

Land at Milksey Lane, Graveley

Preliminary Ecological Appraisal

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Executive Summary

- i) **Introduction.** Aspect Ecology was commissioned by Gade Homes Limited in December 2024 to undertake a Preliminary Ecological Appraisal in respect of proposed development of land at Milksey Lane, Graveley, Hertfordshire.
- ii) **Proposals.** The proposals are for development to provide 24 new residential dwellings, along with associated access and landscaping.
- iii) **Survey.** The site was surveyed in January 2025 based on standard extended Phase 1 methodology. In addition, a general appraisal of faunal species was undertaken to record the potential presence of any protected, rare or notable species, with specific surveys and consideration conducted in respect of bats, Badger and Great Crested Newt.
- iv) **Ecological Designations.** The site itself is not subject to any statutory or non-statutory ecological designations. The nearest statutory nature conservation designation to the site is Purwell Meadows Local Nature Reserve (LNR), which is located approximately 3.1km west of the site. The nearest non-statutory nature conservation designation to the site is Graveley Hall Farm Local Wildlife Site (LWS), which is located approximately 0.2km east of the site. All of the ecological designations in the surrounding area are physically well-separated from the site and, considering the nature of the proposals, are unlikely to be adversely affected by the proposals.
- v) **Habitats.** The site comprises a former horse paddock with stable block and hardstanding, modified grassland, tall forbs, bramble scrub and woodland. The site is bound to the west by a tree line. The only habitat considered to be of ecological importance is the woodland, bounding the site to the east, which is of local level value. The line of trees and the majority of the woodland will be retained under the proposals and will be protected during construction. A small section of the woodland will be removed to facilitate access, which is to be compensated for by new native planting. The remaining habitats within the site are not considered to form important ecological features and their loss to the proposals is of negligible significance.
- vi) **Protected Species.** The site offers some opportunities for protected species, although no evidence of any such species was recorded during the initial survey work. The grassland offers potential suitable habitat for common reptile species and Great Crested Newt. In addition, potentially suitable habitat has been identified for bats and it is likely that birds nest within suitable habitat at the site. Further phase 2 survey work and / or precautionary safeguarding measures are recommended to either identify the use of the site by these species or protect them during construction, should they be present. These include Great Crested Newt eDNA surveys of ponds within 250m of the site, precautionary reptile safeguards, and bat activity and emergence survey work. Where appropriate, mitigation measures will be proposed in relation to individual species to ensure that they are fully safeguarded, whilst the opportunity has been taken to provide enhancement measures to benefit faunal species including those present along with additional species should they colonise in the future.
- vii) **Enhancements.** The proposals present the opportunity to secure biodiversity net gains, including additional native tree planting, new roosting opportunities for bats, and more diverse nesting habitats for birds.
- viii) **Summary.** In summary, the proposals have sought to minimise impacts on biodiversity. Subject to the completion and subsequent results and recommendations of the phase 2 surveys, and the implementation of appropriate avoidance, mitigation and compensation measures, it is considered unlikely that the proposals will result in significant harm.

1 Introduction

1.1 Background and Proposals

- 1.1.1 Aspect Ecology was commissioned by Gade Homes Limited in December 2024 to undertake an Ecological Appraisal in respect of proposed development of land at Milksey Lane, Graveley, Hitchin, Hertfordshire centred at grid reference TL 23022822 (see Plan 6980/ECO1), hereafter referred to as 'the site'.
- 1.1.2 The proposals are for the development of 24 new residential dwellings, along with access infrastructure and landscaping.

1.2 Site Overview

- 1.2.1 The site is located to the north of Graveley, Hertfordshire, and is set within a rural context. It is bounded to the south by Milksey Lane and to the west by a public right of way. A strip of woodland runs along northern and eastern boundaries, and these are bounded by Graveley Lane and Graveley High Street respectively. The wider landscape consists predominantly of arable farmland and open recreational land, with some existing residential development to the south of the site.
- 1.2.2 The site itself is a former horse paddock now dominated by tall forbs vegetation and a single grassland field. The remainder of the site comprises a stable block with associated hardstanding, bramble scrub, bare ground, a line of trees, and a strip of woodland along the eastern boundary. Within the wider survey area to the north there is a barn/storage building with associated hardstanding and bare ground, as well as tall forbs vegetation, modified grassland and woodland which extend north from the redline land into this area.

1.3 Purpose of the Report

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

2 Methodology

2.1 Desktop Study

- 2.1.1 In order to compile background information on the site and its immediate surroundings, Hertfordshire Environmental Record Centre (HERC) was contacted in January 2025, with data requested on the basis of a search radius of 2km around the site.
- 2.1.2 Information on statutory designations was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC) database, which utilises data provided by Natural England, with an extended search radius (25km). In addition, the MAGIC database was searched to identify the known presence of any Priority Habitats within or adjacent the site.
- 2.1.3 In addition, the Woodland Trust database¹ was searched for any records of ancient, veteran or notable trees within or adjacent to the site.
- 2.1.4 Where relevant information has been obtained from the above sources, this is reproduced on Plan 6980/ECO2, where appropriate.

2.2 Habitat Survey

- 2.2.1 The site was surveyed in January 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 methodology², with habitat types identified and mapped in accordance with the UK Habitat Classification system (version 2.0)³, 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 Appraisal⁴ to record details on the actual or potential presence of notable or protected species.
- 2.2.3 Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified. The nomenclature used for plant species is based on the Botanical Society for the British Isles (BSBI) taxon list⁵.

2.3 Faunal Surveys

- 2.3.1 General faunal activity, such as mammals or birds observed visually or by call during the course of the surveys was recorded. Specific attention was also paid to the potential

¹ Woodland Trust Ancient Tree Inventory, at <https://ati.woodlandtrust.org.uk/>

² Joint Nature Conservation Committee (2010, as amended) *Handbook for Phase 1 habitat survey: A technique for environmental audit*.

³ UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

⁴ Chartered Institute for Ecology and Environmental Management (CIEEM) (2013) *Guidelines for Preliminary Ecological Appraisal*.

⁵ <https://bsbi.org/taxon-lists>

presence of any protected, rare or notable species, and specific consideration was given to bats, Badger and Great Crested Newt, as described below.

- 2.3.2 Phase 2 survey work is currently recommended in relation to foraging and commuting bats, roosting bats and Great Crested Newts. It is proposed that the results of these surveys, together with full survey methodologies and mitigation strategies, are submitted in a separate addendum.

Bats⁶

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.

Buildings and Built Structures

- 2.3.5 **Visual Inspection Surveys.** Buildings and built structures within the site assessed as suitable for use by roosting bats were subject to internal and external inspection surveys using ladders, torches and binoculars where necessary in January 2025.
- 2.3.6 During the external inspections, particular attention was given to potential roost features or access points, such as broken or lifted roof tiles, lifted lead flashing, soffit boxes, weatherboarding, hanging tiles, and similar, and for any indications of use by bats such as accumulations of bat droppings or staining. Binoculars were used to inspect inaccessible areas more closely.
- 2.3.7 During the internal inspections, searches were made for evidence of the presence of bats with particular attention paid to any loft voids and locations such as ridge boards, rafters, purlins, gable walls, and mortise joints that may provide potential roost features. Specific searches were made for bat droppings that can indicate present or past use and the extent of use. Droppings collected during the course of the surveys were visually assessed and attributed to a species where possible on the basis of size/shape/texture⁷. Where appropriate, samples of similar droppings were collected with gloved hands and put into labelled Eppendorf tubes, and forwarded to the University of Warwick for DNA analysis. Other signs searched for included the presence of stained areas, feeding remains and corpses.

