximately 84% of countryside hedgerows in GB qualify as a Priority Habitat under this definition.

[22] i.e. five or more native woody species within a 30m length (or four or more in Northern England) – FEP Manual

[23] Based on: Biodiversity Reporting and Information Group (2011) '*UK Biodiversity Action Plan (BAP) Priority Habitat Descriptions'*, ed. Ant Maddock

4.5.4 The hedgerows within the site constitute important ecological features. The hedgerows also connect to off-site woodland at the north and south-west, albeit the network is fragmented by off-site housing to the north-west, south and east, and hedgerows are common in the surrounding local landscape. Overall the hedgerows are therefore assessed as being of importance at the local level.

4.5.5 The proposals include the loss of small sections of hedgerows H2 and H4 for construction of the access road. New native species-rich hedgerow planting, particularly at the eastern site boundaries will compensate for this small loss of hedgerow and overall provide a net gain in hedgerows on site. All other hedgerows will be retained and protected during the construction phase of the proposals as per the recommendations included at Chapter 6 below. Although there will be some loss of connectivity due to hedgerow fragmentation, hedgerow H2 is not well connected to other semi-natural habitat to the north and south, and new hedgerow planting at the north-east of the site will enhance connectivity in this area. As such, the small extent of hedgerow loss is not of ecological significance.

4.6 Trees

Description

4.6.1 A number of trees were recorded within the site, largely associated with the hedgerows (as set out at Table 4.2 above). Standard trees within the hedgerows were noted to range from young to mature in age. In addition, a small collection of young to semi-mature Silver Birch *Betula pendula*, Common Beech *Fagus sylvatica* and Variegated Poplar *Populus candicans* 'Aurora' is present within the field at the north-east of the site.

Evaluation

4.6.2 The more mature trees recorded within the hedgerows are of ecological interest in their own right, albeit at present do not constitute important ecological features. Other trees located outside the hedgerows are generally relatively small in size being young to semi-mature in nature such that they are currently of limited ecological interest and are also not considered to form important ecological features. Many of the Ash trees were recorded to have Ash Dieback as part of the Arboricultural Survey[24] and therefore of limited remaining lifespan.

4.6.3 It is understood that the trees within hedgerows, with the exception of those considered unsafe due to Ash Dieback, will be retained under the proposals. The small group of trees at the north-east of the site would be lost to facilitate the proposals, however this would be of negligible ecological significance and compensated through new native tree planting. Subject to recommended safeguards set out at Chapter 6 below, the trees retained within and adjacent to the site will be protected under the proposals.

4.7 Woodland

Description

4.7.1 A group of trees is present adjacent to the western edge of Round Wood, within the field boundary, comprising semi-mature Aspen *Populus tremula* and English Oak, with two mature English Oak. No shrub layer is present and the field layer is grazed by sheep. The field layer contains some woodland species, some escapees from adjacent gardens and some grassland species, including Creeping Bent, Perennial Rye-grass, Nettle, Dock, Lords

[24] tree:fabrik (2021) *Arboricultural Survey Land at Mockbeggars Farm, Uckfield.*

and Ladies *Arum maculatum*, Wood Anemone *Anemone nemorosa*, Bluebell, and Spanish/hybrid Bluebells.

Evaluation

4.7.2 Although the group of trees resembles woodland and is connected to the adjacent Round Wood, there is no shrub layer and very limited woodland ground flora. The woodland is not identified in MAGIC as a Priority Habitat, which is unsurprising as it does not represent a good quality example of this habitat type. Nonetheless, Policy EN12 seeks to protect woodland, therefore for the purposes of this appraisal the woodland is assessed as an important ecological feature, albeit of poor quality and only of site level value. The woodland will be retained and protected as part of the proposals, whilst new native scrub planting and the removal of grazing pressure will provide a habitat enhancement.

4.8 Habitat Evaluation Summary

4.8.1 On the basis of the above, the following habitats within and adjacent to the site are considered to form important ecological features:

Table 4.2. Evaluation summary of habitats forming important ecological features.

Habitat	Level of Importance
Hedgerows	Local
Woodland	Site

4.8.2 Other habitats present within the site include semi-improved grassland and scattered trees. However, these habitats do not form important ecological features.

5 Faunal Use of the Site

5.1 Overview

5.1.1 During the survey work, general observations were made of any faunal use of the site with specific attention paid to the potential presence of protected or notable species. Specific survey work was undertaken in respect of Badgers, bats, Dormouse and Great Crested Newt, with the results described below.

5.2 Priority Species

5.2.1 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of species which are of principal importance for conservation in England. This list is largely derived from the 'Priority Species' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority species under the subsequent country-level biodiversity strategies.

5.2.2 During the survey work undertaken, the Priority Species House Sparrow *Passer domesticus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Barbastelle *Barbastella barbastellus*, Long-eared Bat *Plecotus* sp. and *Myotis* species were recorded within the site. This is discussed further below.

5.3 Bats

5.3.1 **Legislation.** All British bats are classed as European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended) and are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). As such, both bats and their roosts (breeding sites and resting places) receive full protection under the legislation (see Appendix 6212/2 for detailed provisions). If proposed development work is likely to result in an offence a licence may need to be obtained from Natural England which would be subject to appropriate measures to safeguard bats. Given all bats are protected species, they are considered to represent important ecological features. A number of bat species are also considered S41 Priority Species.

5.3.2 **Background Records.** No specific records of bats from within or immediately adjacent to the site were returned from the desktop study. Information received from the LRC returned records of Common Pipistrelle *Pipistrellus pipistellus*, Soprano Pipistrelle, Brown Long-eared Bat *Plecotus auritus*, Natterer's Bat *Myotis nattereri*, Noctule *Nyctalus noctula*, Serotine *Eptesicus serotinus*, Whiskered Bat *Myotis mystacinus* and Daubenton's Bat *Myotis daubentonii* from the local area. The closest record is for Long-eared Bat *Plecotus sp.* droppings found during a building inspection in 2006, located approximately 130m to the south of the site.

5.3.3 **Survey Results**

Visual Inspection Surveys (roosting)

5.3.4 No buildings are present on-site and no trees with features suitable to support roosting were recorded on-site.

Activity surveys (foraging /commuting)

5.3.5 The species-poor semi-improved grassland which dominates the site is sub-optimal for foraging and commuting bats. The hedgerows provide potential foraging opportunities and form linear corridors that could act as navigational aids for commuting bats and provide connectivity to off-site habitats. As such, bat activity surveys were undertaken at the site between June and September 2021.

5.3.6 **Manual walked transect surveys.** The activity survey results are illustrated on Plan 6212/ECO4 and summarised in the table below.

Table 5.1. Results of the dusk and dawn walked transect surveys.

Species	Number of Passes Recorded	Approximate % of Total Passes Recorded
29th June 2021 (dusk)*		
Common Pipistrelle	7	44
Soprano Pipistrelle	3	19
Pipistrelle sp.	2	12
Unidentified bat	4	25
Total	**16**	**100**
26th July 2021 (dusk)		
Common Pipistrelle	46	70
Soprano Pipistrelle	11	17
Big Bat sp.	3	4
Myotis sp.	6	9
Total	**66**	**100**
7th September 2021 (dusk)		
Common Pipistrelle	37	47
Soprano Pipistrelle	27	35
Myotis sp.	14	18
Total	**78**	**100**
8th September 2021 (dawn)		
Common Pipistrelle	40	56
Soprano Pipistrelle	7	10
Myotis sp.	24	34
Total	**71**	**100**

* A fault with the bat detector microphone after first 30min meant that sound files were not recorded and therefore number of passes may be artificially low.

5.3.7 As shown by the above results, during the dusk and dawn surveys in all months, Common Pipistrelle was the most commonly recorded species, accounting for 56% of all registrations. Soprano Pipistrelle and Myotis sp. were recorded to a lesser extent, accounting for 21% and 19% respectively. *Nyctalus/ Eptesicus* sp. were only recorded during the July dusk activity survey and only in small numbers.

5.3.8 During the walked transects, the highest levels of bat activity were recorded along the central hedgerow H4, along the edge of the off-site woodland (both to the north and west) and at the north-east of the site (see Plan 6212/ECO4). Lower levels of activity were recorded along the western site boundary and at the north of both fields. Both foraging and commuting passes were recorded, with bats recorded flying along hedgerows but also crossing across the eastern field and flying off-site to the east and west.

5.3.9 **Remote Detector Surveys.** The results of the automated static bat surveys are summarised in Tables 5.2 and 5.3 below.

Table 5.2. Automated static bat survey summary for Location 1 (western boundary hedgerow).

Survey Date	Detector Location 1: Western Hedgerow				
	Number of registrations by species#				
	Myotis	**'Big Bat'**	**Pip 45**	**Pip 55**	**BLE**
29th June – 5th July 2021	DETECTOR FAILED				
26th July 2021	1	2	149	4	-
27th July 2021	-	-	99	1	-
28th July 2021	2	-	67	6	-
29th July 2021	3	-	200	4	-
30th July 2021	1	-	142	1	-
31th July 2021	6	-	137	7	-
1st August 2021	3	-	18	-	-
7th September 2021	6	-	16	3	1
8th September 2021	2	-	29	12	2
9th September 2021	10	1	15	4	-
10th September 2021	30	1	144	13	-
11th September 2021	11	1	13	1	-
12th September 2021	9	-	8	3	-
13th September 2021	8	2	16	2	-
Total registrations	**92**	**7**	**1053**	**61**	**3**
Approximate % of total registrations	**7.6**	**0.6**	**86.6**	**5.0**	**0.2**

Key:

Myotis- *Myotis* sp.

