aspect ecology APEM Group

Land at Norwood Lane, Meopham

Ecological Appraisal

February 2026

Quality Management	
Client:	Taylor Wimpey South East
Project:	Land at Norwood Lane, Meopham
Report Title:	Ecological Appraisal
Project Number:	1007007
File Reference:	7007 EcoAp vf JW/JB
Date:	10/02/2026

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Executive Summary

i) **Introduction.** Aspect Ecology was commissioned by Taylor Wimpey South East in February 2025 to undertake an Ecological Appraisal in respect of proposed redevelopment of land at Norwood Lane, Meopham.

ii) **Proposals.** The proposals are for an Outline Application with all matters reserved (except access) for a development of up to 150 dwellings (Use Class C3), including affordable dwellings, and associated landscaping, public open space and infrastructure works.

iii) **Survey.** The site was surveyed in February 2025 with mapping of habitats based on the UK Habitat Classification system. In addition, a general appraisal of fauna was undertaken to record the potential presence of any protected, rare or notable species, with specific surveys conducted in respect of bats, Badger, breeding birds, dormouse and reptiles. An update habitat condition assessment survey was undertaken in May 2025. Desk study information has also been gathered from the local records centre and online resources.

iv) **Ecological Designations.** The site itself is not subject to any statutory or non-statutory ecological designations. The nearest ecological designation is Shorne and Ashenbank Woods (SSSI) located approximately 2.7km northeast of the site. The nearest non-statutory nature conservation designation to the site is Henley Wood and Pasture an area of Ancient and semi-natural woodland, which is located approximately 0.8km southeast of the site. All of the ecological designations in the surrounding area are physically well separated from the site and are unlikely to be adversely affected by the proposals.

v) **Habitats.** The site is dominated by cereal crop planting and is not considered to be an important ecological feature. Features of ecological importance include native hedgerows, associated trees, and an area of Priority Habitat Deciduous Woodland identified as Churchway Wood. Aside from short lengths of hedgerow to be removed for access, these important features are fully retained under the proposals and will be protected during construction. Hedgerow losses will be compensated for by new hedgerow planting.

vi) **Protected Species.** Habitats within the site are suitable to support protected and notable fauna including roosting bats, Hedgehog, Brown Hare and birds. Phase 2 surveys have been completed in relation to reptiles, bats, breeding birds and dormouse. Appropriate mitigation measures are proposed to safeguard such species during construction and maintain the suitability of habitats in the long-term.

vii) **Enhancements.** Ecological enhancements proposed to secure a biodiversity net gain will be set out further in the BNG strategy as a separate submission. Faunal enhancements are also proposed, to be detailed as part of a faunal enhancement plan which can be secured via a suitably-worded planning condition.

viii) **Summary.** In summary, the proposals have sought to minimise impacts on biodiversity and subject to the implementation of appropriate avoidance, mitigation and compensation measures, the proposals would not result in significant harm to biodiversity.

1 Introduction

1.1 Background and Proposals

1.1.1 Aspect Ecology was commissioned by Taylor Wimpey South East in February 2025 to undertake an Ecological Appraisal in respect of proposed development of land at Norwood Lane, Meopham, centred at grid reference TQ 64803 67130 (see Plan 7007/ECO1), hereafter referred to as 'the site'.

1.1.2 The proposals are for an Outline Application with all matters reserved (except access) for a development of up to 150 dwellings (Use Class C3), including affordable dwellings, and associated landscaping, public open space and infrastructure works.

1.2 Site Overview

1.2.1 The site is located to the east of the village of Hook Green in the Borough of Gravesham in north-west Kent. The site is bound to the north and by residential development, to the south by Green Lane and to the east by Norwood Lane. Agricultural fields lie further afield to the north, east and west, whilst the village of Hook Green with associated residential dwellings and access roads lies to the west.

1.2.2 The site is dominated by a single arable field. Hedgerows, ruderal/ephemeral vegetation, grassy margins and trees form the majority of the site boundaries. There is an area of mature deciduous woodland (Churchway Wood), located in the west of the site which is recognised on Multi-Agency Geographic Information for the Countryside (MAGIC) as an area of Priority Habitat Deciduous Woodland. A further patch of mixed woodland lies to the site southwestern corner.

1.2.3 Within the context of the wider landscape, the development is proposed to form the new edge of the Green Belt and therefore the eastern boundary hedgerow will be subject to early infilling to contain the site visually and becomes an important landscape feature thereafter. The Kent Downs National Landscape (Area of Outstanding Natural Beauty) lies immediately adjacent and extends to the east.

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, informing 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. Where appropriate, opportunities for ecological enhancement are identified with reference to national conservation priorities and local Biodiversity Action Plans (BAPs). Habitats are also assessed under Statutory Biodiversity Metric Guidance to inform the pre-development biodiversity value of the site in regard to Biodiversity Net Gain (BNG).

2 Methodology

2.1 Desktop Study

2.1.1 In order to compile background information on the site and its immediate surroundings the following organisations were contacted in February 2025. Data was requested from within a search area extending 2km from the centre of the site:

- Kent and Medway Biological Records Centre

2.1.2 Information on statutory designations was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC) database[1], which uses data provided by Natural England, from within a search area extending to 25km from the site. The MAGIC database was also searched to identify the known presence of any Priority Habitats within or adjacent the site.

2.1.3 In addition, the Woodland Trust database[2] was searched for any records of ancient, veteran or notable trees within or adjacent to the site.

2.1.4 The information received from these organisations is discussed in the text and reproduced where appropriate at Appendix 7007/1 and on Plan 7007/ECO2.

2.2 Habitat Surveys

2.2.1 The site was surveyed in February 2025 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 survey was informed by Phase 1 Habitat Survey methodology[3], with habitat types identified and mapped in accordance with the UK Habitat Classification system (version 2.0)[4], together with an assessment of the species composition of each habitat. This technique provides an inventory of the habitat types present and allows identification of areas of greater potential for botanical interest 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[5] to record details on the actual or potential presence of notable or protected species.

2.2.3 In line with guidance[6], the fine scale minimum mapping unit of 25sqm or 5m in length has been used where appropriate.

2.2.4 The nomenclature used for plant species is based on the Botanical Society for the British Isles (BSBI) taxon list[7].

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[1] Multi-Agency Geographic Information for the Countryside (MAGIC), at https://magic.defra.gov.uk/
[2] Woodland Trust Ancient Tree Inventory, at https://ati.woodlandtrust.org.uk/
[3] Joint Nature Conservation Committee (2010, as amended) *Handbook for Phase 1 habitat survey: A technique for environmental audit.*
[4] UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at https://www.ukhab.org)
[5] Chartered Institute for Ecology and Environmental Management (CIEEM) (2013) *Guidelines for Preliminary Ecological Appraisal.*
[6] *The UK Habitat classification User Manual.* Version 1.1. 2020
[7] https://bsbi.org/taxon-lists

Habitat Condition Assessment

2.2.5 To determine the pre-development biodiversity value of the site for the BNG calculation, the condition of habitats has been assessed in accordance with the methodology set out in the Statutory Biodiversity Metric Technical Annex[8] and using professional judgement. Condition assessment data was collected during the February 2025 survey, with a follow up habitat condition assessment and woodland botanical survey undertaken in May 2025.

2.2.6 Grassland habitats have been surveyed based on the approach set out within the Farm Environment Plan (FEP) Manual[9], allowing an assessment of species per m^2 and frequency of indicator species. A transect was walked through each grassland area, with a number of stopping points (typically ten, chosen to be representative of the habitat type, albeit fewer quadrats were used within some smaller grassland parcels) to record species within a 1x1m quadrat. An assessment of frequency can then be made based on occurrence at each 1x1m quadrat, with frequent species occurring in five or more quadrats out of ten, occasional species occurring in three or four quadrats, and rare species occurring in one or two quadrats.

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. Particular attention was also paid to the potential presence of protected, rare or notable species, with specific survey work undertaken for bats, Badger, reptiles, Dormouse *Muscardinus avellanarius* and breeding birds as described below.

2.3.2 Phase 2 survey work has been completed in relation to foraging and commuting bats, Dormouse, reptile and breeding birds. The results of the foraging and commuting bat surveys are attached within a separate addendum.

Bats[10]

Preliminary Appraisal

2.3.3 A review was undertaken of the desk study information obtained to identify any known constraints in relation to bats, the bat species recorded and habitats likely to be used by bats within the site and the surrounding area. This included a review of background records, known designations including SACs or SSSIs relevant to bats and an appraisal of OS mapping and aerial photography to identify habitats likely to be of value to bats.

2.3.4 During the initial habitat survey, the potential suitability of the site for bats in relation to roosting habitats, potential flight-paths and foraging habitats (termed a 'daytime bat walkover') was investigated. Features were assessed as of negligible, low, moderate or high potential suitability for roosting, foraging and commuting, based on the framework set out under BCT guidance. This appraisal has informed the scope of the survey work undertaken as set out below.

[8] *Statutory Biodiversity Metric - Technical Annex 1 - Condition Assessment Sheets and Methodology*

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

[10] Surveys based on: Reason, P.F. and Wray, S. (2023) UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. CIEEM; and Bat Conservation Trust (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).

Trees

2.3.5 Trees were assessed for their suitability to support roosting bats based on the presence of features such as holes, cracks, splits or loose bark. Trees were categorised as supporting Potential Roost Features (PRFs), Further Assessment Required (FAR) or supporting no suitable features.

2.3.6 **Ground Level Tree Assessment.** Where practical, trees were subject to a Ground Level Tree Assessment (GLTA) based on relevant guidance[11] with PRFs categorised as PRF-I (only suitable for individual or small numbers of bats) or PRF-M (suitable for multiple bats). Any PRFs identified were inspected using binoculars from ground level for any signs indicating possible use by bats, such as staining, scratch marks or bat droppings. Where accessible from ground level, PRFs were subject to close inspection using a torch.

Activity Surveys

2.3.7 **Night-time Bat Walkover Surveys.** Night-time bat walkovers (NBWs) or walked transect surveys have been undertaken to investigate foraging or commuting bat activity at the site. This survey method comprises walking transect routes around the site, specifically covering habitats and features which have been identified as potentially suitable for use by commuting or foraging bats. Anabat Scout handheld bat detectors were employed to aid identification of any bats observed. Each survey began at sunset close to identified potential roosting features or features likely to be of interest as commuting routes, with surveyors remaining in place for 30-60 minutes before commencing the walked transect, continuing until at least 2 hours after sunset. The transect route followed is shown at Plan 7007/ECO4.

2.3.8 This survey work was carried out during suitable weather conditions, as set out in Table 2.1 below.

Table 2.1. Dusk walked transect survey details.

Date	Start & end times & time of sunset	Transect / location	Equipment used	Weather
08/05/2025	Start time: 20.33 End time: 22.33 Sunset: 20.33	Transects A	Anabat Scout	Dry, 55% cloud, BF2, 11°C
Comments: The survey was undertaken by 2 surveyors under direction of licence holder CLS00307.				
10/07/2025	Start time: 21:13 End time: 23:13 Sunset: 21:13	Transects A	Anabat Scout	Dry, 15% cloud, BF0, 22°C
Comments: The survey will be undertaken by 2 surveyors under direction of licence holder CLS00307.				
12/09/2025	Start time: tbc End time: tbc Sunset: tbc	Transects A	Anabat Scout	tbc
Comments: The survey will be undertaken by 2 surveyors under direction of licence holder CLS00307.				

BF0 = calm, BF12 = hurricane force

2.3.9 **Automated Surveys.** Automated static bat detector surveys were undertaken, during which Song Meter SM4BAT detectors were positioned at a number of locations within the site to record bat data over weekly periods during each month between May and October.

[11] Bat Conservation Trust (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).

2.3.10 Detector 1 was deployed on the western boundary of the site adjacent to Norwood Lane, detector 2 was positioned in the centre of the site at the north of Churchway Wood, and detector 3 was placed in the southeast corner of the site (see Plan 7007/ECO4).

2.3.11 Static bat detectors were set to switch on approximately 30 minutes before sunset and switch off approximately 30 minutes after sunrise. The specific timings and weather conditions during the first static detector surveys are set out in Table 2.2 below.

Table 2.2. Automated detector survey details.