⁶ Surveys based on: English Nature (2004) 'Bat Mitigation Guidelines' and Collins, J. (ed.) (2016) 'Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).' Bat Conservation Trust

⁷ Stebbings, RE, Yalden DW and Herman, JS (2007). Which bat is it? A guide to bat identification in Great Britain and Ireland. The Mammal Society

Trees

2.3.8 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.

2.3.9 **Ground Level Tree Assessment.** Where practical, trees / trees that may be impacted by the development proposals were subject to a Ground Level Tree Assessment (GLTA) based on relevant guidance⁸ 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.

Badger (*Meles meles*)⁹

2.3.10 A detailed Badger survey was carried out in January 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 / 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
- 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.

2.3.11 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.

Great Crested Newt (*Triturus cristatus*)

Habitat Suitability Index (HSI)

2.3.12 As a first step in identifying the potential presence of Great Crested Newt at the site, a Habitat Suitability Index (HSI) study was undertaken of all relevant water bodies identified within 250m¹⁰ of the site boundary (based on a review of Ordnance Survey mapping and satellite imagery). Guidance set out within Natural England's Method Statement template, to be used when applying for a Great Crested Newt development licence, states that surveys of ponds within 500m of the site boundary are only required when '(a) data indicates that the pond(s) has potential to support a large Great Crested Newt population, (b) the

⁸ Bat Conservation Trust (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn).

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

¹⁰ 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

footprint contains particularly favourable habitat, (c) the development would have a substantial negative effect on that habitat and (d) there is an absence of dispersal barriers.’ Given that in this instance, 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 represents adequate survey effort.

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

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

2.3.14 The overall suitability of the water body is then determined by entering these figures into an equation devised by Oldham *et al.* (2000)¹¹. The suitability of water bodies is classed into one of five categories, either ‘poor’, ‘below average’, ‘average’, ‘good’ or ‘excellent’.

2.3.15 This HSI study was undertaken in line with the guidelines developed by Oldham *et al.* and subsequently adapted by ARG UK (2010)¹². A suitably experienced ecologist undertook the assessment in line with these guidelines, with the study also supplemented by desktop research where appropriate.

2.4 Survey Constraints and Limitations

2.4.1 All of the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent during different seasons. The Phase 1 habitat survey was undertaken outside the optimal season, albeit the nature of the habitats within the site allowed for the broad habitat types to be identified and for an adequate assessment of the intrinsic ecological interest of the site to be made.

2.4.2 Attention was paid to the presence of any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, the detectability of such species varies due to a number of factors, e.g. time of year, site management, etc., and hence the

¹¹ 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

¹² Amphibian & Reptile Groups of the UK (2010) ‘ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index’

absence of invasive species should not be assumed even if no such species were detected during the Phase 1 survey.

- 2.4.3 Densely vegetated habitats within the site have the potential to reduce the detectability of field signs for faunal species such as Badger. A detailed survey was able to be completed and, whilst dense vegetation is present in some parts of the site, it is considered that the survey results do provide an accurate baseline to assess the potential for impacts on Badger under the development proposals.

2.5 Ecological Evaluation Methodology

- 2.5.1 The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018)¹³, which involves identifying 'important ecological features' within a defined geographical context (i.e. international, national, regional, county, district, local or site importance). For full details refer to Appendix 6980/3.

2.6 National Policy Approach to Biodiversity in the Planning System

- 2.6.1 The National Planning Policy Framework (NPPF)¹⁴ describes the Government's national policies on 'conserving and enhancing the natural environment' (Chapter 15). NPPF is accompanied by Planning Practice Guidance on 'Biodiversity, ecosystems and green infrastructure' and ODPM Circular 06/2005¹⁵.

- 2.6.2 NPPF takes forward the Government's strategic objective to halt overall biodiversity loss¹⁶, 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), 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*

¹³ CIEEM (2018) 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine', ver. 1.2, Chartered Institute of Ecology and Environmental Management, Winchester

¹⁴ Ministry of Housing, Communities & Local Government (2024) 'National Planning Policy Framework'

¹⁵ ODPM (2006) 'Circular 06/2005: Planning for Biodiversity and Geological Conservation – A Guide to Good Practice'

¹⁶ DEFRA (2011) 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services'

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 42020:2019¹⁷, which involves the following step-wise process:

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

2.6.5 The measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development (BS 42020:2019, section 5.5).

2.7 Local Policy

2.7.1 Planning policy at the local level is set out within 'North Hertfordshire Local Plan 2011-2031 (adopted November 2022)'. Policies set out within the Local Plan that are relevant to ecology and nature conservation within the survey area are set out below:

2.7.2 '**Policy SP12: Green infrastructure, landscape and biodiversity**' states that:

'We will accommodate significant growth during the plan period whilst ensuring the natural environment is protected and enhanced. We will:

- a) *Protect, identify, manage and where possible enhance a strategic multi-functional network of green infrastructure;*
- b) *Consider and respect landscape character, scenic beauty and locally sensitive features, particularly in relation to the Chilterns Area of Outstanding Natural Beauty;*
- c) *Protect, enhance and manage designated sites in accordance with the following hierarchy of designations and features:*

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

- *Internationally designated sites*
 - *Nationally designated sites*
 - *Locally designated sites;*
 - *Non-designated sites that include important habitats and species*
- d) *Protect, enhance and manage biodiversity networks including wildlife corridors, ancient woodlands and hedgerows, wetland and riverine habitats, Local Geological Sites, protected species, priority species and habitats, and non-designated sites of ecological value and ensure measurable net gains for biodiversity; and*
- e) *Protect other open spaces and support provision of new and improved open space.'*

2.7.3 'Policy NE4: Biodiversity and geological sites' states that:

'Planning permission will only be granted for development proposals that appropriately protect, enhance and manage biodiversity in accordance with the hierarchy and status of designations and features listed in Policy SP12.

All development should deliver measurable net gains for biodiversity and geodiversity, contribute to ecological networks and the water environment, and/or restore degraded or isolated habitats where possible.

Applicants should, having regard to the status of any affected site(s) or feature(s):

- a) *Submit an ecological survey that is commensurate to the scale and location of the development and the likely impact on biodiversity, the legal protection or other status of the site;*
- b) *Demonstrate that adverse effects can be avoided and / or satisfactorily minimised having regard to the hierarchy of protection below:*
 - i. *locating on an alternative site with a less harmful impact;*
 - ii. *providing adequate mitigation measures; or*
 - iii. *as a last resort compensated for.*

The acceptability of approach(es) to avoidance, mitigation and compensation will be commensurate with the status of the asset(s) likely to be affected by the application; Compensation is unlikely to be an appropriate solution for proposals affecting nationally or internationally designated sites other than in the most exceptional circumstances.