Pip 45- Common Pipistrelle

Pip 55- Soprano Pipistrelle

'Big Bat' - Noctule, Leislers or Serotine

BLE - Brown Long-eared bat

- Figures shown are the total no. of registrations recorded during the dusk to the proceeding dawn period for each date shown, i.e. a recording 'night' for the 20th June will be registrations recorded from ~18.00 on the 20/06 till 07.00 on the morning of the 21/06.

Table 5.3. Automated static bat survey summary for Location 2 (central hedgerow H4).

Survey Date	Detector Location 2: Central Hedgerow H4				
	Number of registrations by species#				
	Myotis	'Big Bat'	Pip 45	Pip 55	Barb
29th June 2021	-	1	198	16	-
30th June 2021	-	-	114	-	-
1st July 2021	-	-	5	2	-
2nd July 2021	-	8	51	-	-
3rd July 2021	1	9	248	9	-
4th July 2021	-	-	164	3	-
26th July 2021	1	4	69	5	-
27th July 2021	-	3	137	4	-
28th July 2021	-	-	228	17	-
29th July 2021	-	1	67	12	-
30th July 2021	-	2	511	22	-
31st July 2021	-	6	287	4	-
1st August 2021	-	2	9	8	-
6th September 2021	-	3	63	37	1
7th September 2021	-	-	9	4	-
8th September 2021	-	1	26	12	-
9th September 2021	-	1	7	7	2
Total registrations	**2**	**41**	**2193**	**162**	**3**
Approximate % of total registrations	**0.1**	**1.7**	**91.3**	**6.7**	**0.1**

Key:

Myotis- *Myotis* sp.

Pip 45- Common Pipistrelle

Pip 55- Soprano Pipistrelle

'Big Bat' - Noctule, Leislers or Serotine

Barb - Barbastelle bat

- Figures shown are the total no. of registrations recorded during the dusk to the proceeding dawn period for each date shown, i.e. a recording 'night' for the 20th June will be registrations recorded from ~18.00 on the 20/06 till 07.00 on the morning of the 21/06.

5.3.10 **Summary.** During the first survey, carried out between late June – early July 2021, the static detector at location 1 failed to record. At location 2, the central hedgerow, 94% of registrations (780) were attributed to Common Pipistrelle, 4% to Soprano Pipistrelle (30) and the remainder to big bat and Myotis species.

5.3.11 During the second survey period in July 2021, 95% (812) of registrations at the western hedgerow (location 1) were attributed to Common Pipistrelle, 3% to Soprano Pipistrelle (23) and the remainder to big bat and Myotis species. At location 2, a greater number of bat registrations were recorded but in similar proportions, with 94% attributed to Common Pipistrelle (1,308) and 5% to Soprano Pipistrelle (72).

5.3.12 During the third survey in September, lower numbers of bat registrations were recorded at both detector locations. A higher proportion of Soprano Pipistrelle were recorded at both detectors, with higher numbers of Myotis species at location 1. During this period 66% of registrations (241) at location 1 were attributed to Common Pipistrelle, 21% to Myotis species (76) and 10% to Soprano Pipistrelle (38). At location two, 60% of registrations were Common Pipistrelle (105) and 35% Soprano Pipistrelle (60). In September three Long-eared Bat registrations were recorded at static location 1 and three Barbastelle registrations were recorded at location 2.

5.3.13 **Evaluation and Assessment of Likely Effects**

Roosting

5.3.14 No roosting opportunities are present on-site. As such, the proposals provide the opportunity to provide new roosting opportunities on-site in the form of bat boxes. Trees with features suitable to support roosting bats were recorded in the adjacent Round Wood and there may be opportunities in association with the off-site woodland to the north, and farm buildings to the north-west. Precautionary mitigation measures are therefore set out in Chapter 6 below in regard to any off-site roosts and subject to their implementation it is considered that roosting bats will be fully safeguarded under the proposals.

Foraging / Commuting

5.3.15 As noted above, the hedgerows and woodland offer foraging and commuting habitat for bats and indeed foraging and commuting bats were recorded during the activity surveys. In particular activity levels were relatively high adjacent to the central hedgerow and off-site ancient woodland during walked activity surveys and bats were recorded foraging and commuting in this area. This was also supported by relatively high levels of activity recorded by the static detector located within this central hedgerow (location 2) during July compared to location 1, albeit activity levels were much lower in September.

5.3.16 The ancient woodland will be buffered by at least 15m from development, thereby retaining foraging and commuting opportunities at these site boundaries and ensuring bats can continue to utilise the off-site woodland itself. The access road will fragment the central hedgerow, approximately where static detector location 2 was located. No evidence of this hedgerow forming an important commuting corridor was recorded during the walked activity surveys, however activity was relatively high in this location during the automated surveys. To compensate for the small loss of the central hedgerow, new hedgerow planting at the north-west, north and north-east site boundaries will provide enhanced connectivity compared to the existing situation as these boundaries are currently formed of garden fences and a short well maintained hedgerow.

5.3.17 The access from London Road will cause fragmentation of the western boundary hedgerow. However, bat activity here was low during the walked transect surveys and the static detector surveys did not record notably high levels of bat activity. London Road itself is not lit and to the west is Paygate Wood and a connecting hedgerow which would not be impacted by the proposals. As such, north-south connectivity will be retained west of London Road and foraging habitat will be retained on-site at this boundary.

5.3.18 The vast majority of bats recorded at the site were Common and Soprano Pipistrelle which are common and widespread and tolerant of lighting. Very low numbers of registrations of other bat species were recorded on-site, including for big bat species (no more than 10 in one night), Long-eared Bat (three in total) and Myotis species (maximum 30 in one night). Only three registrations of Barbastelle were recorded at static detector location 2, on two nights in September, indicating the site is not an important foraging or commuting location for this rare species, which typically prefers woodland habitat. The off-site woodland areas will be protected under the proposals and buffering and a sensitive lighting scheme will ensure bats such as Barbastelle can continue to utilise these off-site habitats.

5.3.19 Considering the bat species recorded on-site and the levels of bat activity, in combination with the habitats present and greater quality habitats located within the surrounding landscape, the site is considered to be of local level value to bats. Subject to the implementation of the recommendations outlined at Chapter 6 below, along with other

ecological enhancements, it is considered that the conservation status of local bat populations will be fully safeguarded under the scheme.

5.4 Badger

5.4.1 **Legislation.** Badger receive legislative protection under the Protection of Badgers Act 1992 (see Appendix 6212/2 for detailed provisions), and as such should be assessed as an important ecological feature. The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain. It is the duty of planning authorities to consider the conservation and welfare impacts of development upon Badger and issue permissions accordingly.

5.4.2 Licences can be obtained from Natural England for development activities that would otherwise be unlawful under the legislation. Guidance on the types of activity that should be licensed is laid out in the relevant best practice guidance. [25, 26]

5.4.3 **Background Records.** The Badger Trust Sussex returned several records of Badger in the surrounding 1km search area, though no records originate from the site itself. The closest record of Badger is approximately 500m to the east of the site.

5.4.4 **Survey Results and Evaluation.** No Badger setts were recorded on-site or immediately adjacent to the site and no latrines were recorded on-site. During a bat activity survey in September 2021 a Badger was observed passing through the western field, from the direction of London Road, and entering Round Wood off-site.

5.4.5 No setts will be lost as a result of the proposals and there is no evidence to suggest the site provides an important foraging resource for Badger. However, a Badger was recorded passing through the site and safeguarding measures are outlined at Chapter 6 to ensure Badgers are fully safeguarded should they enter the site during construction. The site retains connectivity between east and west of the site along the hedgerow corridors and the ancient woodland buffer, which will also provide suitable foraging habitat for Badger. As such, it is unlikely that the local Badger population would be significantly impacted by the proposals.

5.5 Dormouse

5.5.1 **Legislation:** Dormouse is fully protected under the Wildlife and Countryside Act 1981 (as amended) and is a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Such legislation affords protection to individuals of the species and their breeding sites and places of rest (see Appendix 6212/2 for detailed provisions). Dormouse is also a S41 Priority Species. On this basis, Dormouse is considered to form an important ecological feature.

5.5.2 **Background Records:** Numerous records of Dormouse were returned from the desktop study, though no records originate from the site itself. The closest record of Dormouse is for one individual located approximately 230m to the west of the site, dated from March 2021. There is also a record of an individual Dormouse approximately 450m to the east of the site, dated from 2018, indicating that Dormouse are present within woodland in relatively close proximity both to the east and west of the site.

[25] English Nature (2002) '*Badgers and Development*'
[26] Natural England (2011) '*Badgers and Development: A Guide to Best Practice and Licensing*', Interim Guidance Document

5.5.3 **Survey Results:** The site provides good opportunities for Dormouse in the form of the unmanaged hedgerows, albeit the network is relatively limited and disconnected from the off-site woodland with known Dormice presence by roads.

5.5.4 Given the presence of potential Dormouse habitat within the site and known presence in the local area, specific Dormouse survey work was undertaken at the site. No evidence of Dormice was found during the nest tube survey or the nut hunt.

