

Mortimer Common to
Burghfield Common Cycleway

Ecological Appraisal

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Executive Summary

- i) **Introduction.** Aspect Ecology was commissioned by Ridge and Partners LLP on behalf of Stratfield Mortimer Parish Council in May 2022 to undertake an Ecological Appraisal in respect of a proposed future Cycle / Footway between Mortimer Common and Burghfield Common, Berkshire.
- ii) **Survey.** The site was surveyed in June and September 2022 based on standard extended Phase 1 methodology. In addition, a general appraisal of faunal species was undertaken to record the potential presence of any protected, rare or notable species, with specific surveys conducted in respect of bats, Badger and Great Crested Newt.
- iii) **Ecological Designations.** The site itself is not subject to any statutory ecological designations. The nearest statutory designation is Padworth Common Local Nature Reserve (LNR) located approximately 2.4km to the south-west of the site. The nearest non-statutory designation is Wokefield Common Local Wildlife Site (LWS) which encompasses part of the proposed Cycle / Footway route. Development of the route would have a low impact on this designation, but is unlikely to be significant given the small extent of habitat affected.
- iv) **Habitats.** The site comprises a number of woodland compartments located to the east of Reading Road. Other habitats recorded include amenity grassland, scrub, hardstanding, bare ground and hedgerows. Habitats beyond the survey area comprise further woodland and established built development. Areas of woodland within and adjacent to the site are likely to qualify as Priority Habitat Deciduous Woodland and as such, form an important ecological feature. The remaining habitats within the site are not considered to form important ecological features and any losses to the proposals is considered to be of negligible significance.
- v) **Protected Species.** The site offers some opportunities for protected species including roosting bats, foraging and commuting bats, Dormouse, amphibians, reptiles and birds. As such, precautionary safeguards are set out in relation to these species in the accompanying Method Statement (provided at Appendix 6468/1), whilst further survey is recommended in relation to Dormouse at the appropriate stage to inform licensing requirements.
- vi) **Enhancements.** The proposals present the opportunity to secure a number of benefits for biodiversity, including new roosting opportunities for bats, nesting opportunities for birds and creating habitat piles for invertebrates and amphibians.
- vii) **Summary.** In summary, based on the nature and scale of the proposed Cycle / Footway and subject to the implementation of appropriate avoidance, mitigation and compensation measures, it is considered unlikely that the proposals will result in significant harm to biodiversity, and indeed a number of gains can be readily secured (such as faunal enhancements).

1 Introduction

1.1 Background and Proposals

- 1.1.1 Aspect Ecology was commissioned by Ridge and Partners LLP on behalf of Stratfield Mortimer Parish Council in May 2022 to undertake an Ecological Appraisal in respect of a proposed Cycle / Footway between Mortimer Common and Burghfield Common, Berkshire centred at grid reference SU 64632 65749 (see Plan 6468/ECO1), hereafter referred to as 'the site'.

1.2 Site Overview

- 1.2.1 The survey area comprises habitats within and adjoining the proposed Cycle / Footway, which runs from Victoria Road, Mortimer in the south to the village of Burghfield Common in the north, running largely adjacent to Reading Road (see route indicated at Plan 6468/ECO3).
- 1.2.2 The habitats present largely comprise a number of woodland compartments located to the east of Reading Road. Other habitats recorded include amenity grassland, scrub, hardstanding, bare ground and hedgerows. Habitats beyond the survey area comprise further woodland and established built development.

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, both Hampshire Biodiversity Information Centre (HBIC) and the Thames Valley Environmental Records Centre (TVERC) were contacted in February 2022, with data requested on the basis of a search radius of 2km from the approximate mid-point of the route.
- 2.1.2 Information on statutory designations was obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC) database, which utilises data provided by Natural England, with an extended search radius (25km). In addition, the MAGIC database was searched to identify the known presence of any Priority Habitats within or adjacent the site. Relevant information is reproduced on Plan 6468/ECO2, where appropriate.
- 2.1.3 In addition, the Woodland Trust database was searched for any records of ancient, veteran or notable trees within or adjacent to the site.

2.2 Habitat Survey

- 2.2.1 The site was surveyed in June and September 2022 in order to ascertain the general ecological value of the land contained within and immediately adjoining the site and to identify the main habitats and ecological features present.
- 2.2.2 The site was surveyed based on standard Phase 1 Habitat Survey methodology¹, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail through Phase 2 surveys. This method was extended, in line with the Guidelines for Preliminary Ecological Appraisal² to record details on the actual or potential presence of any notable or protected species or habitats.
- 2.2.3 Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified. The nomenclature used for plant species is based on the Botanical Society for the British Isles (BSBI) Checklist.

2.3 Faunal Surveys

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

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

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

Bats³

2.3.2 **Trees.** Trees were assessed for their suitability to support roosting bats based on the presence of features such as holes, cracks, splits or loose bark. Suitability for roosting bats was rated based on relevant guidance⁴ as:

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

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

Badger (*Meles meles*)⁵

2.3.4 A Badger survey was carried out as part of the habitat survey, comprising 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.

2.3.5 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)

2.3.6 As a first step in identifying the potential presence of Great Crested Newt at the site, a Habitat Suitability Index (HSI) study was undertaken of all relevant water bodies within 250m⁶ 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 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.

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

- *S11 Location.* The location of the water body within Great Britain;
- *S12 Pond area.* The size of the water body;

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

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

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

⁶ 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

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

2.3.8 The overall suitability of the water body is then determined by entering these figures into an equation devised by Oldham *et al.* (2000)⁷. The suitability of water bodies is classed into one of five categories, either 'poor', 'below average', 'average', 'good' or 'excellent'.

2.3.9 This HSI study was undertaken in line with the guidelines developed by Oldham *et al.* and subsequently adapted by ARG UK (2010)⁸. 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 September survey was undertaken at a suboptimal time for woodland survey. However, this is not considered to have constrained the assessment of the ecological value of the woodland habitats.

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.

2.4.3 Access to the garden curtilage of Five Oaken Cottage was not permitted at the time of survey, therefore survey of habitats adjacent to the site within this landholding was undertaken from Reading Road. Nevertheless, this lies outside of the site boundary and as such, habitats present within the garden curtilage are unlikely to be affected by the 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)⁹, which involves identifying 'important

⁷ 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

⁸ Amphibian & Reptile Groups of the UK (2010) 'ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index'

⁹ CIEEM (2018) 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine', ver. 1.1, Chartered Institute of Ecology and Environmental Management, Winchester

ecological features' within a defined geographical context (i.e. international, national, regional, county, district, local or site importance). For full details refer to Appendix 6468/2.

2.6 National Policy Approach to Biodiversity in the Planning System

2.6.1 The National Planning Policy Framework (NPPF)¹⁰ 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 06/2005¹¹.

2.6.2 NPPF takes forward the Government's strategic objective to halt overall biodiversity loss¹², as set out at Paragraph 174, which states that planning policies and decisions should contribute to and enhance the natural and local environment by:

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

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

'When determining planning applications, local planning authorities should apply the following principles:

- a) *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'*

2.6.4 The above approach encapsulates the 'mitigation hierarchy' described in British Standard BS 42020:2019¹³, which involves the following step-wise process:

¹⁰ Ministry of Housing, Communities & Local Government (2021) 'National Planning Policy Framework'

¹¹ ODPM (2006) 'Circular 06/2005: Planning for Biodiversity and Geological Conservation – A Guide to Good Practice'

¹² DEFRA (2011) 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services'

¹³ British Standards Institution (2013) 'Biodiversity – Code of practice for planning and development', BS 42020:2019

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

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

2.7 Local Policy

2.7.1 The Local planning policy in relation to the site is set out within the West Berkshire Councils' Local Plan (2006 – 2026) which is made up of several key documents including the Core Strategy Development Plan Document (adopted July 2012). Within the Core Strategy, a single policy related to ecology, namely:

Policy CS 17 – Biodiversity and Geodiversity

2.7.2 Policy CS17 states:

“Biodiversity and geodiversity assets across West Berkshire will be conserved and enhanced.

Habitats designated or proposed for designation as important for biodiversity or geodiversity at an international or national level or which support protected, rare or endangered species, will be protected and enhanced. The degree of protection given will be appropriate to the status of the site or species in terms of its international or national importance.

Development which may harm, either directly or indirectly,

- *locally designated sites (Local Wildlife Sites and Local Geological Sites), or*
- *habitats or species of principal importance for the purpose of conserving biodiversity, or*
- *the integrity or continuity of landscape features of major importance for wild flora and fauna.*

will only be permitted if there are no reasonable alternatives and there are clear demonstrable social or economic benefits of regional or national importance that outweigh the need to safeguard the site or species and that adequate compensation and mitigation measures are provided when damage to biodiversity/geodiversity interests are unavoidable.

In order to conserve and enhance the environmental capacity of the District, all new development should maximise opportunities to achieve net gains in biodiversity and geodiversity in accordance with the Berkshire Biodiversity Action Plan and the Berkshire Local Geodiversity Action Plan. Opportunities will be taken to create links between natural habitats and, in particular, strategic opportunities for biodiversity improvement will be

actively pursued within the Biodiversity Opportunity Areas identified on the Proposals Map in accordance with the Berkshire Biodiversity Action Plan.”

- 2.7.3 West Berkshire Council are in the process of reviewing the above Local Plan to cover the period to 2037 however, due to the Government announcement with regards to changes to the NPPF in July 2021, the Local Plan Review has been delayed, with a revised schedule to be published in due course. However, within the emerging draft of the local plan published in December 2020, two draft policies related directly to ecology were identified, namely Policy SP 11 and DC 14 as detailed below. These policies would be relevant to the current proposals should they be adopted prior to a planning application being submitted.

Policy SP 11 – Biodiversity and Geodiversity

“Development proposals will conserve and enhance biodiversity and / or geodiversity and will deliver a net gain.

Development will be permitted where it:

- protects biodiversity and/or geodiversity value and implements appropriate conservation management. The degree of protection will be proportionate to the status of the site in terms of its international, national and/or local importance;*
- minimises fragmentation and maximises opportunities for restoration, enhancements and connection of natural habitats (including links to habitats outside of the district);*
- incorporates beneficial biodiversity and / or geodiversity conservation features and enhances existing features, including those that will help wildlife to adapt to climate change where appropriate;*
- delivers a net gain for biodiversity and/or geodiversity in the district. Development proposals across sites of all sizes will achieve a minimum 10% net gain for biodiversity, either within the site boundary or as part of on-site compensation, or where agreed, off-site compensation towards more strategic nature recovery;*
- provides or retains appropriate buffer zones between development proposals and designated sites;*
- provides coherent ecological permeability that is integrated and lined to the wider green infrastructure and any nature recovery network identified as relevant to the location;*
- seeks to eradicate or control any invasive non-native species present on site;*
- is compatible with Biodiversity Action Plan, Local Nature Recovery Strategy or other strategic conservation management plans for species or habitats that have been formally adopted by the Council.*

Development that would have a direct or indirect adverse effect on designated sites, protected or priority species or habitats that are considered to have geological and biodiversity value, will be refused unless it can be demonstrated that the benefits of the development clearly outweigh the impacts on the features of the site and the wider network of habitats. Development resulting in the loss or deterioration of irreplaceable habitats will be refused unless it accords with the exceptional reasons identified within the National Planning Policy Framework. If benefits clearly outweigh the impacts or exceptional reasons

are justified, a suitable compensation strategy including long term management and maintenance, will need to be secured.”

Policy DC 14 – Trees, Woodland and Hedgerows

- 2.7.4 Policy DC 14 refers to the protection of trees, woodland and hedgerows and includes the requirement for retention, enhancement or planting of trees, woodland and hedgerows comprising native species where possible. Permission will be refused where proposals result in the loss or deterioration of ancient woodland (unless in accordance with exceptional circumstances set out within the NPPF) and the removal of protected trees, groups of trees, woodland or important hedgerows will only be permitted in exceptional circumstances and in accordance with relevant legislation, policy and good practice.