- c) *Include appropriate measures to manage construction impacts by demonstrating how existing wildlife habitats supporting protected or priority species will be retained, safeguarded and managed during construction;*
- d) *Integrate appropriate buffers of complimentary habitat for designated sites and other connective features, wildlife habitats, priority habitats and species into the ecological mitigation and design. The appropriateness of any buffers will be considered having regard to the status of the relevant habitat. 12 metres of complimentary habitat should be provided around wildlife sites (locally designated sites and above), trees and hedgerows. It may be necessary to exceed this distance for fragile habitats such as ancient woodland or to provide appropriate root protection for mature trees; and*
- e) *Provide a long-term management and monitoring plan including mitigation measures as necessary.*

Local Geological Sites are ratified by the Herts & Middlesex Wildlife Trust (HMWT) and are afforded the same protection as Local Wildlife Sites.'

2.7.4 In addition, the site is listed as an allocated housing site within the adopted local plan, with **Policy GR1** detailing specific criteria for the proposals at Land at Milksey Lane:

- *'Sensitive design to minimise impacts upon Graveley Conservation Area;*
- *Archaeological survey to be completed prior to development; and*
- *Maintain Public Right of Way (Graveley 018) through the site.'*

3 Ecological Designations

3.1 Statutory Designations

Description

- 3.1.1 No statutory designations of ecological importance have been identified within the 2km search area around the site.
- 3.1.2 The nearest identified statutory nature conservation designation to the site is Purwell Meadows Local Nature Reserve (LNR), which is located approximately 3.1km west of the site. The LNR is designated on the basis of a mosaic of habitats, including dry grassland, marshy grassland, hedgerows and shrub, forming part of a chain of important wildlife areas along the Purwell Valley and supporting a rich and distinctive variety of wildlife.
- 3.1.3 With respect to European-level designations, a number of designations are located within 25km of the site. The nearest European-level nature conservation designation identified to the site is Lee Valley Special Protection Area (SPA) and Ramsar, which is located approximately 20.6km southeast of the site. The SPA is designated on the basis of being used by wintering Bittern *Botaurus stellaris*, Shoveler *Spatula clypeata* and Gadwall *Anas strepera*. The Ramsar is designated on the basis of containing a range of wetland and valley bottom habitats that support internationally important numbers of wintering Gadwall and Northern Shoveler in addition to supporting nationally important numbers of several other bird species and a diverse range of wetland fauna and flora.
- 3.1.4 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 a number of Sites of Special Scientific Interest (SSSI), however the IRZ does not relate to residential development.

Evaluation

- 3.1.5 The site itself is not subject to any statutory ecological designations. All statutory ecological designations in the surrounding area are extremely well-separated from the site and given the nature and scale of the proposals, such designations are unlikely to be affected. Accordingly, no further consideration or measures in relation to statutory ecological designations are considered to be required in regard to the proposals.

3.2 Non-statutory Designations

Description

- 3.2.1 The non-statutory designations of nature conservation interest that occur within the local area are shown on Plan 6980/ECO2.
- 3.2.2 The nearest non-statutory nature conservation designation to the site is Graveley Hall Farm Local Wildlife Site (LWS), which is located approximately 0.2km east of the site. The LWS is designated on the basis of the buildings, ponds and environment being important for protected species.

Evaluation

- 3.2.3 The site itself is not subject to any non-statutory nature conservation designations. All non-statutory designations in the surrounding area are well-separated from the site and given

the nature and scale of the proposals, such designations are highly unlikely to be affected. Accordingly, no further consideration or measures in relation to non-statutory ecological designations are considered to be required in regard to the proposals.

3.3 Priority Habitats, Ancient Woodland and Notable Trees

Description

- 3.3.1 There are no records of any notable or veteran trees within the site itself. An area of woodland identified as Priority Habitat 'Deciduous Woodland' is located to the north of the site, separated from the wider survey area by Graveley Lane.

Evaluation

- 3.3.2 The identified priority woodland habitat is located offsite, outside of the site boundary and accordingly, will not be directly affected by the proposals.
- 3.3.3 Subject to the implementation of appropriate mitigation protection measures to avoid any adverse effects on the offsite deciduous woodland, (as discussed below at Chapter 4) it is unlikely that any previously identified irreplaceable or Priority Habitats will be affected by the proposals.

3.4 Summary

- 3.4.1 In summary, 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. No recent records of Priority Species were returned from within the search area. No evidence for the presence of any of Priority Species from within the site were 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 6980/ECO3.
- 4.2.2 The following habitats/ecological features were identified within/adjacent to the survey area:

- Modified Grassland;
- Woodland;
- Tree Line;
- Tall Forbs;
- Bramble Scrub; and
- Buildings and Hardstanding.

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 woodland is considered to qualify as Priority Habitat 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. 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	g4 modified grassland	Grassland: modified grassland (moderate condition)	Grassland field G1 forms the northern part of the survey area and comprises a relatively species poor modified grassland, which was likely previously used in association with the horse paddocks. The grassland does not appear to have undergone any recent management, with an overall tall sward height, a large number of tussocks, and some areas of localised thatching recorded. Some small areas of dumped material are present within the sward. The grassland supports an average of 7 species per m ² with frequent grasses including Bent sp., Cat's-tail <i>Phleum bertolonii</i> , Cock's-foot <i>Dactylis glomerata</i> , False Oat-grass <i>Arrhenatherum elatius</i> , Perennial Rye-grass <i>Lolium perenne</i> , and Yorkshire-fog <i>Holcus lanatus</i> and herbs including Broad-leaved Dock <i>Rumex obtusifolius</i> , Common Nettle <i>Urtica dioica</i> , Creeping Buttercup <i>Ranunculus repens</i> , Creeping Cinquefoil <i>Potentilla reptans</i> , Dandelion <i>Taraxacum officinale</i> agg., Germander Speedwell <i>Veronica chamaedrys</i> , Ribwort Plantain <i>Plantago lanceolata</i> , Selfheal <i>Prunella vulgaris</i> , White Dead-nettle <i>Lamium album</i> , Geranium sp., and Willowherb sp.	Does not form important ecological feature
W1	w1g Other broadleaved woodland	Woodland and forest: Other woodland; broadleaved (poor condition)	Woodland W1 forms the eastern site boundary and comprises a thin strip of woodland on a steeply banked road verge, adjacent to Graveley High Street. The woodland is relatively sparse in nature and is dominated by Sycamore <i>Acer pseudoplatanus</i> , with other canopy species including Field Maple <i>Acer campestre</i> , Lime <i>Tilia</i> sp., Ash <i>Fraxinus excelsior</i> , and Hazel <i>Corylus avellana</i> . The shrub layer is also sparse in nature with species including Dog-rose <i>Rosa canina</i> , Elder <i>Sambucus nigra</i> , Elm <i>Ulmus</i> sp. and Hawthorn <i>Crataegus monogyna</i> . Ground flora was dominated by leaf litter at the time of survey and includes Bramble <i>Rubus fruticosus</i> , White dead nettle, Cleavers <i>Galium aparine</i> and Ivy <i>Hedera helix</i> .	Forms an important ecological feature (local value)
-	(tall forbs) 16	Sparsely vegetated land: tall forbs (poor condition)	The southern half of the site is largely dominated by tall forbs, up to 2.5m tall at the time of survey. The tall forbs vegetation is beginning to encroach on grassland G1, and would be expected to further encroach through lack of management. This habitat is largely dominated by Common Nettle and Dock sp., with other species including Hemlock <i>Conium maculatum</i> , Spear Thistle <i>Cirsium vulgare</i> , Ground Ivy <i>Glechoma hederaceae</i> , Teasel <i>Dipsacus fullonum</i> and Bramble.	Does not form important ecological feature