5.5.5 **Evaluation:** The proposals include the loss of very short sections of suitable Dormouse habitat, in the form of hedgerows, to facilitate access. As no evidence of Dormice on-site was recorded during the specific survey work undertaken, no licensing will be required. Nevertheless, due to the known presence of Dormice within close proximity of the site, precautionary mitigation measures will be implemented during site clearance to safeguard this species in the unlikely event that they enter the on-site hedgerows (see Chapter 6).

5.6 Other Mammals

5.6.1 **Legislation.** A number of other UK mammal species do not receive direct legislative protection relevant to development activities but may receive protection against acts of cruelty (e.g. under the Wild Mammals (Protection) Act 1996). In addition, a number of these mammal species are S41 Priority Species and should be assessed as important ecological features.

5.6.2 **Background Records.** No specific records of other mammals from within or adjacent to the site were returned from the desktop study. A number of records of Hedgehog *Erinaceus europaeus* (Priority Species) was returned from within the search area around the site, with the closest being approximately 0.5km to the south of the site (dated 2017). A number of records of Water Vole were returned from the surrounding search area, with the closest specific record of this species being located approximately 1.2km to the south east of the site, dated from 2012.

5.6.3 **Survey Results and Evaluation.** No evidence of any other protected, rare or notable mammal species was recorded within the site. Other mammal species likely to utilise the site, such as Fox *Vulpes vulpes*, remain common in both a local and national context, and as mentioned above do not receive specific legislative protection in a development context. As such, these species are not a material planning consideration and the loss of potential opportunities for these species to the proposals is of negligible significance. No habitat suitable for Water Vole is present on site

5.6.4 The desktop study returned background records of Hedgehog within close proximity of the site, which is a Priority Species. The site offers potential opportunities for this species, particularly in the form of the hedgerows, although habitats are unlikely to be of importance in a local context, and Hedgehog is considered to be of importance at a site level only. The majority of the hedgerows are retained under the proposals and new habitat will be created through the landscape scheme. In any event, abundant similar opportunities are present within the local area and there is no evidence to suggest the proposals will significantly affect local populations of this species. However, it is recommended that precautionary safeguards are put in place to minimise the risk of harm to Hedgehog in the event this species is present, as detailed in Chapter 6 below.

5.7 Amphibians

5.7.1 **Legislation.** All British amphibian species receive a degree of protection under the Wildlife and Countryside Act 1981 (as amended). Great Crested Newt is protected under the Act and

is also classed as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). As such, both Great Crested Newt and habitats utilised by this species are afforded protection (see Appendix 6212/2 for detailed provisions). Great Crested Newt is also a S41 Priority Species, as are Common Toad *Bufo bufo*, Natterjack Toad *Epidalea calamita*, and Pool Frog *Pelophylax lessonae*. As such, these species should be assessed as important ecological features.

5.7.2 **Background Records.** Records of Smooth Newt *Lissotriton vulgaris* and Common Frog *Rana temporaria* were returned from a 100x100m grid square containing the southern section of the site, dated from 2002. These records are noted to originate from a pond in a residential garden, albeit the address provided is further to the south than the grid reference. No specific records of Great Crested Newt from within or adjacent to the site were returned from the desktop study. A number of records of Great Crested Newt, Palmate Newt *Lissotriton helveticus*, and Common Toad were returned from the search area surrounding the site, with the closest record of Great Crested Newt located approximately 0.6km to the south of the site (dated 1986). The closest recent record of Great Crested Newt is from 2006, located approximately 1.5km to the south-west of the site.

5.7.3 **Survey Results.** Two ponds are recorded on OS mapping within 250m of the site (P1 and P2 on Plan 6212/GCN). An initial appraisal of pond P1 was made using the HSI system to identify potential suitability to support Great Crested Newt, see Table 5.4, below. Access was not granted to pond P2. From a review of aerial mapping pond P2 appears to be an ornamental pond located to the front of a residential property with a hardstanding surround, although in close proximity to vegetation.

Table 5.4. HSI survey results.

Pond	Suitability Indices										HSI Score	Suitability
	SI 1 Location	**SI 2** Pond Area	**SI 3** Pond Drying	**SI 4** Water Quality	**SI 5** Shade	**SI 6** Water Fowl	**SI 7** Fish	**SI 8** Ponds	**SI 9** Terrestrial Habitat	**SI 10** Macrophytes		
P1	1	0.1	0.9	1	1	1	1	0.95	0.67	0.6	**0.71**	*Good*

5.7.4 Pond P1 is located approximately 30m from the site boundary within an area of long sward grass and scattered trees and has 'good' suitability for Great Crested Newt. As such an eDNA survey was completed of the pond in June 2021, which returned a negative result.

5.7.5 **Evaluation and Assessment of Likely Effects.** Great Crested Newt were found to be absent from pond P1 and no records of this species within close proximity of the site were returned from the data search, therefore no licensing is required. However, as access was not granted to pond P2 precautionary safeguards will be implemented during site clearance to safeguard any amphibians that may be present, as detailed in Chapter 6 below.

5.8 Reptiles

5.8.1 **Legislation**. All six species of British reptile are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), which protects individuals against intentional killing or injury. Sand Lizard *Lacerta agilis* and Smooth Snake *Coronella austriaca* receive additional protection under the Conservation of Habitats and Species Regulations 2017 (as amended);

refer to Appendix 6212/2 for detailed provisions. All six reptile species are also S41 Priority Species. As such, all reptile species should be assessed as important ecological features.

5.8.2 **Background Records.** Information from the LRC returned records for Common Lizard *Zootoca vivipara* from a 100x100m grid square containing the southern section of the site, dated from 2002, and a record for Grass Snake located approximately 60m north of the site dated 2020. Further records of Slow Worm *Anguis fragilis*, Grass Snake *Natrix natrix* and Adder *Vipera berus* were returned from the 2km radius surrounding the site.

5.8.3 **Survey Results and Evaluation.** The site is dominated by semi-improved grassland with a uniform sward which is of limited suitability for reptiles. It is therefore unlikely that the site supports a resident reptile population. However, considering the known presence of reptiles within the local area there is the potential for individuals to enter the site and therefore precautionary safeguards will be implemented during vegetation clearance, as detailed in Chapter 6 below.

5.9 Birds

5.9.1 **Legislation.** All wild birds and their nests receive protection under Section 1 of the Wildlife and Countryside Act 1981 (as amended) in respect of killing and injury, and their nests, whilst being built or in use, cannot be taken, damaged or destroyed. Species included on Schedule 1 of the Act receive greater protection and are subject to special penalties (see Appendix 6212/2 for detailed provisions).

5.9.2 **Conservation Status.** The conservation importance of British bird species is categorised based on a number of criteria including the level of threat to a species' population status[27]. Species are listed as Green, Amber or Red. Red Listed species are considered to be of the highest conservation concern being either globally threatened and or experiencing a high/rapid level of population decline (>50% over the past 25 years). A number of birds are also S41 Priority Species. Red and Amber listed species and priority species should be assessed as important ecological features.

5.9.3 **Background Records.** No records of any bird species were returned from within or immediately adjacent to the site. A number of records of Red Listed and Priority Species were returned from the search area, including Skylark *Alauda arvensis,* House Sparrow *Passer domesticus,* Tree Sparrow *Passer montanus*, Song Thrush *Turdus philomelos*, Cuckoo *Cuculus canorus*, Hawfinch *Coccothraustes coccothraustes*, Kingfisher *Alcedo atthis*, Wood Warbler *Phylloscopus sibilatrix*, Marsh Tit *Poecile palustris*, Starling *Sturnus vulgaris* and Nightingale *Luscinia megarhynchos*. The closest record is for an individual Barn Owl located approximately 150m to the north of the site (dated 2020).

5.9.4 **Survey Results and Evaluation.** Several species of bird were observed within the site during the Phase 1 survey including: Carrion Crow *Corvus corone*, Blue Tit *Cyanistes caeruleus*, Jackdaw *Corvus monedula*, Magpie *Pica pica*, Green Woodpecker *Picus viridis*, Nuthatch *Sitta europaea*, Blackbird *Turdus merula*, House Sparrow, and Great Tit *Parus major*.

5.9.5 The site contains potential foraging and nesting habitat for a range of bird species particularly in the form of the hedgerows, trees and woodland, and it is likely that Priority Species (including House Sparrow recorded) utilise the site. However, the habitats present are common in the surrounding area and there are also large areas of woodland, heath and

[27] Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) *'Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man'* British Birds *108*, pp.708-746

waterbodies of high value to birds in the local area. As such, it is unlikely that the site supports an important bird assemblage or is of value beyond the site to local level for this species group.

5.9.6 The proposals will result in the loss of two sections of hedgerow to facilitate site access and this could potentially affect any nesting birds that may be present at the time of works. Accordingly, a number of safeguards in respect of nesting birds are proposed, as detailed in Chapter 6 below. In the long-term, new nesting and foraging opportunities will be available for birds as described in Chapter 6 below.

5.10 Invertebrates

5.10.1 **Legislation.** A number of invertebrate species are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). In addition, Large Blue Butterfly *Maculinea arion*, Fisher's Estuarine Moth *Gortyna borelii lunata* and Lesser Whirlpool Ram's-horn Snail *Anisus vorticulus* receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended); refer to Appendix 6212/2 for detailed provisions. A number of invertebrates are also S41 Priority Species. Where such species are present, they should be assessed as important ecological features.