Draft Neighbourhood Development Plan

- 2.7.5 Burghfield Parish Council are in the process of drafting a Neighbourhood Development Plan which is understood to include policy on minimising the need for the use of cars by extending the system of footpaths and cycle ways which is also relevant to the proposals, albeit not related to ecology.

3 Ecological Designations

3.1 Statutory Designations

Description

3.1.1 A total of five European / International Designations are mapped within 25km of the site boundary, namely:

- Thames Basin Heaths SPA located 10km to the south east of the site;
- Hartslock Wood SAC located 12.6km to the north of the site;
- Kennet & Lambourn Floodplain SAC located 13.4km to the west of the site;
- River Lambourn SAC located 15.8km to the west of the site; and
- Kennet Valley Alderwoods SAC located 24.2km to the west of the site.

3.1.2 The closest European Designation is the Thames Basin Heaths Special Protection Areas (SPA) located approximately 10km to the east of the site designated on the basis of its internationally important bird populations of Dartford Warbler *Sylvia undata*. Hartslock Wood Special Area of Conservation (SAC) is the second nearest European designation and is located approximately 12.6km to the north of the site. This is designated on the basis of its Annex I habitat semi-natural grassland and scrubland facies on calcareous substrates which is an important site for Monkey Orchid *Orchis simia* as well as Annex I habitat of Yew woodland.

3.1.3 The statutory designations of ecological importance that occur within the local area are shown on Plan 6468/ECO2. The nearest other statutory designation is Padworth Common Local Nature Reserve (LNR) located approximately 2.4km to the south west of the site. The LNR is located on the basis that it's an important sanctuary for wildlife and has recreational value for nature. The next nearest statutory designation is Pamber Forest and Silchester Common Site of Special Scientific Interest (SSSI) located approximately 3.6km to the south west of the site. The SSSI is designated on the basis of its extensive ancient oakwood Pamber Forest with two heathland commons and a series of unimproved wet meadows.

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 Pamber Forest and Silchester Common SSSI and Decoy Pit Pools and Wood SSSI, which applies to aviation, agricultural, energy production or landfill proposals. As such, the IRZ would not apply to proposals for a cycle/footway.

Evaluation

3.1.5 The site itself is not subject to any statutory ecological designations. All statutory ecological designations in the surrounding area, including the Thames Basin Heath SPA are well separated from the site by existing development and given the likely nature and scale of the proposed development (comprising a Cycle/Footpath and will not result in a net gain of residential dwellings), it is considered that these designations are unlikely to be affected by future construction of a cycle/footway.

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 6468/ECO2. The nearest non-statutory designation is Wokefield Common Local Wildlife Site (LWS). Approximately 400m of the route runs through the westernmost part of this designation. The LWS is designated on the basis of its secondary woodland and small compartments of dry heath and gorse scrub. The second closest non-statutory designation is Heathland East of Cowpond Piece LWS which is located approximately 0.15km to the north-west of the site at its closest point. The LWS is designated on the basis of humid heath of Heather *Calluna vulgaris*, Cross-leaved Heath *Erica tetralix*, Purple Moor-grass *Molinia caerulea* and Dwarf Gorse *Ulex gallii*.

Evaluation

- 3.2.2 Part of the proposed route (a 400m length) runs through Wokefield Common Local Wildlife Site (LWS). This will result in approximately 0.12ha of the LWS becoming a hoggin (or similar) surfaced footpath/cycleway. However, much of that length appears to already be in use as a footpath, albeit one that is significantly narrower than the proposed cycle/footway. Based on the proposed scheme, which involves only minor tree losses, direct impacts on this LWS are considered to be minor. In addition to direct impacts of construction of the route within the LWS, the improved access may result in an increase in recreational access to the LWS, part of which is managed as a nature reserve by the county Wildlife Trust (BBOWT).
- 3.2.3 The wider area of Wokefield Common LWS was visited during the Phase 1 survey and was found to have a number of well-established footpaths as well as information boards and dog bins suggesting the LWS already experiences high levels of recreational use and as such, has measures in place to mitigate the potential effects on the woodland and dry heath habitats. On this basis, it is considered that any increase in recreational pressure caused by increased accessibility to the site would be unlikely to have any significant effects on the LWS. Furthermore, if the cycle / footway reduces the number of cars using Reading Road then this would potentially be a benefit to the adjacent LWS in the long-term through decreased vehicle emissions.
- 3.2.4 East of Cowpond Piece LWS is separated from the site from existing residential development and given the nature and scale of the proposed Cycle / Footway it is considered this designation will be unaffected by the future proposals.

3.3 Priority Habitats, Ancient Woodland and Notable Trees

Description

- 3.3.1 **Ancient, Veteran or Notable Trees.** There are no records of any notable or veteran trees within or adjacent to the site. The closest mapped tree is approximately 0.5km to the east of the site and is a notable Holly *Ilex aquifolium*.
- 3.3.2 **Ancient Woodland.** No areas of ancient woodland are mapped within or adjacent to the site. The closest area of mapped ancient woodland is the Little Auclum Copse Ancient and Semi-Natural Woodland located approximately 1.2km to the north east of Goring Lane as mapped on MAGIC.
- 3.3.3 **Priority Habitat.** Woodland parcel 5 (see Plan 6468/ECO3) close to the northern end of the route and overlapping the Wokefield Common LWS designation is identified on the MAGIC

website as Priority Habitat, namely a relatively small parcel of (Lowland) Deciduous Woodland Priority Habitat in the south, close to Five Oaken Cottage, with the remainder being identified as Wood-pasture and Parkland Priority Habitat. Although identified as Wood-pasture and Parkland, the habitat recorded to be present in the vicinity of the site is in fact woodland. An area of Priority Habitat Deciduous Woodland is also mapped to the west of Reading Road.

Evaluation

- 3.3.4 There are no ancient, veteran or notable trees or ancient woodland mapped within or adjacent to the site and given the likely nature and scale of the proposed cycle / footway, it is considered these habitats will be unaffected by future development at the site.
- 3.3.5 It is understood that the construction of any proposed cycle / footway would not include widening of the road to the west of Reading Road and as such, the Priority Habitat located to the west of Reading Road would likely be unaffected. As noted above in relation to the LWS designation, the proposed route would have a small, direct impact on the Priority Habitat to the east of the road. However, if the cycle / footway reduces the number of cars using Reading Road then would potentially be a benefit to the adjacent Priority Habitats in the long-term through decreased vehicle emissions.

3.4 **Summary**

- 3.4.1 In summary, the site itself is not subject to any statutory ecological designations and, given the likely nature and scale of the proposals, it is unlikely that any such designations in the surrounding area will be significantly affected. Part of the route lies within woodland identified as Priority Habitat and forming part of Wokefield Common LWS. Accordingly there will be a small, direct impact on the Priority Habitat and LWS, although this is minimal, whilst there will be a potential benefit arising from reduced motor traffic flows along Reading Road.

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 both the Thames Valley Environmental Records Centre (TVERC) and Hampshire Biodiversity Information Centre (HBIC). The closest record of Priority plant species was for Grape-hyacinth *Muscari neglectum* located approximately 1km to the east of the site. The closest record returned to the site was Star Sedge *Carex arenaria* located approximately 0.15km to the east of the site. No evidence for these, or any other notable or protected species was recorded during the Phase 1 survey work undertaken within or adjacent to the site.

4.2 Overview

- 4.2.1 The habitats and ecological features present within the site are described below and evaluated in terms of intrinsic ecological value, such as in relation to 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.

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

- Amenity Grassland;
- Hardstanding
- Bare ground;
- Hedgerows;
- Woodland;
- Individual trees; and
- Scrub.

- 4.2.3 The locations of these habitat types and features are illustrated on Plan 6468/ECO3 and described in detail below.

4.3 Priority Habitats

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

- 4.3.2 Of the habitats present within and adjacent to the site, the woodland is considered to qualify as Priority Habitat.

4.4 Amenity Grassland

Description

- 4.4.1 Amenity grassland verges are present along Reading Road in the south, intermittently further north along Reading Road, and then at the junction between Reading Road and Goring Lane in the north of the site, as shown on Plan 6468/ECO3. Amenity grassland is also present adjacent to the proposed route in the south of the site, adjoining built development located off College Piece, Mortimer.
- 4.4.2 The amenity grassland verges in the south of the site were recorded to be a uniform short sward height of approximately 3-5cm at the time of survey, whilst the verge in the north of the site appeared to be unmanaged, with a sward height of 20-30cm at the time of survey. Species recorded to be present include Cock's-foot *Dactylus glomerata*, Wall Barley *Hordeum murinum*, False Oat-grass *Arrhenatherum elatius*, Yarrow *Achillea millefolium*, White Clover *Trifolium repens*, Common Nettle *Urtica dioica*, Garlic Mustard *Alliaria petiolata*, Bindweed *Convolvulus spp.*, Dock *Rumex spp.*, Greater Plantain *Plantago major*, Cow Parsley *Anthriscus sylvestris*, Common Ragwort *Senecio jacobaea* and Meadow Buttercup *Ranunculus acris*.
- 4.4.3 The amenity grassland adjoining residential development at College Piece comprises short-mown, species-poor, semi-improved grassland consisting of Perennial Rye-grass *Lolium perenne*, Common Bent *Agrostis capillaris*, Yorkshire Fog *Holcus lanatus*, Smooth Meadow-grass *Poa pratensis*, Dandelion *Taraxacum* agg., Daisy *Bellis perennis*, Cat's-ear *Hypochaeris radicata*, Ribwort Plantain *Plantago lanceolata* and Smooth Hawk's-beard *Crepis capillaris*.

Evaluation

- 4.4.4 Overall, the areas of amenity grassland present within the site are small in extent and support a low diversity of common and widespread species. The grassland does not meet the criteria for a Priority Habitat and as such, is not considered to constitute an important ecological feature. Overall, the amenity grassland present within the site is considered to be of ecological value at no more than the site level and any losses to the proposed Cycle / Footway are unlikely to be significant.

4.5 Hardstanding

Description

- 4.5.1 Hardstanding is present along the route in the form of an existing footpath running between woodland block W1 and the amenity grassland.
- 4.5.2 Small areas of hardstanding are present within the site adjacent to Five Oaken Cottage and at the junction between Reading Road and Goring Lane, as shown on Plan 6468/ECO3 and described below. Areas of hardstanding are also present off-site within the Five Oaken Cottage curtilage, comprising areas of carparking.
- 4.5.3 In the south, the hardstanding within and adjacent to the site was recorded to be in good condition and devoid of recolonising vegetation. In the north of the site, the hardstanding supported small amounts of vegetation such as Wall Barley encroaching from the adjacent amenity grassland.

Evaluation

- 4.5.4 The hardstanding present within and adjacent to the site was either devoid of vegetation at the time of survey or supports a small assemblage of common and widespread species encroaching from the adjacent amenity grassland. The hardstanding is current in-use as an access point into Five Oaken Cottage, for carparking or as a footway and as such, is subject to regular disturbance and is considered to be of ecological value at no more than the site level. Any losses under the proposed Cycle / Footway are not considered to be significant.

4.6 Bare Ground

Description

- 4.6.1 An area of bare ground is present within the site comprising a narrow verge approximately 0.5m to 1m in width along Reading Road. A small number of recolonising species were recorded to be present including *Poa* sp., Dandelion *Taraxacum* spp. and Greater Plantain.
- 4.6.2 More extensive bare ground is present a few metres to the east of Reading Road along a horse riding and walking route through College Piece Woodland (W2), located to the south of Longmoor Lane. The bare ground appears to be maintained by pedestrian use and merges into narrow margins of acid grassland and heathland species, described in more detail under 'Woodland' below. Further bare ground is present along another woodland path to the south of Goring Lane, close to the western boundary of the Wokefield Common LWS, although this is less well marked, presumably because of lower levels of usage.