Survey Date	Weather Conditions			
	Wind (BF)	Temp(°C)	Cloud Cover (%)	Precipitation
02/05/2025	3	18	20	No rain
03/05/2025	3	12	5	No rain
04/05/2025	3	10	100	No rain
05/05/2025	3	10	0	No rain
06/05/2025	3	11	60	No rain
07/05/2025	3	12	70	No rain
08/05/2025	3	12	10	No rain
05/06/2025	3	14	30	No rain
06/06/2025	3	16	10	No rain
07/06/2025	2	12	50	Light rain
08/06/2025	3	15	10	No rain
09/06/2025	3	16	80	No rain
10/06/2025	2	17	10	No rain
11/06/2025	4	18	15	No rain

BF0 = calm, BF12 = hurricane force

Analysis of Bat Survey Recordings

2.3.12 All bat calls were analysed using Anabat Insight version 2.0 to identify 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* sp. bat calls around 40kHz or 50kHz) calls were identified to genus; 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)[12]

2.3.13 A Badger survey was carried out in February and May 2025. 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 following information was recorded:

- Number and location of well used and active entrances; these are clear from any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently;
- Number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance; and

[12] Based on: Mammal Society (1989) Occasional Publication No. 9 – Surveying Badgers

- Number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

2.3.14 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)[13]

2.3.15 Surveys were undertaken between May and November 2025 to establish the presence/absence of Dormouse within the site. Survey follows the methodology set out within best practice guidance[13], whereby nesting tubes are attached to branches of trees and shrubs and checked on a regular basis for signs of use by Dormouse.

2.3.16 The guidance employs an indexation system to calculate survey effort, which is based on the number of tubes deployed and the months during which these are in place and checked for signs of use. Months in which use of nest tubes by Dormouse is more likely are afforded a higher number of survey effort 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.

2.3.17 Accordingly, a total of 80 Dormouse nest tubes were deployed within the site, positioned within hedgerows at the site boundaries and at the edge of areas of deciduous woodland in the south-west of the site (see Plan 7007/ECO5). Nest tubes were be checked monthly between May and October 2025, giving a total survey effort score of 22 points across the entire survey area.

Reptiles[14]

2.3.18 Given the presence of potentially suitable reptile habitat within the site, a survey was undertaken between May and June 2025 to establish the presence/absence of common reptile species.

2.3.19 A total of 115 50x50cm sheets of thick roofing felt were placed within suitable areas across the site to act as artificial refugia (see Plan 7007/ECO6). This represents a density of 17 refugia per hectare. The refugia, which provide shelter for reptiles, heat up more quickly than their surroundings in the morning and can remain warmer than their surroundings in the late afternoon. Being ectothermic (cold blooded), reptiles will readily use these refugia to bask upon or beneath so as to raise their body temperature, which allows them to forage earlier and later in the day. Checking the refugia at appropriate times of the day (morning and evening) for the presence of reptiles provides an effective measure of assessing the presence/absence of common reptiles at a site.

2.3.20 The refugia were left in place undisturbed for approximately 1-2 weeks to allow reptiles to find and start using them. Following this initial bedding-in period, refugia were checked at

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

[14] Surveys based on: Froglife Advice Sheet 10 (1999) Reptile Survey - an introduction to planning, conducting and interpreting surveys for snake and lizard conservation.

appropriate times of the day on seven occasions during suitable weather conditions as set out below in Table 2.3. Reptile survey dates and weather conditions.

Table 2.3. Reptile survey dates and weather conditions

Survey Date	Weather Conditions			
	Wind (BF)	Temp(°C)	Cloud Cover (%)	Precipitation
20/05/2025	4	17	30	Dry
23/05/2025	3	17	50	Dry
30/05/2025	3	17	100	Dry
02/05/2025	2	16	80	Dry
05/06/2025	3	13	60	Very Light Rain
09/06/2025	2	15	90	Dry
12/06/2025	3	17	5	Dry

BF0 = calm, BF12 = hurricane force

2.3.21 Any reptiles that were observed basking in the open or within partial cover were also recorded. Searches were also made of existing natural objects (such as logs and rocks) and other artificial refugia (such as debris or discarded tyres), where present, for reptiles or evidence of reptiles (such as sloughed skin).

Great Crested Newt (*Triturus cristatus*)

2.3.22 As a first step in assessing the possible presence of Great Crested Newt at the site, Ordnance Survey mapping and satellite imagery were examined to identify water bodies within 500m of the site boundary.

2.3.23 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 all of the following conditions are met: (a) maps, aerial photos, walk-over surveys or other data indicate that the pond(s) has potential to support a large great crested newt population, (b) the footprint contains particularly favourable habitat, especially if it constitutes the majority available locally, (c) the development would have a substantial negative effect on that habitat, and (d) there is an absence of dispersal barriers."*

2.3.24 Given that in this instance, none of the four points listed above are applicable to the site, it is considered that survey of ponds within 500m of the site boundary is not required, and that survey of ponds within 250m[15] represents adequate survey effort.

Habitat Suitability Index (HSI)

2.3.25 Where access was available, identified ponds were then subject to a Habitat Suitability Index (HSI) assessment. The HSI is used to assess the likely suitability of water bodies to

[15] 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

support Great Crested Newt. The HSI is a score derived from ten component factors that are each scored separately according to the standard method. These are:

- *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 by macrophytes (aquatic plants).

2.3.26 The overall HSI is then determined by combining scores for the above criteria into an equation devised by Oldham *et al*. (2000)[16]. The HSI score corresponds with a measure of the suitability of the water body to support Great Crested Newt of either 'poor', 'below average', 'average', 'good' or 'excellent'.

2.3.27 The HSI study was undertaken in line with the guidelines developed by Oldham *et al.* and subsequently adapted by ARG UK (2010)[17]. A suitably experienced ecologist undertook the assessment, informed by desktop research where appropriate.

Nesting Birds[18]

2.3.28 The following criteria, taken from the methodology used in the `Atlas` surveys of 1988-1991, were used to assess the nesting status of birds observed during the surveys. The following activities are considered evidence of nesting:

- Adult visiting probable nest site;
- Nest-building (including excavating nest-hole);
- Distraction display or feigning injury;
- Used nest found;
- Recently fledged young;
- Adult carrying faecal sac or food;
- Adult entering or leaving the nest site in circumstances indicating occupied nest;
- Nest with eggs found, or bird sitting but not disturbed, or eggshells found near nest; and

[16] 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

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

[18] Surveys based on methodology within: Gibbons, DW, Reid, JB & Chapman, RA (1993) *The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991,* T & A.D. Poyser, London.

- Nest with young; or downy young of ducks, game-birds, waders and other nidifugous species.

Breeding Birds[19]

2.3.29 The use of the site by breeding birds was assessed over three survey visits, each undertaken on a separate day in April, May and June 2025. Birds observed or heard within the site were recorded in accordance with a method modified from the British Trust for Ornithology's (BTO's) Common Bird Census technique[20].

2.3.30 On each survey occasion a route through the site was walked by an experienced ornithologist. Note was made of all birds either seen or heard. These 'registrations' were annotated on a site plan using standard BTO codes for each bird species and appropriate abbreviations.

2.3.31 This survey methodology has the advantage over other survey methods of mapping each registration to a specific point within the site and is therefore able to identify those areas containing the highest density and diversity of bird species.

2.3.32 The dates of each survey, together with a summary of the weather conditions are shown in 2.4 below.

Table 2.4. Breeding bird survey dates and weather conditions.

Survey Date	Weather Conditions			
	Wind (BF)	Temp(°C)	Cloud Cover (%)	Precipitation (0-5)
17/04/2025	0	5	0	0
23/05/2025	0	8	0	0
24/06/2025	0	14	90	0

2.4 Survey Constraints and Limitations

2.4.1 Not all of the species that occur in each habitat will necessarily be present or detectable during survey work carried out at any given time of the year, since different species are apparent during different seasons.

2.4.2 The initial habitat survey was undertaken outside the optimal season. However, the broad habitat types present within the site were able to be identified sufficiently for the purpose of this report, and to enable an adequate assessment of the intrinsic ecological interest of the site to be made. An update habitat condition assessment survey was conducted in May 2025 at the same time as the woodland botanical survey, thus, was subsequently conducted within the optimal survey season.

2.4.3 Note was made of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) that were observed during surveys. However, because the detectability of such species varies according to factors such as the time of year or site

[19] Surveys based on methodology within: Baille *et al*. RA (2010) *Breeding Birds in the Wider Countryside: their conservation status*, BTO Research Report No. 385, BTO, Thetford.

[20] Marchant (1983) Common Birds Census Instructions. Available at: https://www.bto.org/our-science/publications/birdtrends/2020/methods/common-birds-census

management regime, the absence of invasive species should not be assumed even if no such species were recorded during the surveys undertaken.

2.4.4 A recognised limitation of bat activity surveys is that bat detectors can only provide an index of activity rather than determine absolute numbers of bats. The results of bat activity surveys should therefore only be considered indicative of the amount of use bats make of an area rather than a measure of the abundance of bats. In addition, some bat species that are more difficult to detect because of their quiet echolocation calls, such as Brown Long-eared Bat, may be under-recorded.

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)[21], which identifies 'important ecological features' within a defined geographical context (i.e. international, national, regional, county, district, local or site importance). Further details are provided at Appendix 7007/1.

2.6 Relevant Planning Policy

National Policy Approach to Biodiversity in the Planning System

2.6.1 The National Planning Policy Framework (NPPF)[22] 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[23].

2.6.2 NPPF takes forward the Government's strategic objective to halt overall biodiversity loss[24], as set out at Paragraph 187, 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 and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs*'

2.6.3 The approach to dealing with biodiversity in the context of planning applications is set out at Paragraph 193:

'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),

[21] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, ver. 1.3 (updated September 2024)

[22] Ministry of Housing, Communities & Local Government (2024) *National Planning Policy Framework*

[23] ODPM (2006) Circular 06/2005: Planning for Biodiversity and Geological Conservation – A Guide to Good Practice

[24] DEFRA (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services

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.'

2.6.4 The above approach encapsulates the 'mitigation hierarchy' described in British Standard BS 42020:2019[25], which sets out 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 type and scale of the proposed development (BS 42020:2019, section 5.5).

Relevant Local Policy

2.6.6 The Gravesham Local Plan Core Strategy was adopted in 2014 and aims to:

- *Set out a long-term vision for the future of Gravesham based on evidence of need to support communities and outline what makes Gravesham a distinctive and attractive place to live and work.*

- *support and inform; sustainable development via investment in infrastructure, economic development, and regeneration proposals within the borough, while promoting healthy communities.*

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

- *provide a consistent basis for planning application decisions.*

Policy CS12: Green infrastructure

A multifunctional linked network of green spaces, footpaths, cycle routes and wildlife stepping stones and corridors will be created, protected, enhanced and maintained. The network will improve access within the urban area, from the urban area to the rural area and along the River Thames. The key parts of the network are identified on Figure 19: Strategic Green Infrastructure Network.

Sites designated for their biodiversity value will be protected, with the highest level of protection given to internationally designated Special Protection Areas, Special Areas of Conservation and Ramsar sites, followed by nationally designated Sites of Special Scientific Interest, followed by Local Wildlife Sites and then by other areas of more local importance for biodiversity.

There will be no net loss of biodiversity in the Borough, and opportunities to enhance, restore, re-create and maintain habitats will be sought, in particular within the Biodiversity Opportunity Areas shown on the Strategic Green Infrastructure Network map and within new development.

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

The overall landscape character and valued landscapes will be conserved, restored and enhanced. The greatest weight will be given to the conservation and enhancement of the landscape and natural beauty of the Kent Downs Area of Outstanding Natural Beauty and its setting. Proposals will take account of the Kent Downs Area of Outstanding Natural Beauty Management Plan, the Gravesham Landscape Character Assessment, and the Cluster Studies where relevant.

No relevant policies were carried over within the 'Gravesham Local Plan First Review – Saved and Deleted Policies Version (September 2014)', which sets out policies which have been saved from the 'Gravesham Local Plan Adopted November 1994'.

3 Ecological Designations

3.1 Statutory Designations (International)

3.1.1 The statutory designations of ecological importance that occur within the local area around the site are shown on Plan 7007/ECO2.

3.1.2 The nearest statutory nature conservation designation to the site is North Downs Woodland SAC, approximately 2.9km to the southeast of the site. The SAC is designated on the basis of that it supports Annex I habitats. The site consists of mature Beech forests, Yew woods on steep slopes, and calcareous grassland.