Ref	UK Hab Primary Habitat/ Secondary Codes*	Statutory Biodiversity Metric Habitat Type and Condition	Description	Evaluation
			A further area of tall forbs is associated with an artificial earth bank (at the base of TL1 described below) along the western boundary. Species include Bramble, Common Nettle, Stinking Hellebore <i>Helleborus foetidus</i> , Cleavers, Green Alkanet <i>Pentaglottis sempervirens</i> , Hemlock and Mugwort <i>Artemisia vulgaris</i> . Additional small areas of tall forbs are present adjacent building B1 and at the northern section of G1. Species include Burdock <i>Arctium minus</i> , Common Nettle, Spear Thistle, Dock sp., Teasel, Willowherb sp., and Bristly Ox-tongue <i>Helminthotheca echinoides</i> .	
-	h3d Bramble scrub	Heathland and shrub: Bramble scrub (condition assessment N/A)	A small area of Bramble scrub is present along the western aspect of building B1.	Does not form important ecological feature
-	(Scattered scrub) 10	-	Some small patches of scattered scrub are present towards the site boundaries, adjacent the woodland at the eastern boundary and towards the site entrance at the south west corner. Species recorded are limited to Elder.	Does not form important ecological feature
-	(hardstanding) u1b developed land – sealed surface u1c artificial unvegetated – unsealed surface	Urban: developed land; sealed surface (N/A – other) Urban: artificial unvegetated – unsealed surface (N/A – other)	Areas of hardstanding are associated with building B1, whilst an area of artificial unvegetated unsealed surface is also present in the form of a former rubber chip horse paddock. The hardstanding adjacent B1 is generally in a poor state of repair, with abundant colonising vegetation recorded.	Does not form important ecological feature
-	(bare ground) 510	Urban: Bare ground (poor condition)	Milksey Lane extends onto the site from the south and runs along the west of the site as a dirt track. Colonising vegetation is present within the bare ground, with many species consistent with the adjacent grassland habitat.	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

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
TL1	(Line of trees) 33	Line of trees (Poor condition)	A line of trees associated with an artificial bank is present along the western boundary, recorded to contain a single large gap towards the centre. The tree line is dominated by Conifer sp., with other species including semi-mature Pedunculate Oak <i>Quercus robur</i> , semi-mature Sycamore, Elder and Hawthorn.	Does not form important ecological feature

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

UK Hab Secondary Codes:

33 –
line of 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

- 4.6.2 Other habitats present within the site include modified grassland, tall forbs, bramble scrub, bare ground and hardstanding. 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, tall forbs and existing buildings or hardstanding. 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 small area of woodland is to be lost under the proposals in order to facilitate site access. However, this will be compensated for with new planting included within the proposals and, subject to recommended mitigation measures, should not cause significant harm. A discussion of effects and any requirements for mitigation or compensation is set out 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 phase 2 survey work or precautionary safeguarding and mitigation in the absence of faunal survey work is recommended in respect to foraging, commuting and roosting bats, reptiles and Great Crested Newt. Where further Phase 2 surveys are proposed, the results of these surveys, together with full survey methodologies and mitigation strategies are submitted 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.
- 5.2.2 No Priority Species were recorded within the site during the survey work undertaken.

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 6980/2). 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 specific records of bats from within or adjacent to the site were returned from the desktop study. Information received from the LRC includes records of Barbastelle *Barbastella barbastellus*, Brown Long-eared Bat *Plecotus auritus*, Daubenton's Bat *Myotis daubentonii*, Leisler's Bat *Nyctalus leisleri*, Noctule *Nyctalus noctule*, Pipistrelle bat species *Pipistrelle* sp. and Serotine *Eptesicus serotinus*, within 2km of the site. The closest record is for a coarse 1km grid square for both Brown Long-eared Bat and Common Pipistrelle *Pipistrellus pipistrellus* in 2006 potentially located as close as 90m south of the site boundary.

Survey Results

Preliminary Appraisal

- 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 rare status, whilst Leisler's Bat, Nathusius' Pipistrelle and Serotine are considered rare within

Southern 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 woodlands, hedgerows and grassland likely to be of elevated interest for bats.
- 5.3.5 Within the site, trees and a buildings 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 a treeline form continuous habitat that is well connected to the wider landscape – high potential suitability.	As well as the woodland edge, areas of semi-natural habitat including grassland and tall forbs vegetation provide some foraging opportunities – moderate potential suitability.

Visual Inspection Surveys

Buildings

- 5.3.6 All the buildings within the site were subject to detailed inspection.
- 5.3.7 Building B1 is located towards the west of the site and is a former stable block, currently used as a temporary dog kennels. The building consists of a U-shaped building of breezeblock construction with brick and render coverings and wooden weatherboarding surrounding the outward face. The inward facing courtyard area comprises a brick finish and stable doors, whilst the roof is pitched and finished with double roman interlocking tiles. The roof overhangs at the front of the building where there is a wooden soffit box present. Internally, the roof is lined with felt and supported by timber beams which are open throughout with no loft voids present. Overall, the weatherboarding is in a good state of repair, with infrequent small gaps present, however there are some broken/lifted tiles on the roof as well as some damaged/missing comb fillers beneath the eaves, allowing access between the felt lining and tiles. On this basis, the building is assessed to provide moderate potential for roosting bats. No evidence of bat occupation, such as droppings, staining or feeding remains, was recorded during the inspection surveys.

Roosting – Trees

Assessment of Roosting Potential

- 5.3.8 Trees within the site were subject to an initial assessment for their suitability to support roosting bats. Where practical these have been subject to a ground level tree assessment (GLTA). Trees identified as supporting PRFs or identified as FAR are indicated on Plan 6980/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
T1	Sycamore (sm)	Heavy ivy covering, some thick stems creating crevices present	PRF-I
T2	Sycamore (dead)	Rot hole present ~1.5m on west side. Lifted bark present.	PRF-I and PRF-M
T3	Sycamore (sm)	Ivy present. Rot hole from fallen branch ~7m on west side.	PRF-I
T4	Sycamore (sm)	Butt rot on N side	PRF-I

Evaluation and Assessment of Likely Effects

Roosting

Emergence Surveys

- 5.3.9 Building B1 exhibits moderate potential for roosting bats and therefore, under the latest guidance, would require further survey work in the form of dusk emergence surveys, details of which are set out in Chapter 6 below. The results of the dusk emergence surveys would be summarised within a separate addendum report.

Trees

- 5.3.10 It is understood that the trees within the site that possess suitability to support roosting bats are to be retained under the proposals, such that in the event that bats are present within the trees they will remain unaffected. As such, subject to the implementation of the recommendation outlined at Chapter 6 below in relation to lighting, it is considered that bats roosting within trees will be fully safeguarded under the proposals, should they be present.

Foraging/Commuting

The woodland, tree line, grassland and areas of tall forbs are considered to offer potential foraging/commuting habitat for bats. Under the proposals, areas of grassland and tall forb vegetation, as well as a small section of woodland are to be removed. It is therefore recommended that further survey work in the form of automated and manual activity surveys be undertaken, details of which are set out in Chapter 6 below. The results of the bat activity surveys would be summarised within a separate addendum.