Evaluation

- 4.6.3 The very limited vegetation the bare ground supports comprises common and widespread species characteristic of the habitat. As such, the bare ground is considered to be of ecological value at the site level only and is not considered to constitute an important ecological feature. Any losses under the proposed Cycle / Footway are not considered to be significant.

4.7 Hedgerows

Description

- 4.7.1 Two hedgerows are present within the site (labelled **H1** and **H2** on plan 6468/ECO3), located on the eastern side of Reading Road. The hedgerows are described in more detail in Table 4.1 below.

Table 4.1. Hedgerow descriptions.

No.	H	W	Woody species	Avg. per 30m*	Ground flora & climbers	Associated features	Comments (including structure / management)	Likely to qualify#
H1	2-3m	1m	<u>Cypress</u>	1	Ivy	-	Box cut shape, forms residential boundary	N
H2	0.5m	2m	<u>Common Box</u>	1	Ivy and Bramble	<20% gaps,	Generally dense, box cut shape, regularly managed	N

No.	H	W	Woody species	Avg. per 30m*	Ground flora & climbers	Associated features	Comments (including structure / management)	Likely to qualify#
H3	1.5m	1m	<u>Cherry Laurel <i>Prunus lusitanica</i></u> , <u>Beech <i>Fagus sylvatica</i></u> , <u>Holly <i>Ilex aquifolium</i></u> , <u>Yew <i>Taxus baccata</i></u> and <u>Hazel <i>Corylus avellana</i></u>	4	Ruderal colonising species such as Common Nettle	-	Generally dense, unmanaged	N

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

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

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

Evaluation

4.7.2 Hedgerow H3 recorded within the site is relatively substantial and outgrown in nature whereas Hedgerows H1 and H2 appeared to be regularly managed. All appear to form residential boundaries. From a preliminary appraisal, none of the hedgerows are considered to be species-rich¹⁴ and are not likely to qualify as ecologically ‘important’ under the Hedgerows Regulations 1997, based on the limited number of woody species and associated features.

4.7.3 To qualify as a priority habitat, based on the standard definition¹⁵, hedgerows (>20m long and <5m wide) must consist predominantly (≥80%) of at least one native woody species. It has been estimated that approximately 84% of countryside hedgerows in GB qualify as a Priority Habitat under this definition¹⁵. The hedgerows within the site do not qualify as Priority Habitat as they are not >20m in length, or comprise entirely non-native species.

4.7.4 On this basis, the hedgerows do not constitute important ecological features and are of importance at the site level only.

4.7.5 If practical, development proposals should incorporate the retention of all the hedgerows within the site. Retained hedgerows should be protected during the construction phase of any future development as per the recommendations included at Chapter 6 below.

4.8 Woodland

Description

4.8.1 The proposed route of the Cycle / Footway is located either along the edge of existing woodland adjacent to Reading Road, namely Woodland W3 and W4 or approximately 4m east of Reading Road, within woodland blocks W1, W2 and W5 (see Plan 6468/ECO3) and described further below. It is anticipated that any future proposals to widen Reading Road and create a Cycle / Footway will encroach into the existing woodland either permanently or temporarily.

4.8.2 **Woodland W1.** Woodland W1 is a narrow belt of trees in the south of the site, located northeast of the junction between Reading Road and Victoria Road. This compartment comprises a mix of Scots Pine *Pinus sylvestris*, Pedunculate Oak *Quercus robur* and Cherry *Prunus* sp. over a ground layer of Bracken *Pteridium aquilinum*, Bramble *Rubus fruticosus*

¹⁴ i.e. five or more native woody species within a 30m length (or four or more in Northern England) – FEP Manual

¹⁵ Based on: Biodiversity Reporting and Information Group (2011) ‘UK Biodiversity Action Plan (BAP) Priority Habitat Descriptions’, ed. Ant Maddock

agg., Ivy *Hedera helix* and bare ground. The margins of the woodland also support Gorse *Ulex europaea*, False Oat-grass, Cock's-foot, Red Fescue *Festuca rubra* and Bent *Agrostis* sp.. At its northern and eastern extremities, W1 becomes a tree line. At its northern end, the adjoining footpath is constrained to the west by Oak trees growing on a small bank and to the east by a garage building with a narrow conifer hedge. The invasive non-native Montbretia *Crocasmia x crocosmiflora* was noted to be present on the woodland bank at this location.

4.8.3 Woodland W2. Woodland W2, College Piece Woodland, is located north of W1 and south of Longmoor Lane. It is dominated by conifer planting, with relatively mature Scots Pine and occasional Beech forming the canopy over most of the woodland, with an understorey including Silver Birch *Betula pendula*, Oak, Holly, Sweet Chestnut *Castanea sativa*, Rowan *Sorbus aucuparia* and Gorse over abundant Bracken with more occasional Bramble. The woodland edge adjoining Reading Road has frequent semi-mature Oaks interspersed with Scot's Pine growing over locally abundant Bracken. The margins of the footpath parallel to Reading Road are characterised by heathland and acid grassland species including, in addition to Gorse, Heather *Calluna vulgaris*, a Sheep's Fescue *Festuca* sp., Wavy Hair-grass *Deschampsia flexuosa*, Common Bent, Sheep's Sorrel *Rumex acetosella*, Wood Sage *Teucrium scorodonia* and occasional Purple Moor-grass *Molinia caerulea*. Close to the southwestern corner of W2 further *Crocasmia* was noted, while the invasive Variegated Yellow Archangel *Lamium galeobdolon* ssp. *argentatum* was also recorded adjacent to the pathway.

4.8.4 Towards the northern end of W2, more recent conifer planting is present to the east of the site, with Heather present beneath these younger conifers. Acid grassland and heathland vegetation was also noted to be present along the margins of a surfaced trackway running southwest from the junction of Reading Road and Longmoor Lane, to the east of the site.

4.8.5 Woodland W3. Woodland W3 is located to the south of Five Oaken Cottage adjacent to Reading Road on the eastern edge and to the north of Longmoor Lane. The woodland is separated from Reading Road by a narrow strip of Bare Ground (see above) and a steep earth bank. The woodland canopy itself was tall and dense in nature at the time of survey, dominated by mature and semi-mature Pedunculate Oak, Scots Pine, Beech and Silver Birch. The understorey was recorded to be dense, dominated by Holly with occasional Beech, Yew and Hawthorn *Crataegus monogyna* also present. Due to the dense canopy and understorey, the ground flora was sparse, dominated by bare ground and leaf litter, with occasional Bramble and Bracken *Pteridium aquilinum* which becomes dominant where there are gaps in the canopy.

4.8.6 Woodland W4. Woodland W4 is located to the north of Five Oaken Cottage adjacent to Reading Road on the eastern edge and separated from the road by a narrow amenity grassland verge (see above). The canopy is dominated by Pedunculate Oak *Quercus robur*, with occasional semi-mature Alder *Alnus glutinosa* and Silver Birch *Betula pendula* identified along the roadside. The understorey was sparse to moderately dense comprising Hawthorn and young Alder and Silver Birch. The ground flora comprises Common Nettle, Garlic Mustard, Bindweed *Convolvulus* spp., Dock *Rumex* spp., Greater Plantain, Cow Parsley and Meadow Buttercup.

4.8.7 Woodland W5. Woodland W5 comprises the woodland north of W4, extending to the junction of Reading Road and Goring Lane and forming part of Wokefield Common LWS. The southern part of this area is identified as Lowland Woodland Priority Habitat on the MAGIC website, but the majority is identified as Wood Pasture and Parkland Priority Habitat. However, within the vicinity of the proposed route the habitat comprises woodland rather than wood pasture. The woodland is mixed in nature, supporting mature Beech and

Oak, together with Scots Pine, Sweet Chestnut and Silver Birch, with an understorey of Holly, Silver Birch, Beech and occasional Hawthorn and Rowan over bare ground in heavier shade and herbs including Bracken, Common Bent, False Brome *Brachypodium sylvaticum*, occasional Honeysuckle *Lonicera periclymenum* and Goldenrod *Solidago virgaurea*. Towards the north, Holly becomes more dominant in the shrub layer, with the heavily shaded ground being largely bare. Close to the junction of Reading Road with Goring Lane what appears to be a former pond is present a few metres to the east of the existing footpath, supporting Yellow Iris *Iris pseudacorus*. To the west of this, but well removed from the proposed cycle / footway, is an area with coppiced Alder over a dense ground layer of Remote Sedge *Carex remota* with occasional Broad Buckler Fern *Dryopteris dilatata*. Occasional fallen trees were recorded within the site but deadwood appeared to be relatively rare within the wider woodland.

Evaluation

- 4.8.8 Most of the woodland within / adjacent to the site, located to the east of Reading Road, is not mapped as a Priority Habitat on MAGIC, whilst most of W5 is mapped as Wood Pasture and Parkland. However, it is considered that all the woodland on the eastern side of Reading Road between the junctions with Longmoor Lane in the south and Goring Lane in the north (W3, W4 and W5) would meet the standard definition for Priority Habitat Lowland Mixed Deciduous Woodland¹⁶. The majority of this woodland (namely W5) also falls within the Wokefield Common LWS. As such, it is considered that this woodland is of County level value and constitutes an important ecological feature.
- 4.8.9 South of Longmoor Lane, compartment W2 comprises conifer plantation with a scattering of deciduous species, particularly along the boundary with Reading Road. The presence of Heather in open areas within the woodland block indicate that it is growing on an area of former heathland, but the woodland itself is not considered to represent a Priority Habitat. The woodland W2 is considered to be of value at the local level only. Compartment W1 is a small block of trees, comprising a mix of Scots Pine and deciduous species, principally Pedunculate Oak. It is considered to best be described as former conifer plantation with fringing Oak, similar in nature to the western margin of W2. As such, it is considered not to represent a Priority Habitat and is considered to be of value at the site level.
- 4.8.10 The great majority of the woodland is present outside of the likely working area and as such, is unlikely to be affected by a proposed Cycle / Footway. Where the route passes through woodlands, some tree loss would occur, although this has been minimised by careful route selection and can be reduced further through a proposed no dig methodology within rooting zones.
- 4.8.11 Accordingly, the impact of the route is considered to be low in the context of the large extent of woodland that is present outside the working area. It would, nonetheless, represent a small loss of a Priority Habitat within the northern part of the route.
- 4.8.12 Mitigation or compensation could potentially be provided through enhancement of the retained woodland through creation of additional log piles and deadwood which would benefit a number of faunal species (see below).

4.9 Individual Trees

Description

¹⁶ UK Biodiversity Action Plan; Priority Habitat Descriptions. BRIG (ed. Ant Maddock) 2008.

- 4.9.1 A number of individual trees are present outside of the identified woodland areas. These very largely comprise Scots Pine growing over amenity grassland within or adjacent to the site in the vicinity of College Piece in the south of the site. A small number of semi-mature Oaks are also present.

Evaluation

- 4.9.2 None of the individual trees are considered to be of particular note and are not considered to constitute important ecological features. They are considered to be of value at the site level only. Any loss could be mitigated by replacement planting.

4.10 Scrub

Description

- 4.10.1 An area of dense scrub is present to the north of the site on the junction of Reading Road and Goring Lane (as shown on plan 6468/ECO3). The dense scrub comprises species such as Sycamore *Acer pseudoplatanus*, Cypress sp. and Holly and forms the boundary of the adjacent residential curtilage.
- 4.10.2 Scrub is also present adjacent to residential development adjoining amenity grassland in the south of the site. This comprises a mixture of native species such as Bramble and young Holly together with occasional non-natives including Rhododendron *Rhododendron* sp. and a Bamboo (*Bambusoideae*). The amenity grassland here also supports occasional amenity planting in the form of Juneberry *Amelanchier lamarckii*.

Evaluation

- 4.10.3 The scrub present within the site comprises common and widespread species including occasional specimens of non-native species. Given the limited species assemblage and diversity, the scrub is considered to be of ecological value at no more than site level and does not constitute an important ecological feature. It is possible that the dense scrub in the north of the site will be affected by the works to facilitate the cycle / footway. It is anticipated that such losses could be readily compensated for through new landscape planting and as such, are unlikely to be significant.