3.1.3 The next closest international designation is Thames Estuary and Marshes SPA and Ramsar, located approximately 6.8km to the northeast of the site. The SPA is designated for supporting internationally important populations of overwintering Avocet *Recurvirostra avosetta* and Hen Harrier *Circus cyaneus*, passage and overwintering populations of Ringed Plover *Charadrius hiaticula* and an important assemblage of overwintering wildfowl.

3.1.4 The site qualifies as Ramsar on the basis of supporting notable plant and invertebrate species, an internationally important waterfowl assemblage and important populations of Ringed Plover, Black-tailed Godwit *Limosa limosa*, Grey Plover *Pluvialis squatarola*, Red Knot *Calidris canutus islandica*, Dunlin *Calidris alpina* and Redshank *Tringa tetanus*.

Assessment of Proposals

3.1.5 Air quality effects are a consideration with regards to proposed development within the proximity of European Sites which contain features sensitive to such effects. These can include the effects of increased levels of pollutants and elevated levels of nitrogen deposition resulting from various sources including vehicle emissions. However, although the proposals will result in a modest increase in vehicle traffic, this is likely to be well below the screening threshold of 1000 AADT which is set out in the current DMRB guidance. The projected baseline for air quality is also expected to improve significantly due to ongoing improvements in vehicle emissions and the planned phasing out of petrol/diesel cars. Furthermore, the site is not located within an Air Quality Management Area (AQMA), with the nearest AQMA being associated with the A2, approximately 3.5km to the north.

3.1.6 The site is outside the 6km zone of influence for the Medway Estuary and Marshes SPA/Ramsar, Swale SPA/Ramsar and Thames Estuary and Marshes SPA/Ramsar, which form part of the Birdwise North Kent Mitigation Strategy[26].

3.1.7 Overall, Likely Significant Effects (LSE) are not expected to arise from the development with respect to any of the International Designations. Both North Downs Woodlands SAC, and Thames Estuary and Marshes.

3.1.8 As such, it is not considered that either designation will present a constraint/issue, and it is not intended to produce a Shadow Habitats Regulations Assessment. However sufficient information should be set out in the Ecological Appraisal submitted with any planning application to allow the LPA to complete an HRA should it be requested by Natural England.

3.1.9 It is also advised that European Sites are considered as part of the scope of any traffic modelling/assessment carried out by the Transport Consultant, so LSE can be screened out.

[26] Bird Wise North Kent Mitigation Strategy. North Kent SAMMS Project Board. (January 2018)

Other statutory designations are well separated from the site and are unlikely to be affected by the proposals.

3.2 Statutory Designations (Other)

3.2.1 The site does not contain any identified statutory ecological designations.

3.2.2 The nearest ecological designation is Shorne and Ashenbank Woods (SSSI) located approximately 2.7km northeast of the site. It is recorded as a complex of Ancient and Plantation Woodland and includes a variety of stand-types associated with tertiary gravels, clays and sands.

3.2.3 Hailing to Trottiscliffe Escarpment SSSI lies 2.9km to the east of the site which is designated on a biological basis for its outstanding assemblage of plants and invertebrates.

3.2.4 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 Shorne and Ashenbank Woods SSSI, however, this IRZ does not relate to residential development.

Assessment of Proposals

3.2.5 A single Local Nature Reserve identified on MAGIC lies within a 5km zone of the site; however, all are well removed from the, separated by extensive areas of built development and not expected to be impacted considering the nature of the development proposals.

3.2.6 The site has been identified as sitting within the impact risk zone for Shorne and Ashenbank Woods SSSI; however, this relates to Infrastructure, Minerals, Oil and Gas, Air pollution (Industrial/Agricultural development), Combustion and discharge.

3.2.7 Given the distance and separation of all other statutory nature conservation designations from the site, the proposals are considered unlikely to result in any adverse effects on such designations. Which do not therefore appear to represent an ecological constraint on the proposals.

3.3 Non-statutory Designations

3.3.1 The non-statutory designations of nature conservation interest that occur within the local area are shown on Plan 7007/ECO2.

3.3.2 The site does not contain any identified non-statutory ecological designations. The data search request returned by KMBRC found there to be a number of Local Wildlife Sites within the search area.

3.3.3 The nearest non-statutory nature conservation designation to the site is Henley Wood and Pasture an area of Ancient and semi-natural woodland, which is located approximately 0.8km southeast of the site.

3.3.4 The next nearest non-statutory nature conservation designation to the site is B260 Longfield Road, which is located approximately 0.95km west of the site. This area has been designated as a Roadside Nature Reserve and is separated from the site by the village of Hook Green.

Assessment of Proposals

3.3.5 All identified non-statutory designations are located outside of the site and removed from the identified proposed development areas within the site.

3.3.6 Accordingly, non-statutory ecological designations are unlikely to represent a constraint or require further consideration.

3.4 Nation Habitat Network and Local Nature Recovery Strategy

3.4.1 A proportion of the site is designated within the national habitat network as being within Network Enhancement Zone 1. Land here is defined as Land connecting existing patches of primary and associated habitats which is likely to be suitable for creation of the primary habitat. Factors affecting suitability include proximity to primary habitat, land use (urban/rural), soil type, slope and proximity to coast.

3.4.2 Action in this zone: to join up existing habitat patches and improve the connections between them can be targeted here.

3.4.3 Furthermore, the site has been identified within the draft Kent and Medway Local Nature Recovery Strategy (LNRS), as areas that could become of importance to Biodiversity. This is primarily driven due to the areas designations under the connectivity labels (Con 1.1 – Con 3.3) which highlights the potential for maintained, created, restored and enhanced habitat connectivity and that potential value it can bring to biodiversity in the wider landscape.

Assessment of Proposals

3.4.4 The maps of the National Habitat Network provide a basis for Local Nature Recovery Strategies which will be brought forward under the Environment Act 2021.

3.4.5 This document identifies the site as sitting within area Network Enhancement Zone 1. Network Enhancement Zone 1 specifically refers to landscape areas connecting primary and associated habitats. The aim of the habitat network map is to help identify possible locations for actions to improve ecological resilience of the current outstanding habitat network. The potential actions to be undertaken within these areas are: decreasing habitat fragmentation, increasing extent of habitat, restoring degraded habitat, and expanding, linking and joining the networks.

3.4.6 These are not specifically mapped and the positioning of the site in the context of the ecological network's dataset, does not preclude appropriate development. It serves more as a guide to where opportunities for habitat planting and enhancements are available. It also informs the 'strategic significance' multiplier which is used in BNG.

3.4.7 It is also noted that these areas are also identified as those with potential for new habitat corridors to be created to improve ecological network integrity and restoring degraded habitat. Therefore, the National Habitat Network mapping document highlights the potential opportunity for the sites development proposals to add ecological connectivity within the local area, with the significance if any being the importance of maintaining robust habitat corridors when designing development and restoring previously neglected/degraded habitats.

3.5 Priority Habitats, Ancient Woodland and Notable Trees

3.5.1 The site contains an area of woodland that is identified in MAGIC 'Churchway Wood', an area of Priority Habitat 'Deciduous Woodland'.

3.5.2 Several areas of Ancient Woodland are located within the wider surrounding area of the site, the closest located approximately 0.86km to the east of the site.

3.5.3 There are no records of any notable or veteran trees within or adjacent to the site. The closest notable/veteran trees are recorded to be within Camer Park to the southeast.

Assessment of Proposals

3.5.4 There are no records of any notable or veteran trees within or adjacent to the site. A single area of woodland identified as 'Churchway Wood' is recorded identified as Priority Habitat after a review of the MAGIC database. This parcel of Lowland Mixed Deciduous Woodland (LMDW) located in the central western portion of the site is to be entirely protect, retained and enhanced under the development proposals, with a 15m buffer established around its site adjoining faces. As such no impacts on ancient woodland, notable trees or Priority Habitat are anticipated as a result of the proposals.

3.6 Summary

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

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. A number of records of Priority Species were returned from KMBRC including English Bluebell, Early-purple Orchid and Snowdrop dating between 1985 and 2022, none of which were recorded within or adjacent to 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 locations of habitat types and features within the site are indicated on Plan 7007/ECO3.

4.2.2 The site is dominated by a single arable field. Hedgerows, ruderal/ephemeral vegetation, grassy margins and trees form the majority of the site boundaries. There is an area of mature deciduous woodland (Churchway Wood), located in the west of the site which is recognised on Multi-Agency Geographic Information for the Countryside (MAGIC) as an area of Priority Habitat Deciduous Woodland. A further patch of mixed woodland lies to the site southwestern corner.

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 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 Lowland Mixed Deciduous Woodland is considered to qualify as Priority Habitats and therefore constitute an important ecological feature. This is discussed further in the relevant habitat sections below.

4.4 Irreplaceable Habitats

4.4.1 Irreplaceable habitats are now defined under The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024 and include blanket bog, lowland fens, limestone pavements, coastal sand dunes, ancient woodland, ancient trees and veteran trees, spartina saltmarsh swards and mediterranean saltmarsh scrub.

4.4.2 No irreplaceable habitats are present within the site.

4.5 Habitat Descriptions and Evaluation

4.5.1 The habitats and ecological features present within the site are described in Table 4.1 below. This table sets out their UK Habitat Classification Primary Habitats and Secondary Codes, and the corresponding habitat type and condition according to the Statutory Biodiversity Metric. The table also indicates whether these habitats constitute an important ecological feature and sets out 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. Further information relevant to grassland and woodland habitats is set out below the table. The value of habitats for the fauna they may support is considered separately in Chapter 5 below.

Table 4.1a. Habitat Descriptions and Evaluation – Area Habitats

Ref	UK Hab Primary Habitat/ Secondary Codes*	Statutory Biodiversity Metric Habitat Type and Condition	Description	Evaluation
G1, G2, G3, G4	g4 Modified Grassland 507, 510	Grassland: Modified grassland (moderate condition)	The grassland areas on site are entirely located along a proportion of the site boundaries, adjacent to the native hedgerows, forming a rough, species-poor, herb-poor, grass dominant, ecotone edge The grass sward areas on site appeared to have been subject to recent management at the start of the cropping season during the February walkover survey, whilst the update survey in May 2025 recorded the sward height to be varied and outgrown (greater than 30cm in places). Where present, the grass tussock areas were noted to lack structure or thatching with few forb species recorded. Localised areas of bare ground were also evident throughout. Grassland area G1 forms the field margin, running adjacent to woodland are W1. The area was recorded to be heavily colonised by nettle and brambles, whilst areas of localised grassy tussocks were also present. Grassland G1 and associated areas of sparsely vegetated ground were recorded to support <5 species per m^2. Species present within G1 were Perennial Ryegrass *Juncus inflexus*, Yorkshire fog *Holcus lanatus*, Broad-leaved dock *Rumex obtusifolius*, Hogweed *Heracleum sphondylium*, Cleavers *Galium aparine* and Common Nettle *Urtica dioica*. Grassland area G2 and G3 is recorded to form the grassy margin bordering H1 and H2 respectively. Species recorded here included Yorkshire fog, Common Nettle, Cleavers, Bramble, Wood Avens *Geum urbanum* and Ragwort *Jacobaea vulgaris*. Other species recorded to be occasionally present included Field Speedwell *Veronica agrestis*, Cow Parsley *Anthriscus sylvestris*, Dog's Mercury *Mercurialis perennis* and Ground Ivy *Glechoma hederacea*. G4 was recorded to be noticeably different in composition to G1-G3. Forming a thin strip of grassland adjacent to the northern residential fence line, the sward was recorded to be dominated by Maise, with Cleavers, Cow Parsley and Nettle also frequent. Topographically, field F1 is set so that G4 is downhill from the rest of the field,	Does not form important ecological feature