5.4 Badger

- 5.4.1 **Legislation.** Badger receives legislative protection under the Protection of Badgers Act 1992 (see Appendix 6980/2), 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.^{18, 19}

5.4.3 **Background Records.** No specific records of Badger from within the site were returned from the desktop study. A number of records of Badger were returned from within the search area around the site, including within the 1km x 1km OS grid square containing part of the site, albeit more specific information was not available that would allow the precise location of these records to be determined in relation to the site.

5.4.4 **Survey Results and Evaluation.** The habitats within the site provide foraging opportunities for Badger, whilst substantial further opportunities are located immediately adjacent the site and surrounding areas, particularly including the off-site woodland. No evidence of Badger was recorded during the specific survey work undertaken and, subject to the implementation of safeguarding measures detailed at Chapter 6, this species is unlikely to be adversely affected by the proposals.

5.5 Other Mammals

5.5.1 **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.

5.5.2 **Background Records.** No specific records of other mammals from within or adjacent to the site were returned from the desktop study. Records of Brown Hare *Lepus europaeus* and Hedgehog *Erinaceus europaeus* (Priority Species) within 2km were returned by the desk study. The closest record to the site is for Brown Hare, located approximately 80m north west of the site in 2019.

5.5.3 **Survey Results and Evaluation.** No waterbodies are present within the site or its immediate surroundings. Habitats present are unsuitable for use by Water Vole and Otter.

5.5.4 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.

5.5.5 The desktop study returned records of Brown Hare and Hedgehog. Hedgehog and Brown Hare are Priority Species, despite being relatively common and widespread in England. The site contains habitats that may be used by these species, although given the small size of the site Brown Hare and Hedgehog are assessed as being of potential importance at a site level only.

5.5.6 **Assessment of Proposals.** Habitat losses arising from the proposals are not considered likely to have significant effects on Brown Hare and Hedgehog. For Hedgehog, habitat losses 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.

¹⁸ English Nature (2002) *Badgers and Development*

¹⁹ Natural England (2011) *Badgers and Development: A Guide to Best Practice and Licensing*, Interim Guidance Document

Enhancement measures to maintain habitat connectivity for Hedgehog are recommended, as set out in Chapter 6 below.

5.6 Amphibians

5.6.1 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 6980/2). 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.

5.6.2 Background Records. No records of Great Crested Newt from within or adjacent to the site were returned by the desktop study. Records of Great Crested Newt and Common Toad were returned from within the 2km search area, with the closest record of Great Crested Newt from a location approximately 0.12km south west of the site in 2020.

5.6.3 Survey Results and Evaluation. The site itself does not contain any waterbodies, however a single pond is present approximately 250m south of the site (illustrated on Plan 6980/ECO4). Habitats throughout the site, including tall forbs, grassland and localised areas of debris are likely to provide suitable terrestrial opportunities for amphibian species such as Great Crested Newt, should this species be present.

5.6.4 An initial appraisal of the off-site pond where access was available/where the pond was visible from publicly accessible areas was made using the HSI system to identify potential suitability to support Great Crested Newt, the results of which are set out at Table 5.3, below.

Table 50.3. HSI survey results

Pond	Suitability Indices										HSI Score	Suitability
	SI 1 Location	SI 2 Pond Area	SI 3 Pond Drying	SI 4 Water Quality	SI 5 Shade	SI 6 Water Fowl	SI 7 Fish	SI 8 Ponds	SI 9 Terrestrial Habitat	SI 10 Macrophytes		
Offsite Ponds												
P1	1	0.4	0.9	0.67	1	0.67	0.33	0.85	0.33	0.5	0.61	Average

5.6.5 P1 is assessed to provide average suitability to support Great Crested Newt, and as such it is recommended that eDNA surveys are undertaken to determine presence/absence of this species, details of which are set out in Chapter 6 below.

5.7 Reptiles

5.7.1 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 6980/2. All six reptile species are also S41 Priority Species. As such, all reptile species should be assessed as important ecological features.

5.7.2 Background Records. Information returned from the desk study included no recent records of reptiles from within the search area.

5.7.3 Survey Results and Evaluation. The habitats present within the site, in particular the grassland and tall forbs vegetation, appear to provide potentially suitable opportunities for common reptile species, should this group be present. Similar habitats occur relatively frequently throughout the surrounding area and, as such, should this species group be present, the site is considered to be of importance at the local level.

5.7.4 The proposals include the loss of areas of suitable reptile habitat, albeit areas of high-quality grassland will be planted under the proposals, such that suitable opportunities for reptiles will be maintained at the site in the long term. Nonetheless, given that suitable habitats for reptiles will be affected and in the absence of Phase 2 faunal survey work, recommendations in relation to a precautionary approach to vegetation clearance is set out in Chapter 6 below. Further, 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.

5.8 Birds

5.8.1 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 6980/2).

5.8.2 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 status²⁰. 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.

5.8.3 Background Records. Information returned by the desk study included records for several bird species within 2km of the site, including the Red Listed species Grey Partridge *Perdix perdix*, Skylark *Alauda arvensis*, House Sparrow *Passer domesticus*, Fieldfare *Turdus pilaris* and Song Thrush *Turdus philomelos*, all of which are also all Priority Species. None of these records originate from within the site itself.

5.8.4 Survey Results and Evaluation. Several species of bird were observed within the site during the Phase 1 survey including Woodpigeon *Columba palumbus*, Common Whitethroat *Sylvia communis*, Blackbird *Turdus merula*, House Sparrow *Passer domesticus*, Dunnock *Prunella modularis*, Great Spotted Woodpecker *Dendrocopos major*, Greenfinch *Chloris chloris*, Blue

²⁰ 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.

Tit *Cyanistes caeruleus*, European Robin *Erithacus rubecula*, Wren *Troglodytes troglodytes* and Great Tit *Parus major*.

5.8.5 Most of the birds recorded at the site are not listed as having any special conservation status, although House Sparrow is included on the Red list as a result of declines in UK breeding populations. This species is also a S41 Priority Species. However, the habitats present are common in the surrounding area and there is no evidence to suggest the site is of elevated value at a local level for this species, which remains common throughout Great Britain²¹.

5.8.6 **Assessment of Proposals.** The proposals will result in the loss of grassland, tall forbs vegetation and a small section of woodland to facilitate site access and this could affect nesting birds that may be present at the time of works. Accordingly, a number of safeguards in respect of nesting birds are proposed, as described in Chapter 6 below. In the long-term, additional nesting opportunities will be provided for birds as described in Chapter 6 below.

5.9 Invertebrates

5.9.1 **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 6980/2. Some invertebrates are also S41 Priority Species. Where such species are present, they should be assessed as important ecological features.

5.9.2 **Background Records.** No records of invertebrates were returned from within or adjacent to the site. A number of records of Priority Species from potentially within 1km of the site were returned from the desk study, although more accurate grid reference location was not available. The most recent of these was of Black Oil-Beetle *Meloe proscarabeus* in 2023.

5.9.3 **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 contains some areas of bare ground and areas of scrub and tall forbs vegetation but otherwise supports relatively few micro-habitats that would indicate possible elevated value for invertebrates²², 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.

5.9.4 **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.