4.11 Habitat Evaluation Summary

- 4.11.1 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	Site - County

- 4.11.2 Other habitats present within the site include amenity grassland, bare ground, hedgerows, and scrub. However, these habitats do not form important ecological features.

5 Faunal Use of the Site

5.1 Overview

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

5.2 Priority Species

- 5.2.1 Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, Section 41 of the NERC Act requires the Secretary of State to publish a list of species which are of principal importance for conservation in England. This list is largely derived from the 'Priority Species' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority species under the subsequent country-level biodiversity strategies.
- 5.2.2 During the survey work undertaken, no priority species were recorded within the site. This is discussed further below.

5.3 Bats

- 5.3.1 **Legislation.** All British bats are classed as European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended) and are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). As such, both bats and their roosts (breeding sites and resting places) receive full protection under the legislation (see Appendix 6468/3 for detailed provisions). If proposed development work is likely to result in an offence a licence may need to be obtained from Natural England which would be subject to appropriate measures to safeguard bats. Given all bats are protected species, they are considered to represent important ecological features. A number of bat species are also considered S41 Priority Species.
- 5.3.2 **Background Records.** Information received from TVERC and HBIC returned records of Pipistrelle bat species *Pipistrellus spp.*, and Common Pipistrelle *Pipistrellus pipistrellus* to the west of Reading Road, adjacent to the north-western site boundary. Records of Common Pipistrelle, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auratus*, Serotine *Eptesicus serotinus*, Natterer's Bat *Myotis natterii* and Daubenton's Bat *Myotis daubentonii* were also returned from the 2km search area
- 5.3.3 **Survey Results, Evaluation and Assessment of Likely Effects.**
- Roosting
- Trees*
- 5.3.4 A number of semi-mature and mature trees are present on site. The results of the tree assessment work undertaken at the site are illustrated on Plan 6468/ECO3 and summarised in Table 5.1 below:

Table 5.1. Tree inspection results.

Tree No.	Species	Age	Potential Roost Features	Suitability
T1	Pedunculate Oak	Mature	Dense Ivy coverage	Low
T2	Pedunculate Oak	Mature	Split bark and cracked branches	Low
T3	Scots Pine	Mature	Woodpecker nest hole	Low
T4	Scots Pine	Dead	Splits in dead wood	Low
T5	Scots Pine	Mature	Woodpecker nest hole	Low
T6	Scots Pine	Mature	Dense Ivy coverage	Low

- 5.3.5 Tree removals plans were not available at the time the survey was undertaken, such that it will be necessary to confirm if individual trees identified above are to be removed. Should the trees require removal, they will need to be felled using a soft-felling methodology as detailed in the accompanying Method Statement at Appendix 6468/1 in order to fully safeguard roosting bats. It is anticipated that the loss of the above trees would be easily compensated for through erection of bat boxes within the adjacent woodland and subject to the implementation of the proposed mitigation measures, the loss of the trees would not have a significant effect on the local bat population.

Foraging and Commuting

- 5.3.6 The site provides some limited opportunities for foraging and commuting bats in the form of the woodland edge along Reading Road which is currently unlit, albeit some lighting will still be present from car headlights. The hedgerow, dense scrub and other habitats identified within and adjacent to the site are considered to be too small to provide suitable opportunities in isolation.
- 5.3.7 The Cycle/Footway is not proposed to be lit, such that foraging and commuting bats utilising Reading Road are unlikely to be significantly affected by the proposals and as such, survey work in relation to foraging and commuting bats will not be required to inform a planning application.

5.4 Badger

- 5.4.1 **Legislation.** Badger receive legislative protection under the Protection of Badgers Act 1992 (see Appendix 6468/3 for detailed provisions), and as such should be assessed as an important ecological feature. The legislation aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain. It is the duty of planning authorities to consider the conservation and welfare impacts of development upon Badger and issue permissions accordingly.
- 5.4.2 Licences can be obtained from Natural England for development activities that would otherwise be unlawful under the legislation. Guidance on the types of activity that should be licensed is laid out in the relevant best practice guidance.^{17, 18}

¹⁷ English Nature (2002) 'Badgers and Development'

¹⁸ Natural England (2011) 'Badgers and Development: A Guide to Best Practice and Licensing', Interim Guidance Document

5.4.3 **Background Records.** No specific records of badger from within or adjacent to the site were returned from the desktop study. The closest record is located approximately 0.7km to the north of the site which is dated from 2004.

5.4.4 **Survey Results and Evaluation.** The site and adjacent habitats offer foraging habitat for Badger in the form of woodland. No setts were recorded during the survey however, Badger are known to be present in the local area based on the results from the desktop study. No activity of Badger was recorded during the survey work undertaken. However, Badger is a dynamic and mobile species and, therefore, it is recommended that general safeguarding measures are implemented within the site in order to safeguard roaming Badgers in the unlikely event they should enter the site during construction works. These measures are detailed further at Chapter 6 below.

5.5 Dormouse

5.5.1 **Legislation:** Dormouse is fully protected under the Wildlife and Countryside Act 1981 (as amended) and is a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Such legislation affords protection to individuals of the species and their breeding sites and places of rest (see Appendix 6468/3 for detailed provisions). Dormouse is also a S41 Priority Species. On this basis, Dormouse is considered to form an important ecological feature.

5.5.2 **Background Records:** No specific records of Dormouse were returned from the 2km search area surrounding the site.

5.5.3 **Survey Results and Evaluation:** No records of Dormouse were returned from within the 2km search radius however, the site does lie within the known range for Dormouse¹⁹ and as a species, Dormouse are often under recorded. The site does provide suitable habitat for this species in the form of well-connected woodland with a locally dense understorey which is considered to have sufficient floral diversity and vegetation structure to provide a range of food sources throughout the year.

5.5.4 Given the nature of the proposals, involving only minor clearance of trees and wooded vegetation, it is considered unlikely that Dormouse (if present) would be encountered during works, whilst a precautionary approach can be adopted to ensure this species is safeguarded. Nonetheless, given there would be minor loss of potential breeding/resting habitat, it is recommended that surveys are undertaken at an appropriate stage prior to commencement of development to confirm licensing requirements. It is considered that this could be conditioned, in accordance with the exceptional circumstances set out under Section 9.2.4 of BS4202020, namely (c) *“where adequate information is already available and further surveys would not make any material difference to the information provided to the decision-maker to determine the planning permission, but where further survey is required to satisfy other consent regimes, e.g. an EPS licence.”* Further detail is set out within the Method Statement at Appendix 6468/1, whilst a discussion of the three ‘licensing tests’ is set out at Chapter 6 below.

5.6 Water Vole

5.6.1 **Legislation.** Water Vole is fully protected under the Wildlife and Countryside Act 1981 (as amended). Water Vole is also a S41 Priority Species. As such, this species is considered to represent an important ecological feature. The legislation affords protection to individuals

¹⁹ ‘Britain’s Mammals 2018: The Mammal Society’s Guide to their Population and Conservation Status.’

²⁰ British Standards Institution (2013) ‘Biodiversity – Code of practice for planning and development’, BS 42020:2013

of the species and their breeding sites and places of shelter (see Appendix 6468/3 for detailed provisions). There is no provision under the Act for licensing what would otherwise be offences for the purpose of development. Such activities must be covered by the defence in the Act that permits otherwise illegal actions if they are the incidental result of a lawful operation and could not reasonably be avoided.

5.6.2 If, despite all reasonable efforts, properly authorised development will adversely affect Water Vole and there are no alternative habitats nearby, Natural England may issue a licence to trap and translocate Water Vole for the purpose of conservation. To issue such a licence, Natural England would need to be assured there is no reasonable alternative to the development and that there are no other practical solutions that would allow Water Vole to be retained at the same location. NE would also require assurance that the actions would make a positive contribution to Water Vole conservation.

5.6.3 **Background Records.** No specific records of Water Vole within or adjacent to the site or within a 2km radius of the site were returned from the local records centre.

5.6.4 **Survey Results and Evaluation.** No suitable habitat for Water Vole is present within or adjacent to the site and as such, it is considered Water Vole are likely absent from the site and will be unaffected by any future Cycle / Footway.

5.7 Otter

5.7.1 **Legislation.** Otter is fully protected under the Wildlife and Countryside Act 1981 (as amended) and is a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). Such legislation affords protection to individuals of the species and their breeding sites and places of rest (see Appendix 6468/3 for detailed provisions). Otter is also a S41 Priority Species. On this basis, Otter is considered to represent an important ecological feature.

5.7.2 **Background Records.** No specific records of Otter within or adjacent to the site or within the 2km radius of the site were returned from the desktop study.

5.7.3 **Survey Results and Evaluation.** No suitable habitat for Otter is present within or adjacent to the site and as such, it is considered Otter are likely absent from the site and will be unaffected by any future Cycle / Footway.

5.8 Other Mammals

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

5.8.2 **Background Records.** No specific records of other mammals were returned from within or adjacent to the site. A number of records of Hedgehog *Erinaceus europaeus* (Priority Species) was returned from within the search area around the site, with the closest located approximately 0.5km to the north of the site and 0.9km to the south of the site.

5.8.3 **Survey Results and Evaluation.** No evidence of any other protected, rare or notable mammal species was recorded within the site. Other mammal species likely to utilise the site, such as Fox *Vulpes vulpes*, remain common in both a local and national context, and as mentioned above do not receive specific legislative protection in a development context.

As such, these species are not a material planning consideration and the loss of potential opportunities for these species to the proposals is of negligible significance.

- 5.8.4 The desktop study returned background records of Hedgehog within the surrounding area. Hedgehog is a Priority Species, albeit this species remains common and widespread in England. The site offers potential opportunities for this species, particularly in the form of areas of dense scrub and woodland, although habitats are unlikely to be of importance in a local context, and Hedgehog is considered to be of importance at a site level only. Subject to the implementation of general mammal safeguards during construction as detailed at Chapter 6 below, it is anticipated that Hedgehog will be fully safeguarded under any future development proposals.

5.9 Amphibians

- 5.9.1 **Legislation.** All British amphibian species receive a degree of protection under the Wildlife and Countryside Act 1981 (as amended). Great Crested Newt is protected under the Act and is also classed as a European Protected Species under the Conservation of Habitats and Species Regulations 2017 (as amended). As such, both Great Crested Newt and habitats utilised by this species are afforded protection (see Appendix 6468/3 for detailed provisions). Great Crested Newt is also a S41 Priority Species, as are Common Toad *Bufo bufo*, Natterjack Toad *Epidalea calamita*, and Pool Frog *Pelophylax lessonae*. As such, these species should be assessed as important ecological features.

- 5.9.2 **Background Records.** No specific records of Great Crested Newt from within or adjacent to the site were returned from the desktop study. A number of records of Great Crested Newt were returned from the 2km search area, the closest record was within a woodland pond approximately 0.4km to the east of the site, dating from 2012.

- 5.9.3 **Survey Results and Evaluation.** No ponds or suitable waterbodies were recorded to be present within or adjacent to the site. The majority of the site comprises terrestrial habitat which is considered sub-optimal for amphibians, such as bare ground and hardstanding.

- 5.9.4 However, a number of interconnecting off-site ditches are mapped within 250m of the site boundary which have the potential to support suitable habitat for Great Crested Newt. These comprise a network of ditches to the west of the site within the Holden Firs Woodland managed by the Englefield Estate (identified as D1 in the table below) and a further network of ditches to the east of the site within Starvale Woods, also managed by the Englefield Estate and located to the south of Wokefield Common (identified as D2 below). The off-site networks of ditches were surveyed during the Phase 1 survey and an initial appraisal of each ditch system was made using the HSI system to identify potential suitability to support Great Crested Newt, see Table 5.2 below.