Ref	UK Hab Primary Habitat/ Secondary Codes*	Statutory Biodiversity Metric Habitat Type and Condition	Description	Evaluation
			thus it is likely that surface water run of and associated nutrient enrichment has played a role in setting the soil conditions for the species prevalent here.	
W1	wh1 Other woodland - mixed 16, 203, 214	Woodland and forest: Other woodland mixed (moderate condition)	Woodland W1 is recorded to be a mature strip of mature mixed woodland, forming the sites southwestern boundary, adjacent to F1. The wooded strip back on to the adjacent developments back gardens and as a result, it was recorded that there were significant levels of dumped spoil and garden waste. There was also significant lying deadwood present from where felled limbs and branches had been left in situ post topical management of the wooded strip. The woodland was recorded to comprise a mix of mature Oak *Quercus robur*, Scots Pine *Pinus sylvestris*, Cherry *Prunus avium*, Ash *Fraxinus excelsior*; with strands of emergent Hazel *Corylus avellana*, Holly *ilex sp.* and Elder *Sambucus nigra* growth. Mature tree specimens here were documented to have heavy ivy cover, encasing trunks throughout. Minimal woodland ground flora was recorded due to heavy shading, falling leaf litter and rotting detritus/rotting deadwood. Ground flora here included a thick bramble *Rubus fruticosus agg.* understory with occasional Spanish Bluebell *Hyacinthoides hispanica*, Garlic Mustard *Alliaria petiolata*, Lords and Ladies *Arum maculatum*, Cleavers, Dogs Mercury *Mercurialis perennis*, Perennial Honesty *Lunaria rediviva* and Wood avens. W1 is not considered to qualify as 'Priority Woodland' habitat, and therefore not considered to be a feature of significant ecological importance.	Does not form important ecological feature
W2	w1f Lowland mixed deciduous woodland 16, 203, 213, 214	Woodland and forest – Lowland Mixed Deciduous Woodland (moderate condition)	Woodland W2, initially identified on MAGIC as an area of Priority Habitat 'Deciduous Woodland' was surveyed as part of the initial Phase 1 Habitat Walkover survey. Identified as an area of Lowland Mixed Deciduous Woodland', W2 was subsequently subject to a detailed woodland botanical survey during the update condition assessment survey conducted in May 2025. The woodland was recorded to comprise an abundance of mature deciduous native tree species, forming a thick canopy cover. Dominant canopy species include English	Priority habitat, forms important ecological feature (local value)

Ref	UK Hab Primary Habitat/ Secondary Codes*	Statutory Biodiversity Metric Habitat Type and Condition	Description	Evaluation
			Oak, Cherry, Ash, Field Maple, Hazel. The understory was recorded to be dominated by species indicative of nutrient enrichment such as dense Bramble, Cow Parsley, Common Nettle and Ivy; with occasional Hogweed, Spanish Bluebell, Cleavers, Dog's Mercury, Lords and Ladies, Holly and Yellow Iris *Iris pseudacorus*.	
TR1	(Ruderal or ephemeral) 81	Sparsely vegetated land – Ruderal/Ephemeral (poor condition)	Areas of tall ruderal vegetation were recorded to be present along the site's western boundary, north of 'Churchway Wood'. The areas ruderal/ephemeral vegetation were colonising the sites boundary in areas subject to garden waste tipping and nutrient enrichment, associated with the adjacent back gardens. Ruderal margin was estimated to be approximately 4m wide, comprising Common nettles, both new regrowth and a matted dead understorey. Other species present here included Cow Parsley *Anthriscus sylvestris*, Cleavers, Lords and Ladies, Barren Brome *Bromus sterilis*, Cut-leaved Crane's-bill *Geranium dissectum* and Mustard *Brassica juncea*.	Does not form important ecological feature
F1	c1c Cereal crops	Cereal crops (N/A – other)	Field F1 is currently in use as an arable field. At the time of the update condition assessment survey (May 2025), the crop had grown to waist height. Negligible ground flora/herb species were recorded to be present.	Does not form important ecological feature

** Habitat types not listed as a primary habitat are indicated in brackets*

UK Hab Secondary Codes:
16 – Tall forbs
81 – Ruderal or ephemeral
203 – Mature tree
213 – Complex woody structure
214 – Fallen deadwood abundant
507 – Nutrient-enriched substrate
510 – bare ground

Table 4.1b. Habitat Descriptions and Evaluation – Hedgerows/Line of Trees

Ref	UK Hab Primary Habitat/ Secondary Codes*	Statutory Biodiversity Metric Habitat Type and Condition	Description	Evaluation
H1	h2a native hedgerow	Native hedgerow (good condition)	A network of hedgerows is present across the site, forming the majority of field boundaries. These vary in terms of species richness, structure and management, although the majority appear to be well-established. Typical species include Ash, Cherry Hawthorn, Field Maple, Oak, Elm and Dogrose. None of the hedgerows assessed are likely to qualify as an important hedgerow under the Hedgerows Regulations 1997.	Does not form important ecological feature
H2	h2a native hedgerow 11	Native hedgerow (moderate condition)		
H4	h2a native hedgerow	Native hedgerow (moderate condition)		
H3	h2b non-native and ornamental hedgerow	Non-native and ornamental hedgerow (poor condition)	Ornamental non-native hedgerow forming residential curtilage.	Does not form important ecological feature

** Habitat types not listed as a primary habitat are indicated in brackets*

UK Hab Secondary Codes:

11 – Hedgerow with trees

4.6 Summary

4.6.1 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
Woodland	Local
Hedgerows	Local

4.6.2 Other habitats present within the site include modified grassland, ruderal/ephemeral vegetation and ornamental hedgerows. These habitats do not form important ecological features.

4.7 Assessment of Proposals

4.7.1 The proposed development has followed the mitigation hierarchy approach as set out under the National Planning Policy Framework (NPPF), with consideration given first to avoidance, followed by mitigation and compensation.

4.7.2 In line with this hierarchy, habitats forming important ecological features are largely retained under the proposals avoiding significant habitat losses, with built development focused within areas of lower value habitat including modified grassland and arable cropland. Losses of these habitats, not forming important ecological features, will be addressed as part of the overall balance of biodiversity net gain.

4.7.3 A discussion of effects and any requirements for mitigation or compensation in relation to individual habitats of ecological importance is set out below.

Lowland Mixed Deciduous Woodland

4.7.4 It is assumed that the woodland areas can be, and will be retained as part of the development proposals. It is considered that Woodland W2 meets the definition for Lowland Mixed Deciduous Woodland (LMDW)[27] which covers the majority of natural woodlands where the proportional of native deciduous trees species is >80%.

4.7.5 The original Phase 1 Habitat survey was undertaken outside of the optimal survey season for a Woodland survey, thus was limited in its capacity to assess the woodland; however, a subsequent detailed Woodland Botanical Survey was undertaken on the Woodland area, during the optimal survey season (mid-April – early June).

4.7.6 Presence of Ancient Woodland Indicator species and plant communities was assessed and compared to the ancient woodland indicator indicative species list for the southeast (Kent and Medway) and was recorded to be extremely limited, with the extent of the indicator species recorded to be English Bluebell which is not considered to be a strong indicator species due to its colonisation rates and is frequently found in secondary woodland. Therefore, they are only of relevance when found as part of a suite of other AWIs.

4.7.7 As part of the development proposals, a precautionary 15m buffer zone is to be incorporated into the site layout surrounding 'Churchway Wood', this will ensure that root

[27] Lowland mixed deciduous woodland. Climate Change Sensitivity

protection zones are maintained and compaction will be avoided. Therefore, it is assessed that following the establishment of the 15m buffer, the development proposals present the opportunity to protect 'Churchway Wood'. In addition, measures set out within the Biodiversity Net Gain Assessment outline the proposed measures set to be taken to ensure that the woodland is enhanced as part of the development, ensuring its long-term viability.

Hedgerows

4.7.8 Short lengths of hedgerow H1 is to be lost under the proposals. These sections of hedgerow comprise only a small part of the larger hedgerow network and are not considered to be of importance outside of a local context. Whilst these losses will be necessary to facilitate site access, hedgerow losses will be compensated for through new planting, to be secured as part of the habitat measures to achieve biodiversity net gain.

4.7.9 In addition, as the site will be forming the new extent of the green belt, additional screen planting and gap filling will be undertaken along the full extent of hedgerow H2 prior to commencement on site, in the processes enhancing both its condition and core hedgerow classification (Native Hedgerow -> Species-rich native hedgerow; Low -> Medium distinctiveness).

4.7.10 Retained hedgerows will be protected during construction works in line with standard practice, as detailed further at Chapter 6.

Other Development Impacts

4.7.11 Standard measures will be implemented to minimise construction effects such as dust deposition and surface run-off of contaminants or silt, whilst implementation of a drainage strategy as part of the completed development will safeguard water quality in the long-term. Ongoing management of retained habitats and open spaces will allow for management of recreational activity to minimise disturbance to sensitive habitats and wildlife. Further detail is set out at Chapter 6 below.

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 particular attention paid to the potential presence of protected or notable species. Specific survey work was undertaken in respect of Badgers, bats, Breeding birds, Dormouse and reptiles, the results of which are set out below.

5.1.2 The full results in relation to foraging and commuting bats are provided in a separate addendum report.

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 BAP, which continue to be regarded as Priority Species under the subsequent country-level biodiversity strategies.

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 7007/2). 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. Several bat species are also S41 Priority Species.

5.3.2 **Background Records.** No records of bats within or adjacent to site were returned from the LRC, however several species have been recorded near site. The closest record is from 2019 and located 36m East of the site boundary based on a six-figure grid reference, and includes Leisler's Bat *Nyctalus leisleri*, Brown Long-eared Bat *Plecotus auritus*, Noctule *Nyctalus noctule,* Common Pipistrelle *Pipistrellus pipistrellus* and Serotine *Eptesicus serotinus*. Other bat species recorded within 2km of the site was Natterer's bat, Daubenton's bat *Myotis daubentonii* and Soprano Pipistrelle *Pipistrellus pygmaeus.* Whiskered bat *Myotis mystacinus* was also recorded outside of the 2km buffer.

Survey Results and Evaluation

<u>Preliminary Appraisal</u>

5.3.3 As detailed above, records of bats have been returned from within the surroundings of the site. These species are largely typical given the region and the types of habitats present in the wider area of the site, although Barbastelle are of particular interest given their very rare status, whilst Leisler's Bat, Nathusius' Pipistrelle and Serotine are considered rare within Southwestern England. The desk study does not indicate any ecological designations within 10km of the site which are identified for their bat interest.

5.3.4 Habitats within the wider area of the site largely comprise open farmland, with features including woodland and parkland corridors likely to be of elevated interest for bats. Notably, Camer Park Country Park, supporting numerous veteran and notable trees, is located immediately adjacent to the southeast of the site, separated by Camer Road. The site is bounded by residential development to the north and west, although a reasonable network of hedgerows with frequent associated trees extends along the sites southern and eastern boundaries, providing moderate connectivity to Churchway Wood, located along the sites central western boundary. Connectivity appears more limited to the north of the site, where strong hedgerow linkages are lacking.

5.3.5 Within the site, several trees have been identified as potentially suitable to support roosting bats, detailed further below. A preliminary assessment of habitats in terms of their likely value for foraging and commuting bats is set out in Table 5.1 below.

Table 5.1. Assessment of value of habitats within the site for foraging and commuting bats

Commuting (potential flight-paths)	Foraging habitats
Woodland edge and associated hedgerow network forms continuous habitat that is well connected to the wider landscape. Woodland is mature is nature and provides a valuable commuting and foraging resource, boundary hedgerows are heavily managed and gappy in nature – moderate potential suitability. Remainder of the site more fragmented – low potential suitability.	Arable fields unlikely to support foraging activity away from boundary hedgerows – low potential suitability. Tall ruderal vegetation along the sites northwestern boundary does provide some foraging interest, though inflicted with high light spill from the adjacent development – low potential suitability Mature woodland edge habitat with developed understory – high potential suitability. Other areas of semi-natural habitat including grassland and scrub – moderate potential suitability.

<u>Roosting – Trees</u>

Assessment of Roosting Potential

5.3.6 Trees within the site were subject to an initial assessment for their suitability to support roosting bats. Where trees may be impacted under the development proposals, these have been subject to a ground level tree assessment (GLTA). Trees identified as supporting PRFs or identified as FAR are indicated on Plan 7007/ECO3. The results of this assessment are summarised in Table 5.2 below.