5.10.2 **Background Records.** No specific records of invertebrates were returned from within or adjacent to the site. A number of records of invertebrate Priority Species were returned from the wider 2km search radius, including Small Heath *Coenonympha pamphilus*, Dingy Skipper *Erynnis tages*, Wall *Lasiommata megera*, White Admiral *Limenitis Camilla*, Cinnabar *Tyria jacobaeae*, Buff Ermine *Spilosoma luteum*, Brindled Beauty *Lycia hirtaria* and Dusky Thorn *Ennomos fuscantaria*.

5.10.3 **Survey Results and Evaluation.** No evidence for the presence of any protected, rare or notable invertebrate species was recorded within the site. The site is dominated by species-poor semi-improved grassland which is likely to support only a limited diversity of invertebrates. The site has mature hedgerows but otherwise contains relatively few micro-habitats that would typically indicate elevated potential for invertebrates[28], such as a variable topography with areas of vertical exposed soil, areas of species-rich semi-natural vegetation; variable vegetation structure with frequent patches of tussocks combined with short turf; free-draining light soils; walls with friable mortar or fibrous dung. Accordingly, given the habitat composition of the site and lack of adjacent sites designated for significant invertebrate interest, it is considered unlikely that the proposals will result in significant harm to any protected, rare or notable invertebrate populations, and the site is not likely to support an important invertebrate assemblage.

5.11 Summary

5.11.1 On the basis of the above, a summary of the evaluation of fauna is provided overleaf.

[28] Natural England (2010) 'Higher Level Stewardship – Farm Environment Plan (FEP) Manual', 3rd Edition

Table 5.5. Evaluation summary of fauna forming important ecological features.

Species / Group	Supported by or associated with the site	Level of Importance
Bats – Roosting	Negligible opportunities on-site	N/A
Bats – Foraging / Commuting	Confirmed presence on site	Local
Badger	No setts, although confirmed commuting through site	Local
Dormouse	Confirmed absence	N/A
Great Crested Newt	Confirmed absence within off-site pond and unlikely present on-site	N/A
Reptiles	Unlikely to be present although may pass through site	Site
Birds	Confirmed presence on site	Site - Local

5.11.2 Other fauna likely to be supported by the site include non-priority species of mammals, amphibians and invertebrates. However, these species do not form important ecological features.

6 Mitigation Measures and Biodiversity Net Gains

6.1 Mitigation

6.1.1 Based on the habitats, ecological features and associated fauna identified within / adjacent to the site, it is proposed that the following mitigation measures (**MM1 – 11**) are implemented under the proposals. Further, detailed mitigation strategies or method statements can be secured via suitably-worded planning conditions, as recommended by relevant best practice guidance (BS 42020:2019).

Ancient Woodland

6.1.2 **MM1 – Ancient Woodland Buffer.** A buffer of at least 15m from the off-site Round Wood ancient woodland will be retained from built development. This buffer will include native scrub planting and enhancement of the grassland so as to provide an enhanced woodland edge habitat.

6.1.3 **MM2 – Dust Control and Pollution Prevention.** In order to safeguard the adjacent ancient woodland during construction best practice safeguards will be implemented, including the following:

- Storage areas for chemicals, fuels, etc. will be sited well away from the ancient woodland (minimum 15m), and stored on an impervious base within an oil-tight bund with no drainage outlet. Spill kits with sand, earth or commercial products approved for the stored materials shall be kept close to storage areas for use in case of spillages;
- Where possible, and with prior agreement of the sewage undertaker, silty water should be disposed of to the foul sewer or via another suitable form of disposal, e.g. tanker off-site;
- Water washing of vehicles, particularly those carrying fresh concrete and cement, mixing plant, etc. will be carried out in a contained area as far from the ancient woodland as practicable (minimum 15m), to avoid contamination; and
- Refuelling of plant will take place in a designated area, on an impermeable surface, away from the ancient woodland (minimum 15m).
- Dust generating activities will not be located within the ancient woodland buffer;
- Surfaces and dusty activities will be damped down as required by the use of agreed wet cleaning methods or mechanical road sweepers during periods of dry weather;
- All relevant loads entering and leaving the site should be covered; and
- Stock piles of materials should exist for the shortest possible period of time and be kept away from the ancient woodland.

Hedgerows, Woodland and Trees

6.1.4 **MM3 – Hedgerow, Woodland and Tree Protection.** All hedgerows, trees and woodland to be retained within and adjacent to the proposed development shall be protected during construction in line with standard arboriculturalist best practice (BS5837:2012) or as otherwise directed by a suitably competent arboriculturalist. This will involve the use of

protective fencing or other methods appropriate to safeguard the root protection areas of retained trees / hedgerows.

Bats

6.1.5 **MM4 – Update Survey.** Should any considerable time (e.g. >2 years) elapse between the survey work detailed above and any development works, a further survey of the on-site trees should be undertaken prior to the commencement of works to confirm the continued absence of bat roosting opportunities.

6.1.6 **MM5 – Sensitive Lighting.** Light-spill onto retained and newly created habitat, in particular the retained hedgerows and woodland (on and off-site), will be minimised in accordance with good practice guidance[29] to reduce potential impacts on light-sensitive bats (and other nocturnal fauna). This may be achieved through the implementation of a sensitively designed lighting strategy, with consideration given to the following key factors:

- **Light exclusion zones –** ideally no lighting should be used in areas likely to be used by bats. Light exclusion zones or 'dark buffers' may be used to provide interconnected areas free of artificial illumination to allow bats to move around the site;
- **Appropriate luminaire specifications** – consideration should be given to the type of luminaires used, in particular luminaries should lack UV elements and metal halide and fluorescent sources should be avoided in preference for LED luminaries. A warm white spectrum (ideally <2,700K) should be adopted to reduce the blue light component;
- **Light barriers / screening –** new planting (e.g. hedgerows and trees) or fences, walls and buildings can be strategically positioned to reduce light spill;
- **Spacing and height of lighting units –** increasing spacing between lighting units will minimise the area illuminated and allow bats to fly in the dark refuges between lights. Reducing the height of lighting will also help decrease the volume of illuminated space and give bats a chance to fly over lighting units (providing the light does not spill above the vertical plane). Low level lighting options should be considered for any parking areas and pedestrian / cycle routes, e.g. bollard lighting, handrail lighting or LED footpath lighting;
- **Light intensity –** light intensity (i.e. lux levels) should be kept as low as possible to reduce the overall amount and spread of illumination;
- **Directionality –** to avoid light spill lighting should be directed only to where it is needed. Particular attention should be paid to avoid the upward spread of light so as to minimise trespass and sky glow;
- **Dimming and part-night lighting –** lighting control management systems can be used, which involves switching off/dimming lights for periods during the night, for example when human activity is generally low (e.g. 12.30 – 5.30am). The use of such control systems may be particularly beneficial during the active bat season (April to October). Motion sensors can also be used to limit the time lighting is operational.

[29] Bat Conservation Trust and Institute of Lighting Professionals (2018) '*Guidance Note 08/18: Bats and artificial lighting in the UK*'; Stone, E.L. (2013) '*Bats and lighting: Overview of current evidence and mitigation guidance*.'; ILP (2011) '*Guidance notes for the reduction of obtrusive light*' Institution of Lighting Professionals, GN01:2011.

Badger

6.1.7 **MM6 – Badger Construction Safeguards.** In order to safeguard Badger should they enter the site during construction works, the following measures will be implemented:

- Any trenches or excavations within the site that are to be left open overnight will be provided with a means of escape should a Badger enter. This could simply be in the form of a gently graded ramp or roughened plank of wood placed in the trench as a ramp to the surface. This is particularly important if the trench fills with water;
- Any temporarily exposed open pipes (>150mm outside diameter) should be blanked off at the end of each working day so as to prevent Badgers gaining access as may happen when contractors are off-site;
- Any trenches/pits will be inspected each morning to ensure no Badgers have become trapped overnight. Should a Badger become trapped in a trench it will likely attempt to dig itself into the side of the trench, forming a temporary sett. Should a trapped Badger be encountered a suitably qualified ecologist will be contacted immediately for further advice;
- The storage of topsoil or other 'soft' building materials in the site will be given careful consideration. Badgers will readily adopt such mounds as setts. So as to avoid the adoption of any mounds, these will be kept to a minimum and any essential mounds subject to daily inspections with consideration given to temporarily fencing any such mounds to exclude Badgers;
- The storage of any chemicals at the site will be contained in such a way that they cannot be accessed or knocked over by any roaming Badgers;
- Fires will only be lit in secure compounds away from areas of Badger activity and not allowed to remain lit during the night; and
- Unsecured food and litter will not be left within the working area overnight.

6.1.8 **MM7 – Badger Update Survey.** Badgers are dynamic animals and levels of Badger activity can rapidly change at a site, with new setts being created at any time. Given the known presence of Badgers in the area it is recommended that an update survey is carried out prior to commencement of site works in order to confirm the current status of Badgers at the site.

Dormouse

6.1.9 **MM8 – Safeguarding measures during vegetation clearance.** No evidence of Dormice has been recorded on-site, however due to their known presence in the local area, precautionary safeguards are recommended during removal of the short sections of hedgerow required for access. This will involving clearance outside of the peak hibernation or breeding periods where practicable and preceding clearance by a check for nests by a suitably experienced ecologist.