Table 5.2. 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		
Off-site system D1	1	1	0.9	0.33	0.2	1	0.67	0.8	1	0.5	0.66	Average

Off-site system D2	1	1	0.9	0.33	0.2	1	0.67	1	1	0.6	0.68	Average
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5.9.5 The ditch systems supported areas of stagnant / pooling water connected via flowing or dry channels which provides some suitable habitat for amphibians, albeit the channels with a faster flow are considered unsuitable for breeding.

5.9.6 In summary, both off-site ditch systems were found to be of 'average' potential to support Great Crested Newts. The terrestrial habitat within the woodlands surrounding the ditches provides suitable habitat for amphibians and therefore, the presence of Great Crested Newt cannot be ruled out within these systems.

5.9.7 However, as detailed further in the accompanying Method Statement at Appendix 6468/1, given the limited area of habitat affected within proximity of these ditches, Great Crested Newt are unlikely to be affected under the proposals, and the works can proceed under a non-licensed approach in regard to this species, with implementation of precautionary safeguarding measures.

5.10 Reptiles

5.10.1 **Legislation.** All six species of British reptile are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), which protects individuals against intentional killing or injury. Sand Lizard *Lacerta agilis* and Smooth Snake *Coronella austriaca* receive additional protection under the Conservation of Habitats and Species Regulations 2017 (as amended); refer to Appendix 6468/3 for detailed provisions. All six reptile species are also S41 Priority Species. As such, all reptile species should be assessed as important ecological features.

5.10.2 **Background Records.** Information returned from the local records centre returned no records for reptile species within the site itself. A number of records of Grass snake *Natrix natrix*, Common Lizard *Zootoca vivipara*, Adder *Vipera berus* and Slow worm *Anguis fragilis* were returned from the adjacent nature reserves to the east of Reading Road, the closest of which is for Adder, located approximately 0.1km to the north-east of the site.

5.10.3 **Survey Results and Evaluation.** The site provides opportunities for reptiles in the form of the grassland verges, woodland edges and clearings within the woodland. Records of reptiles were returned from the local area, in particular the woodland to the east of the site. It is therefore considered that reptiles may be present along the Cycle / Footway route. Appropriate safeguarding measures are therefore set out in the accompanying Method Statement at Appendix 6468/1.

5.11 Birds

5.11.1 **Legislation.** All wild birds and their nests receive protection under Section 1 of the Wildlife and Countryside Act 1981 (as amended) in respect of killing and injury, and their nests, whilst being built or in use, cannot be taken, damaged or destroyed. Species included on Schedule 1 of the Act receive greater protection and are subject to special penalties (see Appendix 6468/3 for detailed provisions).

- 5.11.2 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 status²¹. Species are listed as Green, Amber or Red. Red Listed species are considered to be of the highest conservation concern being either globally threatened and or experiencing a high/rapid level of population decline (>50% over the past 25 years). A number of birds are also S41 Priority Species. Red and Amber listed species and priority species should be assessed as important ecological features.
- 5.11.3 Background Records.** Information from the data search included records for several bird species in the vicinity of the site, including the Red Listed species Cuckoo *Cuculus canorus* and Mistle Thrush *Turdus viscivorus*.
- 5.11.4** A number of records of notable birds were returned from within the 2km search area, such as species protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) including Barn Owl *Tyto alba*, Woodlark *Lullula arborea*, Red Kite *Milvus milvus*, Common Crossbill *Loxia curvirostra*, Firecrest *Regulus ignicapillus*, Green Sandpiper *Tringa ochropus*, Kingfisher *Alcedo atthis*, Redwing *Turdus iliacus* Woodlark *Lullula arborea*, Hobby *Falco subbuteo*, Spotted Crake *Porzana porzana*, Goshawk *Accipiter gentilis*, Brambling *Fringilla montifringilla*, Eurasian Whimbrel *Numenius phaeopus* and Dartford Warbler *Sylvia undata*. A number of records of Red listed species were also returned from within the 2km search area. These include Lapwing *Vanellus vanellus*, Woodcock *Scolopax rusticola*, Hawfinch *Coccothraustes coccothraustes*, House Sparrow *Passer domesticus*, Marsh Tit *Poecile palustris*, Nightingale *Luscinia megarhynchos*, Ringed Plover *Charadrius hiaticula*, Yellowhammer *Emberiza citrinella*, Turtle Dove *Streptopelia turtur*, Tree Pipit *Anthus trivialis*, Pochard *Aythya ferina*, Herring Gull *Larus argentatus*, Yellow Wagtail *Motacilla flava*, Linnet *Carduelis cannabina*, Swift *Apus apus*, Starling *Sturnus vulgaris*, Lesser Redpoll *Carduelis cabaret*, Corn Bunting *Emberiza calandra*, Whinchat *Saxicola rubetra*, House Martin *Delichon urbica* and Fieldfare *Turdus pilaris*. None of these species were recorded within the site during the survey work undertaken.
- 5.11.5 Survey Results.** Several species of bird were observed within the site during the Phase 1 survey including Wood Pigeon *Columba palumbus*, Blue Tit *Cyanistes caeruleus* and Long-tailed Tit *Aegithalos caudatus*. Habitats present within the site suitable for nesting birds include hedgerows, woodland and dense scrub.
- 5.11.6 Evaluation.** No species listed as having any special conservation status were recorded at the site during the survey. It is possible that future development of the site will result in the loss of suitable nesting habitat such as woodland, dense scrub and hedgerows and therefore a number of safeguards in respect of nesting birds are proposed, as detailed in the accompanying Method Statement at Appendix 6468/1. In any event, any losses on-site are anticipated to be minimal and easily compensated for through erection of nest boxes within the adjacent woodland.

5.12 Invertebrates

- 5.12.1 Legislation.** A number of invertebrate species are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). In addition, Large Blue Butterfly *Maculinea arion*, Fisher's Estuarine Moth *Gortyna borelii lunata* and Lesser Whirlpool Ram's-horn Snail *Anisus vorticulus* receive protection under the Conservation of Habitats and Species Regulations 2017 (as amended); refer to Appendix 6468/3 for detailed provisions. A number of

²¹ Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) 'Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man' British Birds 108, pp.708-746

invertebrates are also S41 Priority Species. Where such species are present, they should be assessed as important ecological features.

5.12.2 Background Records. No specific records of invertebrates were returned from within or adjacent to the site. Records were returned for Stag Beetle *Lucanus Cervus* which are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), the closest record of which was located approximately 1km to the north of the site. A large number of records of UK BAP *Lepidoptera* species were also returned from within the 2km search area including Heart Moth, Small Heath *Coenonympha pamphilus*, Grayling *Hipparchia semele*, White Admiral *Limenitis Camilla* and September Thorn *Ennomos erosaria* which appear to originate from a single location approximately 0.4km to the south of the site boundary. The closest record is for Heart Moth located approximately 0.1km to the east of the site.

5.12.3 Survey Results and Evaluation. No evidence for the presence of any protected, rare or notable invertebrate species was recorded within the site, although a large number of records were returned from the surrounding area suggesting the adjacent woodland habitat supports a good assemblage of invertebrate species. Outside the woodland, the site is dominated by bare ground, amenity grassland and hardstanding which is likely to support only a limited diversity of invertebrates. Given the nature and scale of a future Cycle / Footway, it is anticipated that the local invertebrate assemblage would not be significantly affected. Nevertheless, deadwood habitat is present within the woodland on or close to the proposed routes and, therefore, if this habitat is to be removed or disturbed by future development, consideration to Stag Beetle would need to be given to ensure this and other invertebrate species are fully safeguarded. Mitigation could be provided by retention of standing dead wood as far as practicable and careful relocation of any substantial deadwood present within the working zone of the selected route.

5.13 Summary

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

Table 5.3. Evaluation summary of fauna

Species / Group	Supported by or associated with the site	Level of Importance
Bats – Roosting	Trees T1-T6 classified as low bat roosting potential	Parish (Local)
Bats - Foraging	Woodland edge provides suitable foraging and commuting habitat	Likely Parish (Local)
Badger	No evidence recorded within the site although suitable habitat in the form of woodland is present and Badger known to be present in local area	Site
Dormouse	Suitable habitat present	Likely Parish (Local)
Water Vole	Likely Absent.	Negligible
Otter	Likely Absent.	Negligible
Other Mammals	Suitable habitat present	Site
Great Crested Newt	Off-site aquatic and terrestrial habitat present within 250m and suitable terrestrial habitat present within the site	Likely Parish (Local)
Reptiles	Records returned from within close proximity of the site and suitable habitat present adjacent to Reading Road	Likely Parish (Local)

Species / Group	Supported by or associated with the site	Level of Importance
Birds	Suitable habitat for nesting birds present within the site.	Site
Invertebrates	Background records suggest adjacent woodland supports good assemblage of invertebrates including Stag Beetle. Deadwood habitat may be affected by proposals.	Parish (Local)

6 Mitigation and Enhancement Measures

6.1 Protected Species Method Statement

6.1.1 Given potential habitats for protected species including bats, Dormouse, Great Crested Newt, reptiles and breeding birds have been identified within and surrounding the site, a precautionary method statement is provided at Appendix 6468/1, setting out measures to safeguard such species during works and minimise the risk of an offence under the relevant legislation. Given the nature of the works and limited area of impact, this is considered to be a suitable approach, avoiding a requirement for specific survey work to confirm presence/absence of individual species. It is considered that this can be secured by a suitably worded planning condition.

6.1.2 In regard to Dormouse, given the works would result in minor clearance of potential breeding/resting habitat, it is recommended that further surveys are undertaken at an appropriate stage prior to commencement of development to confirm licensing requirements. It is considered that this could be conditioned, in accordance with the exceptional circumstances set out under Section 9.2.4 of BS4202022, namely (c) *“where adequate information is already available and further surveys would not make any material difference to the information provided to the decision-maker to determine the planning permission, but where further survey is required to satisfy other consent regimes, e.g. an EPS licence.”* Nonetheless, consideration is given to the three ‘licensing tests’ below, whilst the Method Statement at Appendix 6468/1 sets out the approach that would be followed in the event Dormouse is found to be present and a licence is required.

Consideration of the three ‘licensing tests’ in relation to Dormouse

6.1.3 In the event that Dormouse is found to be present within woodland affected under the proposals, an EPS licence would be required to fully adhere to domestic and European legislation. When determining whether to grant a licence, Natural England would need to give consideration to the three derogation tests under Article 16 of the Habitats Directive (1992), namely whether the development is for imperative reasons of overriding public interest, no satisfactory alternative, and maintenance of favourable conservation status.

6.1.4 The need for the development is set out by the planning documents associated with the application. In summary, the scheme will meet a local need for a new cycle/footway, providing social benefits and improving local traffic and air quality through encouraging alternative modes of transport. It would not be possible to deliver this in a cost-effective way without minor losses of Dormouse habitat, and no development would not provide a satisfactory outcome in terms of meeting the identified need. In terms of maintenance of favourable conservation status, this would be achieved through implementation of safeguarding measures as set out in the accompanying Method Statement, whilst minor vegetation clearance is not considered to result in any significant long-term loss in terms of habitat resource.

6.1.5 On the basis of the above, it is therefore considered that, subject to planning permission being granted and confirmation of the detailed measures in line with those set out in the accompanying Method Statement, there is no reason to suggest that any associated licence would be unlikely to be granted by Natural England.

²² British Standards Institution (2013) ‘Biodiversity – Code of practice for planning and development’, BS 42020:2013

6.2 Other Mitigation Measures

- 6.2.1 Based on the habitats, ecological features and associated fauna identified within / adjacent to the site, it is recommended that a number of other mitigation measures are implemented under any future development proposals, as detailed under **MM1-MM7** below. 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).