Table 5.2. Tree assessment results

Tree Ref.	Species	Assessment and potential roosting features	Summary
BT1	Ash	Heavy ivy covering trunk and limbs, small superficial rot holes identified on lower limbs.	PRF-I

Tree Ref.	Species	Assessment and potential roosting features	Summary
TG2	Ash, Cherry	Heavy ivy covering trunks	PRF-I
TG3	Cherry, Field Maple, Oak	Heavy ivy covering trunks	PRF-I
TG4	Broadleaved tree group; Elm	Heavy ivy covering trunks	PRF-I
BT2	Ash	Standing dead tree with heavily ivy coving trunk	PRF-I
BT3	Ash	Heavy ivy covering, lifted bark, multiple split limbs, large dead hanging branch with associated rot	PRF-M
TG5	Various	Numerous established trees associated with woodland. Not fully inspected and could support roosting potential, including heavy ivy cover and split/dead limbs.	PRF-M
BT4	Oak	Heavy ivy covering trunks, smaller limbs with splits in places	PRF-I
BT5	Oak	Heavy ivy covering trunks, smaller limbs with splits in places	PRF-I

Foraging and Commuting

5.3.7 Full results in relation to foraging and commuting bats are included within a separate addendum bat report.

Assessment of Proposals

Roosting

Trees

5.3.8 It is understood that the majority of trees within the site, including those described above with potential bat roost features, are to be retained within the proposals, such that in the event that bats are present within the trees they will remain unaffected. It is noted that TG2 will be removed at least in part in order to facilitate access. This tree group is recorded to have limited bat roosting suitability (PRF-Is) in the form of heavy ivy cover around the trunks. As such, subject to the implementation of the recommendations outlined at Chapter 6 below in relation to the soft felling under ecological supervision of TG2 and a sensitive lighting strategy, it is considered that bats will be fully safeguarded under the proposals.

5.4 Badger

5.4.1 **Legislation.** Badger receives legislative protection under the Protection of Badgers Act 1992 (see Appendix 7007/2), and as such should be assessed as an important ecological feature. The legislation aims to protect this species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain.

5.4.2 Licences can be obtained from Natural England for development activities that would otherwise be unlawful under the legislation. The types of activity that should be licensed are described in the relevant best practice guidance. [28, 29]

5.4.3 **Background Records**. No records of Badger *Meles meles* on site were returned from the LRC, with the closest record of badger from 2011 located 332m west of site based on a six figure grid reference within the urban area of Hook Green, and the next closest record approximately 800m west.

5.4.4 **Survey Results and Evaluation.** Survey results and evaluation in respect of Badger are set out in a Confidential Appendix separate to this report.

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 7007/2). Dormouse is also a S41 Priority Species. On this basis, Dormouse is considered to form an important ecological feature.

5.5.2 **Background Records.** The closest record of Dormouse *Muscardinus avellanarius* returned from the LRC included 30 different records of dormouse in the same location between 2011 and 2012, approximately 1.1km southeast located within Henley wood. An additional record of dormouse is located approximately 1.3km northeast of site.

5.5.3 **Survey Results and Evaluation.** The site contains suitable habitat for Dormouse in the form of areas of woodland and hedgerows. However, the majority of the site is dominated by an open cropland which is unsuitable habitat for Dormouse.

5.5.4 Given the presence of suitable Dormouse habitat within the site and the known presence of this species in the wider area from the desktop study, specific Dormouse survey work was undertaken at the site between May and November 2025. The survey transect plan is shown at Plan 7007/ECO5. During the course of the survey work, no Dormouse, or evidence of Dormouse presence was discovered.

5.5.5 **Assessment of Proposals**. Under the proposals there will be a partial loss of Dormouse habitat in the form of the removal of a section of H1 in order to facilitate access (approximately 0.03m of linear hedgerow and trees). Based on the survey results, it is not assessed that Hazel Dormouse would be negatively impacted by the development proposals.

5.5.6 Habitat of limited value to Dormouse will be lost under the proposals, whilst areas of Dormouse suitable scrub and woodland complex, with an eco-tone edge will be planted under the proposals, such that suitable opportunities for Dormouse will be maintained at the site in the long term. Given that no Dormouse have been found to be present on site during the course of the survey work undertake, it is not considered that Dormouse present a constraint and therefore no further mitigation measure will need to be taken.

[28] English Nature (2002) *Badgers and Development*

[29] Natural England (2011) Badgers and Development: A Guide to Best Practice and Licensing, Interim Guidance Document

5.6 Other Mammals

5.6.1 **Legislation.** Other UK mammal species do not receive direct legislative protection relevant to development activities but may receive protection against acts of cruelty (for example, under the Wild Mammals (Protection) Act 1996). Some other mammal species, such as Hedgehog, Brown Hare and Harvest Mouse are S41 Priority Species and should be assessed as important ecological features.

5.6.2 **Background Records.** The closest record of hedgehog is located 123m west of site based on a six-figure grid reference from 2022 within the Hook Green urban area. No recent records for other mammal species were recorded within 2km.

5.6.3 **Survey Results and Evaluation.** No evidence of any other protected, rare or notable mammal species was recorded from within the site. Other mammal species likely to use the site, such as Fox *Vulpes vulpes*, remain common in both a local and national context, and do not receive specific legislative protection in a development context. Such species are not a material planning consideration and the loss of habitats used by these species to the proposals is of negligible significance.

5.6.4 **Assessment of Proposals.** Habitat losses arising from the proposals are not considered likely to have significant effects on Brown Hare and Hedgehog. Suitable habitat for Hedgehogs is identified as edge habitat, requiring a variety of ecotones available for foraging and sheltering opportunities. Edge habitat would be retained, protected and enhanced under the proposals, and habitat losses in the form of arable field F1 would be offset by the provision of new gardens and open space. Precautionary safeguards are recommended to minimise the risk of harm to other mammals that may be present. Enhancement measures to maintain habitat connectivity for Hedgehog are recommended, as set out in Chapter 6 below.

5.7 Amphibians

5.7.1 **Legislation.** All British amphibians 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 listed as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). As such, both Great Crested Newt and habitats used by this species are afforded protection (see Appendix 7007/2). 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.** The only record of Smooth Newt *Lissotriton vulgaris* and Great Crested Newt *Triturus cristatus* within 2km is approximately 1.3km northeast of site, however the most recent records are from 1990 and based on a 2-figure grid reference. Records of Common Frog and Common Toad were recorded 130m west of site in 2019 and 2009 respectively.

5.7.3 **Survey Results and Evaluation.** A single waterbody was recorded as present within 250m of the site based on the DEFRA MAGIC mapping tool. Upon further inspection during the walkover survey in February 2025, this water was recorded to no longer exist. No other waterbodies are present within 500m.

5.7.4 The site does not contain any ponds or standing waterbodies that could provide potential breeding opportunities for amphibians such as Great Crested Newt. There are also no ponds

located within 500m of the site. As such, given the lack of suitable breeding habitat within the site and its surrounds and the lack of terrestrial habitat of elevated value to amphibians, it is considered that this group does not represent a constraint to the proposals.

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), as set out at Appendix 7007/2. 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.** The closest record of reptiles includes both Common Lizard and Slow Worm 344m east of site within Camer Park in 2014. The next closest record for both species is approximately 1.5km southeast in the Henley Down area.

5.8.3 **Survey Results and Evaluation.** Specific survey work for reptiles was undertaken at the site, as shown on Plan 7007/ECO6 and summarised in Table 5.9 below.

Table 5.9. Reptile survey results.

Visit	Date	Common Lizard		Slow Worm		Grass Snake		Other Species
		Adult	Juv.	Adult	Juv.	Adult	Juv.	
1	20/05/2025	0	0	0	0	0	0	0
2	30/05/2025	0	0	0	0	0	0	0
3	02/06/2025	0	0	0	0	0	0	0
4	05/06/2025	0	0	0	0	0	0	0
5	02/06/2025	0	0	0	0	0	0	0
6	09/06/2025	0	0	0	0	0	0	0
7	12/06/2025	0	0	0	0	0	0	0
Peak Count		**0**		**0**		**0**		

5.8.4 The habitats present within the site, in particular the grassland margins, tall forbs and woodland edge vegetation, appear to provide potentially suitable opportunities for common reptile species, should this group be present. However, no reptiles have been recorded during the conducted reptile surveys and similar habitats of value occur relatively frequently throughout the surrounding area.

5.8.5 Habitat of limited value to reptiles will be lost under the proposals, whilst areas of reptile suitable grassland and scrub complex, with an eco-tone edge will be planted under the proposals, such that suitable opportunities for reptiles will be maintained at the site in the long term. Given that no reptiles have been found to be present on site during the course of the survey work undertaken, it is not considered that reptiles present a constraint and therefore it is not expected that any further mitigation measure will need to be taken.

5.8.6 Furthermore, new opportunities will be available for reptiles as described in Chapter 6 below to ensure that the local conservation status of reptiles will be maintained at the site should they be present.

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 special penalties apply to legal offences (see Appendix 7007/2).

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[30]. 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 level or rapid rate of population decline (>50% over the past 25 years). Numerous 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.** The closest record of birds returned by the LRC includes a number of species 630m west of site recorded in 2014, 2015 and 2016 including White Wagtail *Motacilla alba alba*, Hobby *Falco Subbuteo*, Peregrine *Falco peregrinus,* Little Egret *Egretta garzetta,* Siskin *Carduelis spinus*, Common Buzzard *Buteo buteo and* Sparrowhawk *Accipiter nisus.* Other notable species within 2km of site include Nightingale *Luscinia megarhynchos,* Barn Owl *Tyto alba,* Little Owl *Athene noctua*, Red Kite *Milvus milvus,* Mediterranean Gull *Larus melanocephalus* and Swift *Apus apus.*

5.9.4 **Survey Results and Evaluation.** The site offers potential nesting and foraging opportunities for a range of common bird species, particularly in the form of hedgerows, trees and woodland. Several species of bird were observed within the site during the Phase 1 survey including: Blackbird *Turdus merula*, Siskin, Robin *Erithacus rubecula*, Great Tit *Parus major*, Blue Tit *Cyanistes caeruleus*, Goldfinch *Spinus tristis* and Skylark *Alauda arvensis*.

5.9.5 Specific breeding bird surveys were carried out at the site during April, May and June 2025. These surveys recorded a typical assemblage for arable land in southeast England. For the size of the site, it supports a low to moderate assemblage of bird species, given that the majority of the site is taken up with cereal crop cultivation and despite the presence of the woodland copse towards the centre of the site.

5.9.6 A total of 30 species were recorded over the three post-dawn surveys, the majority of which are not listed as having any special conservation status. 13 species were considered to be either definitely breeding (10) or probably breeding on site (3), five red and six amber listed species were recorded on site of which the red listed Skylark and amber listed Dunnock, Song Thrush *Turdus philomelos*, Woodpigeon *Columba palumbus* and Wren *Troglodytes troglodytes* were all considered to be breeding on site (see Plan 7007/ECO7 for survey results).

5.9.7 Of note, red listed Skylark were considered to be probably breeding in the centre of the site within the cereal crop with two individuals observed singing in flight, a number of individuals flying around the field, flying over singing and interacting between the tracks in the field. However, upon close observation, there was no conclusive evidence of

[30] Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win I. (2021).*'The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain.* British Birds *114*, p.p. 723-747.

nesting/breeding. Furthermore, whilst arable habitat is one of the preferable breeding habitats for Skylark (and thus recorded as probable breeding), it should be noted that there is a high degree of disturbance on site, with members of the public observed walking dogs through the centre of the field using the public right of way. Several Skylark were also recorded singing in the larger arable fields to the east of the site. Finaly, of note, all recordings of Skylark on site took place during the first survey in April, none were recorded during the May and June surveys. As such, it is not considered conclusive that Skylark are definitely breeding or nesting within the site.

5.9.8 **Assessment of Proposals.** The proposals are likely to result in the loss of a small number of trees and arable habitat within the site in order to facilitate the proposed development and, therefore, this could potentially affect any nesting birds that may be present at the time of works. However, W1 and W2 (Churchway Wood) are due to be retained and buffered, maintaining the primary breeding bird resource. Accordingly, a number of safeguards in respect of nesting birds are proposed, as detailed in Chapter 6 below. In the long-term, new nesting opportunities will be available for birds as described in Chapter 6 below.

5.10 Invertebrates

5.10.1 **Legislation.** Various invertebrate species are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). In addition, Large Blue *Phengaris 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), as set out at Appendix 7007/2. Some 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 records of notable or protected invertebrate species were recorded within site by KMBRC, however many protected species have been recorded within 2km. The closest record of notable invertebrates is Maple Dot moth *Stigmella aceris* listed in the Kent Red Data Book approximately 100m southeast of site, with additional notable records including Jersey Tiger *Euplagia quadripunctaria*, Adonis Blue *Polyommatus bellargus*, Silver Washed Fritillary *Argynnis paphia,* Swollen Thighed Blood Bee *Sphecodes crassus*, Red-Tailed Cuckoo Bee *Bombus rupestris,* White Admiral *Limenitis Camilla,* Necklace Ground Beetle *Carabus monilis* and Small Heath *Coenonympha pamphilus*. Several other species of invertebrates within NERC, UK Biodiversity Action Plan and UK Red List have been historically recorded within 2km of site.