Hedgehogs

6.1.10 **MM9 – Hedgehog Safeguards.** In order to safeguard Hedgehogs and other small mammals should they enter the site during construction works, the following measures will be implemented:

- A watching brief should be maintained for Hedgehog and other small mammals throughout any clearance works;

- Any piles of material already present on site, particularly vegetation/leaves, etc. and any areas of dense scrub or hedgerows, shall be dismantled/removed by hand and checked for Hedgehog prior to the use of any machinery/disposal;
- Any material to be disposed of by burning, particularly waste from vegetation clearance and tree works, should not be left piled on site for more than 24 hours in order to minimise the risk of Hedgehogs occupying the pile. If this cannot be avoided, material should be stored within a container such as a skip to prevent animals from gaining access. Any material which has been stored on the ground overnight should be moved prior to burning to allow a thorough check for any animals which may have been occupying the pile;
- In the event that an injured Hedgehog is found, the animal should be wrapped carefully in a towel, the British Hedgehog Preservation Society (BHPS) phoned (01584 890 801) and the Hedgehog taken to a local vet immediately;
- To maintain connectivity throughout the site for Hedgehog and to allow access to suitable foraging habitat contained within residential gardens, small holes (13cmx13cm) should be created within garden fences or under gates.

Reptiles and Amphibians

6.1.11 **MM10 – Destructive Search.** Due to the presence of reptiles in the local area and in the absence of survey of pond P2, precautionary measures to minimise the risk of harm to reptiles and amphibians in the form of a destructive search is proposed. The destructive search will involve cutting the grassland within the development footprint to a short height if necessary (~15cm) so as to encourage reptiles/amphibians to disperse to suitable areas of retained habitat. Clearance of hedgerows will also follow this method, followed by a fingertip search of the area. This exercise shall be carried out under the supervision of a competent ecologist during the active reptile season where practicable (generally March/April to September/October, depending on prevailing weather). Any potential refuge features, e.g. piles of rubble, heavy logs, brash piles, will be fingertip-searched by an ecologist prior to being carefully disassembled. Any reptiles encountered during the destructive search will be carefully rescued by the supervising ecologist and relocated to suitable nearby habitat.

Nesting Birds

6.1.12 **MM11** – **Timing of Works.** To avoid a potential offence under the relevant legislation, no clearance of suitable vegetation should be undertaken during the bird-nesting season (1st March to 31st August inclusive). If this is not practicable, any potential nesting habitat to be removed should first be checked by a competent ecologist in order to determine the location of any active nests. Any active nests identified would then need to be cordoned off (minimum 5m buffer) and protected until the end of the nesting season or until the birds have fledged. These checking surveys would need to be carried out no more than three days in advance of vegetation clearance.

6.2 Biodiversity Net Gains

6.2.1 The National Planning Policy Framework (NPPF) encourages new developments to maximise the opportunities for biodiversity through incorporation of enhancement measures. The proposals present the opportunity to deliver ecological enhancements at the site for the benefit of local biodiversity, thereby making a positive contribution towards the broad objectives of national conservation priorities and the local Biodiversity Action Plan (BAP). The recommendations and enhancements summarised below are considered

appropriate given the context of the site and the scale and nature of the proposals. Through implementation of the following ecological enhancements (**EE1** – **EE8**), the opportunity exists for the proposals to deliver a number of biodiversity net gains at the site.

Habitat Creation

6.2.2 **EE1 – New Hedgerows.** New native species-rich hedgerow planting at the north-eastern site boundaries would provide a net gain in hedgerow habitat on-site and provide enhanced connectivity through the site and with off-site habitats.

6.2.3 **EE2 – New Planting.** It is proposed that, where practicable, new planting within the site be comprised of native species of local provenance, including trees and shrubs appropriate to the local area. Suitable species for inclusion within the planting could include native trees such as Oak, Birch *Betula pendula* and Field Maple, whilst native shrub species of particular benefit would likely include fruit and nut bearing species which would provide additional food for wildlife, such as Blackthorn, Hawthorn, Crab Apple *Malus sylvestris*, Hazel *Corylus avellana* and Elder. Where non-native species are proposed, these should include species of value to wildlife, such as varieties listed on the RHS' 'Plants for Pollinators' database, providing a nectar source for bees and other pollinating insects.

6.2.4 **EE3 – Grassland Enhancement.** It is proposed that the grassland within the ancient woodland buffer be enhanced through the introduction of a sensitive meadow management regime. With the removal of sheep grazing, over time this should enhance the botanical diversity and increase species-richness of the grassland.

6.2.5 **EE4 – Wetland Features.** A number of SuDS basins and swales are included under the proposals. Through seeding with a native wetland mix and appropriate management this would provide opportunities for a range of wildlife, including invertebrates and reptiles, while also helping to attenuate surface water run-off.

Bats

6.2.6 **EE5 - Bat Boxes.** A number of bat boxes will be incorporated within the proposed development. The provision of bat boxes will provide new roosting opportunities for bats in the area, such as Common and Soprano Pipistrelle, recorded foraging and commuting on-site. So as to maximise their potential use, the bat boxes should ideally be situated on suitable retained trees, erected as high up as possible and sited in sheltered wind-free areas that are exposed to the sun for part of the day, facing a south-east, south or south-westerly direction. In addition, where architectural design allows, a number of integrated bat boxes / roost features should be incorporated into a proportion of the new build. The precise number and locations of boxes / roost features should be determined by a competent ecologist, post-planning once the relevant final development design details have been approved.

Hedgehog

6.2.7 **EE6 – Hedgehog Nest Domes.** It is proposed that Hedgehog nest domes be installed within sheltered areas, such as the existing or newly created hedgerows/woodland to provide suitable nesting and hibernation sites for this species. The Hedgehog nest domes should be positioned out of direct sunlight, in areas of dense vegetation.

Birds

6.2.8 **EE5 - Bird Boxes**. A number of bird nesting boxes are to be incorporated within the proposed development, thereby increasing nesting opportunities for birds at the site. Ideally, the bird

boxes will have greater potential for use if sited on suitable, retained trees, situated as high up as possible. Bird boxes should also be integrated into the new dwellings to provide nesting opportunities for species such as House Sparrow, a Priority Species recorded on-site. The precise number and locations of boxes should be determined by a competent ecologist, post-planning once the relevant final development design details have been approved.

Invertebrates

6.2.9 **EE6 – Habitat Piles.** A proportion of any deadwood arising from vegetation clearance works shall be retained within the site in a number of wood piles located within areas of new planting, new wetland habitats or areas of wildflower grassland in order to provide potential habitat opportunities for invertebrate species, which in turn could provide a prey source for a range of other wildlife. In addition, the provision and management of new native landscape planting will provide additional opportunities for invertebrates at the site in the long term.

6.2.10 **EE7 – Nectar Source.** Enhancement of the grassland as well as new wildflower grassland seeding and the creation of wetland areas would provide enhanced nectar sources for invertebrate species. In addition, areas of amenity planting associated with new dwellings should include species of known value to wildlife.

6.2.11 **EE8 – Bee Bricks.** It is proposed that a number of bee bricks be incorporated within the proposed development thereby increasing nesting opportunities for declining populations of non-swarming solitary bee populations. Ideally, bee bricks should be located within suitable south-facing walls (where architectural design allows), located at least 1m off the ground. The bricks should be unobstructed by vegetation, though within close vicinity of nectar and pollen sources.

7 Conclusions

7.1 Aspect Ecology has carried out an Ecological Appraisal of the proposed development, based on the results of a desktop study, Phase 1 habitat survey and a number of detailed protected species surveys.

7.2 The available information confirms that no statutory or non-statutory nature conservation designations are present within or adjacent to the site, and subject to contributions to strategic mitigation in regard to Ashdown Forest SPA, none of the designations within the surrounding area are likely to be adversely affected by the proposals. The adjacent ancient woodland will be retained and protected with a buffer of at least 15m from built development.