Habitats and Local Designations

- 6.2.2 **MM1 – Pollution Prevention.** Retained habitats within and in close proximity to the site i.e. woodland in addition to nearby non-statutory designated sites will be safeguarded by implementing environmental good practice during construction, such as pollution prevention measures including:

- Measures will be implemented to minimise generation of dust, and where dust is generated to suppress drifting onto retained habitats or off-site (e.g. damping down of roadways and spoil piles during periods of dry weather);
- Storage areas for chemicals, fuels, etc. will be stored on an impervious base within an oil-tight bund with no drainage outlet. Spill kits with sand, earth or commercial products approved for the stored materials shall be kept close to storage areas for use in case of spillages;
- Where possible, and with prior agreement of the sewage undertaker, silty water should be disposed of to the foul sewer or via another suitable form of disposal, e.g. tanker off-site;
- Refuelling of plant will take place in a designated area, on an impermeable surface.

- 6.2.3 Post-development, the drainage system for the development will ensure the woodland is not subject to adverse changes in surface water run-off or quality.

Hedgerows and Trees

- 6.2.4 **MM2 – Hedgerow and Tree Protection.** All hedgerows and trees to be retained within the proposed development shall be protected during construction in line with standard arboriculturalist best practice (BS5837:2012) or as otherwise directed by a suitably competent arboriculturalist. This will involve the use of protective fencing or other methods appropriate to safeguard the root protection areas of retained trees / hedgerows.

Bats

- 6.2.5 **MM3 – Update Survey.** Should any considerable time (e.g. >2 years) elapse between the survey work recommended above and any development works, a further survey of the trees within the site should be undertaken to confirm additional features with the potential to support roosting bats have not developed.

Badger

- 6.2.6 **MM4 – Badger Construction Safeguards.** In order to safeguard Badger should they enter the site during construction works, the following measures will be implemented:

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

6.2.7 MM5 – Badger Update Survey. Given that no evidence of Badgers has been recorded within or adjacent to the site it is considered that Badgers do not currently pose a constraint to development. Nonetheless, Badgers are dynamic animals and levels of Badger activity can rapidly change at a site, with new setts being created at any time. It is therefore recommended that an update survey is carried out prior to commencement of site works in order to confirm the current status of Badgers at the site.

Hedgehogs

6.2.8 MM6 – Hedgehog Safeguards. In order to safeguard Hedgehogs and other small mammals should they enter the site during construction works, the following measures will be implemented:

- A watching brief should be maintained for Hedgehog and other small mammals throughout any clearance works;
- Any piles of material already present on site, particularly vegetation/leaves, etc. and any areas of dense scrub or hedgerows, shall be dismantled/removed by hand and checked for Hedgehog prior to the use of any machinery/disposal;
- Any material to be disposed of by burning, particularly waste from vegetation clearance and tree works, should not be left piled on site for more than 24 hours in order to minimise the risk of Hedgehogs occupying the pile. If this cannot be avoided, material should be stored within a container such as a skip to prevent animals from gaining access. Any material which has been stored on the ground overnight should be moved prior to burning to allow a thorough check for any animals which may have been occupying the pile;

- In the event that an injured Hedgehog is found, the animal should be wrapped carefully in a towel, the British Hedgehog Preservation Society (BHPS) phoned (01584 890 801) and the Hedgehog taken to a local vet immediately;

Invertebrates

- 6.2.9 **MM7 - Retention of Deadwood Features.** As far as possible, standing deadwood should be retained. Where this is not possible it should be carefully felled and moved in as intact a condition as possible further within the woodland. Any substantial lying deadwood, i.e. tree trunks and large branches, that need to be moved to enable the works to proceed should also be carefully relocated further within the adjacent woodland.

6.3 Ecological Enhancements

- 6.3.1 The National Planning Policy Framework (NPPF) encourages new developments to maximise the opportunities for biodiversity through incorporation of enhancement measures. The proposals present the opportunity to deliver ecological enhancements at the site for the benefit of local biodiversity, thereby making a positive contribution towards the broad objectives of national conservation priorities and the local Biodiversity Action Plan (BAP). The recommendations and enhancements summarised below are considered appropriate given the context of the site and the scale and nature of the proposals. Through implementation of the following ecological enhancements (**EE1 – EE3**), the opportunity exists for the proposals to deliver a number of biodiversity net gains at the site.

Habitat Creation

Bats

- 6.3.2 **EE1 - Bat Boxes.** It will be readily achievable to incorporate a number of bat boxes within the woodland adjacent to the site. The provision of bat boxes will provide new roosting opportunities for bats in the area, such as Soprano Pipistrelle, a national Priority Species. 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.

Birds

- 6.3.3 **EE2 – Bird Boxes.** It is recommended that a number of bird nesting boxes be incorporated into future development proposals, thereby increasing nesting opportunities for birds at the site. Ideally the bird boxes will be placed on trees in the adjacent woodland to provide opportunities for woodland species such as Blue Tit. The precise number and locations of boxes should be determined by a competent ecologist, post-planning once the relevant final development design details have been approved.

Invertebrates

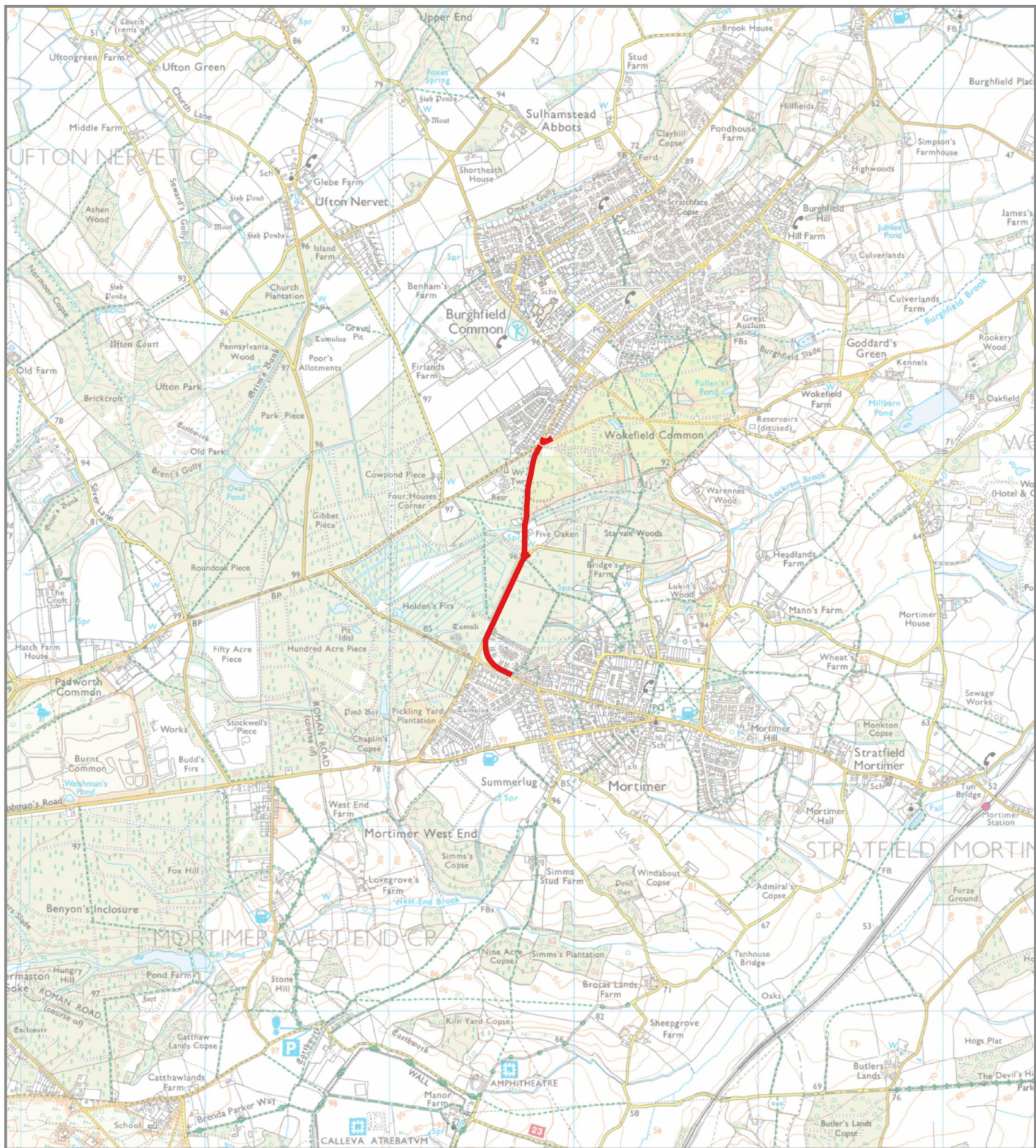
- 6.3.4 **EE3 – Habitat Piles.** A proportion of any deadwood arising from vegetation clearance works should be retained within the site in a number of wood piles adjacent to the woodland edge in order to provide potential habitat opportunities for invertebrate species such as Stag Beetle, which in turn could provide a prey source for a range of other wildlife. The retained material should comprise large pieces of timber, i.e. sections of trunk that are as large as practicable.

7 Conclusions

- 7.1.1 Aspect Ecology has carried out a Preliminary Ecological Appraisal of the proposed Cycle / Footway route between Mortimer Common to Burghfield Common, Berkshire, based on the results of a desktop study and Phase 1 habitat survey.
- 7.1.2 The available information identifies one non-statutory nature conservation designation to be present within part of the site. Development of the route would have a low impact on this designation and result in a small loss of a Priority Habitat. No other designations within the surrounding area are likely to be adversely affected by the proposals.
- 7.1.3 The Phase 1 habitat survey has established that the habitats of ecological importance within the site include woodland which is likely to qualify as Priority Habitat Lowland Deciduous Woodland. The retention of features of greatest relative value is likely to be achievable under future development proposals, whilst it is anticipated that small losses could be compensated for through a sensitively designed layout and through a range of enhancements.
- 7.1.4 The habitats within the site support/have the potential to support roosting bats, commuting and foraging bats, birds, reptiles, amphibians and Dormouse. As such, precautionary safeguards are set out in relation to these species in the accompanying Method Statement (provided at Appendix 6468/1), whilst further survey is recommended in relation to Dormouse at the appropriate stage to inform licensing requirements.
- 7.1.5 In conclusion, the scheme design is considered to minimise impacts on biodiversity by retaining key habitat features, such as woodland. Subject to the implementation of appropriate mitigation, and compensation measures, it is considered unlikely that development of the site would result in significant harm to biodiversity.

Plan 6468/ECO1:

Site Location



Key:

— Proposed Cycle/Footway Route

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**Mortimer Common to Burghfield
Common Cycle / Footway
Site Location**

6468/ECO1

C/IP

October 2022

PROJECT

TITLE

DRAWING NO.