5.10.3 **Survey Results and Evaluation.** No evidence of the presence of any protected, rare or notable invertebrate species was recorded from within the site. The site is dominated by an arable field, amenity grassland and an isolate patch of woodland, which are likely to only support a limited diversity of invertebrates. The site contains relatively few micro-habitats that would indicate possible elevated value for invertebrates[31], 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, the site is likely to support only a limited diversity of invertebrates.

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

5.10.4 **Assessment of Proposals.** Habitats within the site are unlikely to support an important invertebrate assemblage and therefore the proposals are unlikely to result in harm to protected, rare or notable invertebrate populations.

5.11 Summary

5.11.1 On the basis of the above, a summary of the evaluation of fauna is provided in table 5.10 below:

Table 5.10. Evaluation summary of fauna forming important ecological features

Species / Group	Summary	Level of Importance
Bats – Roosting	Potential habitat in the form of trees	Local
Bats – Foraging / Commuting (assemblage)	Confirmed presence on site	Site level only
Bats – Foraging / Commuting (Common and Soprano Pipistrelle)	Moderate levels of activity recorded	Site level only
Badger	Potentially present on site	Local
Dormouse	No confirmed presence on site	None
Reptiles	Potential habitat in the form of grassland and scrub vegetation	Local (if present)
Birds	Confirmed presence on site	Local

5.11.2 Other fauna potentially supported by the site include non-Priority Species of mammals, amphibians and invertebrates. These species do not form important ecological features.

6 Mitigation, Compensation and Enhancement

6.1 Mitigation and Compensation

6.1.1 As set out in the previous chapters, the proposed development has followed the mitigation hierarchy approach as set out under the National Planning Policy Framework (NPPF), with consideration given first to avoidance, followed by mitigation and compensation.

6.1.2 Based on the assessment of the proposals and ecological designations, habitats and associated fauna identified within or adjacent to the site, it is proposed that the following mitigation and compensation measures (**MC1-MC9**) 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).

Ecological Designations

6.1.3 The site is not subject to any statutory or non-statutory ecological designations and it is unlikely that any such designations in the surrounding area will be significantly affected by the proposals. Accordingly, no specific mitigation or compensation measures are required.

Habitats

6.1.4 The proposed development would require the loss of a small section of native hedgerow H1 for road access. Other important habitats including other native hedgerows and associated trees, veteran trees and woodland are retained under the proposals. Compensation for hedgerow losses are set out below, together with standard safeguarding measures. Losses of non-important features will be addressed as part of the BNG strategy.

6.1.5 **MC1 – Hedgerow and Tree Protection.** All hedgerows and trees to be retained within the proposed development will be protected during construction in line with standard arboricultural best practice (BS5837:2012) or as otherwise directed by a suitably competent arboriculturalist. This may require the use of protective fencing or other methods appropriate to safeguard the root protection areas of retained trees and hedgerows.

6.1.6 **MC2 – New Hedgerow Planting.** To compensate for the loss of short sections of H1, new native hedgerow planting will be provided. This will also ensure a minimum 10% gain in hedgerow biodiversity value and will be secured as part of the BNG strategy.

Bats

6.1.1 Potential roosting habitat provided by trees is to be retained in the form of the retained onsite woodland and enhanced in relation to the proposed green corridors around the sites boundaries. Impacts on foraging and commuting bats will be minimised by implementation of a sensitive lighting design, as detailed further below.

6.1.2 **MC3 – 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 trees with potential to support roosting bats should be undertaken prior to the commencement of works to confirm the roosting suitability.

6.1.3 **MC4 – Felling of Trees Supporting Bat Roosting Potential.** Tree group **TG1**, which will be lost to the proposals, has been identified as providing low potential for roosting bats. Felling of this tree group will therefore be undertaken under an ecological watching brief, and will

be carried out using the 'soft-felling' technique, whereby sections of the tree will be cut and lowered to the ground, followed by leaving the felled sections on the ground for a period of at least 24 hours to allow any bats, should these be present, to escape.

6.1.4 If any evidence for the presence of roosting bats is recorded, works on that tree will be suspended and consideration will be given to the need to undertake works under a European Protected Species (EPS) development licence, and a licence application will be made to Natural England as required.

6.1.5 Survey work is ongoing in relation to bats, and any specific mitigation requirements in relation to these species will be set out in a separate addendum report.

6.1.6 **MC5 – Sensitive Lighting.** Light-spill onto retained and newly created habitat, in particular the retained hedgerows, tree lines and scrub (especially along the south- western boundary), will be minimised in accordance with good practice guidance[32] to reduce potential impacts on light-sensitive bats (and other nocturnal fauna). This will be achieved through the implementation of a sensitively designed lighting strategy, with consideration given to the following key factors:

- **Light exclusion zones –** lighting should be controlled 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

[32] Bat Conservation Trust and Institute of Lighting Professionals (2023) Guidance Note 08/23: Bats and artificial lighting at night; 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.

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.

Reptiles

6.1.7 No reptiles were found to be present during the survey work undertaken on site. Potential habitat losses for reptiles are restricted to the ruderal and ephemeral areas, together with lengths of grassy/arable ecotone margins adjacent to the current site perimeter areas.

6.1.8 **MC6 – Habitat Creation.** In order to ensure suitable areas of reptile habitat are present within the site following completion of development works, large areas of wildflower and long-sward grassland will be created. Following development, this habitat creation will be managed in the long-term to ensure opportunities for reptiles are maintained. To further increase the suitability of the development for reptiles, a number of hibernacula and log piles will be incorporated into the areas of open space to provide shelter and hibernation opportunities.

Nesting Birds

6.1.9 Removal of short sections of H1 may result in effects on nesting birds. Accordingly, the following approach will be adopted.

6.1.10 **MC7 – Nesting Bird Restrictions.** 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 chicks have fledged. These checking surveys would need to be carried out no more than three days in advance of vegetation clearance.

Other Fauna

6.1.11 The site has been identified as offering potential for other mammal species including Hedgehog and Brown Hare. Accordingly, the following approach will be adopted during site clearance and construction works.

6.1.12 **MC8 – Small Mammal Safeguards.** In order to safeguard Hedgehog, Brown Hare 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, Brown Hare and other small mammals throughout any clearance works;
- Any trenches left open overnight should be provided with a means of escape, e.g. gently graded ramp or a roughened plank, in order to allow animals to escape should they enter the trench. This is particularly important if the trench fills with water;
- Any temporarily exposed open pipes or open drains should be blanked off at the end of each working day so as to prevent animals gaining access as may happen when contractors are off-site;
- Any trenches/pits should be inspected each morning to ensure no animals have become trapped overnight;

- 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 animals;
- Fires will only be lit in secure compounds away from wooded habitats and will not be allowed to remain lit during the night;
- Unsecured food and litter will not be left within the working area overnight;
- 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 or other animals 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 mammal is found, the animal should be wrapped carefully in a towel and taken to a local vet immediately. If an injured Hedgehog is found the British Hedgehog Preservation Society (BHPS) can be phoned (01584 890 801).

6.1.13 **MC9 – Faunal Habitat Connectivity.** To maintain connectivity throughout the site for Hedgehog and other small mammals and to allow access to suitable foraging habitat contained within residential gardens, small holes (13cmx13cm) should be created within garden fences or under gates.

6.2 Ecological Enhancements

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 BAP.

Habitats

6.2.2 Habitat enhancements will be delivered as part of the BNG strategy, forming a separate submission. This will be informed by the following principles, according with national and local conservation priorities.

6.2.3 **New Planting.** Where practicable, new planting within the site should 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 **Wildflower Grassland and Flowering Lawn.** Within areas of open space, wildflower grassland can be created. These should be subject to a varied management regime to provide a range of sward types. Most areas should be managed as hay meadow, subject to cutting 2-3 times a year to promote a flower rich sward, whilst areas of rough, tussocky grassland can be established along woodland and hedgerow margins. As such, grassland areas will provide a rich habitat resource for invertebrate species, in turn providing increased foraging opportunities for wildlife including birds and bats. Consideration can also be given to the laying of wildflower turfs, comprising locally appropriate native species, to establish wildflower grassland. This would ensure rapid establishment of these habitats and reduce the timeframe for delivering the range of ecological benefits that are proposed. Within parks and other recreation and amenity areas, consideration can be given to seeding of flowering lawn, containing a range of herb species which respond well to frequent mowing. This will provide a further flowering and pollen resource for invertebrates.

6.2.5 **Scrub Planting.** Scrub habitat should be established along woodland margins, hedgerows and within grassland areas creating scrub mosaics and forming valuable ecotone habitats for a range of wildlife, including reptiles, small mammals and invertebrates.

6.2.6 **Wetland Features.** The opportunity exists under the proposals to create new wetland habitats as part of the Sustainable Drainage System (SUDS). Where practical these should be designed in accordance with ecological principles, incorporating measures such as shallow, sinuous margins, areas of permanent water and planting with native vegetation. Such measures will benefit a range of wetland species including birds, aquatic invertebrates and amphibians whilst also helping to attenuate surface water run-off.

6.2.7 **Hedgerows.** New lengths of hedgerow planting can be provided along the boundaries of green space areas and around areas of built development. Existing hedgerows should also be subject to supplementary planting where necessary to fill gaps and strengthen the integrity of the hedgerow.

Fauna

6.2.8 To provide additional opportunities for fauna, it is proposed that a range of new features are incorporated within the proposed development. This should include the following features, with specific measures to be detailed as part of a faunal enhancement plan which can be secured via a suitably-worded planning condition.

6.2.9 **Bat Boxes.** Bat boxes should be incorporated within the proposed development. The provision of bat boxes will provide new roosting opportunities for bats in the area, such as Soprano Pipistrelle, a national Priority Species. 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.

6.2.10 **Bird Boxes.** Bird nesting boxes should be incorporated within the proposed development, thereby increasing nesting opportunities for birds at the site. This should include integrated nest boxes on new buildings targeting species including Swift and House Sparrow, whilst boxes can be erected on retained trees. 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.

6.2.11 **Habitat Piles and Refugia.** A proportion of any deadwood arising from vegetation clearance works should 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. Dedicated hibernacula and refugia can also be provided for reptile and amphibian species, comprising log or rubble piles either left open or covered in soil and turfs. Loggeries can also be provided, comprising buried logs to form dead wood habitat for invertebrates such as Stag Beetle.

6.2.12 **Bee Bricks and Insect Boxes.** It is recommended that 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. Insect boxes can also be provided within the areas of wildlife habitat in order to enhance the nesting and over-wintering locations available for a range of invertebrates, particularly solitary wasps and bees.

7 Conclusions

7.1 Aspect Ecology has carried out an Ecological Appraisal of the proposed development of Land at Norwood Lane, Meopham, based on the results of a desktop study, habitat survey and a number of detailed protected species surveys (some of which are currently ongoing).

7.2 The proposals are for an Outline Application with all matters reserved (except access) for a development of up to 150 dwellings (Use Class C3), including affordable dwellings, and associated landscaping, public open space and infrastructure works.

7.3 The available information confirms that no statutory or non-statutory nature conservation designations are present within or adjacent to the site. All of the ecological designations in the surrounding area are physically well separated from the site and are unlikely to be adversely affected by the proposals.

7.4 The 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. Indeed, the opportunity to positively contribute to the draft Kent Medway Local Nature Recovery Strategy is presented through the enhancement of on-site woodland habitats and on-site connectivity. Where it has not been practicable to avoid loss of habitats (e.g. circa 15m hedgerow H2), new habitat creation is proposed to offset losses, in conjunction with the generous landscape proposals.