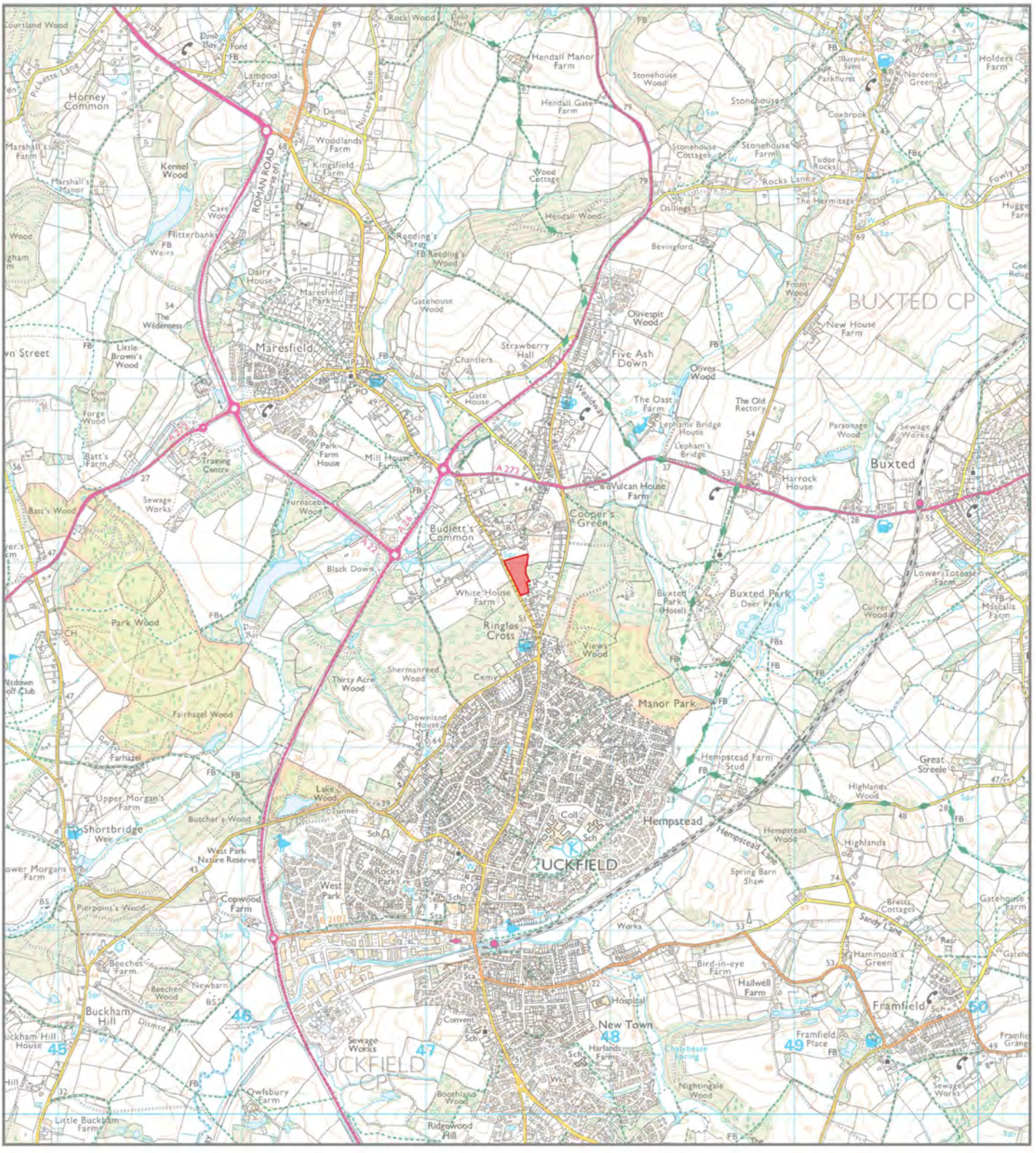
7.3 The Phase 1 habitat survey has established that the site is dominated by habitats not considered to be of ecological importance, whilst the proposals have sought to retain those features identified to be of value, namely the hedgerows and woodland. Where it has not been practicable to avoid loss of hedgerows to facilitate access, new habitat creation has been proposed to offset losses, in conjunction with the landscape proposals.

7.4 The habitats within the site support several protected species, including species protected under both national and European legislation. Accordingly, a number of mitigation measures have been proposed to minimise the risk of harm to protected species, with compensatory measures proposed, where appropriate, in order to maintain the conservation status of local populations.

7.5 In conclusion, the proposals have sought to minimise impacts and subject to the implementation of appropriate avoidance, mitigation and compensation measures, it is considered unlikely that the proposals will result in significant harm to biodiversity. On the contrary, the opportunity exists to provide a number of biodiversity net gains as part of the proposals.

Plan 6212/ECO1:

Site Location



Key:

Site Location

aspect ecology

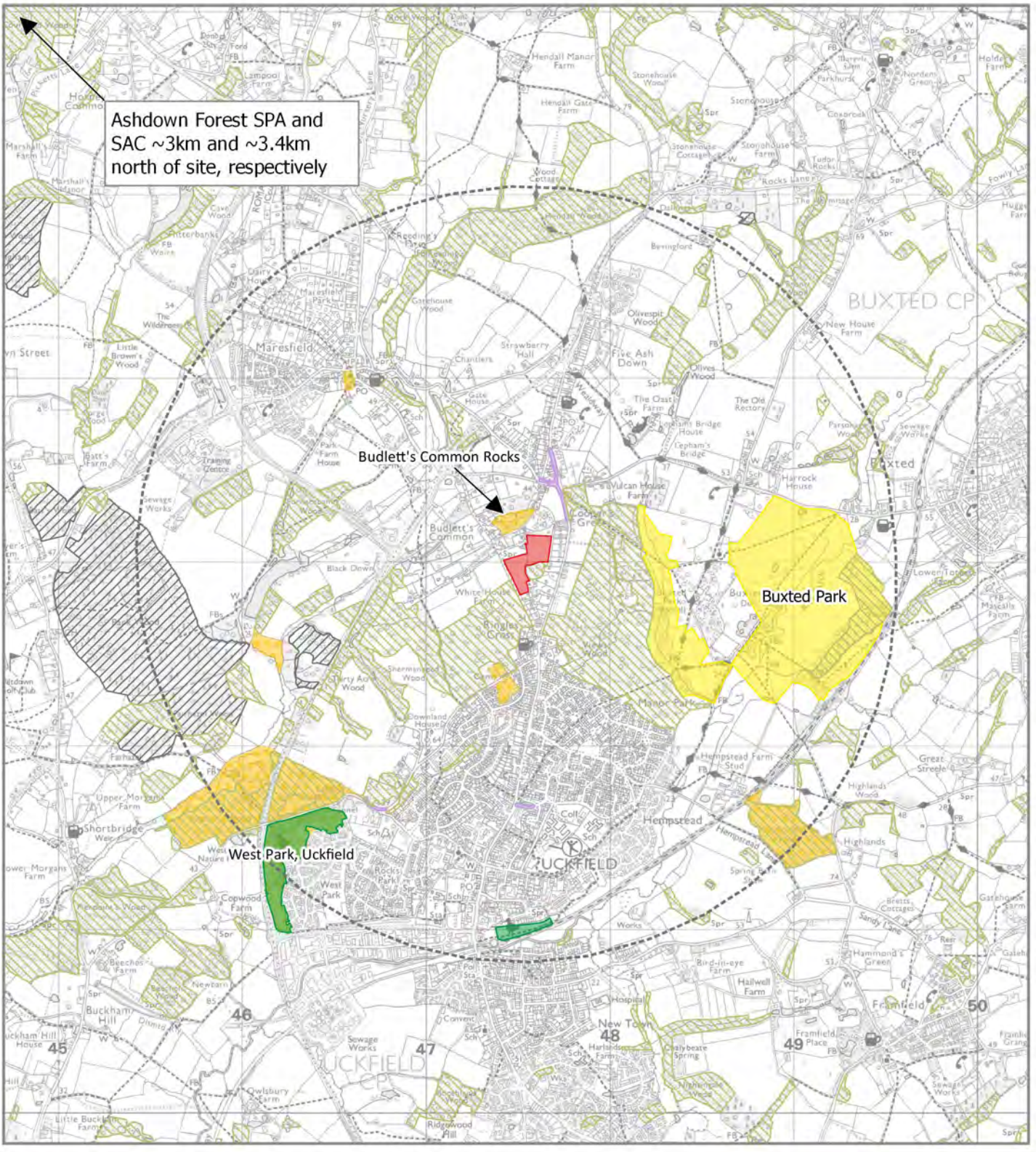
Aspect Ecology Limited · West Court · Hardwick Business Park
Noral Way · Banbury · Oxfordshire · OX16 2AF
01295 279721 · info@aspect ecology.com · www.aspect ecology.com

Mockbeggars Farm, Uckfield	PROJECT
Site Location	TITLE
6212/ECO1	DRAWING NO.
A/BG	REV
October 2021	DATE

Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Aspect Ecology Ltd, West Court, Hardwick Business Park, Noral Way, Banbury, Oxfordshire, OX16 2AF. Licence No. 100045262

Plan 6212/ECO2:

Ecological Designations



Key:

- Site Boundary
- 2km Study Area
- Local Nature Reserve
- Ancient Semi Natural Woodland
- Ancient Replanted Woodland
- Designated Road Verge
- Local Wildlife Site
- Site of Special Scientific Interest

aspect ecology

Aspect Ecology Limited West Court Hardwick Business Park
Noral Way Banbury Oxfordshire OX16 2AF
01295 279721 info@aspect ecology.com www.aspect ecology.com

Mockbeggars Farm, Uckfield	PROJECT
Ecological Designations	TITLE
6212/ECO2	DRAWING NO.
A/BG	REV.
November 2021	DATE

Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright. Aspect Ecology Ltd, West Court, Hardwick Business Park, Noral Way, Banbury, Oxfordshire, OX16 2AF. Licence No. 100045262

Plan 6212/ECO3:

Habitats and Ecological Features



Key:

- Site Boundary
- Tree
- Hedgerow
- Woodland
- Ancient Woodland
- Semi-improved Grassland

aspect ecology

Aspect Ecology Limited · West Court · Hardwick Business Park
Noral Way · Banbury · Oxfordshire · OX16 2AF
01295 279721 · info@aspect-ecology.com · www.aspect-ecology.com