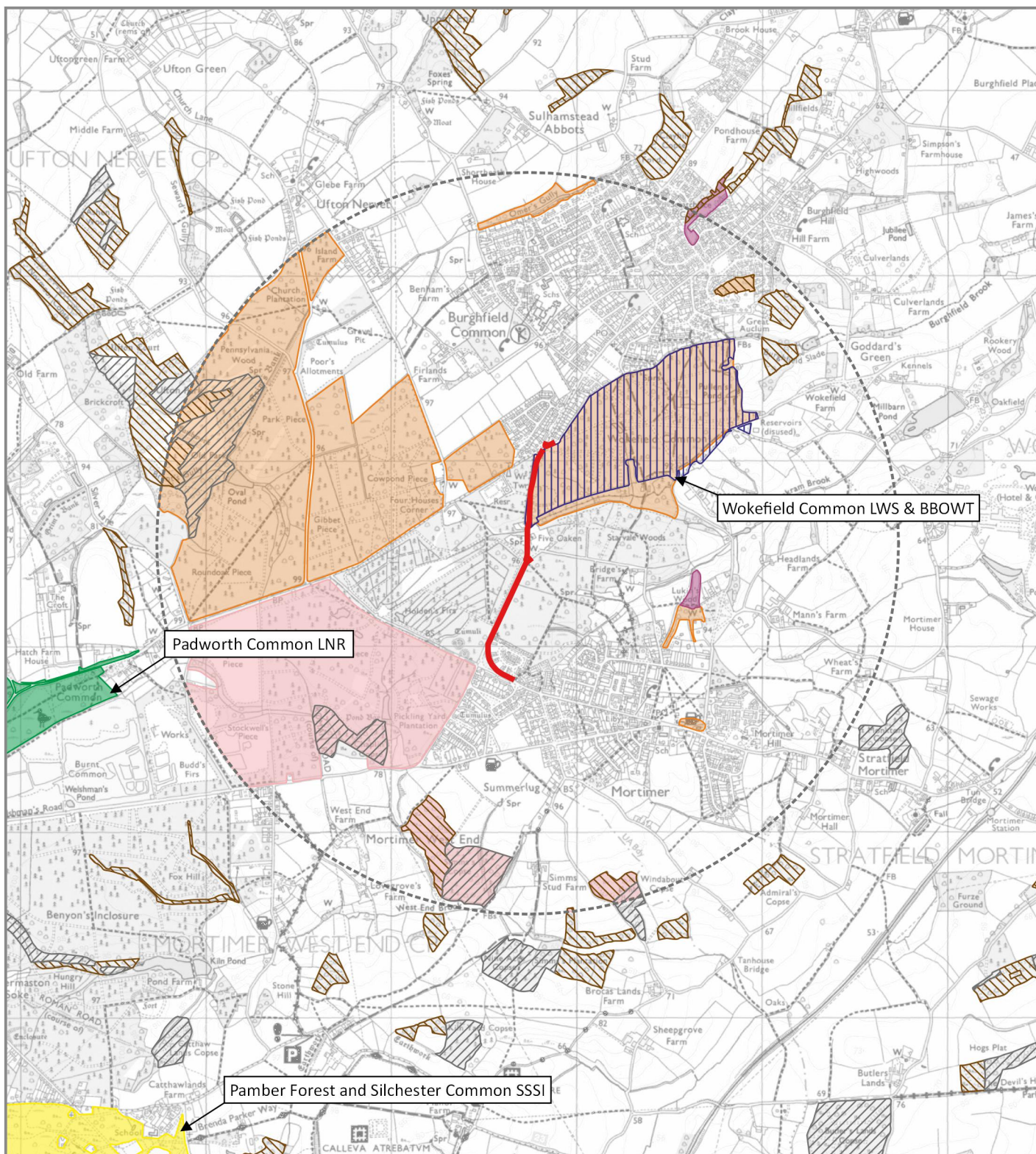
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DATE



Plan 6468/ECO2:

Ecological Designations



Key:

- | | | | |
|--|---|--|---|
| | Proposed Cycle/
Footway Route | | Proposed Local Wildlife Site
(pLWS) |
| | Site of Special Scientific
Interest (SSSI) | | Berks, Bucks & Oxon Wildlife Trust
(BBOWT) |
| | Local Nature Reserve (LNR) | | Ancient & Semi-Natural
Woodland (ASW) |
| | Sites of Importance for
Nature Conservation (SINC) | | Ancient Replanted
Woodland (ARW) |
| | Local Wildlife Site (LWS) | | Local Records Centre 2km Search
Area (Only non-statutory
designations occurring within 2km
of the site centre are shown) |

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**Mortimer Common to Burghfield
Common Cycle / Footway
Ecological Designations**

6468/ECO2

C/IP

October 2022

PROJECT

TITLE

DRAWING NO.

REV

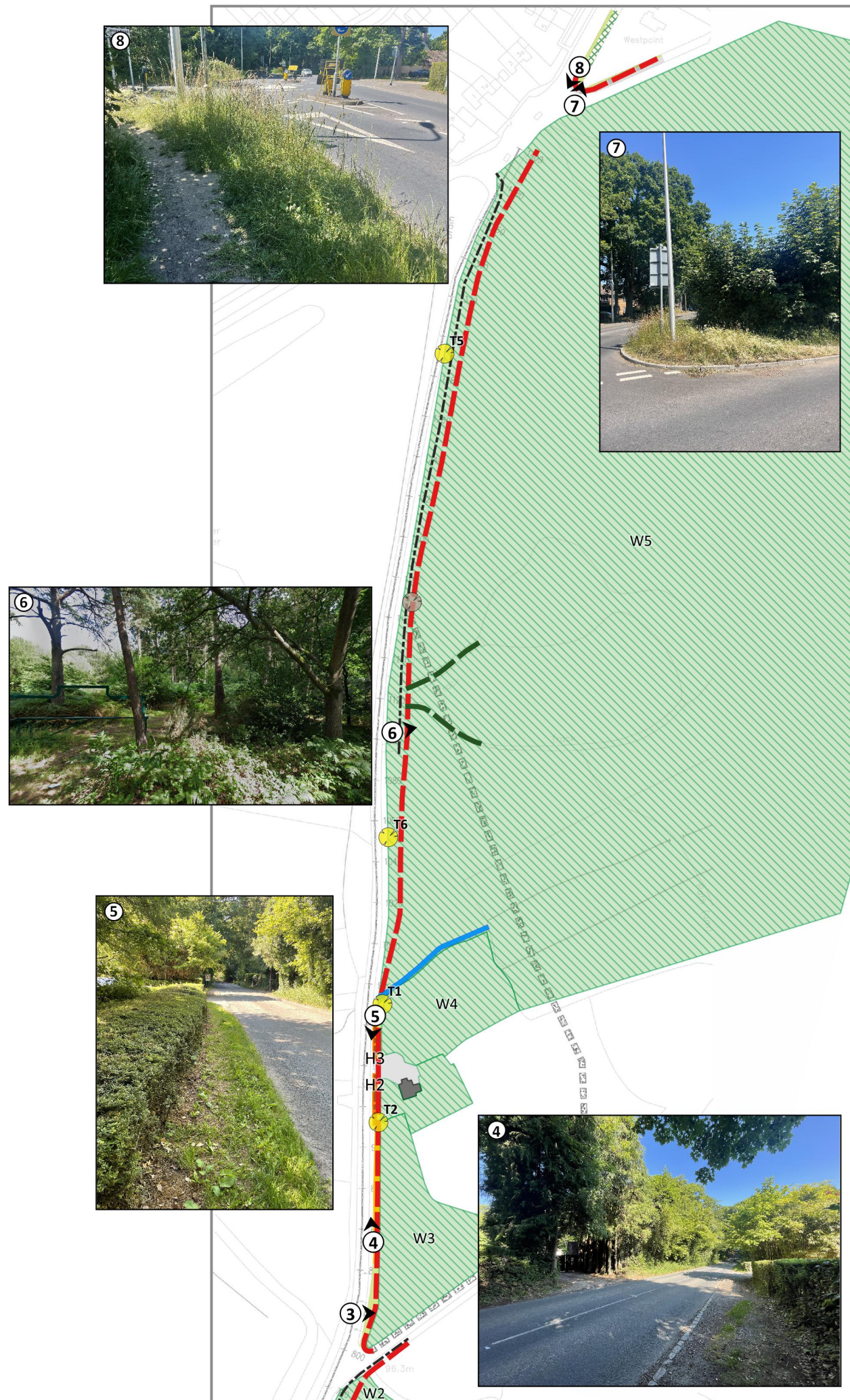
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Plan 6468/ECO3:

Habitats and Ecological Features

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Key:

- Proposed Cycle/Footway
- Amenity Grassland
- Hardstanding
- Bare Ground
- Woodland
- Dense Scrub
- Building
- Hedgerow
- Watercourse
- Footpath
- Grassy Ride
- Tree with Low Bat Potential
- Broadleaved Tree
- Conifer Tree
- Fallen Tree
- Scrub
- Invasive Species
- Photo Location

0 30 60 90 120 m

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Mortimer Common to Burghfield
Common Cycle / Footway
Habitats and Ecological Features



6468/ECO3

F/JP

March 2023

Appendix 6468/1:

Protected Species Method Statement

Technical Note 01

Project: Mortimer Common to Burghfield Common Cycleway

Date: March 2023

Protected Species Method Statement

1 Introduction and Background

- 1.1 Aspect Ecology is advising Ridge and Partners LLP on behalf of Stratfield Mortimer Parish Council in respect of ecological matters relating to a proposed Cycle / Footway between Mortimer Common and Burghfield Common, Berkshire.
- 1.2 The proposed Cycle / Footway is located to the east of Reading Road, and passes through a number of woodland compartments. The proposals will require some minor tree removal, crown lifting and other vegetation clearance in order to construct the Cycle / Footway, which will comprise a 3m wide track.
- 1.3 Ecological survey work undertaken at the site has identified potential habitat for European Protected Species (EPS), including bats, Dormouse *Muscardinus avellanarius* and Great Crested Newt *Triturus cristatus* within the site or its surrounds, whilst there is also the potential for common reptiles and nesting birds on-site. Whilst the nature of the works involves only limited impacts on such habitat, consideration needs to be given to the legislative requirements in respect of these species associated with the proposed clearance works.
- 1.4 As such, the following note sets out the methodology to be implemented during the clearance works required under the proposals, and provides a discussion of legislative issues in respect of European Protected Species.

2 Proposed Works and Assessment of Effects

- 2.1 As discussed, the proposals require minor tree removal, crown lifting and other vegetation clearance works in order to construct the proposed Cycle / Footway. Accordingly, the proposed vegetation removal could impact the above species if they are present on-site, through direct harm/disturbance during construction works and habitat loss. Appropriate safeguarding measures are therefore set out below, on a precautionary basis.

3 Methodology for Vegetation Removal Works

- 3.1 As set out within the accompanying Ecological Appraisal, further survey will be undertaken at the appropriate stage to confirm presence/absence of Dormouse and determine if a licence is required. The following approach sets out a precautionary approach in relation to this species on the basis that presence is confirmed. If no evidence of Dormouse is found, there may be

some additional flexibility in relation to timing of works (e.g. no requirement to avoid the peak summer period), but otherwise a similar approach will be followed.

- 3.2 Vegetation clearance works will be carried out under an ecological watching brief, and as directed by the ecologist in relation to appropriate working methods and location and extent of areas to be cleared.
- 3.3 Given the small areas of vegetation to be cleared, it is proposed that vegetation clearance and any necessary ground disturbance is undertaken between April and October, forming the active period for Dormouse, bats, Great Crested Newt, reptiles and nesting birds. This will follow the approach set out within the Dormouse Conservation Handbook, whereby only small amounts of vegetation are cut back each day, allowing animals time to escape, combined with searches for nests. By undertaking works during the summer period, this will ensure works are carried out during the period when Dormice (and other animals) are active and can therefore respond immediately to any disturbance. Subject to survey results (i.e. if evidence of Dormouse is recorded), works will be restricted to April/May and September/October outside of the peak summer period when breeding females with dependent young may be present. Otherwise, works can be undertaken throughout this period
- 3.4 Safeguarding measures will be implemented during these works to minimise potential adverse effects on protected species, as set out below:

Bats:

- Prior to clearance works commencing, individual tree stems or shrubs to be removed will be agreed, and an inspection of affected areas will be undertaken by the supervising ecologist;
- During the above inspection, all trees requiring removal will be subject to an update check for bat roosting potential. It is understood that trees to be removed include dead and poor condition Scot's Pine *Pinus sylvestris*, of which some specimens were previously noted to have low bat roosting potential;
- Any works undertaken on trees identified as having low bat roosting potential would need to be undertaken under an ecological watching brief, and would be carried out using the 'soft-felling' technique, whereby sections of the tree will be cut and lowered to the ground, followed by leaving the felled sections on the ground for a period of at least 24 hours to allow any bats, should these be present, to escape;
- Any trees identified as having moderate or high roosting potential will require further survey work prior to works (see section 4 below).