5.10 Summary

5.10.1 On the basis of the above, a summary of the evaluation of fauna is provided below:

²¹ Population estimates of birds in Great Britain and the United Kingdom. Musgrove et al., British Birds, 2013

²² Natural England (2010) Higher Level Stewardship – Farm Environment Plan (FEP) Manual, 3rd Edition

Table 5.014. Evaluation summary of fauna forming important ecological features

Species / Group	Summary	Level of Importance
Bats – Roosting	Potential habitat in the form of trees and buildings	Local (if present)
Bats – Foraging / Commuting	Potential habitat in the form of grassland, tall forbs, tree line and woodland	Local (if present)
Badger	Likely absent, although potential foraging habitat present in the form of woodland, grassland and tall forbs vegetation	Local (if present)
Great Crested Newt	Potential aquatic habitat off-site habitat and potential terrestrial habitat on-site	Local (if present)
Reptiles	Potential habitat in the form of grassland and tall forbs vegetation	Local (if present)
Birds	Confirmed presence on site	Local

5.10.2 Other fauna 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-MC11**) 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 woodland for road access. Losses of non-important features will be addressed as part of the BNG strategy.

6.1.5 **MC1 – Tree Protection.** All trees / tree lines 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.

Bats

6.1.6 **MC2 – Dusk Emergence / Dawn Re-entry Survey of Building B1.** Based on the results of the preliminary visual inspection survey, building B1 was recorded to support moderate suitability for roosting bats. As such, in line with current good practice guidance²³, phase 2 survey work comprising two survey visits between April and October, with at least one of the surveys undertaken between May and August, is recommended to be undertaken to ascertain presence / absence of roosting bats and inform the potential requirement for a European Protected Species licence and inform the demolition of this building.

6.1.7 **MC3 – Felling of Trees Supporting Bat Roosting Potential.** No trees identified as providing elevated suitability to support roosting bats have been identified for removal under the current layout. Nevertheless, should a need for works to these trees be identified at a later stage (e.g. for health and safety purposes) it is recommended a suitably qualified ecologist is consulted to advise on any further survey requirements and mitigation measures. Such measures may include climbing inspections to investigate potential roosting features and soft felling of trees under an ecological watching brief.

²³ Collins, J. (ed.) (2016) 'Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).' Bat Conservation Trust

6.1.8 **MC4 – Update Survey.** Should any considerable time (e.g. >2 years) elapse between the survey work detailed above / at MC2 and any development works, a further survey of the buildings with potential to support roosting bats should be undertaken prior to the commencement of works to confirm the continued absence of bats.

6.1.9 **MC5 – Sensitive Lighting.** Light-spill onto retained and newly created habitat, in particular the retained hedgerows, tree lines and woodland (especially towards the site boundaries), will be minimised in accordance with good practice guidance²⁴ 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 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.

Badger

6.1.1 No evidence of Badger has been recorded at the site. Nonetheless a precautionary approach will be adopted in relation to this species as detailed below.

²⁴ 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.

6.1.2 MC6 – Badger Construction Safeguards. In order to safeguard Badger should they enter the site during construction works, the following measures will be implemented:

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

Great Crested Newt

6.1.3 MC7 – Further Survey Work and Mitigation. The site is considered to provide potentially suitable terrestrial habitat opportunities for Great Crested Newt, whilst the site is connected to potentially suitable breeding habitat (pond P1). Accordingly, in the absence of specific survey work confirming the position in regard to Great Crested Newt and/or the implementation of mitigation measures, the potential exists for the proposals to impact on this species.

6.1.4 Should access be possible, in order to confirm the presence or likely absence of this species, specific eDNA survey work could be carried out during the appropriate season (mid-April to end of June) to further inform the proposals. Should this survey work provide a negative result this can be used to confirm the absence of Great Crested Newt and accordingly, mitigation measures and / or further surveys may be avoided. However, should Great Crested Newts be confirmed to be present, detailed mitigation measures would then likely need to be drawn up, potentially including a site-specific licence application to Natural England (post planning) to facilitate the works.

6.1.5 Alternatively, potential impacts on Great Crested Newt could be addressed through participation in the District Level Licensing (DLL) scheme. District Level Licensing in respect of Great Crested Newt is available to developments within Hertfordshire, administered by Natural England, whereby developments contribute to the strategic mitigation approach in order to create maximum benefits for this species at a landscape scale rather than a site-specific mitigation approach. In order to participate within the District Level Licensing

scheme, level of contribution required by the developer would be calculated as part of the developer's application process.

Reptiles

6.1.6 MC8 – Precautionary Mitigation Measures. Habitats within the site, including grassland, tall forbs, and localised areas of debris were recorded to provide potentially suitable habitat opportunities for common reptile species should these be present. In the absence of specific reptile survey work, as a minimum it is recommended that measures are put in place to safeguard reptiles in the event they are present.

6.1.7 In particular, it is recommended that initial vegetation clearance within the site be undertaken following a precautionary approach, including staged clearance of any tall vegetation under a suitable methodology. This will involve cutting suitable vegetation within the affected areas of the development footprint to a short height (~15cm) in a directional manner so as to encourage reptiles to disperse to suitable areas of retained/offsite habitat, whilst also allowing for a fingertip search of the area. Following this, a destructive search will be undertaken involving stripping of the top layer of ground. This exercise should be carried out under the supervision of a competent ecologist during the active reptile season (generally March/April to September/October, depending on prevailing weather). Any potential refuge features, e.g. piles of rubble, heavy logs, brash piles, will be fingertip-searched by an ecologist prior to being carefully disassembled. Any reptiles encountered during the destructive search will be carefully rescued by the supervising ecologist and relocated to suitable nearby habitat.

Nesting Birds

6.1.8 MC9 – Timing of Works. To avoid a potential offence under the relevant legislation, no clearance of suitable vegetation should be undertaken during the bird-nesting season (1st March to 31st August inclusive). If this is not practicable, any potential nesting habitat to be removed should first be checked by a competent ecologist in order to determine the location of any active nests. Any active nests identified would then need to be cordoned off (minimum 5m buffer) and protected until the end of the nesting season or until the birds have fledged. These checking surveys would need to be carried out no more than three days in advance of vegetation clearance.

Other Fauna

6.1.9 Results returned from the data search identified records of other mammal species, including Hedgehog and Brown Hare, from within the search area. Accordingly, the following precautionary approach will be adopted during site clearance and construction works.

6.1.10 MC10 – 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).

6.1.11 MC11 – 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 is to be created. These should be subject to a varied management regime to provide a range of sward types. Most areas should be 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.
- 6.2.5 Scrub Planting.** Scrub habitat is to be planted around the proposed attenuation basin, in proximity of the woodland margin 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. This will link with and strengthen retained vegetation and provide connectivity through the site for a range of wildlife.

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.