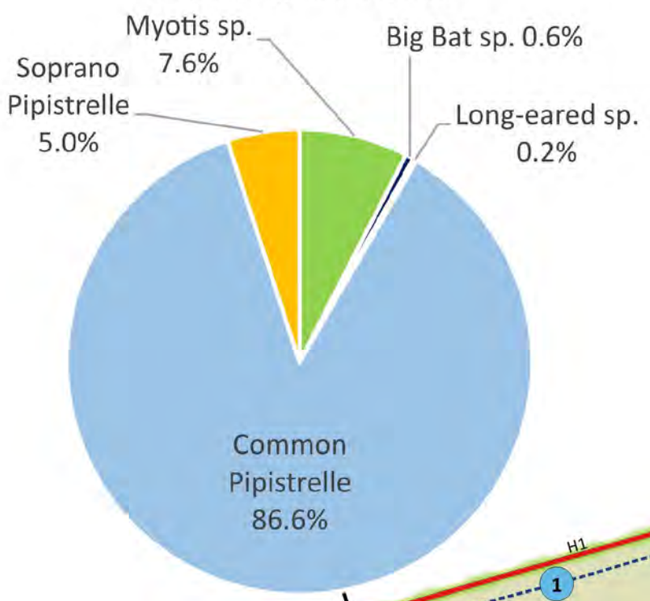
Mockbeggars Farm, Uckfield	PROJECT
Habitats and Ecological Features	TITLE
6212/ECO3	DRAWING NO.
A/BG	REV
November 2021	DATE

Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Aspect Ecology Ltd, West Court, Hardwick Business Park, Noral Way, Banbury, Oxfordshire, OX16 2AF. Licence No. 100045262

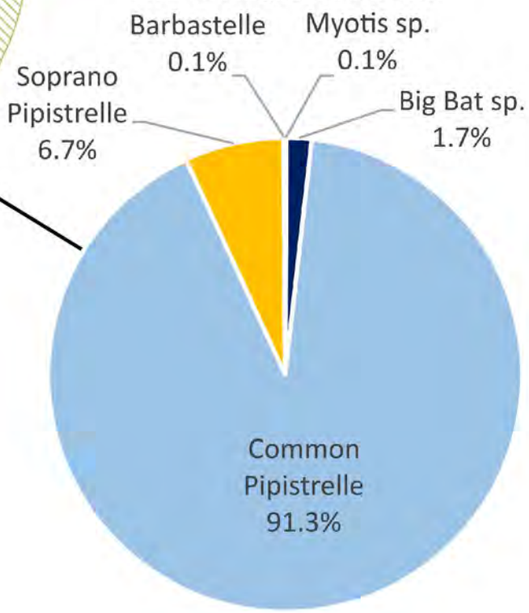
Plan 6212/ECO4:

Bat Survey Results

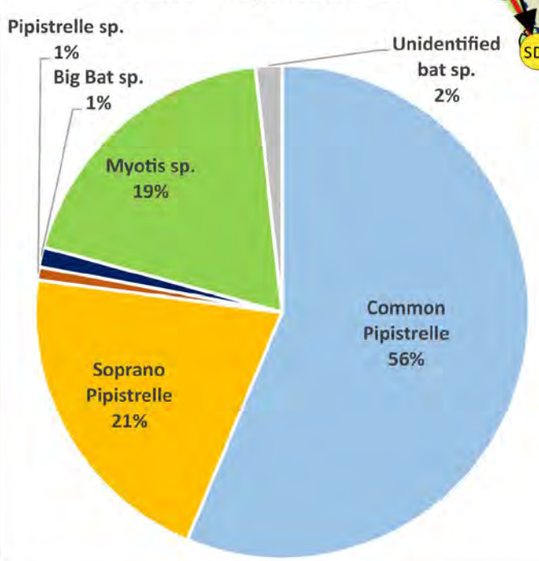
Bat Static Detector Survey
Location 1
Total Call Registrations: 1216



Bat Static Detector Survey
Location 2
Total Call Registrations: 2401



Bat Walked Activity Survey
4 Surveys, June-September
Total Call Registrations: 231



Key:

- Site Boundary
- Static Detector Locations

Bat Walked Activity Survey Listening Points

- High
- Moderate
- Low
- Negligible

Bat Walked Activity Survey Transect

- High
- Moderate
- Low
- Negligible

Results Key

High: >1 Passes per minute

Moderate: 0.51-1.0 Passes per minute

Low: 0.01-0.50 Passes per minute

Negligible: 0 Passes per minute

aspect ecology

Aspect Ecology Limited - West Court - Hardwick Business Park
Noral Way - Banbury - Oxfordshire - OX16 2AF
01295 279721 - info@aspect-ecology.com - www.aspect-ecology.com

Mockbeggars Farm, Uckfield	PROJECT
Bat Survey Results	TITLE
6212/ECO4	DRAWING NO.
-	REV
November 2021	DATE

Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Aspect Ecology Ltd, West Court, Hardwick Business Park, Noral Way, Banbury, Oxfordshire, OX16 2AF. Licence No. 100045262

Plan 6212/DM:

Dormouse Survey Methods



Key:

Site Boundary

Dormouse nest tube transects

aspect ecology

Aspect Ecology Limited · West Court · Hardwick Business Park
Noral Way · Banbury · Oxfordshire · OX16 2AF
01295 279721 · info@aspect-ecology.com · www.aspect-ecology.com

Mockbeggars Farm, Uckfield	PROJECT
Dormouse Survey Methods	TITLE
6212/DM	DRAWING NO.
A/BG	REV
November 2021	DATE

Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Aspect Ecology Ltd, West Court, Hardwick Business Park, Noral Way, Banbury, Oxfordshire, OX16 2AF. Licence No. 100045262

Plan 6212/GCN:

Great Crested Newt Survey Results



Key:

- Site Boundary
- 250m Study Area
- Pond - GCN Absent
- Pond - Not Surveyed

aspect ecology

Aspect Ecology Limited · West Court · Hardwick Business Park
Noral Way · Banbury · Oxfordshire · OX16 2AF
01295 279721 · info@aspect-ecology.com · www.aspect-ecology.com

Mockbeggars Farm, Uckfield	PROJECT
Great Crested Newt Survey	TITLE
6212/GCN	DRAWING NO.
A/BG	REV
October 2021	DATE

Based upon the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Aspect Ecology Ltd, West Court, Hardwick Business Park, Noral Way, Banbury, Oxfordshire, OX16 2AF. Licence No. 100045262

Photographs

Photograph 1 : Off-site ancient woodland



Photograph 2 : Eastern semi-improved grassland field



Photograph 3 : Western semi-improved grassland field



Photograph 4 : H2



Photograph 5: H4 (northern end)



Photograph 6: H4 (southern end)



Photograph 7 : On-site woodland



Photograph 8: Off-site pond



Appendix 6212/1:

Evaluation Methodology

Principles of Ecological Evaluation

1. The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and Environmental Management (CIEEM) 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (2016)[1].

Importance of Ecological Features

2. Various characteristics contribute to the importance of ecological features, including:

- Naturalness;
- Animal or plant species, sub-species or varieties that are rare or uncommon, either internationally, nationally or more locally, including those that may be seasonally transient;
- Ecosystems and their component parts, which provide the habitats required by important species, populations and/or assemblages;
- Endemic species or locally distinct sub-populations of a species;
- Habitat diversity;
- Habitat connectivity and/or synergistic associations;
- Habitats and species in decline;
- Rich assemblages of plants and animals;
- Large populations of species or concentrations of species considered uncommon or threatened in a wider context;
- Plant communities (and their associated animals) that are considered to be typical of valued natural/semi-natural vegetation types, including examples of naturally species-poor communities; and
- Species on the edge of their range, particularly where their distribution is changing as a result of global trends and climate change.

3. As an objective starting point for identifying important ecological features, European, national and local governments have identified sites, habitats and species which form a key focus for biodiversity conservation in the UK, supported by policy and legislation. These are summarised by CIEEM guidance as follows:

Designated Sites

- Statutory sites designated or classified under international conventions or European legislation, for example World Heritage Sites, Biosphere Reserves, Wetlands of International Importance (Ramsar sites), Special Areas of Conservation (SAC), Special Protection Areas (SPA);
- Statutory sites designated under national legislation, for example Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR);
- Locally designated wildlife sites, e.g. Local Wildlife Sites (LWS).

[1] Chartered Institute of Ecology and Environmental Management (CIEEM) (2016) '*Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal*'

Biodiversity Lists

- Habitats and species of principal importance for the conservation of biodiversity in England and Wales (largely drawn from UK BAP priority habitats and priority species), often referred to simply as Priority Habitats / Species;
- Local BAP priority species and habitats.

Red Listed, Rare, Legally Protected Species

- Species of conservation concern, Red Data Book (RDB) species;
- Birds of Conservation Concern;
- Nationally rare and nationally scarce species;
- Legally protected species.

4. In addition to this list, other features may be considered to be of importance on the basis of local rarity, where they enable effective conservation of other important features, or play a key functional role in the landscape.

<u>Assigning Level of Importance</u>

5. The importance of an ecological feature should then be considered within a defined geographical context. Based on CIEEM guidance, the following frame of reference is used:

- International (European);
- National;
- Regional;
- County;
- District;
- Local (e.g. Parish or Neighbourhood);
- Site (not of importance beyond the immediate context of the site).

6. Features of 'local' importance are those considered to be below a district level of importance, but are considered to appreciably enrich the nature conservation resource or are of elevated importance beyond the context of the site.