Dormouse:

- Habitat clearance will proceed in small sections (2-3m at a time), with clearance of each area preceded by a search of habitats by the supervising ecologist to check for Dormouse presence;
- All vegetation clearance works will be carried out using handheld tools only (including mechanised handheld tools subject to the agreement of the on-site ecologist);
- Should an active adult Dormice be discovered during works, they will be carefully removed from the area by the supervising ecologist and moved, together with their nest if present, to a nest box in the closest identified 'safe area' of retained habitat;
- In the unlikely event a breeding nest is encountered, this will be retained in-situ together with a 5m buffer area and connective habitat until the young have been weaned and have left the nest;

- Following completion of vegetation clearance works, removal of roots/stumps and ground disturbance will proceed immediately to clear the route for construction.

Great Crested Newt and reptiles:

- Clearance of ground vegetation, such as tall ruderal vegetation or tall grasses, or dense scrub, will be undertaken using a staged approach, with staged strimming to reduce vegetation height, allowing it to be checked by the supervising ecologist;
- Any suitable refugia, such as log piles, will be dismantled by hand under supervision of the on-site ecologist;
- As works are proposed to be undertaken in the summer active season, reptiles will likely respond to any disturbance and move out of the affected area. However, in the unlikely event that a reptile is encountered during works, it should be carefully moved to an area of retained, suitable unaffected habitat (preferably within an area of cover);
- If a Great Crested Newt is encountered at any point, works will cease immediately, and Natural England will be consulted for further advice on how to proceed.

Breeding birds:

- The vegetation to be removed will 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 check surveys would need to be carried out no more than three days in advance of vegetation clearance and will be preceded by a toolbox talk.

4 Consideration of Legislative Requirements and Further Surveys

- 4.1 Given habitats within or surrounding the site offer some potential for EPS including bats, Dormouse and Great Crested Newt, together with reptiles and birds protected under the Wildlife and Countryside Act 1981 (as amended), consideration is given to the likelihood of these being encountered during works and legislative requirements below.
- 4.2 All British bats, Dormouse and Great Crested Newt are classed as European Protected Species (EPS) under the Conservation of Habitats and Species Regulations 2017 (as amended). As such, individuals of these species, their breeding sites and resting places receive full protection under the legislation.
- 4.3 In this regard, guidance on the need to obtain a Natural England licence for works that may affect European Protected Species, such as bats, Dormouse and Great Crested Newt, is set out within Natural England's document WML-G12 'European Protected Species: Mitigation Licensing – How to Get a Licence' (2013). Natural England advocates the use of good practice and avoidance measures to minimise the impact of a proposed activity on European Protected Species and notes that licensing should be seen as the last resort where all other alternative ways of avoiding impacts on the species have been discounted.
- 4.4 WML-G12 states that "a licence is needed if the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the

proposed activity is **reasonably likely** [Natural England's emphasis] to result in an offence under Regulation 41 (animals)".

- 4.5 However, "if the consultant ecologist, on the basis of survey information and specialist knowledge of the species concerned, considers that on balance the proposed activity is **reasonably unlikely** [Natural England's emphasis] to result in an offence under regulation 41 or 45 then no licence is required. However, in these circumstances Natural England would urge that reasonable precautions be taken to avoid affecting European Protected Species during works."
- 4.6 In terms of the proposed works at the site, it is relevant to consider the following potential offences:
- 4.7 **Deliberate killing and injury:** Clearance of the vegetation without appropriate safeguards could result in killing or injury if bats/Dormouse/Great Crested Newt are present.
- 4.8 **Deliberate disturbance of:** In terms of disturbance, the Conservation of Habitats and Species Regulations 2017 (as amended) specifically refer to any disturbance which is likely to impair the ability of animals to breed, hibernate or migrate, or significantly affect the local distribution or abundance of the species. Further guidance is provided in the European Commission's Article 12 guidance¹, which states that, "*for disturbance of a protected species to occur a certain negative impact likely to be detrimental must be involved*" and that "*consideration must be given to its effect on the conservation status of the species at population level and biogeographic level in a Member State.*" Consequently, "*sporadic disturbances without any likely negative impact on the species, [...] should not be considered as disturbance under Article 12.*"
- 4.9 **Damage to, or destruction of, breeding and resting sites:** The guidance makes clear that breeding sites and resting places should be protected even when they are not being used, where there is a reasonably high probability that the species concerned will return to these sites and places. On the other hand, the guidance advises that where a certain site "*is used only occasionally for breeding or resting purposes it is very likely that the site does not qualify as a breeding site or resting place*".
- 4.10 Further discussion of these offences in relation to the individual species is set out below.

Bats

- 4.11 On the basis of the survey work undertaken, a small number of trees were identified as supporting low bat roosting potential. No moderate or high potential trees were identified such that roosting bats are unlikely to be present and the risk of an offence is minimal, albeit standard precautionary measures will be implemented in relation to low potential trees in accordance with recommended guidance. In the event that pre-works inspections identify any trees supporting moderate or high roosting potential to be affected by works, further survey in the form of dusk emergence / dawn-re-entry surveys or climbed inspection surveys will be undertaken to assess whether roosting bats are present. If any evidence for the presence of

¹ Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC, February 2007

roosting bats is recorded, works on that tree will be suspended and an EPS mitigation licence will be secured.

4.12 As the tree and vegetation removal required is relatively minor, and it is understood that the path is to remain unlit, the proposals are unlikely to disturb foraging and commuting bats.

4.13 On the basis of these measures, it is considered that the works are unlikely to result in an offence in regard to bats, such that the works can proceed following a non-licensed approach.

Dormouse

4.14 As set out within the accompanying Ecological Appraisal, further survey will be undertaken at the appropriate stage to confirm presence/absence of Dormouse and determine if a licence is required. The precautionary strategy set out above would ensure that this species is safeguarded if present, whilst the works are not considered to result in any significant loss of habitat for this species.

Great Crested Newt

4.15 No potential breeding habitat will be affected by the proposals; however, there are a number of interconnecting off-site ditches mapped within 250m of the site boundary, and records of Great Crested Newts originating from within the woodland, approximately 400m to the east of the site. The ditch systems support areas of stagnant / pooling water connected via flowing or dry channels which provide some suitable habitat for amphibians, and the surrounding woodland habitat provides suitable terrestrial habitat for this species.

4.16 The proposed development would result in some disturbance to the area of habitat along the route of the footpath/cycleway, risking injury and disturbance during construction works and a minor loss of habitat along the route of the footpath/cycleway itself. However, due to the nature of the proposals, the loss of potential habitat is minimal, equating to only 0.09ha within 100m of the ditches (discounting the ditches separated from the site by Reading Road, as this is considered to form a barrier to dispersal unlikely to be regularly crossed by newts), and a further loss of 0.3ha within 250m. Imputing these figures into Natural England's risk assessment tool indicates that an offence is "highly unlikely" as *"development activities are of such a type, scale and location that it is highly unlikely any offence would be committed should the development proceed. Therefore, no licence would be required. [...] you should carefully examine your specific plans to ensure this is a sound conclusion, and take precautions [...] to avoid offences if appropriate."*

4.17 Accordingly, it is considered that the methodology set out in section 3 fulfil these criteria, and the works are unlikely to result in an offence in regard to Great Crested Newt, such that the works can proceed following a non-licensed approach.

Reptiles and nesting birds

4.18 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. All wild birds and their nests receive protection under Section 1 of the Wildlife and Countryside Act 1981 (as amended) in respect of killing and injury, and their nests, whilst being built or in use, cannot

be taken, damaged or destroyed. Species included on Schedule 1 of the Act receive greater protection and are subject to special penalties.

- 4.19 It is considered that the methodology set out at section 3 will adequately safeguard these species and minimise the risk of any of the above offences occurring.

5 Conclusion

- 5.1 Given the scale of the proposed works, and following implementation of the precautionary strategy set out within section 3, it is considered that bats, Dormouse and Great Crested Newt will be safeguarded during proposed works. Further survey work will be undertaken for Dormouse (and bats if required), and relevant EPS mitigation licences obtained if necessary, to ensure legislative requirements are met, whilst it is considered that proposed works are unlikely to result in an offence with regards to Great Crested Newt such that a non-licensed approach can be followed. Measures have also been included to safeguard reptiles and nesting birds in accordance with the relevant legislation.

Appendix 6468/2:

Evaluation Methodology

Principles of Ecological Evaluation

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

Importance of Ecological Features

2. Various characteristics contribute to the importance of ecological features, including:
 - Naturalness;
 - Animal or plant species, sub-species or varieties that are rare or uncommon, either internationally, nationally or more locally, including those that may be seasonally transient;
 - Ecosystems and their component parts, which provide the habitats required by important species, populations and/or assemblages;
 - Endemic species or locally distinct sub-populations of a species;
 - Habitat diversity;
 - Habitat connectivity and/or synergistic associations;
 - Habitats and species in decline;
 - Rich assemblages of plants and animals;
 - Large populations of species or concentrations of species considered uncommon or threatened in a wider context;
 - Plant communities (and their associated animals) that are considered to be typical of valued natural/semi-natural vegetation types, including examples of naturally species-poor communities; and
 - Species on the edge of their range, particularly where their distribution is changing as a result of global trends and climate change.
3. As an objective starting point for identifying important ecological features, European, national and local governments have identified sites, habitats and species which form a key focus for biodiversity conservation in the UK, supported by policy and legislation. These are summarised by CIEEM guidance as follows:

Designated Sites

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

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

Biodiversity Lists

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

Red Listed, Rare, Legally Protected Species

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

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

Assigning Level of Importance

5. The importance of an ecological feature should then be considered within a defined geographical context. Based on CIEEM guidance, the following frame of reference is used:
 - International (European);
 - National;
 - Regional;
 - County;
 - District;
 - Local (e.g. Parish or Neighbourhood);
 - Site (not of importance beyond the immediate context of the site).
6. Features of 'local' importance are those considered to be below a district level of importance, but are considered to appreciably enrich the nature conservation resource or are of elevated importance beyond the context of the site.
7. Where features are identified as 'important' based on the list of key sites, habitats and species set out above, but are very limited in extent or quality (in terms of habitat resource or species population) and do not appreciably contribute to the biodiversity interest beyond the context of the site, they are considered to be of site importance.
8. In terms of assigning the level of importance, the following considerations are relevant:

Designated Sites

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

Habitats

10. In certain cases, the value of a habitat can be measured against known selection criteria, e.g. SAC selection criteria, 'Guidelines for the selection of biological SSSIs' and the Hedgerows Regulations 1997. However, for the majority of commonly encountered sites, the most relevant habitat evaluation will be at a more localised level and based on relevant factors such as antiquity, size, species-diversity, potential, naturalness, rarity, fragility and typicalness (Ratcliffe, 1977). The ability to restore or re-create the habitat is also an important consideration, for example in the case of ancient woodland.
11. Whether habitats are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Habitats of Principal Importance' or 'Priority Habitats', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular habitat under a BAP does not in itself imply any specific level of importance.
12. Habitat inventories (such as habitat mapping on the MAGIC database) or information relating to the status of particular habitats within a district, county or region can also assist in determining the appropriate scale at which a habitat is of importance.

Species

13. Deciding the importance of species populations should make use of existing criteria where available. For example, there are established criteria for defining nationally and internationally important populations of waterfowl. The scale within which importance is determined could also relate to a particular population, e.g. the breeding population of common toads within a suite of ponds or an otter population within a catchment.
14. When determining the importance of a species population, contextual information about distribution and abundance is fundamental, including trends based on historical records. For example, a species could be considered particularly important if it is rare and its population is in decline. With respect to rarity, this can apply across the geographic frame of reference and particular regard is given to populations where the UK holds a large or significant proportion of the international population of a species.
15. Whether species are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Species of Principal Importance' or 'Priority Species', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular species under a BAP does not in itself imply any specific level of importance.
16. Species populations should also be considered in terms of the potential zone of influence of the proposals, i.e. if the entire species population within the site and surrounding area were to be affected by the proposed development, would this be of significance at a local, district, county or wider scale? This should also consider the foraging and territory ranges of individual species (e.g. bats roosting some distance from site may forage within site whereas other species such as invertebrates may be more sedentary).

Appendix 6468/3:

Legislation Summary

LEGISLATION SUMMARY

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