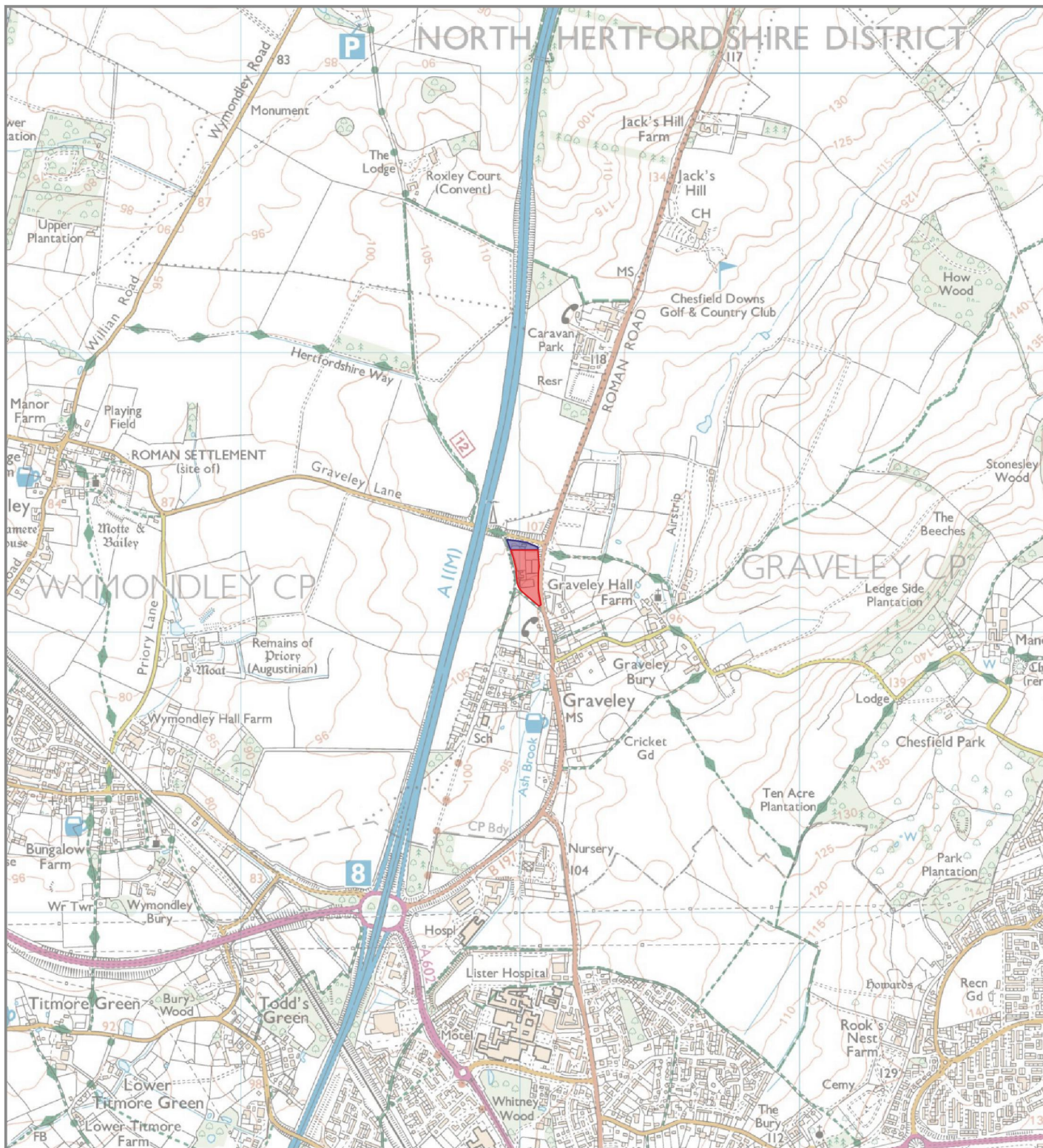
6.2.12 Bee Bricks and Insect Boxes. It is recommended that bee bricks be incorporated within the proposed development thereby increasing nesting opportunities for declining populations of non-swarming solitary bee populations. Ideally, bee bricks should be located within suitable south-facing walls (where 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, based on the results of a desktop study, habitat survey and initial protected species surveys.
- 7.2 The available information confirms that no statutory or non-statutory nature conservation designations are present within or adjacent to the site, and none of the designations within the surrounding area are likely to be adversely affected by the proposals.
- 7.3 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. A small section of woodland will be lost the proposals in order to facilitate site access. Where it has not been practicable to avoid loss of habitats, new habitat creation is proposed to offset losses, in conjunction with the landscape proposals.
- 7.4 The habitats within the site have potential to support a number of protected species, including species protected under both national and European legislation. Accordingly, a number of mitigation measures and further Phase 2 faunal surveys have been proposed to minimise the risk of harm to protected species and / or establish the use of the site by these species. In addition, compensatory measures are proposed, where appropriate, in order to maintain the conservation status of local populations.
- 7.5 In conclusion, subject to the implementation of the measures set out and results of recommended Phase 2 surveys, 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. Further, enhancement measures are proposed in regard to faunal species, including features to support priority or threatened species such as swifts, bats and Hedgehog.
- 7.6 Considerations in regard to Biodiversity Net Gain, including in relation to statutory requirements are set out further within a separate document.

Plan 6980/ECO1:

Site Location



Key:

- Site Location
- Other Land within Applicants Ownership

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Land at Milksey Lane, Graveley

Site Location

6980/ECO1

A/DO

March 2025

JB/DO

PROJECT

TITLE

DRAWING NO.

REV

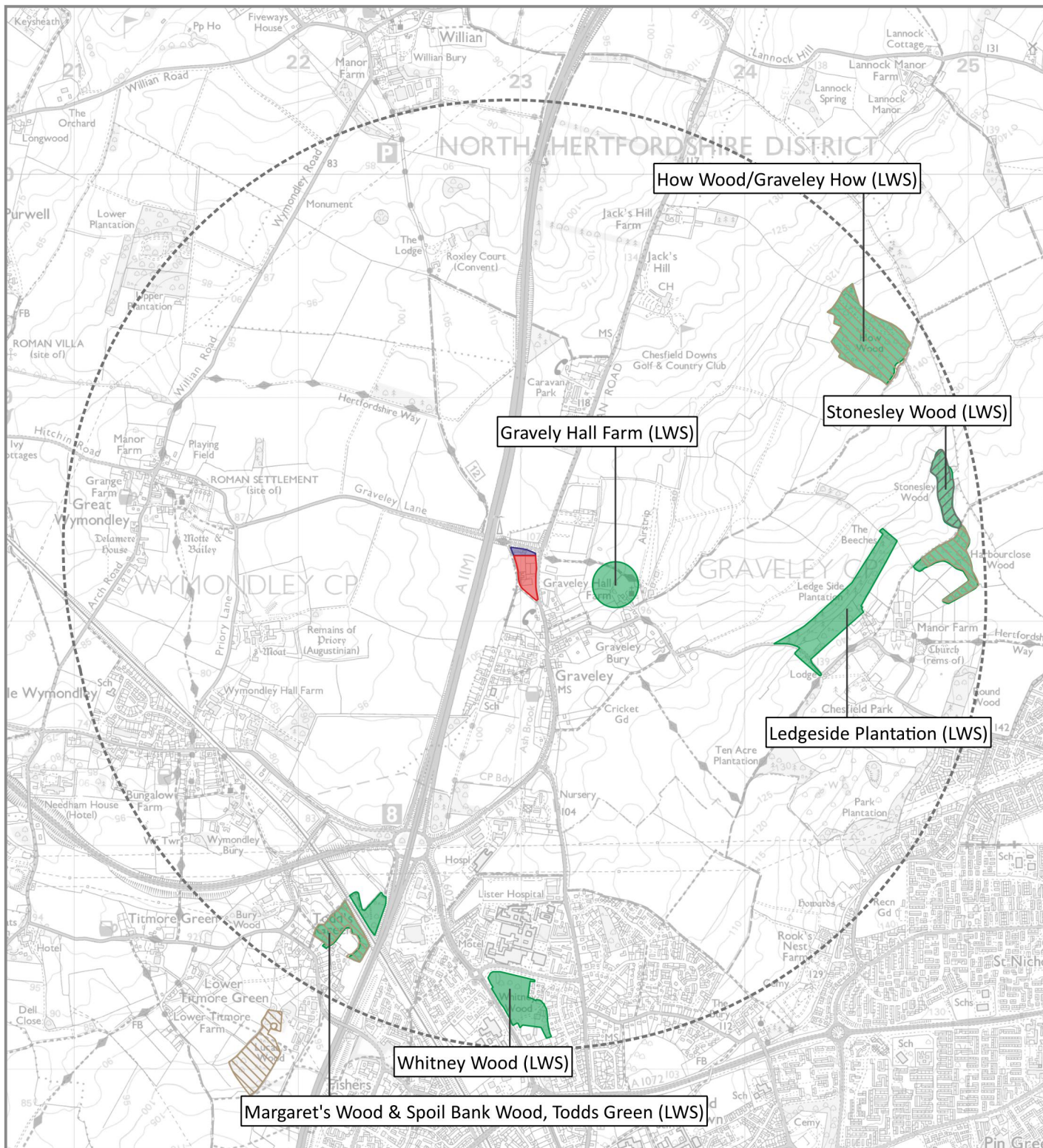
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Plan 6980/ECO2:

Ecological Designations



Key:

- Site Location
- Other Land within Applicants Ownership
- Local Wildlife Sites (LWS)
- Ancient Replanted Woodland (ARW)
- Ancient Semi Natural Woodland (ASNW)
- 2km Local Research Centre Study Area

Non-statutory data provided by Hertfordshire Environmental Records Centre (HERC) Records Centre

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Land at Milksey Lane, Graveley

Ecological Designations

6980/ECO2

B/DO

March 2025

JB/DO



PROJECT

TITLE

DRAWING NO.

REV

DATE

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Plan 6980/ECO3:

Habitats and Ecological Features



- Key:
- Site Location
 - Other Land within Applicants Ownership
 - Hardstanding
 - Building
 - Bare ground
 - Modified Grassland
 - Bramble scrub
 - Tall Forbs
 - Woodland
 - Off-site woodland
 - Tree Line
 - Scattered scrub
 - Tree with suitability to support roosting bats

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Land at Milksey Lane, Graveley

Habitats and Ecological Features

6980/ECO3

B/DO

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JB/DO

PROJECT

TITLE

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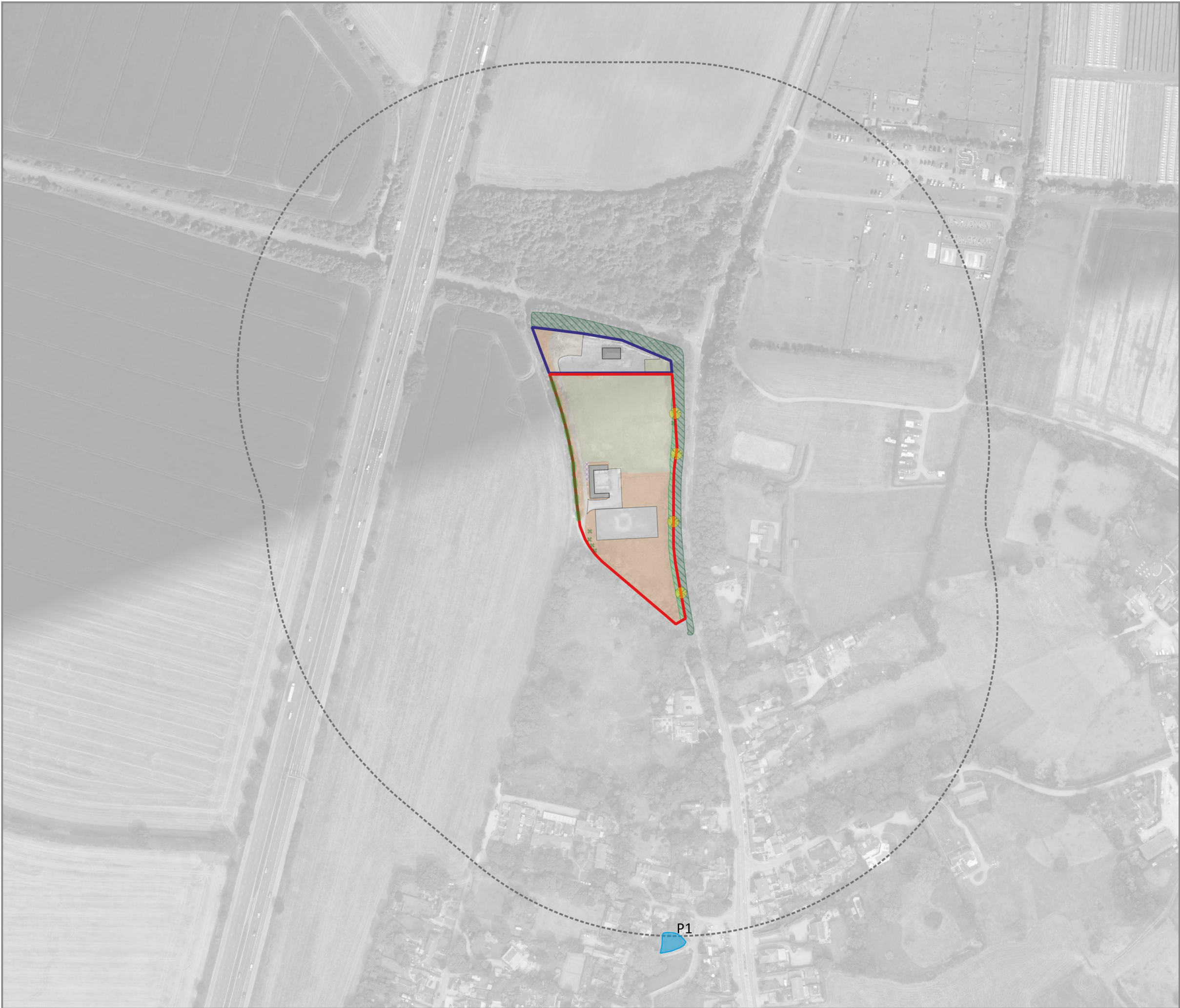
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Plan 6980/ECO4:

Pond Plan



- Key:
- Site Location
 - Other Land within Applicants Ownership
 - 250m Site Buffer
 - Pond



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Land at Milksey Lane, Graveley

Pond Plan

6980/ECO4

A/DO

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Appendix 6980/1:

Evaluation Methodology

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.

Assigning Level of Importance

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 6980/2:

Legislation Summary

LEGISLATION SUMMARY

1. In England and Wales primary legislation is made by the UK Parliament, and in Scotland by the Scottish Parliament, in the form of Acts. The main piece of legislation relating to nature conservation in the UK is the Wildlife and Countryside Act 1981 (as amended).
2. Acts of Parliament confer powers on Ministers to make more detailed orders, rules or regulations by means of secondary legislation in the form of statutory instruments. Statutory instruments are used to provide the necessary detail that would be too complex to include in an Act itself¹. 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 it 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.

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