7. Where features are identified as 'important' based on the list of key sites, habitats and species set out above, but are very limited in extent or quality (in terms of habitat resource or species population) and do not appreciably contribute to the biodiversity interest beyond the context of the site, they are considered to be of site importance.

8. In terms of assigning the level of importance, the following considerations are relevant:

Designated Sites

9. For designated sites, importance should reflect the geographical context of the designation (e.g. SAC/SPA/Ramsar sites are designated at the international level whereas SSSIs are designated at the national level). Consideration should be given to multiple designations as appropriate (where an area is subject to differing levels of nature conservation designations).

Habitats

10. In certain cases, the value of a habitat can be measured against known selection criteria, e.g. SAC selection criteria, 'Guidelines for the selection of biological SSSIs' and the Hedgerows Regulations 1997. However, for the majority of commonly encountered sites, the most relevant habitat evaluation will be at a more localised level and based on relevant factors such as antiquity, size, species-diversity, potential, naturalness, rarity, fragility and typicalness (Ratcliffe, 1977). The ability to restore or re-create the habitat is also an important consideration, for example in the case of ancient woodland.

11. Whether habitats are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Habitats of Principal Importance' or 'Priority Habitats', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular habitat under a BAP does not in itself imply any specific level of importance.

12. Habitat inventories (such as habitat mapping on the MAGIC database) or information relating to the status of particular habitats within a district, county or region can also assist in determining the appropriate scale at which a habitat is of importance.

Species

13. Deciding the importance of species populations should make use of existing criteria where available. For example, there are established criteria for defining nationally and internationally important populations of waterfowl. The scale within which importance is determined could also relate to a particular population, e.g. the breeding population of common toads within a suite of ponds or an otter population within a catchment.

14. When determining the importance of a species population, contextual information about distribution and abundance is fundamental, including trends based on historical records. For example, a species could be considered particularly important if it is rare and its population is in decline. With respect to rarity, this can apply across the geographic frame of reference and particular regard is given to populations where the UK holds a large or significant proportion of the international population of a species.

15. Whether species are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Species of Principal Importance' or 'Priority Species', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular species under a BAP does not in itself imply any specific level of importance.

16. Species populations should also be considered in terms of the potential zone of influence of the proposals, i.e. if the entire species population within the site and surrounding area were to be affected by the proposed development, would this be of significance at a local, district, county or wider scale? This should also consider the foraging and territory ranges of individual species (e.g. bats roosting some distance from site may forage within site whereas other species such as invertebrates may be more sedentary).

Appendix 6212/2:

Legislation Summary

LEGISLATION SUMMARY

1. In England and Wales primary legislation is made by the UK Parliament, and in Scotland by the Scottish Parliament, in the form of Acts. The main piece of legislation relating to nature conservation in the UK is the Wildlife and Countryside Act 1981 (as amended).

2. Acts of Parliament confer powers on Ministers to make more detailed orders, rules or regulations by means of secondary legislation in the form of statutory instruments. Statutory instruments are used to provide the necessary detail that would be too complex to include in an Act itself[1]. The provisions of an Act of Parliament can also be enforced, amended or updated by secondary legislation.

3. In summary, the key pieces of legislation relating to nature conservation in the UK are:

    - Wildlife and Countryside Act 1981 (as amended)
    - Protection of Badgers Act 1992
    - Hedgerows Regulations 1997
    - Countryside and Rights of Way (CRoW) Act for England and Wales 2000
    - Natural Environment and Rural Communities Act 2006
    - Conservation of Habitats and Species Regulations 2017

4. A brief summary of the relevant legislation is provided below. The original Acts and instruments should be referred to for the full and most up to date text of the legislation.

5. **Wildlife and Countryside Act 1981 (as amended)**. The WCA Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) identified for their flora, fauna, geological or physiographical features. The Act contains strict measures for the protection and management of SSSIs.

6. The Act also refers to the treatment of UK wildlife including protected species listed under Schedules 1 (birds), 5 (mammals, herpetofauna, fish, invertebrates) and 8 (plants).

7. Under Section 1(1) of the Act, all wild birds are protected such that is an offence to intentionally:

    - Kill, injure or take any wild bird;
    - Take, damage or destroy the nest of any wild bird whilst in use* or being built;
    - Take or destroy an egg of any wild bird.

    * The nests of birds that re-use their nests as listed under Schedule ZA1, e.g. Golden Eagle, are protected against taking, damage or destruction irrespective of whether they are in use or not.

8. Offences in respect of Schedule 1 birds are subject to special, i.e. higher, penalties. Schedule 1 birds also receive greater protection such that it is an offence to intentionally or recklessly:

    - Disturb any wild bird included in Schedule 1 while it is building a nest or while it is in, on or near a nest containing eggs or young;
    - Disturb dependent young of such a bird.

[1] http://www.parliament.uk/business/bills-and-legislation/secondary-legislation/statutory-instruments/

9. Under Section 9(1) of the Act, it is an offence to:

- Intentionally kill, injure or take any wild animal included in Schedule 5.

10. In addition, under Section 9(4) it is an offence to intentionally or recklessly:

- Obstruct access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection; or
- Disturb any wild animal included in Schedule 5 while occupying a structure or place which it uses for that purpose.

11. Under Section 13(1) it is an offence:

- To intentionally pick, uproot or destroy any wild plant listed in Schedule 8; or
- Unless the authorised person, to intentionally uproot any wild plant not included in Schedule 8.

12. The Act also contains measures (S.14) for preventing the establishment of non-native species that may be detrimental to native wildlife, prohibiting the introduction into the wild of animals (releases or allows to escape) and plants (plants or causes to grow) listed under Schedule 9.

13. **Protection of Badgers Act 1992.** The Act aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain. It should be noted that the legislation is not intended to prevent properly authorised development. Under the Act it is an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat* a Badger, or attempt to do so;
- To intentionally or recklessly interfere with a sett# (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).

* the intentional elimination of sufficient foraging area to support a known social group of Badgers may, in certain circumstances, be construed as an offence

\# A sett is defined as "*any structure or place which displays signs indicating current use by a Badger*". Natural England advice (June 2009) is that a sett is protected so long as such signs remain present, which in practice could potentially be for some time after the last actual occupation by Badger. Interference with a sett includes blocking tunnels or damaging the sett in any way

14. Licences can be obtained from the Statutory Nature Conservation Organisation (SNCO) for development activities that would otherwise be unlawful under the legislation, provided there is suitable justification. The SNCO for England is Natural England.

15. **Hedgerows Regulations 1997**. 'Important' hedgerows (as defined by the Regulations) are protected from removal (up-rooting or otherwise destroying). Various criteria specified in the Regulations are employed to identify 'important' hedgerows for wildlife, landscape or historical reasons.

16. **Countryside and Rights of Way (CRoW) Act for England and Wales 2000.** The CRoW Act provides increased measures for the management and protection of SSSIs and strengthens wildlife enforcement legislation. Schedule 12 of the Act amends the species provisions of the WCA 1981, strengthening the legal protection for threatened species. The Act also introduced a duty on Government to have regard to the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity.

17. **Natural Environment and Rural Communities Act 2006.** Section 41 of the NERC Act requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as local planning authorities, in implementing their duty under Section 40 of the Act, to have regard to the conservation of biodiversity in England, when exercising their normal functions. 56 habitats and 943 species of principal importance are included on the S41 list. These are all the habitats and species in England that were identified as requiring action in the UK Biodiversity Action Plan (BAP).

18. **Conservation of Habitats and Species Regulations 2017.** The Regulations enact the European Union's Habitats Directive (92/43/EEC) in the UK. The Habitats Directive was designed to contribute to the maintenance of biodiversity within member states through the conservation of sites, known in the UK as Special Areas of Conservation (SACs), containing habitats and species selected as being of EC importance (as listed in Annexes I and II of the Habitats Directive respectively). Member states are required to take measures to maintain or restore these natural and semi-natural habitats and wild species at a favourable conservation status.

19. The Regulations also require the compilation and maintenance of a register of European sites, to include SACs and Special Protection Areas (SPAs)[2] classified under Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). These sites constitute the Natura 2000 network. The Regulations impose restrictions on planning decisions likely to significantly affect SPAs or SACs.

20. The Regulations also provide protection to European Protected Species of animals that largely overlaps with the WCA 1981, albeit the provisions are generally stricter. Under Regulation 43 it is an offence, *inter alia*, to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species;
- Deliberately disturb any wild animals of any such species, including in particular any disturbance likely to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate, or which is likely to affect significantly their local distribution or abundance;
- Deliberately take or destroy the eggs of such an animal;
- Damage or destroy a breeding site or resting place of such an animal.

21. Similar protection is afforded to European Protected Species of plants, as detailed under Regulation 47.

22. The Regulations do provide a licensing system that permits otherwise illegal activities in relation to European Protected Species, subject to certain tests being fulfilled.

[2] Special Protection Areas (SPAs) are protected sites classified in accordance with Article 4 of the EC Directive on the Conservation of Wild Birds (79/409/EEC) (aka the Birds Directive), which came into force in April 1979. SPAs are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

landscape planning • ecology • arboriculture

aspect

Aspect Ecology Ltd
West Court
Hardwick Business Park
Noral Way
Banbury
Oxfordshire OX16 2AF

T: 01295 279721
E: info@aspect-ecology.com
W: www.aspect-ecology.com