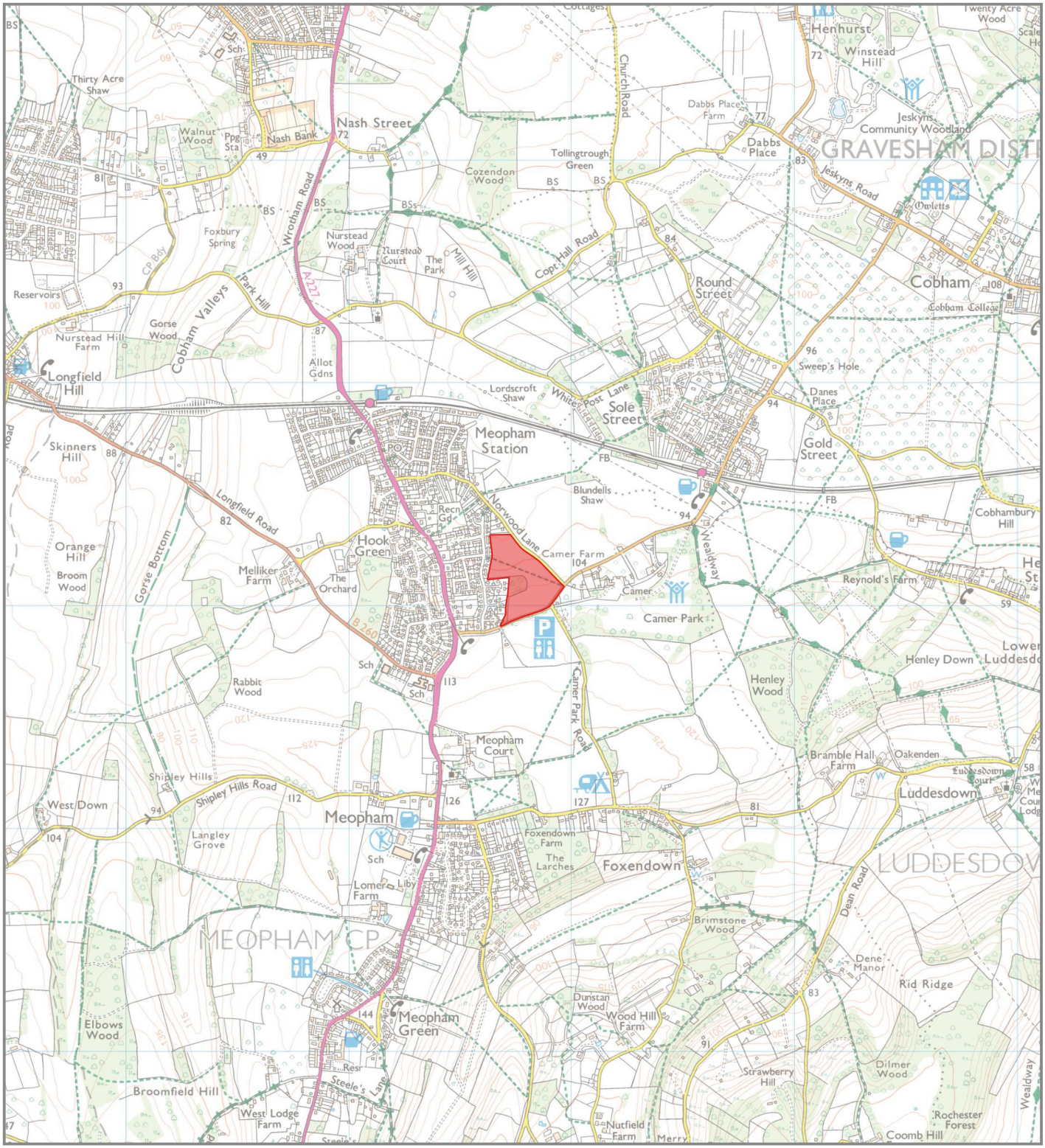
7.5 The habitats within the site support several protected species, including species protected under both national and European legislation. Accordingly, a number of mitigation measures have been proposed to minimise the risk of harm to protected species, with compensatory measures proposed, where appropriate,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

7.6 In conclusion, the proposals have sought to minimise impacts and, subject to the implementation of appropriate avoidance, mitigation and compensation measures, the proposals will not result in significant harm to biodiversity.

7.7 Ecological enhancements are proposed to achieve a biodiversity net gain, to be set out further as part of the BNG strategy in a separate submission.

Plan 7007/ECO1:

Site Location



Key:

Site Location

aspect ecology
APEM Group

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

Norwood Lane, Meopham	PROJECT
Site Location	TITLE
7007/ECO1	DRAWING NO.
A/LS	REV
February 2025	DATE
JW/LS	QC

P:\Project\Aspect Ecology Projects\ECO 7000\107007\Graphics\QGIS\7007 - ECO1 3.qgz

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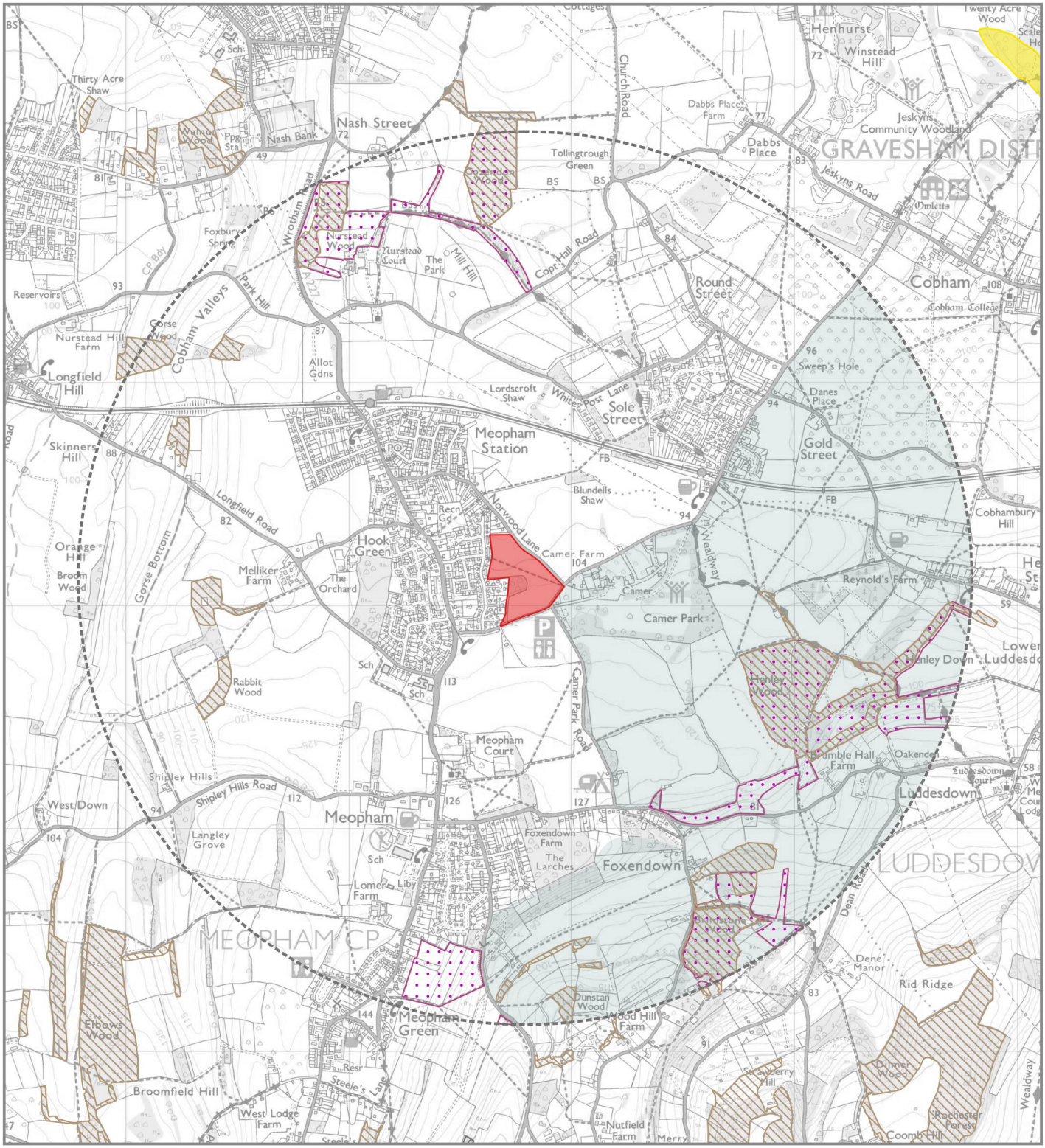
Plan 7007/ECO2:

Ecological Designations



Key:

- Site Location
- 2km Local Records Centre Search Area
- Site of Special Scientific Interest (SSSI)
- Local Wildlife Site (LWS)
- Area of Outstanding Natural Beauty (AONB)
- Ancient Replanted Woodland (ARW)
- Ancient Semi Natural Woodland (ASNW)

Non-statutory data provided by Kent & Medway Biological Records Centre

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Norwood Lane, Meopham	PROJECT
Ecological Designations	TITLE
7007/ECO2	DRAWING NO.
A/LS	REV
March 2025	DATE
JW/LS	QC

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Plan 7007/ECO3:

Habitats and Ecological Features

Key:

- Site Boundary
- Arable
- Grassland
- Tall Ruderal
- Woodland
- Hedgerow
- Tree with Bat Suitability (PRF-I)
- Tree with Bat Suitability (PRF-M)

0 20 40 60 80 m

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Norwood Lane, Meopham	PROJECT
Habitats and Ecological Features	TITLE
7007/ECO3	DRAWING NO.
B/LS	REV
July 2025	DATE
JW/DO	QC

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Plan 7007/ECO4:

Bat Survey Plan

Key:

- Site Boundary
- Starting Location
- Transect
- Static

0 20 40 60 80 m

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Norwood Lane, Meopham	PROJECT
Bat Transect Plan	TITLE
7007/ECO4	DRAWING NO.
A/AM	REV
June 2025	DATE
JW/AM	QC

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Plan 7007/ECO5:

Dormouse Survey Plan

Key:

Site Boundary

Transect (80 Tubes)

0 20 40 60 80 m

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Norwood Lane, Meopham	PROJECT
Dormouse Transect Plan	TITLE
7007/ECO5	DRAWING NO.
A/AM	REV
June 2025	DATE
JW/AM	QC

P:\Project\Aspect Ecology Projects\ECO 7000\1007007\Graphics\GIS\7007 ECO1 3.qgz

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Plan 7007/ECO6:

Reptile Survey Plan

Key:

Site Boundary

Transect (115 Mats)

0 20 40 60 80 m

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Norwood Lane, Meopham	PROJECT
Reptile Transect Plan	TITLE
7007/ECO6	DRAWING NO.
A/AM	REV
June 2025	DATE
JW/AM	QC

P:\Project\Aspect Ecology Projects\ECO 7000\1007007\Graphics\QGIS\7007 ECO1 3.qgz

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Plan 7007/ECO7:

Breeding Bird Survey Results

Bird Species:

- B. Blackbird
- BC Blackcap
- BT Blue Tit
- CH Chaffinch
- CC Chiffchaff
- D. Dunnock
- GT Great Tit
- MG Magpie
- R. Robin
- S. Skylark
- ST Song Thrush
- WP Woodpigeon
- WR Wren

Key:

- Site Boundary
- Breeding / Probable Breeding (BOCC Red List)
- Breeding / Probable Breeding (BOCC Amber List Species)
- Breeding / Probable Breeding (BOCC Green List - Not Threatened)

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Norwood Lane, Meopham	PROJECT
Breeding Bird Survey Results	TITLE
7007/ECO7	DRAWING NO.
A/JP	REV
August 2025	DATE
JB/JP	QC

P:\Project\Aspect Ecology Projects\ECO 7000\1007007\Graphics\QGIS\7007 ECO1 3.qgz

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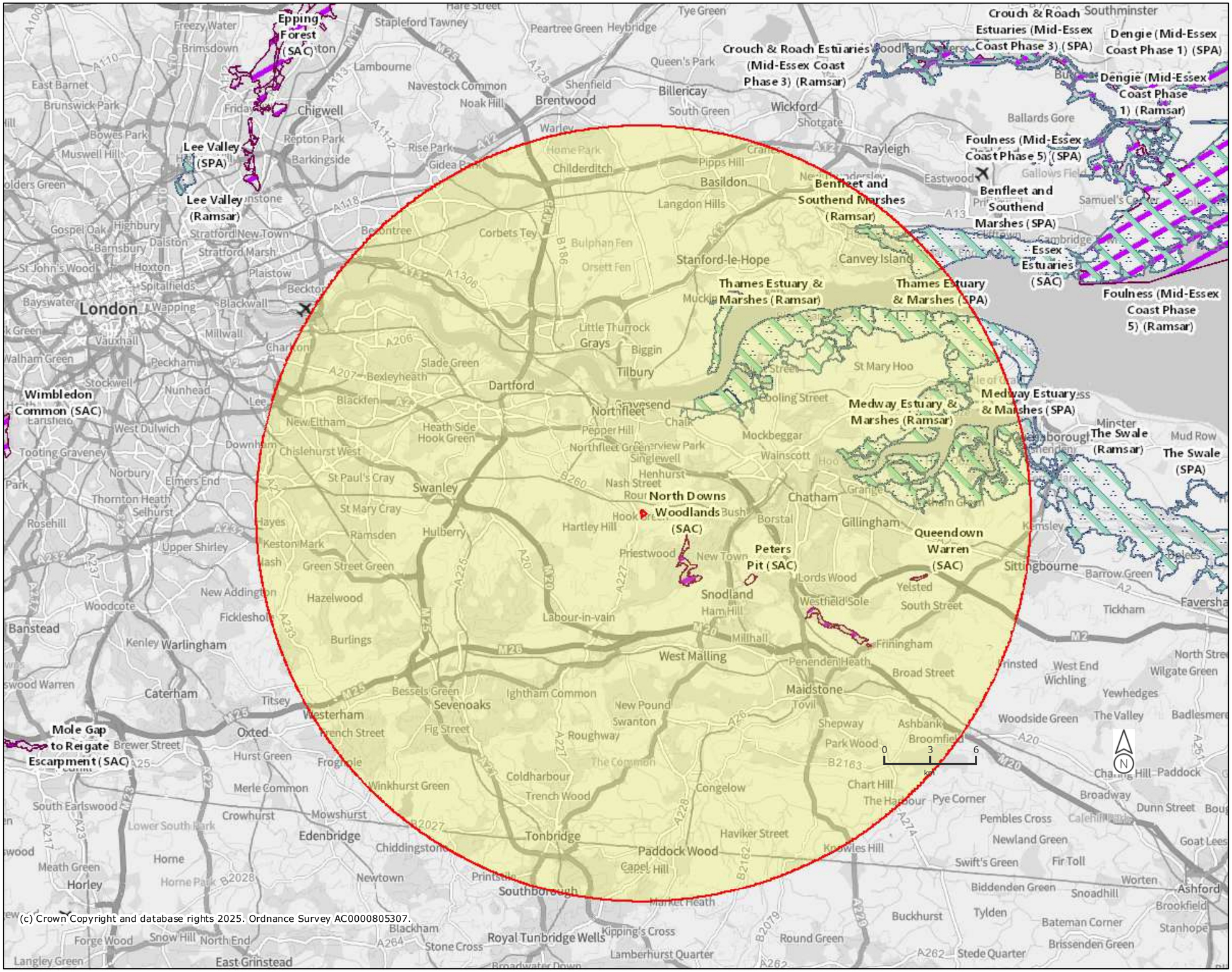
Appendix 7007/1:

Desktop Study Data

MAGiC

ECO7007 International Sites 25km



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Legend

- Ramsar Sites (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)

Projection = OSGB36
xmin = 499500
ymin = 133600
xmax = 626500
ymax = 204100

0 4.5 9 km

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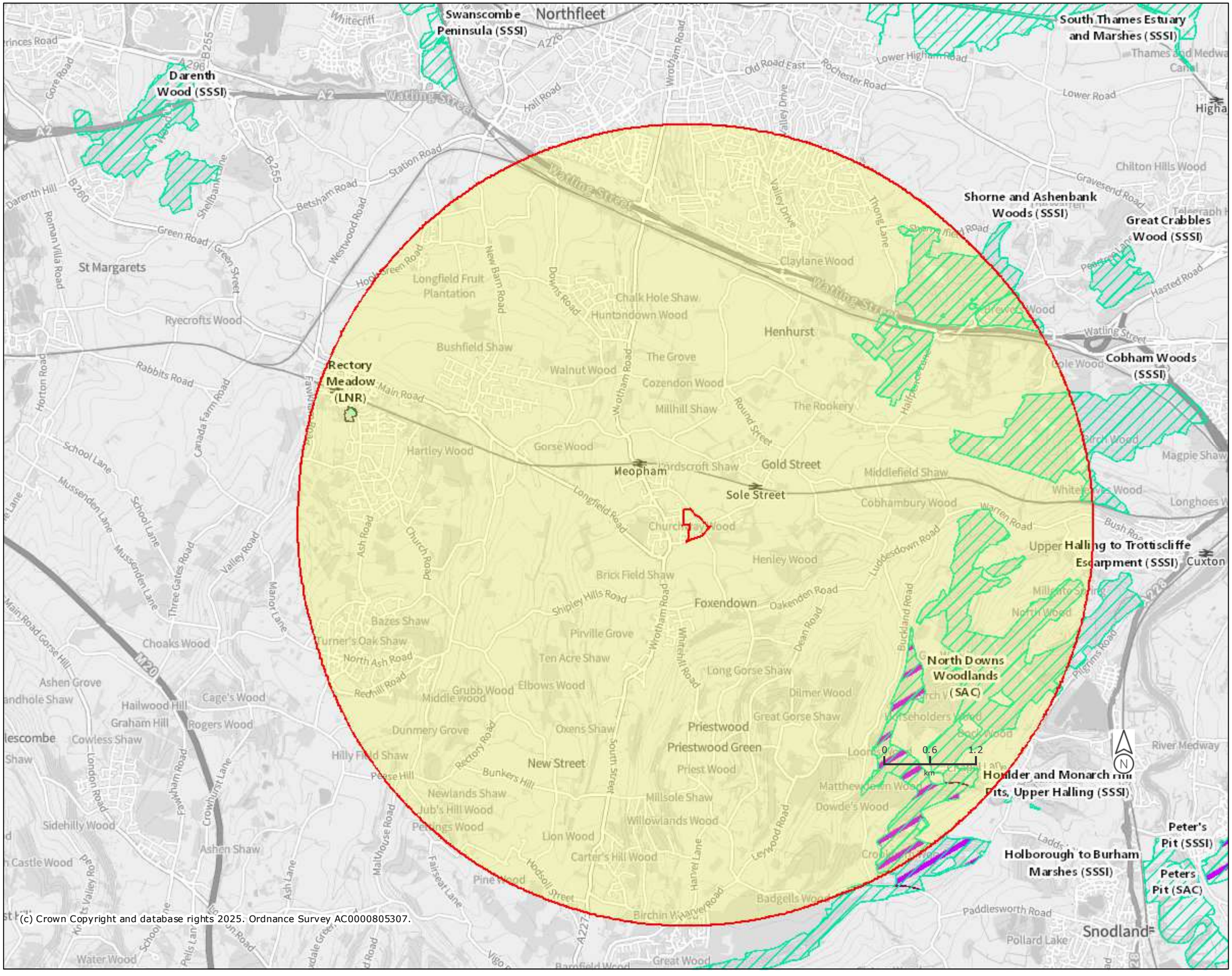
MAGIC

ECO7007 All Designations 5km



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Legend

- Local Nature Reserves (England)
- Sites of Special Scientific Interest (England)
- Special Areas of Conservation (England)

Projection = OSGB36
xmin = 551100
ymin = 160600
xmax = 576500
ymax = 174700

0 1 2 km

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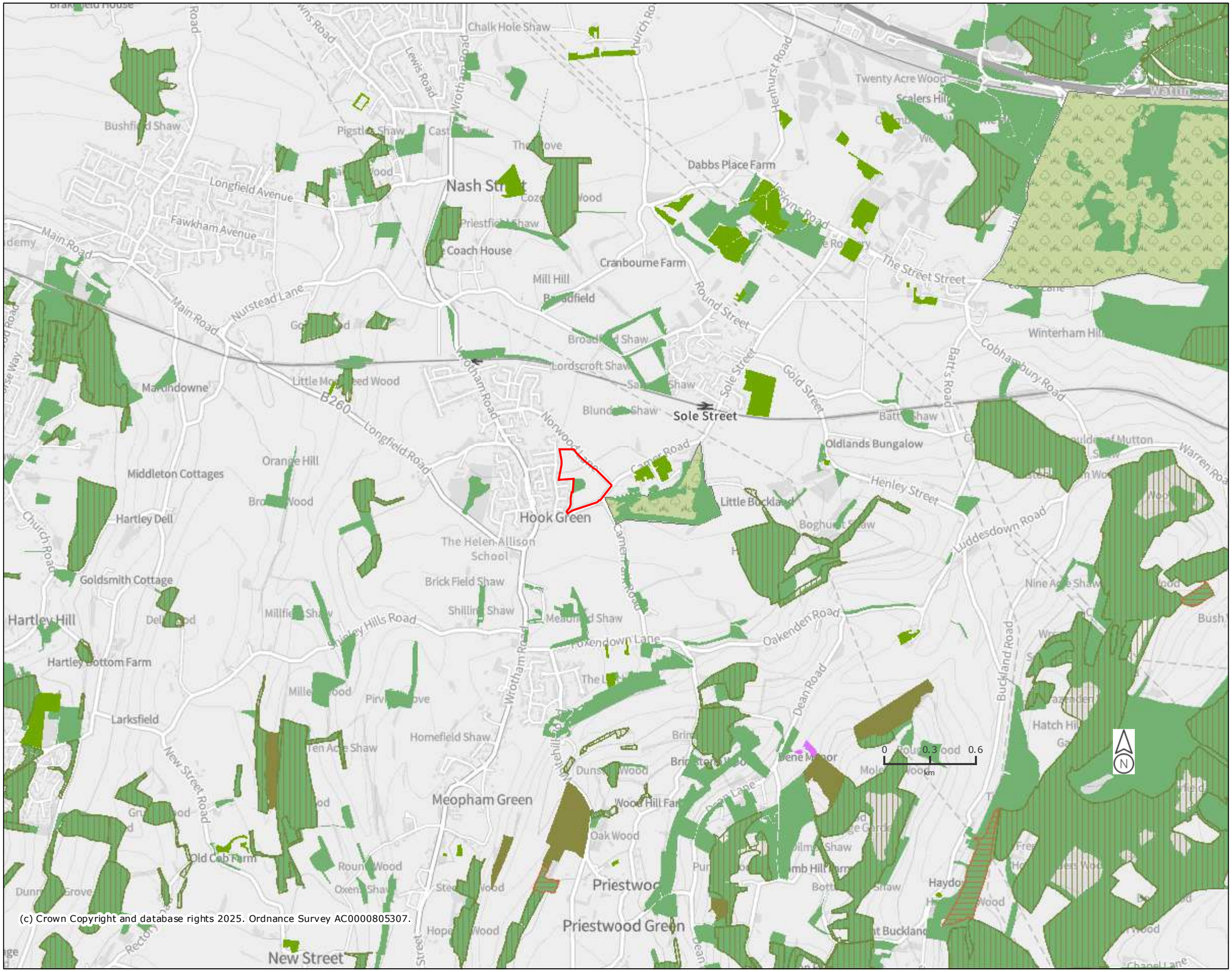
MAGIC

ECO7007 Priority Habitats



Legend

- Priority Habitat Inventory - Good quality semi-improved grassland (Non Priority) (England)
- Priority Habitat Inventory - Lowland Calcareous Grassland (England)

Ancient Woodland (England)

- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland
- Priority Habitat Inventory - Deciduous Woodland (England)
- Priority Habitat Inventory - Traditional Orchards (England)
- Woodpasture and Parkland BAP Priority Habitat (England)

Projection = OSGB36
xmin = 558600
ymin = 163600
xmax = 571300
ymax = 170600

0 0.5 1
km

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Appendix 7007/2:

Principles of Ecological Evaluation

Evaluation Methodology

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' (2018)[1].

Importance of Ecological Features

2. Ecological features within the site/study area have been evaluated in terms of whether they qualify as 'important ecological features'. In this regard, CIEEM guidance states that *"it is not necessary to carry out detailed assessment of features that are sufficiently widespread, unthreatened and resilient to project impacts and will remain viable and sustainable".*

3. 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.

4. 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);

[1] CIEEM (2018) '*Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*', Version 1.3, Chartered Institute of Ecology and Environmental Management, Winchester (updated September 2024)

- 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).

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.

5. 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>

6. 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).

7. 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.

8. 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.

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

Designated Sites

10. 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

11. 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.

12. 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.

13. 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

14. 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.

15. 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.

16. 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.

17. 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 7007/3:

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 (as amended).** 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.

Confidential Appendix

Badger Survey Results and Assessment (available on request)

ecology • landscape planning • arboriculture

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